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**Haier**  
Intelligent Buildings

Nov., 2023  
Version 1.0

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Haier

# Haier

Intelligent Buildings

MRV

2024 Europe



General  
**MRV**

# 2024

**Haier**  
Intelligent Buildings

# Haier Brand Story

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.



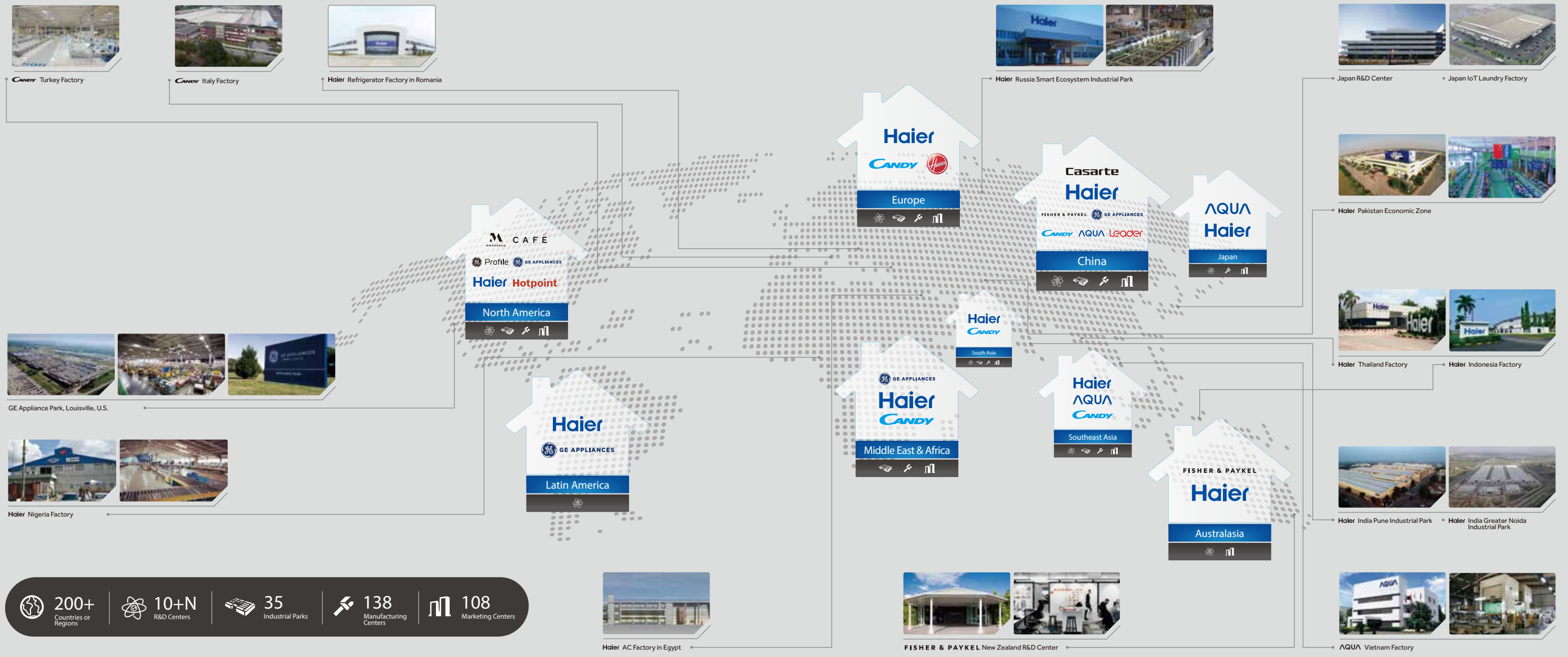
# Haier



# 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.



200+ Countries or Regions |
 10+N R&D Centers |
 35 Industrial Parks |
 138 Manufacturing Centers |
 108 Marketing Centers



# Haier 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





# 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



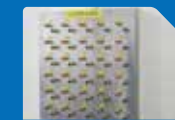
EMC Test Lab



Water-spray  
Test Lab



Psychrometric  
Test Lab



Safety Test Lab



Full-anechoic  
Test Lab



Centralized Control  
Test Lab



Simulated Snow  
Test Lab



Simulated  
Sunshine Test Lab



Environmental  
Evaluation Test Lab



Humidity  
Evaluation Test Lab

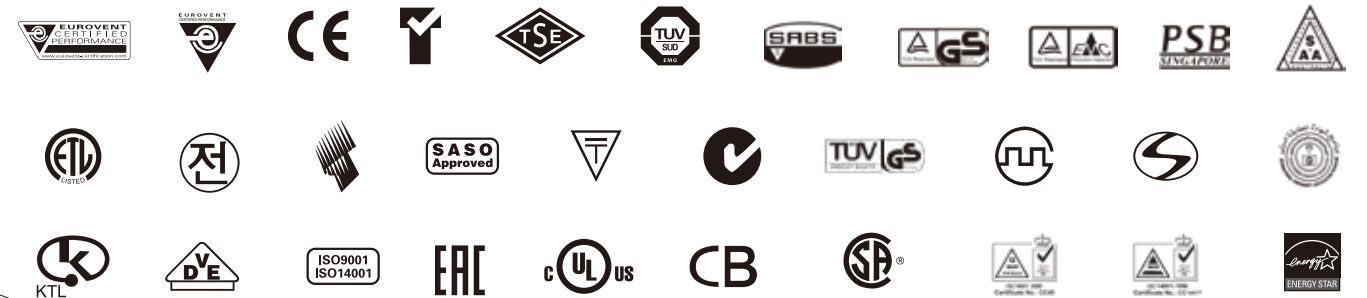


Double 85  
Test Lab



Height Drop  
Test Lab

## Global Certification



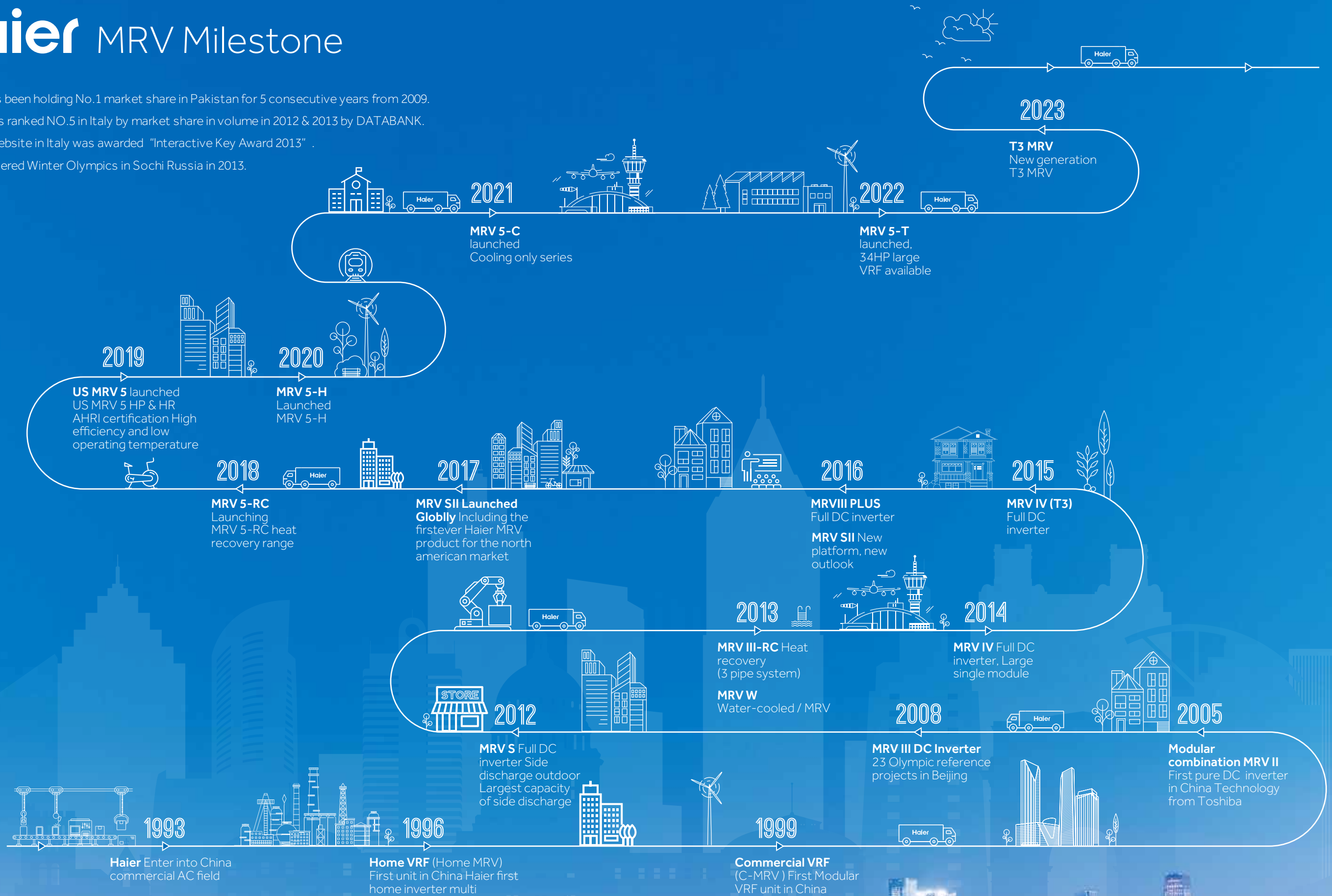
# Haier MRV Milestone

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

## T1 Eurovent Line-up

MRV 5	3/380-415/50											
	3/380-415/60	8/10/12/14/16HP	10/20/22/24/26HP	28/30/32HP	34HP					36/38/40/42/46/48/50/52HP	54/56/58/60/62/64/66/68/70/72/74/76/78HP	80/82/84/86/88/90/92/96/98/100/102/104HP
MRV 5-H	3/380-415/50											
	3/380-415/60	8/10/12/14/16HP	10/20/22/24/26HP	28/30/32HP	34HP					36/38/40/42/46/48/50/52HP	54/56/58/60/62/64/66/68/70/72/74/76/78HP	80/82/84/86/88/90/92/96/98/100/102/104HP
MRV 5-RC	3/380-415/50											
	3/380-415/60	8/10/12/14HP	16/18/20/22HP	24/26/28HP	30HP	32/34/36/38/40/42/44HP				46HP	48/50/52/54/56/58/60/62/64/66HP	68/70/72/74/76/78/80/82/84/86/88HP


Series	HP	3	4	5	6	7	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36		
MRV SII	1/220-240/50 1/220-240/60																						
	1/220-240/50 1/220-240/60																						
	3/380-415/50 3/380-415/60																						
	3/380-415/50 3/380-415/60																						













# PRODUCT LINE-UP

Outdoor Units

## T1 Line-up

<b>MRV 5-T</b>	3/380-415/50/60											
<b>MRV 5-T</b> Coming Soon	3/380-415/50/60											
<b>MRV 5</b>	3/380-415/50/60											
<b>MRV 5-C</b>	3/380-415/50/60											

Series	HP	3	4	5	6	7	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
<b>MRV SI</b>	1/220-240/50/60																					
	3/380-415/50/60																					
<b>MRV SII</b>	1/220-240/50/60																					
	1/220-240/50/60 3/380-415/50/60																					
<b>MRV W</b>	3/380-415/50/60																					

# PRODUCT LINE-UP









Outdoor Units

## T3 Line-up

<b>MRV 5 T3</b>	3/380-415/50/60							
		8-12HP	14-20HP	22-24HP	26HP	28-40HP	42-60HP	62-80HP

Series	HP	3	4	5	6	7	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	
<b>MRV SII T3</b>	3/380-415/50/60																					
	3/380-415/50/60																					

## Connection Kit


Model	EASY MRV			DX AHU <sup>2</sup> Connection kit					
	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<X≤60K	Every indoor capacity ≤36K						
MRV series	MRV 5-H, MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)			MRV series	MRV 5-H, MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)				














# PRODUCT LINE-UP

Indoor Units

Series	KBTU/h		24			48			96		
	kW		7			14			28		

Hydro Box		HU**2WVLNA																
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Series	KBTU/h		5	7	9	12	16	18	24	28	30	38	42	48	54	72	96
	kW		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)																
New Round Way Cassette		AB**2MNERAB																
Round Way Cassette		AB**2MRERA																
4-way Cassette		AB**2MCERA																
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		5	7	9	12	16	18	24	28	30	38	42	48	54	72	96	
	kW		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										■	■		■			
High ESP Duct (0-300Pa)		AD**2MTERAD														■	■	
High ESP Duct (0-250Pa)		AD**2MTERAB															■	■
Built-in Floor Standing		AE**2MLERA		■	■	■	■	■	■									
Console		AF**2MBERA	■	■	■	■	■	■										
High Wall		AS**2MNERAB AS**2MNERA AS**2MNERAC	■	■	■	■	■	■	■	■	■							
		AS**2MFERAB AS**2MFERA AS**2MFERAC	■	■	■	■	■	■	■									
Fresh Air Duct (Comming soon)		AD**2MJERAF AD**2MTERAF												■		■	■	
HRV (Heat ReclaimVentilation) ERV***ANW		150m³/h 500m³/h 250m³/h 800m³/h 350m³/h 1000m³/h 2000m³/h	HRV (Heat ReclaimVentilation) ERV***BNN							150m³/h 500m³/h 2000m³/h 250m³/h 800m³/h 350m³/h 1000m³/h								



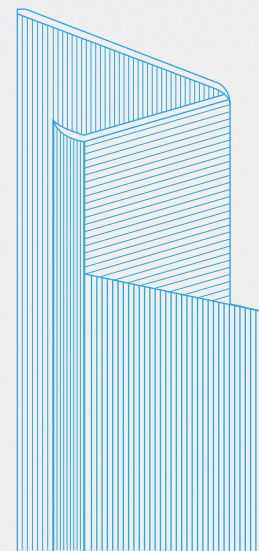
# MRV5

DC INVERTER

**015** Features & Benefits

**020** MRV 5 Outdoor

**033** Dimensions





# MRV5



Advanced Technology



High Efficiency



Super Comfort



Easy Installation



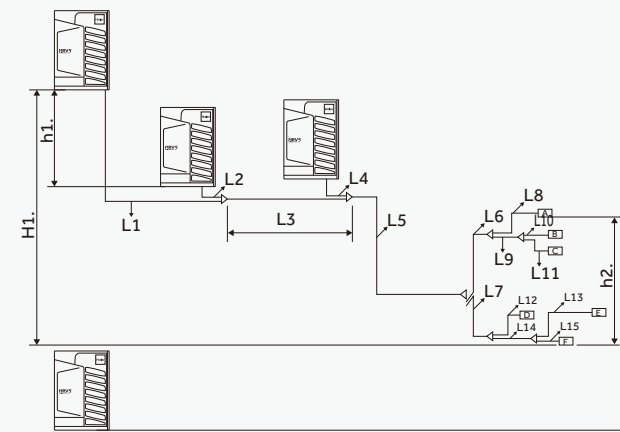
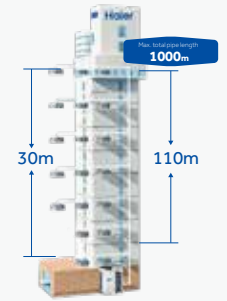
## Advanced Technology

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.

**No.1**  
High Drop Tower



	Max. length	Pipe in left figure	
Single way total pipe length (=total liquid pipe length)	1000m	L1+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15	
Single way Max. pipe length (max. length between outdoor & indoor) actual length	220m	L1+L3+L5+L7+L14+L15	
Main pipe actual length (length between first gather pipe & first branch pipe)	130m	L5	
Pipe length after first branch pipe (length between first branch & farthest indoor)	90m	L7+L13+L14	
The distance between the nearest indoor unit and the farthest indoor	40m	L13+L14-L12	
Pipe length among outdoor units (length between first gather pipe & farthest outdoor unit)	10m	L1+L3	
Height difference between indoors	18m	h2	
Height difference between outdoors	5m	h1	
Height difference between indoor & outdoor	Indoor below outdoor (between highest outdoor & lowest indoor)	50m	H1
	Indoor above outdoor (between lowest outdoor & highest indoor)	40m	H2

## Advanced Technology

### Smart link

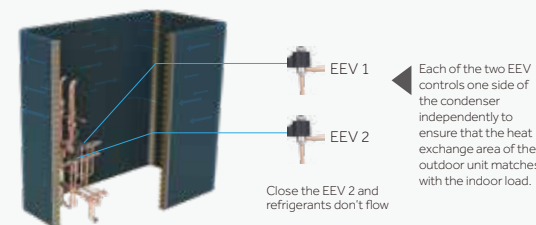
Wireless connection and communication between indoor units.

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



### 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.



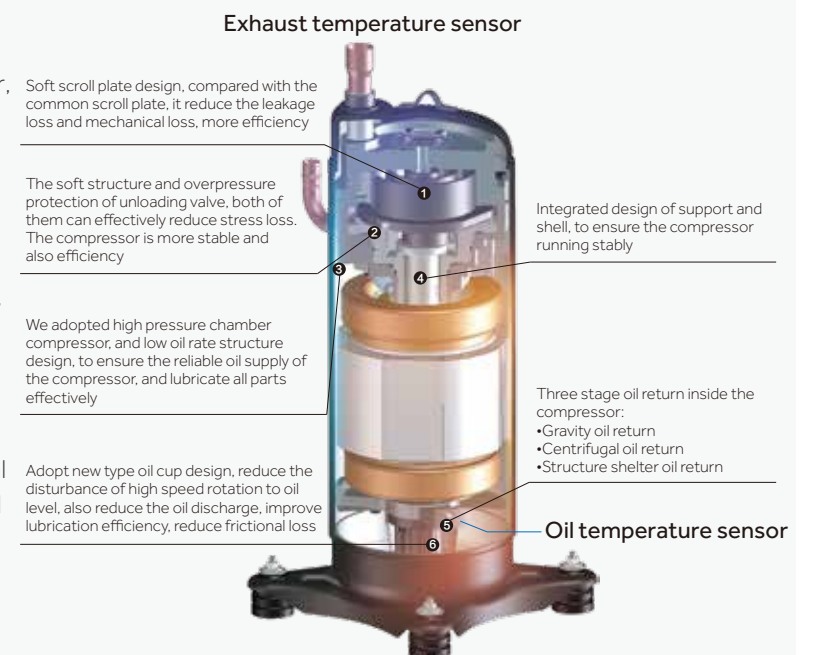
\* Class 3000 EEV customized for outdoor unit and Class 2000 EEV customized for indoor unit.

## 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.

Each compressor is adopted oil temperature sensor and the discharge temperature sensor, detecting the discharge temperature and oil temperature of compressor, cooperated with the compressor frequency and the EEV control, to ensure exhaust heat and oil temperature superheat kept within the optimal range. Ensure that the oil dilution is maintained at a safe level at all times.





## 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.

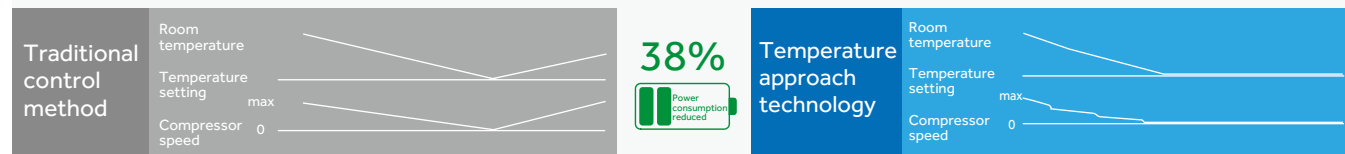


### New one-piece of four-way heat exchanger



### 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. Haier MRV 5 series units adopts 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

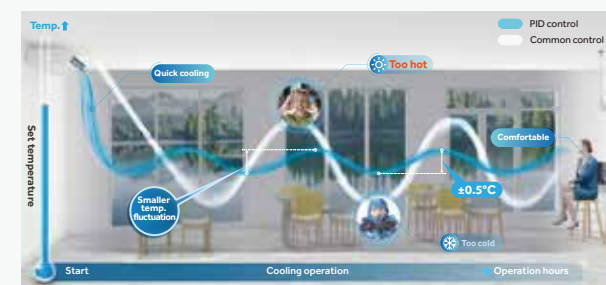
### Wide operation temperature

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 available (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

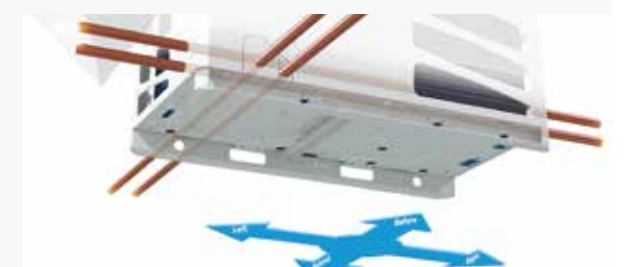
Rotary electric control box design, while maintaining the internal space, maintainers only need to rotate the box, do not need to dismantle the box, easy and fast maintenance.



## 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



The outdoor unit is hidden inside the building without affecting the overall image of the building



Model		AV08IMVEVA	AV10IMVEVA	AV12IMVEVA	AV14IMVEVA	AV16IMVEVA		
Capacity	Combination model	/	/	/	/	/		
	Capacity range	HP	8	10	12	14	16	
	Cooling	kW	25.2	28	33.5	40	45	
	Heating	kW	25.2	28	33.5	40	45	
	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	Cooling	Rated power input	kW	6.24	7.37	10.15	11.94	13.24
		Max. power input	kW	10.08	11.56	13.80	16.40	19.20
		Rated current	A	10.53	12.44	17.14	20.16	22.34
		Max. current	A	17.02	19.52	23.30	27.69	32.41
	Heating	Rated power input	kW	5.73	6.51	8.59	10.00	11.25
		Max. power input	kW	9.90	11.25	12.50	15.10	18.40
		Rated current	A	9.67	10.99	14.52	16.88	18.99
	Max. current	A	16.71	18.99	21.10	25.49	31.06	
	EER		4.04	3.80	3.30	3.35	3.40	
	COP		4.40	4.30	3.90	4.00	4.00	
SEER		7.25	7.09	6.69	6.6	6.36		
SCOP		4.41	4.31	4.31	4.12	4.05		
η <sub>SC</sub>	%	287	280.6	264.6	261	251.4		
η <sub>SH</sub>	%	173.4	169.4	169.4	161.8	159		
Performance	Air flow (H)	m <sup>3</sup> /h	11000	11000	12000	13500	13500	
	Sound pressure level (H)	dB(A)	56	56	59	59	60	
	Sound power level (H)	dB(A)	81	82	88	88	88	
Installation	Dimension(W*H*D)	mm	980/1690/750	980/1690/750	980/1690/750	980/1690/750	980/1690/750	
	Packing (W*H*D)	mm	1070/1858/850	1070/1858/850	1070/1858/850	1070/1858/850	1070/1858/850	
	Net weight	kg	224	224	224	244	244	
	Gross weight	kg	250	250	250	270	270	
	Compressor brand		MITSUBISHI ELECTRIC					
	Compressor type		DC INV. SCROLL					
	Compressor quantity		1INV	1INV	1INV	1INV	1INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	8.5	8.5	8.5	10	10	
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	
	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	28.58	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	
	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		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	13	16	20	24	27	
Working Temp.	Cooling	°C	-5-50					
	Heating	°C	-23-21					

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U.&O.U \*2  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
Max. drop between I.U. \*4  
Standard design and production in the factory.

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 indoor units 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 tested under nominal condition (cooling, indoor temp. is 27°C DB/19°C WB, Outdoor Temp 35°C DB/24°C WB; heating, indoor temp is 20°C DB, outdoor temp is 7°C DB/6°C WB)



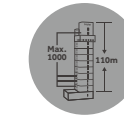
# 3/380~415/50/60



AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV18IMVEVA	AV20IMVEVA	AV22IMVEVA	AV24IMVEVA	AV26IMVEVA	AV28IMVEVA	AV30IMVEVA	AV32IMVEVA	
Combination model			/	/	/	/	/	AV14IMVEVA	AV14IMVEVA	AV16IMVEVA	
			/	/	/	/	/	AV14IMVEVA	AV16IMVEVA	AV16IMVEVA	
			/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	18	20	22	24	26	28	30	32	
	Cooling	kW	50.4	56	61.5	68	73.5	80	85	90	
	Heating	kW	50.4	56	61.5	68	73.5	80	85	90	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	15.60	16.62	20.16	22.67	27.22	23.88	25.18	26.47
		Max. power input	kW	21.40	25.10	28.50	29.10	37.80	32.80	35.60	38.40
		Rated current	A	26.34	28.05	34.06	38.27	45.96	40.32	42.50	44.69
		Max. current	A	36.13	42.37	48.11	49.13	61.91	55.37	60.10	64.83
	Heating	Rated power input	kW	13.19	14.66	18.64	19.43	26.25	20.00	21.25	22.50
		Max. power input	kW	17.70	22.70	25.50	26.50	30.40	30.20	33.50	36.80
		Rated current	A	22.27	24.75	31.49	32.80	45.68	33.76	35.87	37.98
		Max. current	A	29.88	38.32	43.05	44.74	51.32	50.98	56.55	62.13
	EER			3.23	3.37	3.05	3.00	2.70	3.35	3.38	3.40
	COP			3.82	3.82	3.30	3.50	2.80	4.00	4.00	4.00
	SEER			6.78	6.75	6.54	5.83	4.9	6.6	6.36	6.36
	SCOP			4.15	4.2	4.21	4.17	3.5	4.12	4.05	4.05
ηsc	%		268.2	267	258.6	230.2	193	261	251.4	251.4	
ηsh	%		163	165	165.4	163.8	137	161.8	159	159	
Performance	Air flow (H)	m <sup>3</sup> /h	17000	17000	18000	18000	19000	27000	27000	27000	
	Sound pressure level (H)	dB(A)	61	61	61	62	62	62	63	63	
	Sound power level (H)	dB(A)	88	88	90	90	90	91	91	91	
Installation	Dimension(W*H*D)	mm	1410/1690/750	1410/1690/750	1410/1690/750	1410/1690/750	1410/1690/750	980/1690/750+980/1690/750			
	Packing (W*H*D)	mm	1515/1858/850	1515/1858/850	1515/1858/850	1515/1858/850	1515/1858/850	1070/1858/850+1070/1858/850			
	Net weight	kg	287	370	370	370	370	488	488	488	
	Gross weight	kg	317	400	400	400	400	540	540	540	
	Compressor bBrand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC				
	Compressor type		DC INV. SCROLL				DC INV. SCROLL				
	Compressor quantity		1INV	2INV	2INV	2INV	2INV	2INV	2INV	2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	10	10	10	10	10	20	20	20	
	Refrigerant liquid pipe	mm	15.88	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	28.58	31.8	31.8	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	30	33	36	40	43	47	50	53	
Working Temp.	Cooling	°C	-5~50				-5~50				
	Heating	°C	-23~21				-23~21				

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB in heating, indoor temp is 20°C DB in heating, outdoor temp is 7°C DB/6°CWB



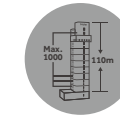
# 3/380~415/50/60



AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

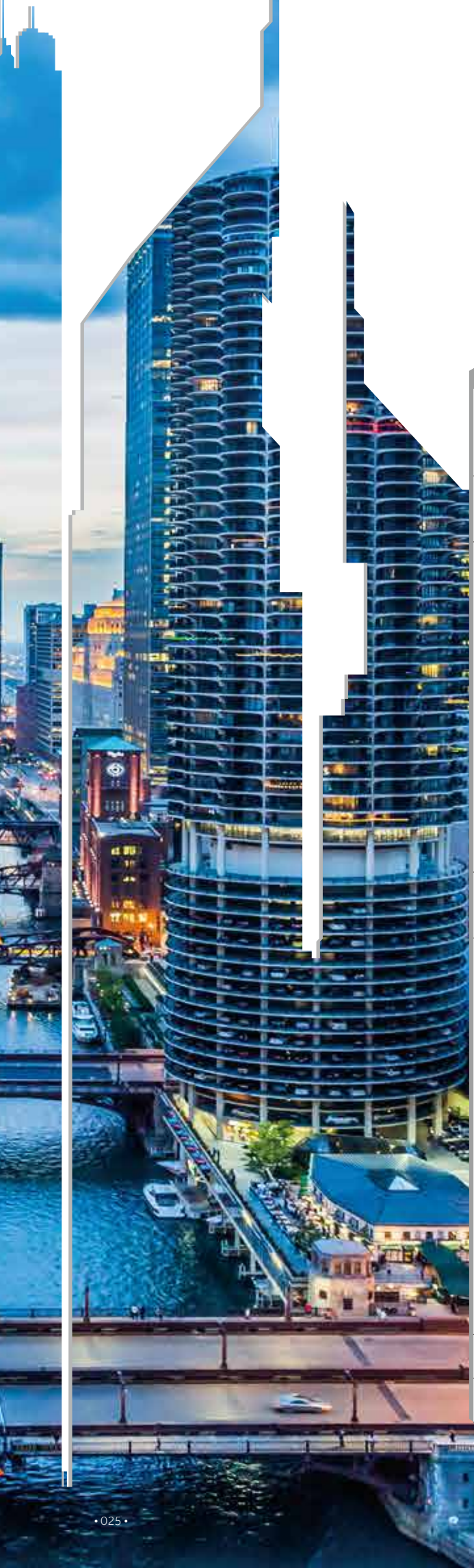
Model			AV34IMVEVA	AV36IMVEVA	AV38IMVEVA	AV40IMVEVA	AV42IMVEVA	AV44IMVEVA	AV46IMVEVA	AV48IMVEVA	
Combination model			AV16IMVEVA	AV18IMVEVA	AV18IMVEVA	AV20IMVEVA	AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV24IMVEVA	
			AV18IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV24IMVEVA	AV24IMVEVA	
			/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	34	36	38	40	42	44	46	48	
	Cooling	kW	95.4	100.8	106.4	112	117.5	123	129.5	136	
	Heating	kW	95.4	100.8	106.4	112	117.5	123	129.5	136	
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	
	Cooling	Rated power input	kW	28.84	31.21	32.22	33.23	36.78	40.32	42.83	45.34
		Max. power input	kW	40.60	42.80	46.50	50.20	53.60	57.00	57.60	58.20
		Rated current	A	48.69	52.68	54.40	56.11	62.11	68.12	72.33	76.54
		Max. current	A	68.54	72.26	78.50	84.75	90.49	96.23	97.24	98.25
	Heating	Rated power input	kW	24.44	26.39	27.85	29.32	33.30	37.28	38.07	38.86
		Max. power input	kW	36.10	35.40	40.40	45.40	48.20	51.00	52.00	53.00
		Rated current	A	41.27	44.55	47.02	49.50	56.24	62.98	64.29	65.60
		Max. current	A	60.94	59.76	68.20	76.64	81.37	86.10	87.79	89.48
	EER		3.31	3.23	3.30	3.37	3.19	3.05	3.02	3.00	
	COP		3.90	3.82	3.82	3.82	3.53	3.30	3.40	3.50	
	SEER		6.36	6.78	6.75	6.75	6.54	6.54	5.83	5.83	
	SCOP		4.05	4.15	4.15	4.2	4.2	4.21	4.17	4.17	
$\eta_{sc}$	%	251.4	268.2	267	267	258.6	258.6	230.2	230.2		
$\eta_{sh}$	%	159	163	163	165	165	165.4	163.8	163.8		
Performance	Air flow (H)	m <sup>3</sup> /h	30500	34000	34000	34000	35000	36000	36000	36000	
	Sound pressure level (H)	dB(A)	64	64	64	64	64	64	65	65	
	Sound power level (H)	dB(A)	91	91	91	91	92	93	93	93	
Installation	Dimension(W*H*D)	mm	980/1690/750+1410/1690/750				1410/1690/750+1410/1690/750				
	Packing (W*H*D)	mm	1070/1858/850+1515/1858/850				1515/1858/850+1515/1858/850				
	Net weight	kg	531	574	657	740	740	740	740	740	
	Gross weight	kg	587	634	717	800	800	800	800	800	
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC				
	Compressor type		DC INV. SCROLL				DC INV. SCROLL				
	Compressor quantity		2INV	2INV	3INV	4INV	4INV	4INV	4INV	4INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	20	20	20	20	20	20	20	20	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	31.8	38.1	38.1	38.1	38.1	38.1	38.1	38.1	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	56	59	63	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50								
	Heating	°C	-23-21								

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.

\* All the specifications are tested under normal condition in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB in heating, indoor temp is 20°C DB in heating, outdoor temp is 7°C DB/6°CWB



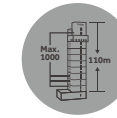


AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV50IMVEVA	AV52IMVEVA	AV54IMVEVA	AV56IMVEVA	AV58IMVEVA	AV60IMVEVA	AV62IMVEVA	AV64IMVEVA	
Combination model			AV24IMVEVA	AV26IMVEVA	AV18IMVEVA	AV18IMVEVA	AV18IMVEVA	AV20IMVEVA	AV20IMVEVA	AV22IMVEVA	AV22IMVEVA
			AV26IMVEVA	AV26IMVEVA	AV18IMVEVA	AV18IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV22IMVEVA
			/	/	AV18IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV20IMVEVA
			/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	50	52	54	56	58	60	62	64	
	Cooling	kW	141.5	147	151.2	156.8	162.4	168	173.5	179	
	Heating	kW	141.5	147	151.2	156.8	162.4	168	173.5	179	
Electrical Parameters	Power supply	PhV/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	3/380-415/50/60	
	Cooling	Rated power input	kW	49.89	54.44	46.81	47.82	48.84	49.85	53.39	56.94
		Max. power input	kW	66.90	75.60	64.20	67.90	71.60	75.30	78.70	82.10
		Rated current	A	84.23	91.91	79.03	80.74	82.45	84.16	90.17	96.17
		Max. current	A	111.04	123.82	108.38	114.63	120.88	127.12	132.86	138.60
	Heating	Rated power input	kW	45.68	52.50	39.58	41.05	42.51	43.98	47.96	51.94
		Max. power input	kW	56.90	60.80	53.10	58.10	63.10	68.10	70.90	73.70
		Rated current	A	78.48	91.36	66.82	69.30	71.77	74.25	80.99	87.73
		Max. current	A	96.06	102.64	89.64	98.08	106.53	114.97	119.69	124.42
	EER			2.84	2.70	3.23	3.28	3.33	3.37	3.25	3.14
	COP			3.10	2.80	3.82	3.82	3.82	3.82	3.62	3.45
	SEER			4.9	4.9	6.78	6.75	6.75	6.75	6.54	6.54
	SCOP			3.5	3.5	4.15	4.15	4.15	4.2	4.2	4.2
ηsc	%		193	193	268.2	267	267	267	258.6	258.6	
ηsh	%		137	137	163	163	163	165	165	165	
Performance	Air flow (H)	m³/h	37000	38000	51000	51000	51000	51000	52000	53000	
	Sound pressure level (H)	dB(A)	65	65	66	66	66	66	66	66	
	Sound power level (H)	dB(A)	93	93	93	93	93	93	94	94	
Installation	Dimension(W*H*D)	mm	1410/1690/750+1410/1690/750		1410/1690/750+1410/1690/750+1410/1690/750						
	Packing (W*H*D)	mm	1515/1858/850+1515/1858/850		1515/1858/850+1515/1858/850+1515/1858/850						
	Net weight	kg	740	740	861	944	1027	1110	1110	1110	
	Gross weight	kg	800	800	951	1034	1117	1200	1200	1200	
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC					
	Compressor type		DC INV. SCROLL			DC INV. SCROLL					
	Compressor quantity		4INV	4INV	3INV	4INV	5INV	6INV	6INV	6INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	20	20	30	30	30	30	30	30	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	41.3	41.3	41.3	41.3	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5~50			-5~50					
	Heating	°C	-23~21			-23~21					

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB, in heating, indoor temp is 20°C DB, outdoor temp is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



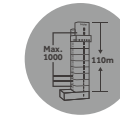
# 3/380~415/50/60



AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV66IMVEVA	AV68IMVEVA	AV70IMVEVA	AV72IMVEVA	AV74IMVEVA	AV76IMVEVA	AV78IMVEVA	
Combination model			AV22IMVEVA	AV22IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV26IMVEVA	AV26IMVEVA	
			AV22IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV26IMVEVA	
			/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	
Capacity	Capacity range	HP	66	68	70	72	74	76	78	
	Cooling	kW	184.5	191	197.5	204	209.5	215	220.5	
	Heating	kW	184.5	191	197.5	204	209.5	215	220.5	
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	
	Cooling	Rated power input	kW	60.48	62.99	65.50	68.01	72.56	77.11	81.67
		Max. power input	kW	85.50	86.10	86.70	87.30	96.00	104.70	113.40
		Rated current	A	102.18	106.39	110.60	114.82	122.50	130.19	137.87
		Max. current	A	144.34	145.35	146.37	147.38	160.16	172.95	185.73
	Heating	Rated power input	kW	55.92	56.71	57.50	58.29	65.11	71.93	78.75
		Max. power input	kW	76.50	77.50	78.50	79.50	83.40	87.30	91.20
		Rated current	A	94.47	95.78	97.09	98.40	111.28	124.16	137.04
		Max. current	A	129.15	130.84	132.52	134.21	140.80	147.38	153.96
	EER		3.05	3.03	3.02	3.00	2.89	2.79	2.70	
	COP		3.30	3.37	3.43	3.50	3.22	2.99	2.80	
	SEER		6.54	5.83	5.83	5.83	4.9	4.9	4.9	
	SCOP		4.21	4.17	4.17	4.17	3.5	3.5	3.5	
	η <sub>sc</sub>	%	258.6	230.2	230.2	230.2	193	193	193	
η <sub>sh</sub>	%	165.4	163.8	163.8	163.8	137	137	137		
Performance	Air flow (H)	m <sup>3</sup> /h	54000	54000	54000	54000	55000	56000	57000	
	Sound pressure level (H)	dB(A)	66	66	66	67	67	67	67	
	Sound power level (H)	dB(A)	95	95	95	95	95	95	95	
Installation	Dimension(W*H*D)	mm	1410/1690/750+1410/1690/750+1410/1690/750			1410/1690/750+1410/1690/750+1410/1690/750				
	Packing (W*H*D)	mm	1515/1858/850+1515/1858/850+1515/1858/850			1515/1858/850+1515/1858/850+1515/1858/850				
	Net weight	kg	1110	1110	1110	1110	1110	1110	1110	
	Gross weight	kg	1200	1200	1200	1200	1200	1200	1200	
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC				
	Compressor type		DC INV. SCROLL			DC INV. SCROLL				
	Compressor quantity		6INV	6INV	6INV	6INV	6INV	6INV	6INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	30	30	30	30	30	30	30	
	Refrigerant liquid pipe	mm	19.05	22.2	22.2	22.2	22.2	22.2	22.2	
	Refrigerant gas pipe	mm	41.3	44.5	44.5	44.5	44.5	44.5	44.5	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50							
	Heating	°C	-23-21							

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB, in heating, indoor temp is 20°C DB, in heating, outdoor temp is 7°C DB/6°CWB)



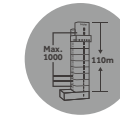
# 3/380~415/50/60



AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV80IMVEVA	AV82IMVEVA	AV84IMVEVA	AV86IMVEVA	AV88IMVEVA	AV90IMVEVA	AV92IMVEVA	
Combination model			AV20IMVEVA	AV20IMVEVA	AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV24IMVEVA	
			AV20IMVEVA	AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	
			AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	
			AV20IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	AV22IMVEVA	
Capacity	Capacity range	HP	80	82	84	86	88	90	92	
	Cooling	kW	224	229.5	235	240.5	246	252.5	259	
	Heating	kW	224	229.5	235	240.5	246	252.5	259	
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	
	Cooling	Rated power input	kW	66.47	70.01	73.55	77.10	80.64	83.15	85.66
		Max. power input	kW	100.40	103.80	107.20	110.60	114.00	114.60	115.20
		Rated current	A	112.21	118.22	124.23	130.23	136.24	140.45	144.66
		Max. current	A	169.50	175.24	180.98	186.72	192.46	193.47	194.48
	Heating	Rated power input	kW	58.64	62.62	66.60	70.58	74.56	75.35	76.14
		Max. power input	kW	90.80	93.60	96.40	99.20	102.00	103.00	104.00
		Rated current	A	98.99	105.74	112.48	119.22	125.96	127.27	128.58
		Max. current	A	153.29	158.02	162.74	167.47	172.20	173.89	175.57
	EER		3.37	3.28	3.19	3.12	3.05	3.04	3.02	
	COP		3.82	3.67	3.53	3.41	3.30	3.35	3.40	
	SEER		6.75	6.54	6.54	6.54	6.54	5.83	5.83	
	SCOP		4.2	4.2	4.2	4.2	4.21	4.17	4.17	
	η <sub>sc</sub>	%	267	258.6	258.6	258.6	258.6	230.2	230.2	
η <sub>sh</sub>	%	165	165	165	165	165.4	163.8	163.8		
Performance	Air flow (H)	m <sup>3</sup> /h	68000	69000	70000	71000	72000	72000	72000	
	Sound pressure level (H)	dB(A)	67	67	67	67	67	67	68	
	Sound power level (H)	dB(A)	94	95	95	96	96	96	96	
Installation	Dimension(W*H*D)	mm	1410/1690/750+1410/1690/750+1410/1690/750+1410/1690/750			1410/1690/750+1410/1690/750+1410/1690/750+1410/1690/750				
	Packing (W*H*D)	mm	1515/1858/850+1515/1858/850+1515/1858/850+1515/1858/850			1515/1858/850+1515/1858/850+1515/1858/850+1515/1858/850				
	Net weight	kg	1480	1480	1480	1480	1480	1480	1480	
	Gross weight	kg	1600	1600	1600	1600	1600	1600	1600	
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC				
	Compressor type		DC INV. SCROLL			DC INV. SCROLL				
	Compressor quantity		8INV	8INV	8INV	8INV	8INV	8INV	8INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charged volume*3	kg	40	40	40	40	40	40	40	
	Refrigerant liquid pipe	mm	22.2	22.2	22.2	25.4	25.4	25.4	25.4	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	50.8	50.8	50.8	50.8	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50							
	Heating	°C	-23-21							

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB, in heating, indoor temp is 20°C DB, outdoor temp is 7°C DB/6°CWB)

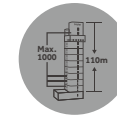


AV08IMVEVA  
AV10IMVEVA  
AV12IMVEVA  
AV14IMVEVA  
AV16IMVEVA



AV18IMVEVA  
AV20IMVEVA  
AV22IMVEVA  
AV24IMVEVA  
AV26IMVEVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV94IMVEVA	AV96IMVEVA	AV98IMVEVA	AV100IMVEVA	AV102IMVEVA	AV104IMVEVA	
Combination model			AV24IMVEVA	AV26IMVEVA	AV24IMVEVA	AV26IMVEVA	AV26IMVEVA	AV26IMVEVA	
			AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV26IMVEVA	AV26IMVEVA	AV26IMVEVA	
			AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV26IMVEVA	AV26IMVEVA	
			AV22IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV24IMVEVA	AV26IMVEVA	
Capacity	Capacity range	HP	94	96	98	100	102	104	
	Cooling	kW	265.5	272	277.5	283	288.5	294	
	Heating	kW	265.5	272	277.5	283	288.5	294	
Electrical Parameters	Power supply	PhV/Hz	3/380-415/50/60		3/380-415/50/60		3/380-415/50/60		
	Cooling	Rated power input	kW	88.17	90.68	95.23	99.78	104.34	108.89
		Max. power input	kW	115.80	116.40	125.10	133.80	142.50	151.20
		Rated current	A	148.88	153.09	160.77	168.46	176.14	183.83
		Max. current	A	195.49	196.51	209.29	222.07	234.86	247.64
	Heating	Rated power input	kW	76.93	77.71	84.54	91.36	98.18	105.00
		Max. power input	kW	105.00	106.00	109.90	113.80	117.70	121.60
		Rated current	A	129.89	131.20	144.08	156.96	169.84	182.72
		Max. current	A	177.26	178.95	185.53	192.12	198.70	205.29
	EER			3.01	3.00	2.91	2.84	2.77	2.70
	COP			3.45	3.50	3.28	3.10	2.94	2.80
	SEER			5.83	5.83	4.9	4.9	4.9	4.9
	SCOP			4.17	4.17	3.5	3.5	3.5	3.5
	ηsc	%		230.2	230.2	193	193	193	193
ηsh	%		163.8	163.8	137	137	137	137	
Performance	Air flow (H)	m <sup>3</sup> /h	72000	72000	73000	74000	75000	76000	
	Sound pressure level (H)	dB(A)	68	67	67	68	68	68	
	Sound power level (H)	dB(A)	96	96	96	96	96	96	
Dimension(W*H*D)	mm	1410/1690/750+1410/1690/750+1410/1690/750+1410/1690/750			1410/1690/750+1410/1690/750+1410/1690/750+1410/1690/750				
Packing (W*H*D)	mm	1515/1858/850+1515/1858/850+1515/1858/850+1515/1858/850			1515/1858/850+1515/1858/850+1515/1858/850+1515/1858/850				
Net weight	kg	1480	1480	1480	1480	1480	1480		
Gross weight	kg	1600	1600	1600	1600	1600	1600		
Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC				
Compressor type		DC INV. SCROLL			DC INV. SCROLL				
Compressor quantity		8INV	8INV	8INV	8INV	8INV	8INV		
Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A		
Refrigerant charged volume*3	kg	40	40	40	40	40	40		
Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4		
Refrigerant gas pipe	mm	50.8	50.8	54.1	54.1	54.1	54.1		
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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90		
Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40		
Max. drop between I.U *3	m	30	30	30	30	30	30		
Standard drop between I.U *4	m	18	18	18	18	18	18		
External static pressure	Pa	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum indoor units	Piece	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50					-5-50	
	Heating	°C	-23-21					-23-21	

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor temp 35°C DB/24WB, in heating, indoor temp is 20°C DB, in heating, outdoor temp is 7°C DB/6°CWB)

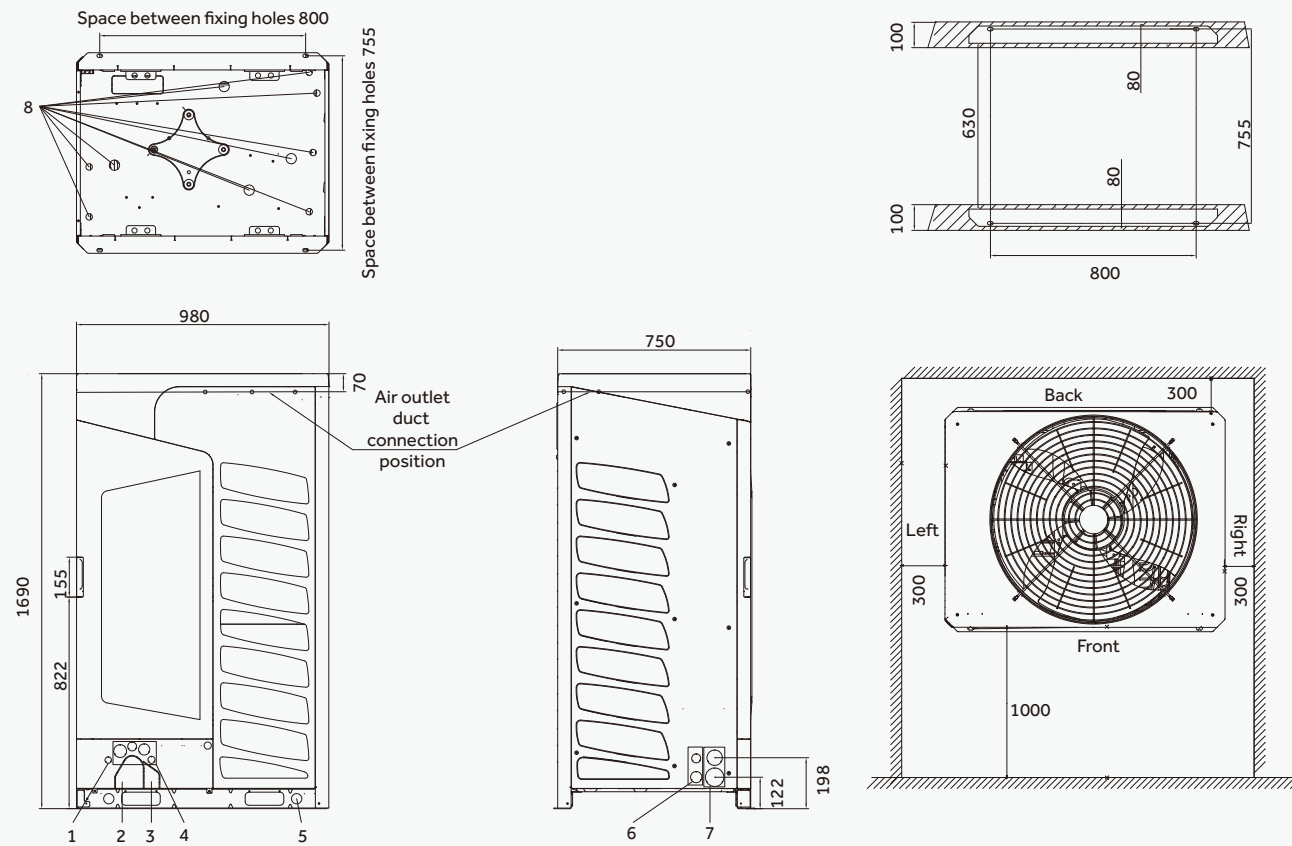
If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.  
Standard design and production in the factory.  
If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.  
Standard design and production in the factory.



# Dimensions

AV08IMVEVA AV10IMVEVA AV12IMVEVA AV14IMVEVA AV16IMVEVA

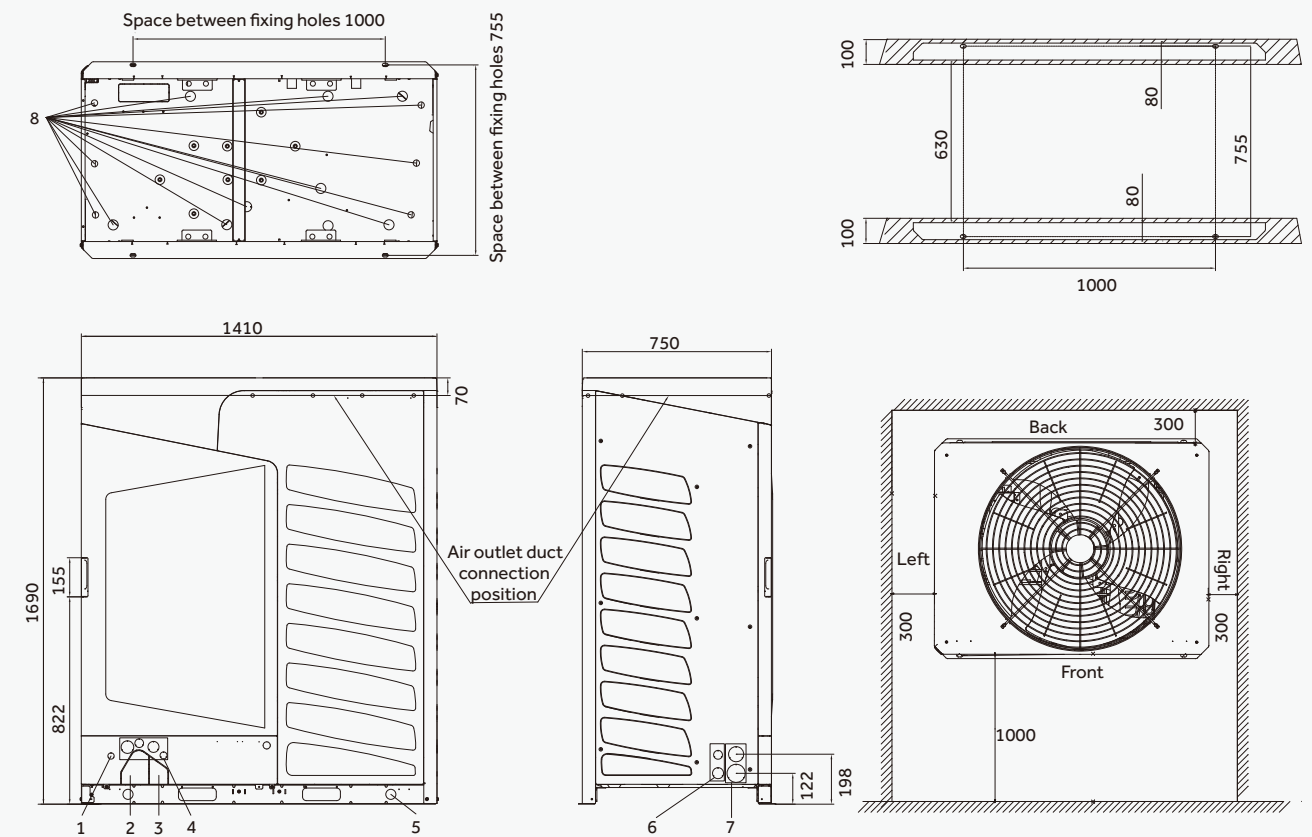
Unit:mm



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	

AV18IMVEVA AV20IMVEVA AV22IMVEVA AV24IMVEVA AV26IMVEVA

Unit:mm



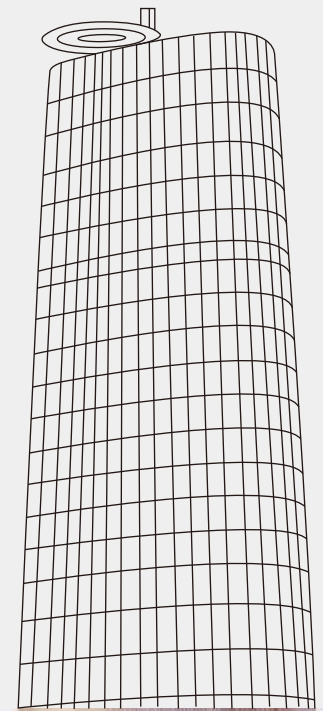
No.	Name	Remark
1	Signal line hole Ø25	Using the rubber plug in the unit's attachment for protection
2	Pipe outlet for 2-pipe system	
3	Pipe outlet for 3-pipe system	
4	Power supply hole	According to the wire diameter size to choose the appropriate line hole, and using the line sheath in the unit's attachment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



**MRV5-H**  
DC INVERTER

**037** Features & Benefits

**041** MRV 5-H Outdoor





# MRV5-H



## High Efficiency

### 2 stage sub-cooling

Sub-cooling degree is up to 30°C, improve the cooling and heating capacity.



### Speed-less DC fan motor

Standard with speed-less DC fan motor, compared with normal type, the motor efficiency is increased by 17%.



## Super Comfort

### Continuous heating technology

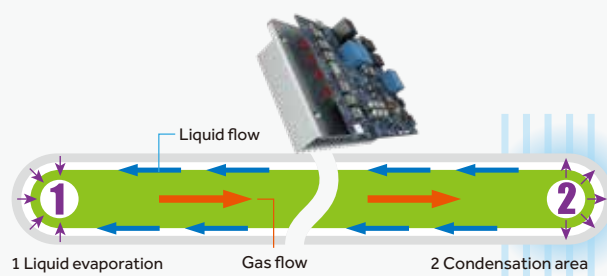
Intelligent defrosting technology, realizing continuous heating.



## High Efficiency

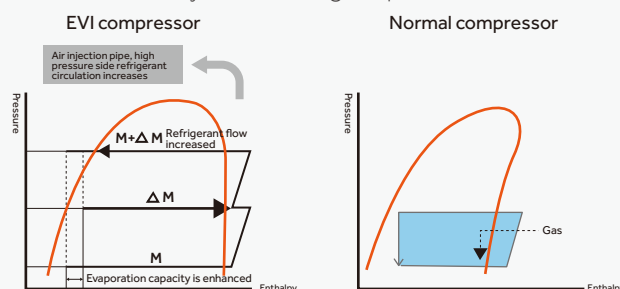
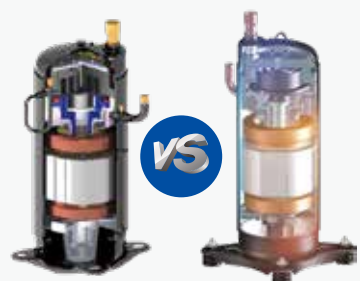
### Super conducting refrigerant cooling technology

Adopt innovative super heat conduction cooling PCB technology, heat transfer media conduct heat 100 times better than copper. Does not occupy the refrigerant amount of the system, no additional refrigerant loss. At the same time, this cooling mode will not affect the rotation of the electric control box, easy maintain.



### EVI compressor

Standard with EVI compressor, increase the refrigerant circulation by 15%, strong output.





# Super Comfort

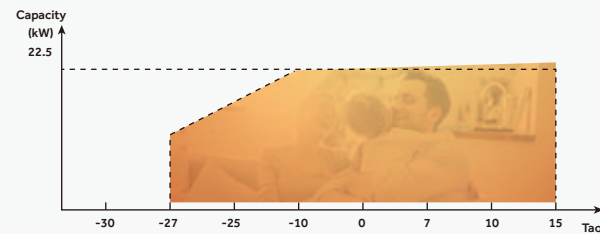
## Wide operation Temp.

Cooling: -5°C~52°C Heating: -27°C~21°C



## Reliable performance in low temperature

In the low temperature, compared with the standard series, the heating capacity increased by 10%. The heating capacity is 100% under -10°C.



## 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 Convenience

## 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.



## 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.



## 4-way pipe connection

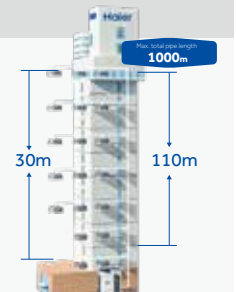
You can freely choose the front, back, left side, right side of the unit to connect the pipe, easy to install and design.



## Long pipe length, high height drop

Total pipe length 1000m;  
Drop length 110m.

**No.1**  
High Drop Tower





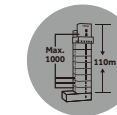
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



Intelligent Defrosting  
Technology



Model			AV08NMVETA	AV10NMVETA	AV12NMVETA	AV14NMVETA	AV16NMVETA	AV18NMVETA	AV20NMVETA	AV22NMVETA	AV24NMVETA	AV26NMVETA	
Combination model			/	/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24	26	
	Cooling	kW	25.2	28.0	33.5	40.0	45.0	50.4	56.0	61.5	68.0	73.5	
	Heating	kW	25.2	28.0	33.5	40.0	45.0	50.4	56.0	61.5	68.0	73.5	
Electrical Parameters	Power supply	PhV/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	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	6.24	7.37	10.15	11.76	13.24	15.60	16.62	20.16	22.67	27.22
		Max. power input	kW	14.3	15.1	16.32	17.58	20.69	25.9	28.91	31.82	32.81	37.8
		Rated current	A	10.53	12.44	17.14	19.86	22.34	26.34	28.05	34.04	38.27	45.96
		Max. current	A	23.81	25.14	27.17	29.27	34.50	40.30	46.30	51.91	54.12	61.91
	Heating	Rated power input	kW	5.25	5.96	8.59	10.00	10.47	13.19	14.66	18.64	19.43	22.97
		Max. power input	kW	11.69	12.19	12.69	16.10	19.56	21.93	24.70	25.69	30.40	32.45
		Rated current	A	8.86	10.06	14.50	16.88	17.67	22.27	24.75	31.46	32.80	38.78
		Max. current	A	19.47	20.30	21.13	26.81	32.57	36.51	41.13	42.78	50.62	54.03
		SEER		7.25	7.09	6.69	6.6	6.36	6.78	6.75	6.54	5.83	5.15
		SCOP		4.41	4.31	4.31	4.12	4.05	4.15	4.2	4.21	4.17	3.5
		ηsc	%	287	281	265	261	251	268	267	259	230	203
	ηsh	%	173	169	169	162	159	163	165	165	164	137	
Performance	Air flow (H)	m <sup>3</sup> /h	11000	11000	12000	13500	13500	17000	17000	18000	18000	19000	
	Sound power level (H)	dB(A)	81	82	88	88	88	88	88	88	88	90	90
Installation	External dimensions(W/D/H)	mm	980/750/1690	980/750/1690	980/750/1690	980/750/1690	980/750/1690	1410/750/1690	1410/750/1690	1410/750/1690	1410/750/1690	1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1070/850/1858	1070/850/1858	1070/850/1858	1070/850/1858	1070/850/1858	1515/850/1858	1515/850/1858	1515/850/1858	1515/850/1858	1515/850/1858	
	Net/Shipping weight	kg	255/280	255/280	255/280	255/280	255/280	385/410	385/410	385/410	385/410	385/410	
	Compressor type		DC INV. SCROLL				DC INV. SCROLL						
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC						
	Compressor quantity		1INV	1INV	1INV	1INV	1INV	2INV	2INV	2INV	2INV	2INV	2INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge (follow specification)	kg	10	10	10	10	10	10	10	10	10	10	10
	Refrigerant liquid pipe (follow specification)	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	15.88	15.88
	Refrigerant gas pipe (follow specification)	mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58	28.58	28.58
	Max. total pipe length	m	1000	1000	1000	1000	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	260/220	260/220	260/220	260/220
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	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	m	30	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	110	110	110	110	110	110	110	110	110	110	110
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		13	16	20	24	27	30	33	36	40	43	
Working Temp.	Cooling	°C	-5-52				-5-52						
	Heating	°C	-27-21				-27-21						

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor temp 35°C DB/24WB; in heating, indoor temp. is 20°C DB, in heating, outdoor temp. is 7°C DB/6°C WB)

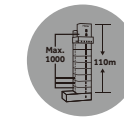
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



Intelligent Defrosting  
Technology

Model			AV28NMVETA	AV30NMVETA	AV32NMVETA	AV34NMVETA	AV36NMVETA	AV38NMVETA	
Combination model			AV14NMVETA	AV14NMVETA	AV16NMVETA	AV16NMVETA	AV18NMVETA	AV18NMVETA	
			AV14NMVETA	AV16NMVETA	AV16NMVETA	AV18NMVETA	AV18NMVETA	AV20NMVETA	
			/	/	/	/	/	/	
			/	/	/	/	/	/	
Capacity	Capacity range	HP	28	30	32	34	36	38	
	Cooling	kW	80.0	85.0	90.0	95.4	100.8	106.4	
	Heating	kW	80.0	85.0	90.0	95.4	100.8	106.4	
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	
	Cooling	Rated power input	kW	23.53	25.00	26.47	28.84	31.21	32.22
		Max. power input	kW	35.16	38.27	41.38	46.59	51.8	54.81
		Rated current	A	39.72	42.21	44.69	48.69	52.68	54.40
		Max. current	A	58.54	63.77	69.00	74.80	80.60	86.60
	Heating	Rated power input	kW	20.00	20.47	20.93	23.66	26.39	27.85
		Max. power input	kW	32.20	35.66	39.12	41.49	43.86	46.63
		Rated current	A	33.76	34.55	35.33	39.94	44.55	47.02
		Max. current	A	53.61	59.38	65.14	69.08	73.03	77.64
		SEER		6.6	6.36	6.36	6.36	6.78	6.75
		SCOP		4.12	4.05	4.05	4.05	4.15	4.15
	ηsc	%	261	251	251	251	268	267	
	ηsh	%	162	159	159	159	163	163	
Performance	Air flow (H)	m³/h	27000	27000	27000	30500	34000	34000	
	Sound power level (H)	dB(A)	91	91	91	91	91	91	
Installation	External dimensions(W/D/H)	mm	980/750/1690+980/750/1690	980/750/1690+980/750/1690		980/750/1690+1410/750/1690		1410/750/1690+1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1070/850/1858+1070/850/1858	1070/850/1858+1070/850/1858		1070/850/1858+1485/850/1858		1485/850/1858+1485/850/1858	
	Net/Shipping weight	kg	255/280+255/280	255/280+255/280	255/280+255/280	255/280+385/410	385/410+385/410		
	Compressor type		DC INV. SCROLL	DC INV. SCROLL				DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC					
	Compressor quantity		2INV	2INV	2INV	3INV	4INV	4INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge (follow specification)	kg	20	20	20	20	20	20	
	Refrigerant liquid pipe (follow specification)	mm	15.88	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe(follow specification)	mm	28.58	31.8	31.8	31.8	38.1	38.1	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		47	50	53	56	59	63	
Working Temp.	Cooling	°C	-5~52				-5~52		
	Heating	°C	-27~21				-27~21		

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.

\* All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor temp 35°C DB/24WB; in heating, indoor temp is 20°C DB; in heating, outdoor temp is 7°C DB/6°CWB)



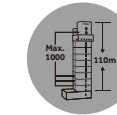
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



Intelligent Defrosting  
Technology

Model			AV40NMVETA	AV42NMVETA	AV44NMVETA	AV46NMVETA	AV48NMVETA	AV50NMVETA	AV52NMVETA	AV54NMVETA	AV56NMVETA	
Combination model			AV20NMVETA	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA	AV26NMVETA	AV18NMVETA	AV18NMVETA
			AV20NMVETA	AV22NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA	AV26NMVETA	AV26NMVETA	AV18NMVETA	AV18NMVETA
			/	/	/	/	/	/	/	/	AV18NMVETA	AV20NMVETA
			/	/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	40	42	44	46	48	50	52	54	56	
	Cooling	kW	112.0	117.5	123.0	129.5	136.0	141.5	147.0	151.2	156.8	
	Heating	kW	112.0	117.5	123.0	129.5	136.0	141.5	147.0	151.2	156.8	
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	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Cooling	Rated power input	kW	33.23	36.78	40.33	42.83	45.33	49.89	54.44	46.81	47.82
		Max. power input	kW	57.82	60.73	63.64	64.63	65.62	70.61	75.6	77.7	80.71
		Rated current	A	56.11	62.09	68.08	72.31	76.53	84.22	91.91	79.03	80.74
		Max. current	A	92.60	98.21	103.82	106.03	108.24	116.03	123.82	120.90	126.90
	Heating	Rated power input	kW	29.32	33.30	37.27	38.06	38.86	42.40	45.94	39.58	41.05
		Max. power input	kW	49.40	50.39	51.38	56.09	60.80	62.85	64.90	65.79	68.56
		Rated current	A	49.50	56.21	62.92	64.26	65.60	71.58	77.55	66.82	69.30
		Max. current	A	82.25	83.90	85.55	93.39	101.23	104.65	108.06	109.54	114.15
	SEER			6.75	6.54	6.54	5.83	5.83	5.15	5.15	6.78	6.75
	SCOP			4.2	4.2	4.21	4.17	4.17	3.5	3.5	4.15	4.15
	ηsc	%		267	259	259	230	230	203	203	268	267
	ηsh	%		165	165	165	164	164	137	137	163	163
Performance	Air flow (H)	m³/h	34000	35000	36000	36000	36000	37000	38000	51000	51000	
	Sound power level (H)	dB(A)	91	91	91	92	93	93	93	93	93	
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	
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858				1485/850/1858+1485/850/1858				1485/850/1858+1485/850/1858+1485/850/1858	
	Net/Shipping weight	kg	385/410+385/410				385/410+385/410				385/410+385/410+385/410	
	Compressor type		DC INV. SCROLL				DC INV. SCROLL					
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC					
	Compressor quantity		4INV	4INV	4INV	4INV	4INV	4INV	4INV	4INV	6INV	6INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge (follow specification)	kg	20	20	20	20	20	20	20	20	30	30
	Refrigerant liquid pipe (follow specification)	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe (follow specification)	mm	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1	38.1
	Max. total pipe length	m	1000	1000	1000	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	260/220	260/220	260/220
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Standard drop between I.U.&O.U (O.U up/down) *2	m	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	m	30	30	30	30	30	30	30	30	30	30
Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-52				-5-52					
	Heating	°C	-27-21				-27-21					

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor temp 35°C DB/24WB; in heating, indoor temp is 20°C DB, in heating, outdoor temp is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



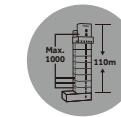
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



Intelligent Defrosting  
Technology

Model			AV58NMVETA	AV60NMVETA	AV62NMVETA	AV64NMVETA	AV66NMVETA	AV68NMVETA	AV70NMVETA	AV72NMVETA	AV74NMVETA	
Combination model			AV18NMVETA	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA
			AV20NMVETA	AV20NMVETA	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA
			AV20NMVETA	AV20NMVETA	AV20NMVETA	AV20NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA
			/	/	/	/	/	/	/	/	/	/
Capacity	Capacity range	HP	58	60	62	64	66	68	70	72	74	
	Cooling	kW	162.4	168.0	173.5	179.0	184.5	191.0	197.5	204.0	209.5	
	Heating	kW	162.4	168.0	173.5	179.0	184.5	191.0	197.5	204.0	209.5	
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	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	48.84	49.85	53.40	56.95	60.49	62.99	65.50	68.00	72.56
		Max. power input	kW	83.72	86.73	89.64	92.55	95.46	96.45	97.44	98.43	103.42
		Rated current	A	82.45	84.16	90.15	96.14	102.12	106.35	110.57	114.80	122.49
		Max. current	A	132.90	138.90	144.51	150.12	155.73	157.94	160.15	162.36	170.15
	Heating	Rated power input	kW	42.51	43.98	47.96	51.93	55.91	56.70	57.49	58.29	61.83
		Max. power input	kW	71.33	74.10	75.09	76.08	77.08	81.78	86.49	91.20	93.25
		Rated current	A	71.77	74.25	80.96	87.67	94.39	95.72	97.06	98.40	104.37
		Max. current	A	118.76	123.38	125.03	126.68	128.33	136.17	144.01	151.85	155.26
	SEER			6.75	6.75	6.54	6.54	6.54	5.83	5.83	5.83	5.15
	SCOP			4.15	4.2	4.2	4.2	4.21	4.17	4.17	4.17	3.5
	ηsc	%		267	267	259	259	259	230	230	230	203
	ηsh	%		163	165	165	165	165	164	164	164	137
Performance	Air flow (H)	m³/h	51000	51000	52000	53000	54000	54000	54000	54000	55000	
	Sound power level (H)	dB(A)	93	93	93	93	93	94	94	95	95	
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					
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858				1485/850/1858+1485/850/1858+1485/850/1858					
	Net/Shipping weight	kg	385/410+385/410+385/410				385/410+385/410+385/410					
	Compressor type		DC INV. SCROLL				DC INV. SCROLL					
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC					
	Compressor quantity		6INV	6INV	6INV	6INV	6INV	6INV	6INV	6INV	6INV	6INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge (follow specification)	kg	30	30	30	30	30	30	30	30	30	30
	Refrigerant liquid pipe (follow specification)	mm	19.05	19.05	19.05	19.05	19.05	22.2	22.2	22.2	22.2	22.2
	Refrigerant gas pipe (follow specification)	mm	41.3	41.3	41.3	41.3	41.3	44.5	44.5	44.5	44.5	44.5
	Max. total pipe length	m	1000	1000	1000	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	260/220	260/220	260/220
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Standard drop between I.U.&O.U (O.U up/down) *2	m	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	m	30	30	30	30	30	30	30	30	30	30
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18	18
	External static pressure	Pa	110	110	110	110	110	110	110	110	110	110
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-52				-5-52					
	Heating	°C	-27-21				-27-21					

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\*4 All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor temp 35°C DB/24WB; in heating, indoor temp is 20°C DB, in heating, outdoor temp is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.  
Standard design and production in the factory.



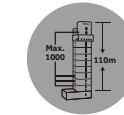
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



Intelligent Defrosting  
Technology

Model			AV76NMVETA	AV78NMVETA	AV80NMVETA	AV82NMVETA	AV84NMVETA	AV86NMVETA	AV88NMVETA	AV90NMVETA	AV92NMVETA	
Combination model			AV26NMVETA	AV26NMVETA	AV20NMVETA	AV20NMVETA	AV20NMVETA	AV20NMVETA	AV22NMVETA	AV24NMVETA	AV24NMVETA	
			AV26NMVETA	AV26NMVETA	AV20NMVETA	AV20NMVETA	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV24NMVETA	
			AV24NMVETA	AV26NMVETA	AV20NMVETA	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	
			/	/	AV20NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	AV22NMVETA	
Capacity	Capacity range	HP	76	78	80	82	84	86	88	90	92	
	Cooling	kW	215.0	220.5	224.0	229.5	235.0	240.5	246.0	252.5	259.0	
	Heating	kW	215.0	220.5	224.0	229.5	235.0	240.5	246.0	252.5	259.0	
	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	3/380-415/50/60	3/380-415/50/60	
Electrical Parameters	Cooling	Rated power input	kW	77.11	81.67	66.47	70.02	73.56	77.11	80.66	83.16	85.66
		Max. power input	kW	108.41	113.4	115.64	118.55	121.46	124.37	127.28	128.27	129.26
		Rated current	A	130.18	137.87	112.21	118.20	124.19	130.18	136.16	140.39	144.61
		Max. current	A	177.94	185.73	185.20	190.81	196.42	202.03	207.64	209.85	212.06
	Heating	Rated power input	kW	65.37	68.91	58.64	62.62	66.59	70.57	74.55	75.34	76.13
		Max. power input	kW	95.30	97.35	98.80	99.79	100.78	101.78	102.77	107.48	112.18
		Rated current	A	110.35	116.33	98.99	105.71	112.42	119.13	125.85	127.19	128.52
		Max. current	A	158.67	162.09	164.50	166.15	167.81	169.46	171.11	178.95	186.79
	SEER		5.15	5.15	6.75	6.54	6.54	6.54	6.54	6.54	5.83	5.83
	SCOP		3.5	3.5	4.2	4.2	4.2	4.2	4.21	4.17	4.17	
	ηsc	%	203	203	267	259	259	259	259	230	230	
	ηsh	%	137	137	165	165	165	165	165	164	164	
Performance	Air flow (H)	m³/h	56000	57000	68000	69000	70000	71000	72000	72000	72000	
	Sound power level (H)	dB(A)	95	95	94	94	94	94	94	95	95	
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					
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858				1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858					
	Net/Shipping weight	kg	385/410+385/410+385/410				385/410+385/410+385/410+385/410					
	Compressor type		DC INV. SCROLL				DC INV. SCROLL					
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC					
	Compressor quantity		6INV	6INV	8INV	8INV	8INV	8INV	8INV	8INV	8INV	8INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge (follow specification)	kg	30	30	40	40	40	40	40	40	40	40
	Refrigerant liquid pipe (follow specification)	mm	22.2	22.2	22.2	22.2	22.2	25.4	25.4	25.4	25.4	
	Refrigerant gas pipe (follow specification)	mm	44.5	44.5	44.5	44.5	44.5	50.8	50.8	50.8	50.8	
	Max. total pipe length	m	1000	1000	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	260/220	260/220	
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	30	30	
Standard drop between I.U *4	m	18	18	18	18	18	18	18	18	18		
External static pressure	Pa	110	110	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5~52				-5~52					
	Heating	°C	-27~21				-27~21					

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; in heating, indoor temp is 20°C DB; in heating, outdoor temp is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



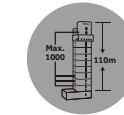
# 3/380~415/50/60



AV08NMVETA  
AV10NMVETA  
AV12NMVETA  
AV14NMVETA  
AV16NMVETA



AV18NMVETA  
AV20NMVETA  
AV22NMVETA  
AV24NMVETA  
AV26NMVETA



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Single Module 26HP,  
Maximum Combination 104HP



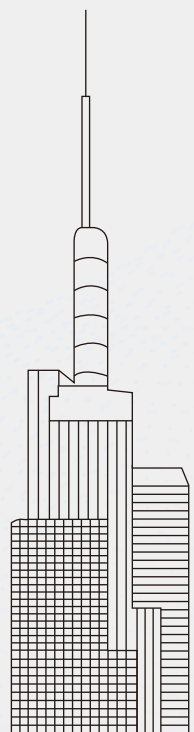
Intelligent Defrosting  
Technology

Model			AV94NMVETA	AV96NMVETA	AV98NMVETA	AV100NMVETA	AV102NMVETA	AV104NMVETA		
Combination model			AV24NMVETA	AV24NMVETA	AV26NMVETA	AV26NMVETA	AV26NMVETA	AV26NMVETA		
			AV24NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA	AV26NMVETA	AV26NMVETA		
			AV24NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA	AV26NMVETA		
			AV22NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA	AV24NMVETA	AV26NMVETA		
Capacity	Capacity range	HP	94	96	98	100	102	104		
	Cooling	kW	265.5	272.0	277.5	283.0	288.5	294.0		
	Heating	kW	265.5	272.0	277.5	283.0	288.5	294.0		
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		
	Cooling	Rated power input	kW	88.16	90.67	95.22	99.78	104.33	108.89	
		Max. power input	kW	130.25	131.24	136.23	141.22	146.21	151.2	
		Rated current	A	148.84	153.06	160.75	168.45	176.14	183.83	
		Max. current	A	214.27	216.48	224.27	232.06	239.85	247.64	
	Heating	Rated power input	kW	76.92	77.71	81.25	84.79	88.33	91.88	
		Max. power input	kW	116.89	121.60	123.65	125.70	127.75	129.80	
		Rated current	A	129.86	131.20	137.17	143.15	149.13	155.10	
		Max. current	A	194.63	202.46	205.88	209.29	212.70	216.12	
		SEER		5.83	5.83	5.15	5.15	5.15	5.15	
		SCOP		4.17	4.17	3.5	3.5	3.5	3.5	
		ηsc	%	230	230	203	203	203	203	
		ηsh	%	164	164	137	137	137	137	
Performance	Air flow (H)	m³/h	72000	72000	73000	74000	75000	76000		
	Sound power level (H)	dB(A)	96	94	95	95	96	96		
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	
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858						1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858	
	Net/Shipping weight	kg	385/410+385/410+385/410+385/410						385/410+385/410+385/410+385/410	
	Compressor type		DC INV. SCROLL						DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC						MITSUBISHI ELECTRIC	
	Compressor quantity		8INV		8INV	8INV	8INV	8INV	8INV	
	Refrigerant type		R410A		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge (follow specification)	kg	40		40	40	40	40	40	
	Refrigerant liquid pipe (follow specification)	mm	25.4		25.4	25.4	25.4	25.4	25.4	
	Refrigerant gas pipe (follow specification)	mm	50.8		50.8	54.1	54.1	54.1	54.1	
	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 I.U.&O.U (O.U down/up) *1	m	110/90		110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U (O.U up/down) *2	m	50/40		50/40	50/40	50/40	50/40	50/40	
Max. drop between I.U *3	m	30		30	30	30	30	30		
Standard drop between I.U *4	m	18		18	18	18	18	18		
External static pressure	Pa	110		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	-5-52		-5-52	-5-52	-5-52	-5-52		
	Heating	°C	-27-21		-27-21	-27-21	-27-21	-27-21		

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor temp 35°C DB/24WB; in heating, indoor Temp. is 20°C DB; in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.





# MRV5-RC

DC INVERTER

**055** Features & Benefits

**058** MRV 5-RC Outdoor





# MRV5-RC

## Advanced Technology

### What is heat recover VRF unit?

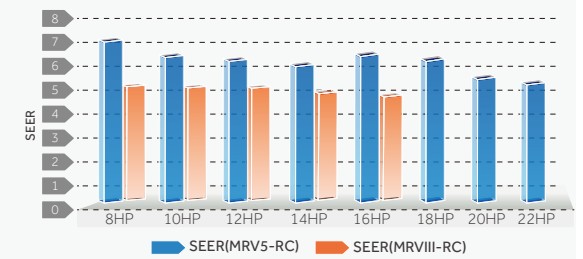
With large capacity full DC inverter compressor, MRV 5-RC can reach single module 22HP, maximum combination 88HP.



## High Efficiency

### Full DC inverter technology

New generation heat recovery MRV, continue the excellent feature of MRV 5. Full DC inverter compressor, speedless inverter DC motor, large diameter fan of 700mm, new 4-way heat exchanger. SEER up to 7.05(8HP), more efficiency. Single module up to 22HP, saving the installation space.



### Two stage cooling technology

Two stage cooling of the MRV 5-RC, the subcooling degree is up to 30 °C, which greatly improves the cooling and heating capacity of the system, reduces the pressure loss of the refrigerant of the system, improve the system capability and the long piping capability.

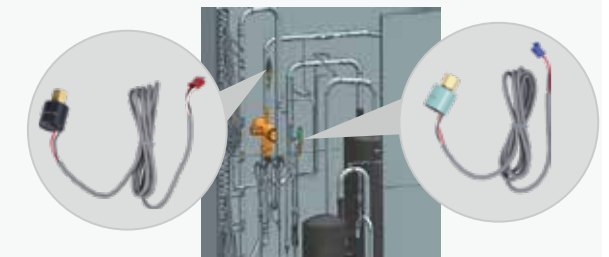


Condenser cooling

Plate heat exchanger cooling

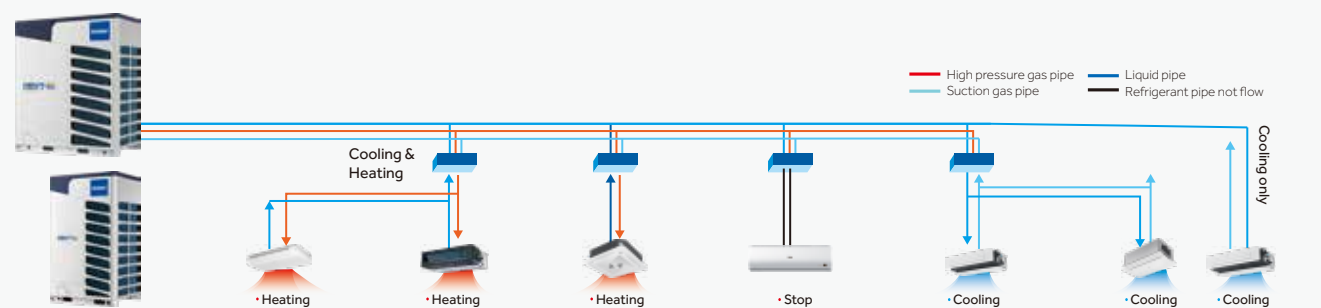
### Twin pressure sensors

High pressure sensor used to real-time monitor the high pressure change. Protecting MRV 5-RC against the impact of high pressure momentary changes. Low pressure sensor used to real-time feedback compressor suction pressure, so our unit rapidly respond the change of room load.



## System Introduction

### Variable operation mode in one system



### What is heat recovery VRF unit?

For the heat pump series, the units within one system can only work in the same mode. Now Haier heat recovery series, due to heat recovery pipeline design of outdoor unit and the new valve box, can achieve cooling and heating simultaneously in one system. In addition, multiple indoor unit types are provide to meet various project demands.





# High Efficiency

## Three layers fin and new four-way heat exchanger

New three layers fin and four way heat exchanger, increase the heat exchange area, realize big capacity.



# Easy Installation

## VP (valve pipe) box structure overview

Overview

- Specially designed for MRV 5-RC, volume is small to 0.02m<sup>3</sup> (for VP1 box), 0.05m<sup>3</sup> (for VP4 box). Greatly reduced the installation space.
- Individual valve and pipe box for heat recovery.
- The valve box can be connected in series, reduce the use of diverging pipes and reduce the installation cost.



Model name	Max. capacity of indoor (kw)	Power supply	Max. indoor units	Dimension
VP1-112C	xs11.2	1/220-240/50/60	5	388*200*277
VP1-180C	11.2<xs18	1/220-240/50/60	8	388*200*277
VP1-280C	18<xs28	1/220-240/50/60	8	388*200*277
VP4-450C	≤45	1/220-240/50/60	20	396x290x411

## Auto addressing indoor units and oil balancing

Continue auto addressing indoor units and oil balancing of MRV 5-RC, improving the easy installation of system, greatly reduce the lab.



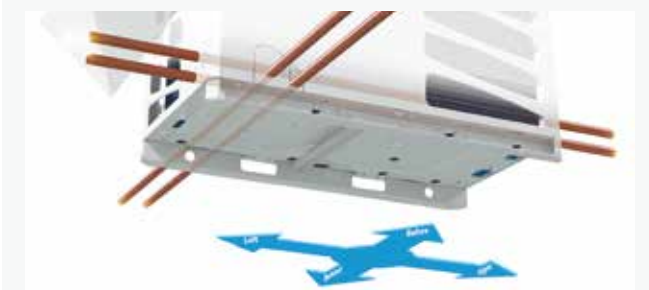
## Door-type electric control box

Door-type design, the maintenance panel could be opened like a door, no need to remove the panel, more convenience.



## Four-way pipe connection

4-way (front, back, left & right) pipe connection, according to the actual installation conditions to choice pipe connection flexible.



Model		AV08IMVURA	AV10IMVURA	AV12IMVURA	AV14IMVURA		
Combination model		/	/	/	/		
		/	/	/	/		
		/	/	/	/		
		/	/	/	/		
Capacity	Capacity range	HP	8	10	12	14	
	Cooling	kW	22.4	28	33.5	40	
	Heating	kW	22.4	28	33.5	40	
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	
	Cooling	Rated power input	kW	5.83	7.67	9.94	12.31
		Max power input	kW	12.80	13.80	18.20	19.20
		Rated current	A	9.63	12.67	16.43	20.33
		Max current	A	21.14	22.79	30.06	31.71
	Heating	Rated power input	kW	5.38	6.67	8.77	10.53
		Max power input	kW	11.50	12.50	17.40	18.40
		Rated current	A	8.88	11.01	14.48	17.38
		Max current	A	18.99	20.64	28.74	30.39
	SEER			6.12	6.68	6.46	6.37
	SCOP			3.82	3.94	3.99	3.86
	ηs.c	%		242	264	255	252
	ηs.h	%		150	155	157	151
Performance	Air flow (H)	m <sup>3</sup> /h	12000	12000	13500	13500	
	Sound pressure level (H)	dB(A)	57	58	60	61	
Installation	External dimensions(W/D/H)	mm	980/750/1690				
	Shipping dimensions(W/D/H)	mm	1070/850/1858				
	Net/Shipping weight	kg	246/271		257/282		
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor brand		MITSUBISHI	MITSUBISHI	MITSUBISHI	MITSUBISHI	
			ELECTRIC	ELECTRIC	ELECTRIC	ELECTRIC	
	Compressor quantity		1INV	1INV	1INV	1INV	
	Refrigerant type		R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10	10	10	10	
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	
	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	
	Refrigerant high gas pipe	mm	19.05	19.05	22.22	22.22	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90		
Standard drop between I.U.&O.U. (O.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		
External static pressure	Pa	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		13	16	20	24	
Working Temp.	Cooling	°C	-5-50				
	Heating	°C	-23-21				

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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Standard design and production in the factory.  
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Standard design and production in the factory.



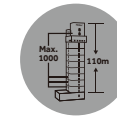


AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA

# 3/380~415/50/60



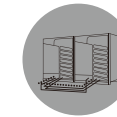
Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV16IMVURA	AV18IMVURA	AV20IMVURA	AV22IMVURA	AV24IMVURA	AV26IMVURA	AV28IMVURA	AV30IMVURA	
Combination model			/	/	/	/	AV12IMVURA	AV12IMVURA	AV14IMVURA	AV14IMVURA	
			/	/	/	/	AV12IMVURA	AV14IMVURA	AV14IMVURA	AV16IMVURA	
			/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	16	18	20	22	24	26	28	30	
	Cooling	kW	45	50	56	60	67.0	73.5	80.0	85.0	
	Heating	kW	45	50	56	60	67.0	73.5	80.0	85.0	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	13.93	16.13	18.67	20.00	19.88	22.25	24.62	26.24
		Max power input	kW	25.10	28.50	32.00	33.00	36.400	37.40	38.40	44.30
		Rated current	A	23.01	26.64	30.83	33.03	32.83	36.74	40.65	43.33
		Max current	A	41.45	47.07	52.85	54.50	60.11	61.77	63.42	73.16
	Heating	Rated power input	kW	11.39	13.70	15.77	17.91	17.54	19.30	21.05	21.92
		Max power input	kW	22.70	25.50	29.40	30.40	34.800	35.80	36.80	41.10
		Rated current	A	18.81	22.62	26.05	29.58	28.97	31.87	34.77	36.20
		Max current	A	37.49	42.11	48.55	50.21	57.472	59.12	60.78	67.88
	SEER		6.86	6.48	4.73	5.63	6.46	6.37	6.37	6.37	6.37
	SCOP		4.21	3.99	3.91	3.50	3.99	3.86	3.86	3.86	3.86
	ηs.c	%	271	256	233	222	255	252	252	252	252
ηs.h	%	165	157	154	137	157	151	151	151	151	
Performance	Air flow (H)	m <sup>3</sup> /h	17000	17000	19000	19000	27000	27000	27000	30500	
	Sound pressure level (H)	dB(A)	62	63	63	64	63	63.5	64	64.5	
Installation	External dimensions(W/D/H)	mm	1410/750/1690			1410/750/1690		980/750/1690+980/750/1690			980/750/1690+1410/750/1690
	Shipping dimensions(W/D/H)	mm	1485/850/1858			1485/850/1858		1070/850/1858+1070/850/1858			1070/850/1858+1485/850/1858
	Net/Shipping weight	kg	366/395			375/404		246/271+246/271			246/271+366/395
	Compressor type		DC INV. SCROLL	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	MITSUBISHI ELECTRIC	
	Compressor quantity		2INV	2INV	2INV	2INV	2INV	2INV	2INV	3INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10	10	10	10	20	20	20	20	
	Refrigerant liquid pipe	mm	12.7	15.88	15.88	15.88	15.88	15.88	15.88	19.05	
	Refrigerant gas pipe	mm	28.58	28.58	28.58	28.58	28.58	28.58	28.58	31.8	
	Refrigerant high gas pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	28.58	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		27	30	33	36	40	43	47	50	
Working Temp.	Cooling	°C	-5-50			-5-50					
	Heating	°C	-23-21			-23-21					

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



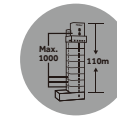


AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV32IMVURA	AV34IMVURA	AV36IMVURA	AV38IMVURA	AV40IMVURA	AV42IMVURA	AV44IMVURA	AV46IMVURA	
Combination model			AV16IMVURA	AV16IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	AV20IMVURA	AV22IMVURA	AV14IMVURA	
			AV16IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	AV20IMVURA	AV22IMVURA	AV22IMVURA	AV16IMVURA	
			/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	32	34	36	38	40	42	44	46	
	Cooling	kW	90.0	95.0	100.0	106.0	112.0	116.0	120.0	130.0	
	Heating	kW	90.0	95.0	100.0	106.0	112.0	116.0	120.0	130.0	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	27.86	30.06	32.26	33.36	34.46	37.23	40.00	40.17
		Max power input	kW	50.20	53.60	57.00	60.50	64.00	65.00	66.00	69.40
		Rated current	A	46.02	49.65	53.27	55.09	56.91	61.49	66.06	66.34
		Max current	A	82.91	88.52	94.14	99.92	105.70	107.35	109.00	114.61
	Heating	Rated power input	kW	22.78	25.09	27.40	29.47	31.54	33.68	35.82	33.31
		Max power input	kW	45.40	48.20	51.00	54.90	58.80	59.80	60.80	63.80
		Rated current	A	37.63	41.44	45.25	48.67	52.09	55.62	59.16	55.01
		Max current	A	74.98	79.60	84.23	90.67	97.11	98.76	100.41	105.37
	SEER		6.86	6.48	6.48	5.90	5.90	5.63	5.63	5.63	6.37
	SCOP		4.21	3.99	3.99	3.93	3.93	3.50	3.50	3.50	3.86
	ηs.c	%	271	256	256	233	233	222	222	222	252
ηs.h	%	165	157	157	154	154	137	137	137	151	
Performance	Air flow (H)	m³/h	34000	34000	34000	36000	38000	38000	38000	47500	
	Sound pressure level (H)	dB(A)	65	65.5	66	66	66	66.5	67	66.5	
Installation	External dimensions(W/D/H)	mm	1410/750/1690+1410/750/1690			1410/750/1690+1410/750/1690				980/750/1690+1410/750/1690 +1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858			1485/850/1858+1485/850/1858				1070/850/1858+1485/850/1858 +1485/850/1858	
	Net/Shipping weight	kg	366/395+366/395			366/395+366/395	366/395+375/404		375/404+375/404		257/282+366/395+366/395
	Compressor type		DC INV. SCROLL	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	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		4INV	4INV	4INV	4INV	4INV	4INV	4INV	4INV	5INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	20	20	20	20	20	20	20	20	30
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8	31.8
	Refrigerant high gas pipe	mm	28.58	28.58	34.9	34.9	34.9	34.9	34.9	34.9	34.9
	Max.total pipe lenth	m	1000	1000	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	260/220	260/220
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	30
Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		53	56	59	63	64	64	64	64	
Working Temp.	Cooling	°C	-5-50				-5-50				
	Heating	°C	-23-21				-23-21				

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



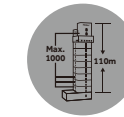
# 3/380~415/50/60



AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA



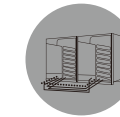
Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV48IMVURA	AV50IMVURA	AV52IMVURA	AV54IMVURA	AV56IMVURA	AV58IMVURA	AV60IMVURA	
Combination model			AV16IMVURA	AV16IMVURA	AV16IMVURA	AV18IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	
			AV16IMVURA	AV16IMVURA	AV18IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	AV20IMVURA	
			AV16IMVURA	AV18IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	AV20IMVURA	AV20IMVURA	
			/	/	/	/	/	/	/	
Capacity	Capacity range	HP	48	50	52	54	56	58	60	
	Cooling	kW	135.0	140.0	145.0	150.0	156.0	162.0	168.0	
	Heating	kW	135.0	140.0	145.0	150.0	156.0	162.0	168.0	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60			3/380-415/50/60			3/380-415/50/60	
	Cooling	Rated power input	kW	41.80	43.99	46.19	48.39	49.49	50.59	51.69
		Max power input	kW	75.30	78.70	82.10	85.50	89.00	92.50	96.00
		Rated current	A	69.03	72.65	76.28	79.91	81.73	83.55	85.37
		Max current	A	124.36	129.97	135.59	141.20	146.98	152.76	158.54
	Heating	Rated power input	kW	34.18	36.48	38.79	41.10	43.17	45.24	47.31
		Max power input	kW	68.10	70.90	73.70	76.50	80.40	84.30	88.20
		Rated current	A	56.44	60.25	64.06	67.87	71.29	74.71	78.13
		Max current	A	112.47	117.09	121.72	126.34	132.78	139.22	145.66
	SEER		6.86	6.48	6.48	6.48	5.90	5.90	5.90	5.90
	SCOP		4.21	3.99	3.99	3.99	3.93	3.93	3.93	3.93
	ηs.c	%	271	256	256	256	233	233	233	233
	ηs.h	%	165	157	157	157	154	154	154	154
Performance	Air flow (H)	m³/h	51000	51000	51000	51000	53000	55000	57000	
	Sound pressure level (H)	dB(A)	67	67	67.5	68	68	68	68	
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				
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858			1485/850/1858+1485/850/1858+1485/850/1858				
	Net/Shipping weight	kg	366/395+366/395+366/395			366/395+366/395+366/395		366/395+366/395+375/404	366/395+375/404+375/404	375/404+375/404+375/404
	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		DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	DAIKIN	
	Compressor quantity		6INV	6INV	6INV	6INV	6INV	6INV	6INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	30	30	30	30	30	30	30	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	31.8	31.8	31.8	31.8	31.8	41.3	41.3	
	Refrigerant high gas pipe	mm	34.9	34.9	34.9	34.9	34.9	38.1	38.1	
	Max.total pipe lenth	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50						-5-50	
	Heating	°C	-23-21						-23-21	

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (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 in heating, outdoor Temp. is 7°C DB/6°C WB)

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 in the factory.  
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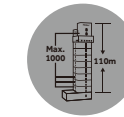
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AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA



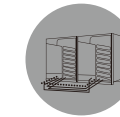
Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV62IMVURA	AV64IMVURA	AV66IMVURA	AV68IMVURA	AV70IMVURA	AV72IMVURA	
Combination model			AV20IMVURA	AV20IMVURA	AV22IMVURA	AV16IMVURA	AV16IMVURA	AV18IMVURA	
			AV20IMVURA	AV22IMVURA	AV22IMVURA	AV16IMVURA	AV18IMVURA	AV18IMVURA	
			AV22IMVURA	AV22IMVURA	AV22IMVURA	AV18IMVURA	AV18IMVURA	AV18IMVURA	
			/	/	/	AV18IMVURA	AV18IMVURA	AV18IMVURA	
Capacity	Capacity range	HP	62	64	66	68	70	72	
	Cooling	kW	172.0	176.0	180.0	190.0	195.0	200.0	
	Heating	kW	172.0	176.0	180.0	190.0	195.0	200.0	
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	
	Cooling	Rated power input	kW	54.46	57.23	60.00	60.12	62.32	64.52
		Max power input	kW	97.00	98.00	99.00	107.20	110.60	114.00
		Rated current	A	89.94	94.52	99.09	99.29	102.92	106.55
		Max current	A	160.20	161.85	163.50	177.04	182.66	188.27
	Heating	Rated power input	kW	49.45	51.59	53.73	50.18	52.49	54.79
		Max power input	kW	89.20	90.20	91.20	96.40	99.20	102.00
		Rated current	A	81.67	85.20	88.74	82.88	86.68	90.49
		Max current	A	147.31	148.97	150.62	159.21	163.83	168.45
	SEER		5.63	5.63	5.63	6.48	6.48	6.48	
	SCOP		3.50	3.50	3.50	3.99	3.99	3.99	
	ηs.c	%	222	222	222	256	256	256	
	ηs.h	%	137	137	137	157	157	157	
Performance	Air flow (H)	m³/h	57000	57000	57000	68000	68000	68000	
	Sound pressure level (H)	dB(A)	68	68.5	69	69	69	69	
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	
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858			1485/850/1858+1485/850/1858+1485/850/1858		1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858	
	Net/Shipping weight	kg	375/404+375/404+375/404			375/404+375/404+375/404		366/395+366/395+366/395+366/395	
	Compressor type		DC INV. SCROLL			DC INV. SCROLL		DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		6INV			6INV		8INV	
	Refrigerant type		R410A			R410A		R410A	
	Refrigerant charge	kg	30			30		40	
	Refrigerant liquid pipe	mm	19.05			19.05		22.2	
	Refrigerant gas pipe	mm	41.3			41.3		44.5	
	Refrigerant high gas pipe	mm	38.1			38.1		41.3	
	Max.total pipe lenth	m	1000			1000		1000	
	Max. pipe length (Equivalent/Actual)	m	260/220			260/220		260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90			110/90		110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40			50/40		50/40	
	Max. drop between I.U. *3	m	30			30		30	
	Standard drop between I.U. *4	m	18			18		18	
External static pressure	Pa	110			110		110		
Connection Ratio	Connectable indoor unit ratio	%	50-130			50-130		50-130	
	Maximum number of indoor units		64			64		64	
Working Temp.	Cooling	°C	-5-50			-5-50		-5-50	
	Heating	°C	-23-21			-23-21		-23-21	

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



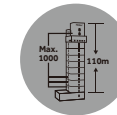


AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV74IMVURA	AV76IMVURA	AV78IMVURA	AV80IMVURA	
Combination model			AV18IMVURA	AV18IMVURA	AV18IMVURA	AV20IMVURA	
			AV18IMVURA	AV18IMVURA	AV20IMVURA	AV20IMVURA	
			AV18IMVURA	AV20IMVURA	AV20IMVURA	AV20IMVURA	
			AV20IMVURA	AV20IMVURA	AV20IMVURA	AV20IMVURA	
Capacity	Capacity range	HP	74	76	78	80	
	Cooling	kW	206.0	212.0	218.0	224.0	
	Heating	kW	206.0	212.0	218.0	224.0	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60		3/380-415/50/60		
	Cooling	Rated power input	kW	65.62	66.72	67.82	68.92
		Max power input	kW	117.50	121.00	124.50	128.00
		Rated current	A	108.37	110.19	112.01	113.83
		Max current	A	194.05	199.83	205.61	211.39
	Heating	Rated power input	kW	56.87	58.94	61.01	63.08
		Max power input	kW	105.90	109.80	113.70	117.60
		Rated current	A	93.91	97.34	100.76	104.18
		Max current	A	174.89	181.34	187.78	194.22
	SEER		5.90	5.90	5.90	5.90	
	SCOP		3.93	3.93	3.93	3.93	
	ηs.c	%	233	233	233	233	
	ηs.h	%	154	154	154	154	
Performance	Air flow (H)	m³/h	70000	72000	74000	76000	
	Sound pressure level (H)	dB(A)	69	69	69	69	
Installation	External dimensions(W/D/H)	mm	1410/750/1690+1410/750/1690+1410/750/1690+1410/750/1690				
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858				
	Net/Shipping weight	kg	366/395+366/395+366/395+375/404	366/395+366/395+375/404+375/404	366/395+375/404+375/404+375/404	375/404+375/404+375/404+375/404	
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor brand		DAIKIN	DAIKIN	DAIKIN	DAIKIN	
	Compressor quantity		8INV	8INV	8INV	8INV	
	Refrigerant type		R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	40	40	40	40	
	Refrigerant liquid pipe	mm	22.2	22.2	22.2	22.2	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	44.5	
	Refrigerant high gas pipe	mm	41.3	41.3	41.3	41.3	
	Max.total pipe lenth	m	1000	1000	1000	1000	
	Max. pipe length (Equivalent/Actual)	m	260/220	260/220	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.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	
External static pressure	Pa	110	110	110	110		
Connection Ratio	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				
	Heating	°C	-23-21				

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



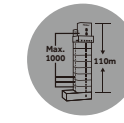
# 3/380~415/50/60



AV08IMVURA  
AV10IMVURA  
AV12IMVURA  
AV14IMVURA



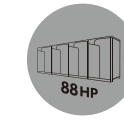
AV16IMVURA  
AV18IMVURA  
AV20IMVURA  
AV22IMVURA



Total Pipe Length 1000m,  
Height Drop 110m



Full DC Inverter  
Compressors



Single Module 22HP,  
Maximum Combination 88HP



Automatic  
Oil Balancing

Model			AV82IMVURA	AV84IMVURA	AV86IMVURA	AV88IMVURA	
Combination model			AV20IMVURA	AV20IMVURA	AV20IMVURA	AV22IMVURA	
			AV20IMVURA	AV20IMVURA	AV22IMVURA	AV22IMVURA	
			AV20IMVURA	AV22IMVURA	AV22IMVURA	AV22IMVURA	
			AV22IMVURA	AV22IMVURA	AV22IMVURA	AV22IMVURA	
Capacity	Capacity range	HP	82	84	86	88	
	Cooling	kW	228.0	232.0	236.0	240.0	
	Heating	kW	228.0	232.0	236.0	240.0	
Electrical Parameters	Power supply	Ph/V/Hz	3/380~415/50/60		3/380~415/50/60		
	Cooling	Rated power input	kW	71.69	74.46	77.23	80.00
		Max power input	kW	129.00	130.00	131.00	132.00
		Rated current	A	118.40	122.97	127.55	132.12
		Max current	A	213.04	214.70	216.35	218.00
	Heating	Rated power input	kW	65.22	67.36	69.50	71.64
		Max power input	kW	118.60	119.60	120.60	121.60
		Rated current	A	107.71	111.25	114.78	118.31
		Max current	A	195.87	197.52	199.17	200.82
	SEER		5.63	5.63	5.63	5.63	
	SCOP		3.50	3.50	3.50	3.50	
	ηs.c	%	222	222	222	222	
ηs.h	%	137	137	137	137		
Performance	Air flow (H)	m³/h	76000	76000	76000	76000	
	Sound pressure level (H)	dB(A)	69	69.5	70	70	
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		
	Shipping dimensions(W/D/H)	mm	1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858		1485/850/1858+1485/850/1858+1485/850/1858+1485/850/1858		
	Net/Shipping weight	kg	375/404+375/404+375/404+375/404		375/404+375/404+375/404+375/404		
	Compressor type		DC INV. SCROLL		DC INV. SCROLL		
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC		
	Compressor quantity		8INV		8INV		
	Refrigerant type		R410A		R410A		
	Refrigerant charge	kg	40		40		
	Refrigerant liquid pipe	mm	22.2		25.4		
	Refrigerant gas pipe	mm	44.5		50.8		
	Refrigerant high gas pipe	mm	41.3		44.5		
	Max.total pipe lenth	m	1000		1000		
	Max. pipe length (equivalent/actual)	m	260/220		260/220		
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90		110/90		
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40		50/40		
	Max. drop between I.U. *3	m	30		30		
	Standard drop between I.U. *4	m	18		18		
	External static pressure	Pa	110		110		
Connection Ratio	Connectable indoor unit ratio	%	50~130		50~130		
	Maximum number of indoor units		64		64		
Working Temp.	Cooling	°C	-5~50		-5~50		
	Heating	°C	-23~21		-23~21		

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition (in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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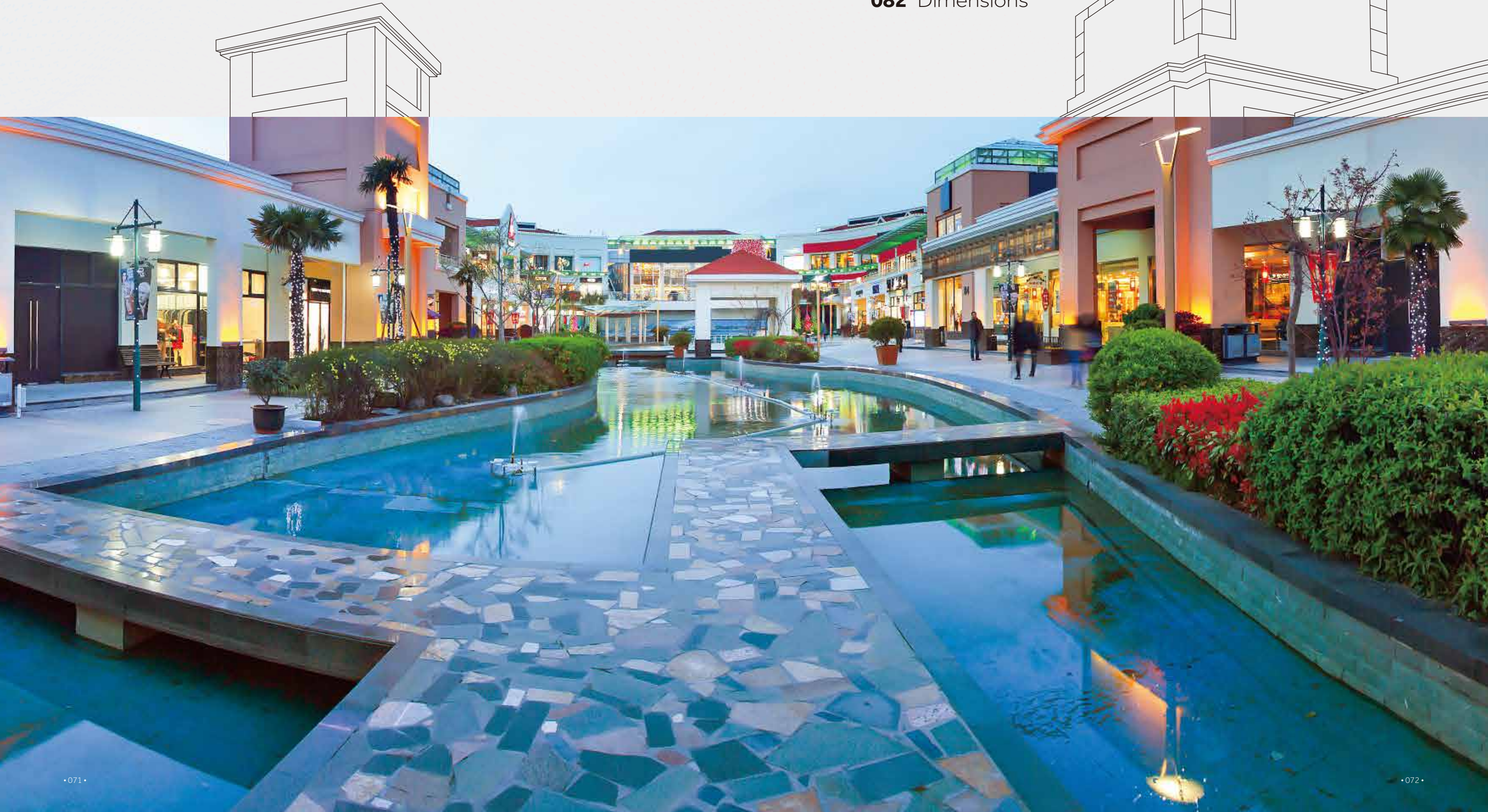


# MRV S<sup>II</sup>

**073** Features & Benefits

**078** MRV S<sup>II</sup> Outdoor

**082** Dimensions







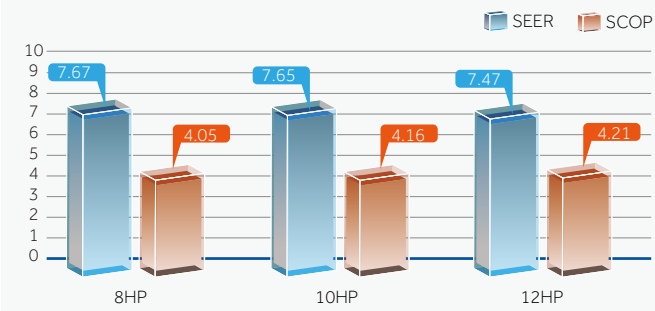
-  Advanced Technology
-  High Efficiency
-  Super Comfort
-  Easy Installation
-  High Reliability



## Advanced Technology

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

The promotion of energy efficiency.



### Leadership in technology(4-6HP)

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



### Upgraded configuration, upgraded performance (8/10/12HP side discharge)

Bigger outdoor capacity, more flexible application

#### High efficiency DC fan motor

- DC fan motor with stepless inverter control, efficiency increase 45% comparing with AC motor and power input largely decrease

#### Large diameter fan

- $\varnothing 570$ mm big diameter axial flow fan
- Zigzag design, reduce airflow disturbance, air volume is bigger, the noise is lower

#### High efficiency condenser

- New type high efficiency  $\varnothing 7$  inner grooved tube
- New hydrophilic corrugated fissure fin, high efficiency

#### Vector inverter control

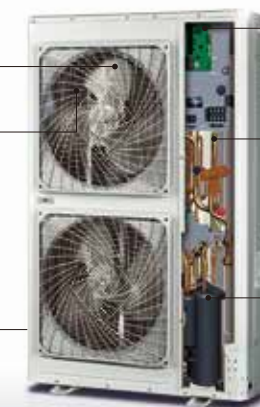
- 180 degrees sine wave vector control, 64-bit operation
- High precision control, to achieve high efficiency and lower noise

#### Double pressure sensor

- Equipped with high and low voltage, pressure double sensors
- Accurate pressure control, the system run more smoothly, more energy efficiency

#### Twin rotary DC Inverter compressor

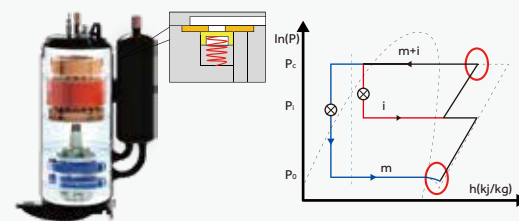
- High chamber DC inverter twin rotary compressor
- Small vibration, low noise, high energy efficiency



## Advanced Technology

### Increasing enthalpy by 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 is reduced, increase the amount of refrigerant in the heating cycle of the indoor unit heat exchanger. There by achieving improved heating capacity.



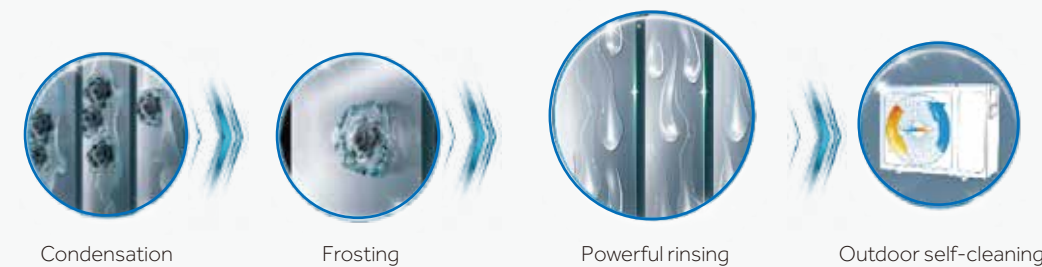
### DC inverter fan motor

- DC inverter fan motor more higher efficiency in part 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)



### 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

Haier 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%

### Charge valve

Built-in charge valve enables safer and easier maintenance

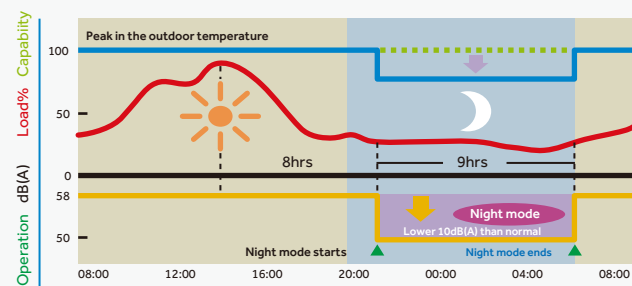
### Low standby power

New PCB programme, reduce 20% standby power consumption

## Low noise level

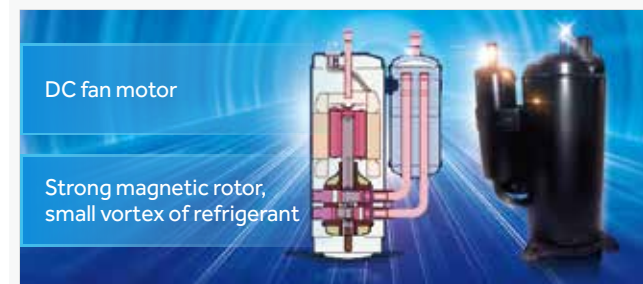
Night quiet operation function

Noise can be reduced to 45dB(A).



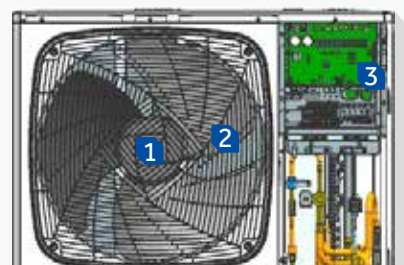
## New DC inverter twin rotary compressor

- 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.



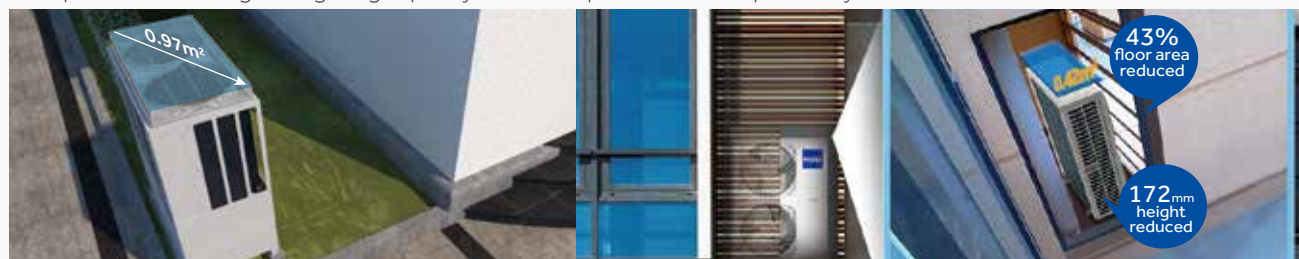
## Low noise operation

- 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 0.42m<sup>2</sup>, 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



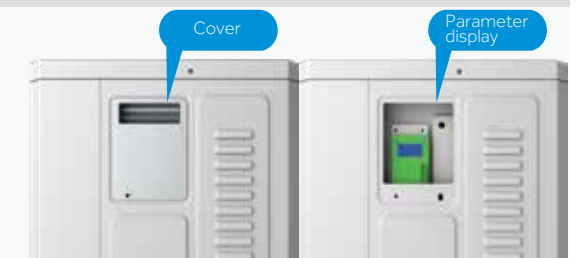
## Long pipe length, high height drop

- 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.



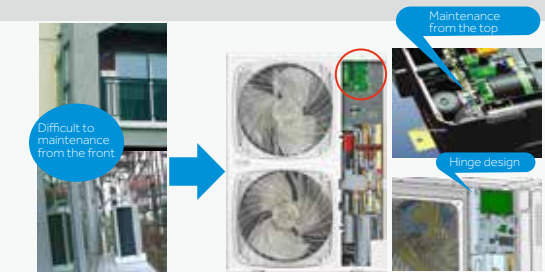
## Parameter display panel

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).



## Compact side discharge design

No need additional ventilation hood comparing with top discharge unit.



## Separate refrigerant charging valve

Easy for refrigerant charging.

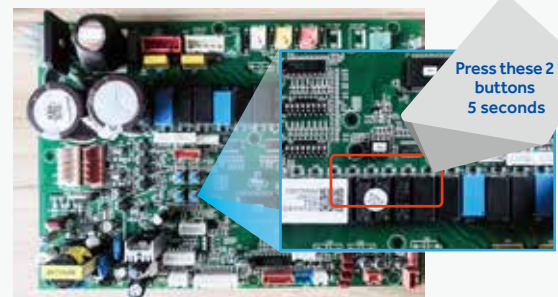




# High Reliability

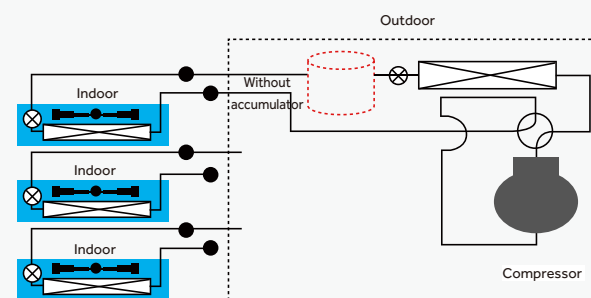
## Refrigerant automatically reclaim technology

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.



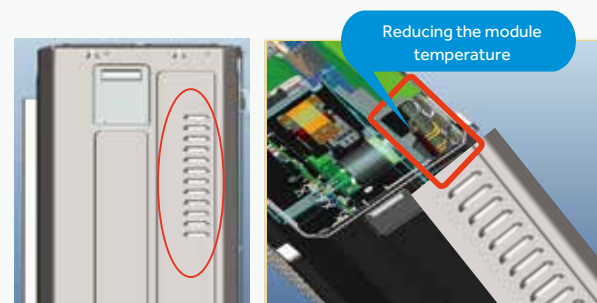
## Refrigerant control technology

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



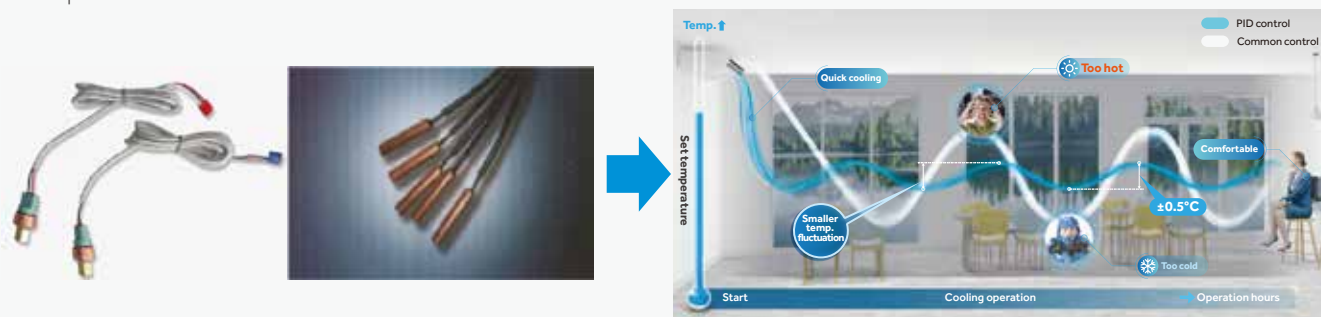
## Air inlet grill design on right side panel

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  $\pm 0.5^{\circ}\text{C}$ .



Model			AU042FNERA	AU052FNERA
Capacity (1)	Capacity range	HP	4	5
	Cooling	kW	12.1	14.0
	Heating	kW	12.1	14.0
	Heating(Max.)	kW	14.0	15.5
	SEER(T1)	/	4.90	4.85
	$\eta$ s.c	%	193	191
	SCOP(T1)	/	3.50	3.55
Electrical Parameters	$\eta$ s.h	%	137	139
	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Rated power input (Cooling)	kW	4.25	5.00
Dimensions	Rated power input (Heating)	kW	4.10	4.83
	External (W/D/H)	mm	950/370/965	950/370/965
Weight	Shipping (W/D/H)	mm	1010/458/990	1010/458/990
	Net/Shipping weight	kg	90/102	90/102
Compressor	Compressor type	/	Rotary	Rotary
	Motor power	W	4130	4130
	Compressor quantity	/	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	5400	5400
Pressure Sound level	Cooling	dB(A)	58	60
	Heating	dB(A)	60	62
Refrigerant	Type	/	R410A	R410A
	Charge	kg	3.3	3.3
Piping	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
	Total pipe length	m	120	120
	Max. pipe length(Equivalent/Actual)	m	70/60	70/60
	Max. drop between I.U.&O.U.(ODU above / below)	m	30/20	30/20
Connection Ratio	Max. drop between I.U.&I.U.	m	10	10
	Connectable indoor unit ratio	%	50-130	50-130
Working Temp.	Maximum number of indoor units	/	7	8
	Cooling	$^{\circ}\text{C}$	-5-50	-5-50
	Heating	$^{\circ}\text{C}$	-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 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)

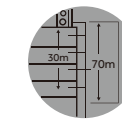




AU042FPERA  
 AU052FPERA  
 AU062FPERA  
 AU04IFPERA  
 AU05IFPERA  
 AU06IFPERA



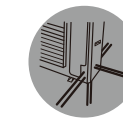
Double Fan Series



Total Pipe Length 300m



Two Stage Sub-cooling



Easy Connection  
 With 4 Way



Model			AU042FPERA	AU052FPERA	AU062FPERA	AU04IFPERA	AU05IFPERA	AU06IFPERA
Capacity <sup>(1)</sup>	Capacity range	HP	4	5	6	4	5	6
	Cooling	kW	12.1	14	15.5	12.1	14	15.5
	Heating	kW	12.1	14	15.5	12.1	14	15.5
	SEER(T1)	/	6.82	6.65	6.80	6.82	6.65	6.80
	η s.c	%	270	263	269	270	263	269
	SCOP(T1)	/	4.05	4.11	4.05	4.05	4.11	4.05
	η s.h	%	159	161	159	159	161	159
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	3/380-415/50/60
	Rated power input (Cooling)	kW	3.61	4.33	5.17	3.61	4.33	5.17
	Rated power input (Heating)	kW	3.23	3.76	5.00	3.23	3.76	5.00
Dimensions	External(W/D/H)	mm	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350
	Shipping (W/D/H)	mm	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492
Weight	Net/Shipping	kg	108/123	108/123	108/123	108/123	108/123	108/123
Compressor	Compressor type	/	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Motor power	W	4130	4130	4130	4060	4060	4060
	Compressor quantity	/	1	1	1	1	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	7200	7200	7200	7200	7200	7200
Pressure Sound level	Cooling	dB(A)	57	58	59	57	58	59
	Heating	dB(A)	57	58	59	57	58	59
Refrigerant	Type	/	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	4	4	4	4	4	4
Piping	Refrigerant liquid pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88	15.88	15.88	15.88
	Total pipe length	m	300	300	300	300	300	300
	Max. pipe length (Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150
	Max. drop between IDU&ODU (ODU above/below)	m	50/40	50/40	50/40	50/40	50/40	50/40
	Max. drop between IDU & IDU	m	15	15	15	15	15	15
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units	/	8	10	13	8	10	13
Working Temp.	Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50	-5-50
	Heating	°C	-20-27	-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 35°C DB/24°C WB; In heating, Indoor Temp. is 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)





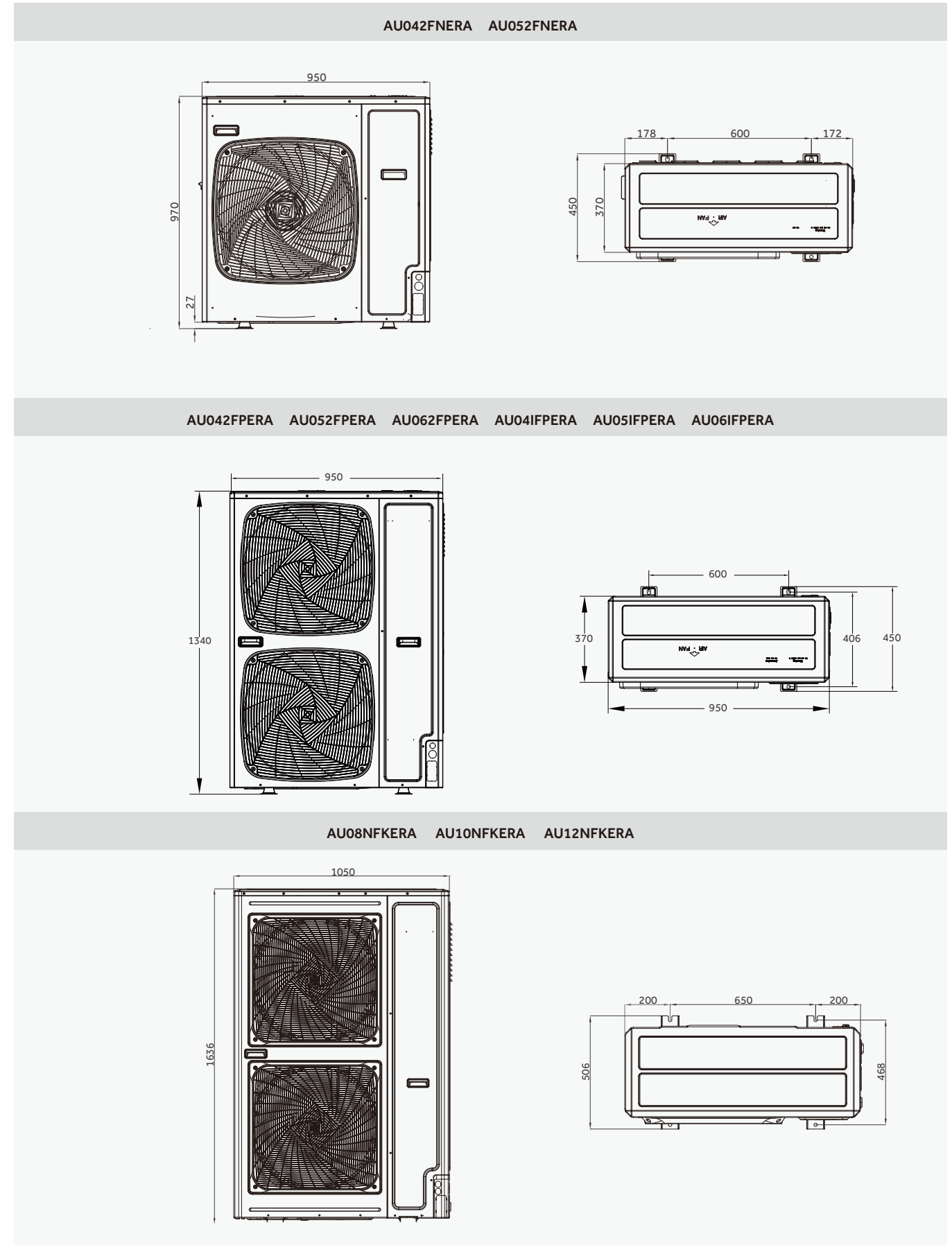
AU08NFKERA  
AU10NFKERA  
AU12NFKERA



Model		AU08NFKERA	AU10NFKERA	AU12NFKERA	
Capacity (1)	Capacity range	HP	8HP	10HP	12HP
	Cooling	kW	22.6	28	31.5
	Heating	kW	22.6	30.5	31.5
	Heating(Max.)	kW	25	32	35
	SEER	/	7.67	7.65	7.47
	$\eta$ s.c	%	304	303	296
	SCOP	/	4.05	4.16	4.21
	$\eta$ s.h	%	159	163.4	165.4
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Rated Power input (Cooling)	kW	6.95	8.67	11.52
	Rated Power input (Heating)	kW	5.79	8.03	8.49
Dimensions	External (W/D/H)	mm	1050/400/1636	1050/400/1636	1050/400/1636
	Shipping (W/D/H)	mm	1150/510/1790	1150/510/1790	1150/510/1790
Weight	Net/Shipping weight	kg	149/168	149/168	149/168
Compressor	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary
	Motor Power	W	6270	6270	6270
	Compressor quantity	/	1	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	10000	10000	10000
Pressure Sound level	Cooling	dB(A)	63	64	65
	Heating	dB(A)	65	66	67
Refrigerant	Type	/	R410A	R410A	R410A
	Charge	kg	5.1	5.1	5.1
	Refrigerant liquid pipe	mm	9.52	9.52	12.7
Piping	Refrigerant gas pipe	mm	19.05	22.22	25.4
	Total pipe length	m	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150
	Max. drop between I.U.&O.U.(ODU above / below)	m	50	50	50
	Max. drop between I.U.&I.U.	m	15	15	15
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130
	Maximum number of indoor units	/	13	16	19
Working Temp.	Cooling	°C	-5-48	-5-48	-5-48
	Heating	°C	-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. 35°C DB/24°C WB; In heating, Indoor Temp. is 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)

# Dimensions





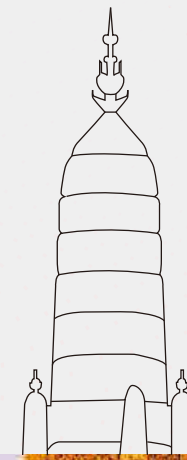
# MRV5-T

DC INVERTER

T1

085 Features & Benefits

087 MRV 5-T Outdoor





# MRV5-T



## ✂ Easy Installation

### 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.

1. Remote monitor and control via PC, smartphone, tablet etc.
2. Scan the QR code to complete configuration and check the status of the AC at any time and place.
3. Check real-time working status of AC by cloud service data platform.
4. Convenient scheduling and central control.
5. Smart detection, pre-alarm and self-diagnostic for malfunction.
6. Group/zone control. control temp. , mode, fan speed etc. of each group/zone flexibly.



### Auto adjustment

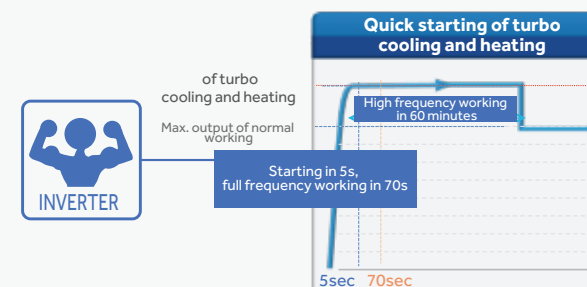
After the system is installed, through ODU mainboard, the whole system can be adjusted, eliminate possible faults in the system, more convenience.



## ☀ Super Comfort

### Quick start, strong cooling and heating

Quick start in 5s, achieve maximum output in 70s, maintain high frequency operation for one hour, ensure that the room temperature reaches the maximum set value quickly.



### Power cut memory function and restart

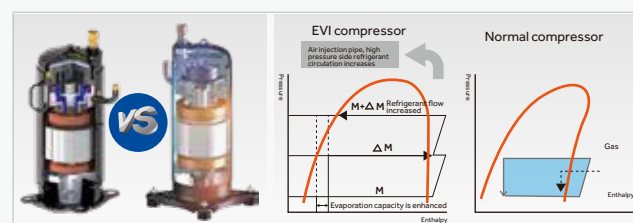
During operation, if the system power off suddenly, the system will automatically remember state before power off. When power is restored, the system will start automatically and run in the original state. Don't need to reset the system, more convenience.



## 🧠 Advanced Technology

### Enhanced vapor injection technology, low temperature heating and high temperature cooling

The unit adopts EVI compressor, which can increase the refrigerant circulation by 15%, and improve the heating effect by 30% compared with the normal type. meanwhile, the one-way valve built in, and the efficiency of the unit can be increased by 5%. the cooling temperature can be 53°C.





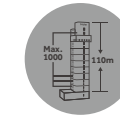


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV08NMVETS	AV10NMVETS	AV12NMVETS	AV14NMVETS	AV16NMVETS	AV18NMVETS	AV20NMVETS	AV22NMVETS	AV24NMVETS	AV26NMVETS		
Combination model			/	/	/	/	/	/	/	/	/	/		
			/	/	/	/	/	/	/	/	/	/		
			/	/	/	/	/	/	/	/	/	/		
			/	/	/	/	/	/	/	/	/	/		
Capacity	Capacity range	HP	8	10	12	14	16	18	20	22	24	26		
	Cooling @T1	kW	25.2	28.0	33.5	40.0	45.0	50.4	56.0	61.5	68.0	73.5		
	Heating	kW	27.0	31.5	37.5	45.0	50.0	56.5	63.0	69.0	75.0	82.5		
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	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60		
	Cooling	Rated power input	kW	5.38	6.80	8.40	10.70	12.80	13.85	15.71	17.72	19.10	21.20	
		Rated current	A	8.96	11.32	13.99	17.82	21.31	23.06	26.16	29.50	31.80	35.30	
		Max. power input	kW	14.30	15.10	16.32	17.58	20.69	25.90	28.91	31.82	32.81	35.35	
		Max. current	A	23.81	25.14	27.17	29.27	34.50	40.30	46.30	51.91	54.12	58.86	
	Heating	Rated power input	kW	5.30	6.40	8.30	10.60	11.80	13.50	15.30	16.90	18.50	19.70	
		Rated current	A	8.82	10.66	13.82	17.65	19.65	22.48	25.47	28.14	30.80	32.80	
		Max. power input	kW	11.69	12.19	12.69	16.10	19.56	21.93	24.70	25.69	30.40	32.45	
		Max. current	A	19.47	20.30	21.13	26.81	32.57	36.51	41.13	42.78	50.62	54.03	
	EER	/	4.68	4.12	3.99	3.74	3.52	3.64	3.56	3.47	3.56	3.47		
COP	/	5.09	4.92	4.52	4.25	4.24	4.19	4.12	4.08	4.05	4.19			
Dimensions	External dimensions(W/D/H)	mm	980/750/1690				980/750/1690				1410/750/1690			
	Shipping dimensions(W/D/H)	mm	1070/850/1858				1070/850/1858				1515/850/1858			
Refrigerant	Net/Shipping weight	kg	255/280				255/280				385/410			
	Refrigerant type		R410A				R410A				R410A			
Fan	Air flow (H)	m³/h	11000	12000	13500	13500	13500	17000	17000	18000	18000	19000		
	External static pressure	Pa	110	110	110	110	110	110	110	110	110	110		
Pipe	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	28.58	28.58	28.58	28.58	28.58	28.58		
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	15.88		
Sound	Sound pressure level (H)	dB(A)	57	57	59	59	60	61	62	62	63	63		
	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130		
Pipe Length	Maximum number of indoor units		13	16	20	24	27	30	33	36	40	43		
	Max. total pipe length	m	1000	1000	1000	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	260/220	260/220	260/220		
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90		
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	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	m	30	30	30	30	30	30	30	30	30	30		
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	18	18		
	Cooling	°C	-5~53				-5~53				-5~53			
Working Temp.	Heating	°C	-25~27				-25~27				-25~27			

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)



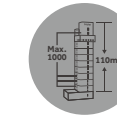


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV28NMVETS	AV30NMVETS	AV32NMVETS	AV34NMVETS	AV36NMVETS	AV38NMVETS	AV40NMVETS	AV42NMVETS	AV44NMVETS	
Combination model			/	/	/	/	AV18NMVETS	AV18NMVETS	AV20NMVETS	AV20NMVETS	AV22NMVETS	
			/	/	/	/	AV18NMVETS	AV20NMVETS	AV20NMVETS	AV22NMVETS	AV22NMVETS	
			/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	28	30	32	34	36	38	40	42	44	
	Cooling	kW	80.0	85.0	90.0	95.0	100.8	106.4	112.0	117.5	123.0	
	Heating	kW	90.0	95.0	100.0	106.5	113.0	119.5	126.0	132.0	138.0	
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	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	21.30	22.75	25.10	26.65	27.70	29.56	31.42	33.43	35.44
		Rated current	A	34.70	37.06	40.89	43.42	46.12	49.22	52.31	55.66	59.01
		Max. power input	kW	35.60	36.41	37.62	42.98	51.80	54.81	57.82	60.73	63.64
		Max. current	A	58.95	59.31	61.29	70.02	80.60	86.60	92.60	98.21	103.82
	Heating	Rated power input	kW	20.84	22.40	24.60	25.30	27.00	28.80	30.60	32.20	33.80
		Rated current	A	33.95	36.49	40.08	41.22	44.96	47.95	50.95	53.61	56.28
		Max. power input	kW	32.60	33.10	33.50	37.38	43.86	46.63	49.40	50.39	51.38
		Max. current	A	53.69	54.51	55.17	60.90	73.03	77.64	82.25	83.90	85.55
	EER	/	3.76	3.74	3.59	3.56	3.64	3.60	3.56	3.51	3.47	
COP	/	4.32	4.24	4.07	4.21	4.19	4.15	4.12	4.10	4.08		
Dimensions	External dimensions(W/D/H)	mm	1785/830/1858			1785/830/1858		1410/750/1690+1410/750/1690				
	Shipping dimensions(W/D/H)	mm	1886/950/2025			1886/950/2025		1515/850/1858+1515/850/1858				
Refrigerant	Net/Shipping weight	kg	495/530			495/530		385/410+385/410				
	Refrigerant type		R410A			R410A		R410A				
Fan	Refrigerant charge	kg	10	10	10	10	20	20	20	20	20	
	Air flow (H)	m³/h	27000	27000	27000	27000	34000	34000	34000	34000	35000	36000
Pipe	External static pressure	Pa	110	110	110	110	110	110	110	110	110	
	Refrigerant gas pipe	mm	31.75	31.75	31.75	31.75	38.1	38.1	38.1	38.1	38.1	
Sound	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Sound pressure level (H)	dB(A)	63	64	64	64	64	64	64	64	64	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		47	50	53	56	59	63	64	64	64	
Pipe Length	Max. total pipe length	m	1000	1000	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	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	30	30	
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	18	
	Cooling	°C	-5~53				-5~53					
Working Temp.	Heating	°C	-25~27				-25~27					

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB; In heating, indoor Temp. is 20°C DB, outdoor Temp. is 7°C DB/6°C WB)

MRV 5-T (T1)



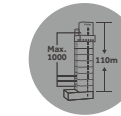


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV46NMVETS	AV48NMVETS	AV50NMVETS	AV52NMVETS	AV54NMVETS	AV56NMVETS	AV58NMVETS	AV60NMVETS	
Combination model			AV22NMVETS	AV24NMVETS	AV24NMVETS	AV26NMVETS	AV18NMVETS	AV18NMVETS	AV18NMVETS	AV20NMVETS	
			AV24NMVETS	AV24NMVETS	AV26NMVETS	AV26NMVETS	AV18NMVETS	AV18NMVETS	AV20NMVETS	AV20NMVETS	
			/	/	/	/	AV18NMVETS	AV20NMVETS	AV20NMVETS	AV20NMVETS	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	46	48	50	52	54	56	58	60	
	Cooling	kW	129.5	136.0	141.5	147.0	153.5	160.0	165.0	170.0	
	Heating	kW	144.0	150.0	157.5	165.0	172.5	180.0	185.0	190.0	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	36.82	38.20	40.30	42.40	42.50	42.60	44.05	45.50
		Rated current	A	61.31	63.60	67.10	70.60	70.00	69.40	71.77	74.13
		Max. power input	kW	64.63	65.62	68.16	70.70	70.95	71.20	72.01	72.81
		Max. current	A	106.03	108.24	112.98	117.72	117.81	117.90	118.26	118.62
	Heating	Rated power input	kW	35.40	37.00	38.20	39.40	40.54	41.68	43.24	44.80
		Rated current	A	58.94	61.61	63.60	65.60	66.75	67.90	70.45	72.99
		Max. power input	kW	56.09	60.80	62.85	64.90	65.05	65.20	65.70	66.20
		Max. current	A	93.39	101.23	104.65	108.06	107.72	107.38	108.20	109.03
	EER	/	3.52	3.56	3.51	3.47	3.61	3.76	3.75	3.74	
COP	/	4.07	4.05	4.12	4.19	4.26	4.32	4.28	4.24		
Dimensions	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				
	Shipping dimensions(W/D/H)	mm	1515/850/1858+1515/850/1858		1515/850/1858+1515/850/1858		1515/850/1858*3				
Refrigerant	Net/Shipping weight	kg	385/410+385/410		385/410+385/410		385/410*3				
	Refrigerant type		R410A		R410A		R410A				
	Refrigerant charge	kg	20	20	20	20	30	30	30	30	
Fan	Air flow (H)	m³/h	36000	36000	37000	38000	46000	54000	54000	54000	
	External static pressure	Pa	110	110	110	110	110	110	110	110	
Pipe	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	38.1	38.1	41.3	41.3	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
Sound	Sound pressure level (H)	dB(A)	64.5	65	65	65	65.8	65.8	65.8	65.8	
	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
Connection Ratio	Maximum number of indoor units		64	64	64	64	64	64	64	64	
	Max. total pipe length	m	1000	1000	1000	1000	1000	1000	1000	1000	
Pipe Length	Max. pipe length(Equivalent/Actual)	m	260/220	260/220	260/220	260/220	260/220	260/220	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	
Working Temp.	Cooling	°C	-5-53			-5-53					
	Heating	°C	-25-27			-25-27					

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U.&O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)



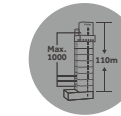


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV62NMVETS	AV64NMVETS	AV66NMVETS	AV68NMVETS	AV70NMVETS	AV72NMVETS	AV74NMVETS	AV76NMVETS	AV78NMVETS	
Combination model			AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV24NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	
			AV20NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	AV26NMVETS	AV26NMVETS	
			AV20NMVETS	AV20NMVETS	AV22NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	AV26NMVETS	
			/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	62	64	66	68	70	72	74	76	78	
	Cooling	kW	175.0	180.0	185.0	190.0	197.5	204.0	209.5	215.0	220.5	
	Heating	kW	195.0	200.0	206.5	213.0	219.0	225.0	232.5	240.0	247.5	
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	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	47.85	50.20	51.75	53.30	55.92	57.30	59.40	61.50	63.60
		Rated current	A	77.96	81.79	84.31	86.84	93.11	95.40	98.90	102.40	105.89
		Max. power input	kW	74.02	75.24	80.60	85.96	97.44	98.43	100.97	103.51	106.05
		Max. current	A	120.60	122.58	131.31	140.04	160.15	162.36	167.10	171.84	176.57
	Heating	Rated power input	kW	47.00	49.20	49.90	50.60	53.90	55.50	56.70	57.90	59.10
		Rated current	A	76.57	80.16	81.30	82.44	89.74	92.41	94.41	96.40	98.40
		Max. power input	kW	66.60	67.00	70.88	74.76	86.49	91.20	93.25	95.30	97.35
		Max. current	A	109.68	110.34	116.07	121.80	144.01	151.85	155.26	158.67	162.09
	EER	/	3.66	3.59	3.57	3.56	3.53	3.56	3.53	3.50	3.47	
	COP	/	4.15	4.07	4.14	4.21	4.06	4.05	4.10	4.15	4.19	
Dimensions	External dimensions(W/D/H)	mm	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*3				1515/850/1858*3					
Refrigerant	Net/Shipping weight	kg	385/410*3				385/410*3					
	Refrigerant type		R410A				R410A					
Fan	Refrigerant charge	kg	30	30	30	30	30	30	30	30	30	
	Air flow (H)	m <sup>3</sup> /h	54000	54000	54000	54000	54000	54000	55000	56000	57000	
Pipe	External static pressure	Pa	110	110	110	110	110	110	110	110	110	
	Refrigerant gas pipe	mm	41.3	41.3	41.3	44.5	44.5	44.5	44.5	44.5	44.5	
Sound	Refrigerant liquid pipe	mm	19.05	19.05	19.05	22.2	22.2	22.2	22.2	22.2	22.2	
	Sound pressure level (H)	dB(A)	65.8	65.8	65.8	66	66.5	66.8	66.8	66.8	66.8	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	
Pipe Length	Max. total pipe length	m	1000	1000	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	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	30	30	
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	18	
	Cooling	°C	-5~53				-5~53					
	Heating	°C	-25~27				-25~27					

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)



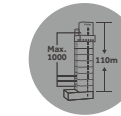


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV80NMVETS	AV82NMVETS	AV84NMVETS	AV86NMVETS	AV88NMVETS	AV90NMVETS	AV92NMVETS	AV94NMVETS	
Combination model	AV20NMVETS		AV20NMVETS	AV20NMVETS	AV20NMVETS	AV20NMVETS	AV22NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	
	AV20NMVETS		AV20NMVETS	AV20NMVETS	AV20NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV24NMVETS	AV24NMVETS	
	AV20NMVETS		AV20NMVETS	AV20NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV24NMVETS	
	AV20NMVETS		AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	AV22NMVETS	
Capacity	Capacity range	HP	80	82	84	86	88	90	92	94	
	Cooling	kW	227.0	233.5	240.0	245.0	250.0	255.0	260.0	265.0	
	Heating	kW	255.0	262.5	270.0	275.0	280.0	285.0	290.0	295.0	
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		
	Cooling	Rated power input	kW	63.70	63.80	63.90	65.35	66.80	68.25	70.60	72.95
		Rated current	A	105.30	104.70	104.11	106.47	108.83	111.19	115.02	118.85
		Max. power input	kW	106.30	106.55	106.80	107.61	108.41	109.22	110.43	111.64
		Max. current	A	176.67	176.76	176.85	177.21	177.57	177.93	179.91	181.89
	Heating	Rated power input	kW	60.24	61.38	62.52	64.08	65.64	67.20	69.40	71.60
		Rated current	A	99.55	100.71	101.86	104.40	106.94	109.48	113.07	116.65
		Max. power input	kW	97.50	97.65	97.80	98.30	98.80	99.30	99.70	100.10
		Max. current	A	161.75	161.41	161.07	161.89	162.71	163.54	164.20	164.86
	EER	/	3.56	3.66	3.76	3.75	3.74	3.74	3.68	3.63	
	COP	/	4.23	4.28	4.32	4.29	4.27	4.24	4.18	4.12	
Dimensions	External dimensions(W/D/H)	mm	1410/750/1690*4				1410/750/1690*4				
	Shipping dimensions(W/D/H)	mm	1515/850/1858*4				1515/850/1858*4				
Refrigerant	Net/Shipping weight	kg	385/410*4				385/410*4				
	Refrigerant type		R410A				R410A				
Fan	Refrigerant charge	kg	40	40	40	40	40	40	40	40	
	Air flow (H)	m³/h	65000	73000	81000	81000	81000	81000	81000	81000	
Pipe	External static pressure	Pa	110	110	110	110	110	110	110	110	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	50.8	50.8	50.8	50.8	50.8	
Sound	Refrigerant liquid pipe	mm	22.2	22.2	22.2	25.4	25.4	25.4	25.4	25.4	
	Sound pressure level (H)	dB(A)	67	67	67	67	67	67.5	67.5	68	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	
Pipe Length	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	30	
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	
	Cooling	°C	-5-53				-5-53				
	Heating	°C	-25-27				-25-27				

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)

MRV 5-T (T1)



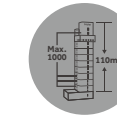


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV96NMVETS	AV98NMVETS	AV100NMVETS	AV102NMVETS	AV104NMVETS	AV106NMVETS	AV108NMVETS	
Combination model			AV24NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	
			AV24NMVETS	AV24NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	
			AV24NMVETS	AV24NMVETS	AV24NMVETS	AV26NMVETS	AV26NMVETS	AV26NMVETS	AV28NMVETS	
			AV24NMVETS	AV24NMVETS	AV24NMVETS	AV24NMVETS	AV26NMVETS	AV28NMVETS	AV28NMVETS	
Capacity	Capacity range	HP	96	98	100	102	104	106	108	
	Cooling	kW	270.0	275.0	280.0	285.0	294.0	300.5	307.0	
	Heating	kW	300.0	306.5	313.0	319.5	330.0	337.5	345.0	
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	
	Cooling	Rated power input	kW	75.30	76.85	78.40	79.95	84.80	84.90	85.00
		Rated current	A	122.68	125.20	127.73	130.25	141.19	140.60	140.00
		Max. power input	kW	112.86	118.22	123.58	128.94	141.40	141.65	141.90
		Max. current	A	183.86	192.60	201.33	210.06	235.43	235.52	235.62
	Heating	Rated power input	kW	73.80	74.50	75.20	75.90	78.80	79.94	81.08
		Rated current	A	120.23	121.38	122.52	123.66	131.20	132.35	133.51
		Max. power input	kW	100.50	104.38	108.26	112.14	129.80	129.95	130.10
		Max. current	A	165.51	171.24	176.97	182.70	216.12	215.78	215.44
	EER	/	3.59	3.58	3.57	3.56	3.47	3.54	3.61	
COP	/	4.07	4.11	4.16	4.21	4.19	4.22	4.26		
Dimensions	External dimensions(W/D/H)	mm	1410/750/1690*4		1410/750/1690*4		1410/750/1690*4	1410/750/1690+1410/750/1690+1410/750/1690+1785/830/1858	1410/750/1690+1410/750/1690+1785/830/1858+1785/830/1858	
	Shipping dimensions(W/D/H)	mm	1515/850/1858*4		1515/850/1858*4		1515/850/1858*4	1515/850/1858*3+1886/950/2025	1515/850/1858*3+1886/950/2025	
Refrigerant	Net/Shipping weight	kg	385/410*4		385/410*4		385/410*4	385/410*3+495/530	385/410+495/530*3	
	Refrigerant type		R410A		R410A		R410A	R410A	R410A	
Fan	Refrigerant charge	kg	40	40	40	40	40	40	40	
	Air flow (H)	m³/h	81000	81000	81000	81000	76000	84000	92000	
Pipe	External static pressure	Pa	110	110	110	110	110	110	110	
	Refrigerant gas pipe	mm	50.8	54.1	54.1	54.1	54.1	66.7	66.7	
Sound	Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	28.58	28.58	
	Sound pressure level (H)	dB(A)	68	68	68	68	68	69.3	69.6	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Pipe Length	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 I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	
	Cooling	°C	-5-53				-5-53			
	Heating	°C	-25-27				-25-27			

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.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.

Standard design and production in the factory.

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 design and production in the factory.

\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)



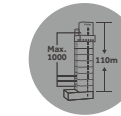


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV110NMVETS	AV112NMVETS	AV114NMVETS	AV116NMVETS	AV118NMVETS	AV120NMVETS	
Combination model			AV26NMVETS	AV28NMVETS	AV28NMVETS	AV28NMVETS	AV30NMVETS	AV30NMVETS	
			AV26NMVETS	AV28NMVETS	AV28NMVETS	AV28NMVETS	AV30NMVETS	AV30NMVETS	
			AV26NMVETS	AV28NMVETS	AV28NMVETS	AV30NMVETS	AV30NMVETS	AV30NMVETS	
			AV28NMVETS	AV28NMVETS	AV30NMVETS	AV30NMVETS	AV28NMVETS	AV30NMVETS	
Capacity	Capacity range	HP	110	112	114	116	118	120	
	Cooling	kW	313.5	320.0	325.0	330.0	335.0	340.0	
	Heating	kW	352.5	360.0	365.0	370.0	375.0	380.0	
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	
	Cooling	Rated power input	kW	85.10	85.20	86.65	88.10	89.55	91.00
		Rated current	A	139.40	138.81	141.17	143.53	145.89	148.26
		Max. power input	kW	142.15	142.40	143.21	144.01	144.82	145.62
		Max. current	A	235.71	235.80	236.16	236.52	236.88	237.24
	Heating	Rated power input	kW	82.22	83.36	84.92	86.48	88.04	89.60
		Rated current	A	134.66	135.81	138.35	140.89	143.43	145.98
		Max. power input	kW	130.25	130.40	130.90	131.40	131.90	132.40
		Max. current	A	215.10	214.76	215.58	216.40	217.23	218.05
	EER	/	3.68	3.76	3.75	3.75	3.74	3.74	
COP	/	4.29	4.32	4.30	4.28	4.26	4.24		
Dimensions	External dimensions(W/D/H)	mm	1785/830/1858+1785/830/1858+1785/830/1858+1785/830/1858				1785/830/1858+1785/830/1858+1785/830/1858+1785/830/1858		
	Shipping dimensions(W/D/H)	mm	1886/950/2025*4				1886/950/2025*4		
Refrigerant	Net/Shipping weight	kg	495/530*4				495/530*4		
	Refrigerant type		R410A				R410A		
	Refrigerant charge	kg	40	40	40	40	40	40	
Fan	Air flow (H)	m³/h	100000	108000	108000	108000	108000	108000	
	External static pressure	Pa	110	110	110	110	110	110	
Pipe	Refrigerant gas pipe	mm	66.7	66.7	66.7	66.7	66.7	66.7	
	Refrigerant liquid pipe	mm	28.58	28.58	28.58	28.58	28.58	28.58	
Sound	Sound pressure level (H)	dB(A)	69.8	70	70	70	70	70	
Connection Ratio	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	
Pipe Length	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 I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	
	Standard drop between I.U.*4	m	18	18	18	18	18	18	
Working Temp.	Cooling	°C							-5-53
	Heating	°C							-25-27

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)

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 in the factory.

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 design and production in the factory.



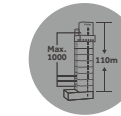


AV08NMVETS  
AV10NMVETS  
AV12NMVETS  
AV14NMVETS  
AV16NMVETS

AV18NMVETS  
AV20NMVETS  
AV22NMVETS  
AV24NMVETS  
AV26NMVETS

AV28NMVETS  
AV30NMVETS  
AV32NMVETS  
AV34NMVETS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



EVI Compressors



Maximum Combination  
136HP

Model			AV122NMVETS	AV124NMVETS	AV126NMVETS	AV128NMVETS	AV130NMVETS	AV132NMVETS	AV134NMVETS	AV136NMVETS	
Combination model			AV30NMVETS	AV30NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV34NMVETS	AV34NMVETS	
			AV30NMVETS	AV30NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV34NMVETS	AV34NMVETS	
			AV30NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV32NMVETS	AV34NMVETS	AV34NMVETS	AV34NMVETS	
			AV32NMVETS	AV32NMVETS	AV30NMVETS	AV32NMVETS	AV34NMVETS	AV34NMVETS	AV32NMVETS	AV34NMVETS	
Capacity	Capacity range	HP	122	124	126	128	130	132	134	136	
	Cooling	kW	345.0	350.0	355.0	360.0	365.0	370.0	375.0	380.0	
	Heating	kW	385.0	390.0	395.0	400.0	406.5	413.0	419.5	426.0	
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		
	Cooling	Rated power input	kW	93.35	95.70	98.05	100.40	101.95	103.50	105.05	106.60
		Rated current	A	152.09	155.91	159.74	163.57	166.10	168.62	171.15	173.67
		Max. power input	kW	146.83	148.05	149.26	150.47	155.84	161.20	166.56	171.92
		Max. current	A	239.22	241.20	243.17	245.15	253.88	262.62	271.35	280.08
	Heating	Rated power input	kW	91.80	94.00	96.20	98.40	99.10	99.80	100.50	101.20
		Rated current	A	149.56	153.14	156.73	160.31	161.45	162.59	163.73	164.87
		Max. power input	kW	132.80	133.20	133.60	134.00	137.88	141.76	145.64	149.52
		Max. current	A	218.71	219.37	220.03	220.69	226.41	232.14	237.87	243.60
	EER	/	3.70	3.66	3.62	3.59	3.58	3.57	3.57	3.56	
COP	/	4.19	4.15	4.11	4.07	4.10	4.14	4.17	4.21		
Dimensions	External dimensions(W/D/H)	mm	1785/830/1858+1785/830/1858+1785/830/1858+1785/830/1858						1785/830/1858+1785/830/1858+1785/830/1858+1785/830/1858		
	Shipping dimensions(W/D/H)	mm	1886/950/2025*4						1886/950/2025*4		
Refrigerant	Net/Shipping weight	kg	495/530*4						495/530*4		
	Refrigerant type		R410A						R410A		
Fan	Refrigerant charge	kg	40	40	40	40	40	40	40	40	
	Air flow (H)	m³/h	108000	108000	108000	108000	108000	108000	108000	108000	
Pipe	External static pressure	Pa	110	110	110	110	110	110	110	110	
	Refrigerant gas pipe	mm	66.7	66.7	66.7	66.7	66.7	66.7	66.7	66.7	
Sound	Refrigerant liquid pipe	mm	28.58	28.58	28.58	28.58	28.58	28.58	28.58	28.58	
	Sound pressure level (H)	dB(A)	70	70	70	70	70	70	70	70	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	
Pipe Length	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U.*3	m	30	30	30	30	30	30	30	30	
Working Temp.	Standard drop between I.U.*4	m	18	18	18	18	18	18	18	18	
	Cooling	°C								-5~53	
	Heating	°C								-25~27	

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

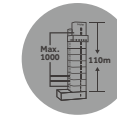


AV20NMVEMS  
AV22NMVEMS  
AV24NMVEMS  
AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV08NMVEMS	AV10NMVEMS		AV12NMVEMS	AV14NMVEMS	AV16NMVEMS	AV18NMVEMS	AV20NMVEMS	AV22NMVEMS	AV24NMVEMS	AV26NMVEMS	AV28NMVEMS	
Combination model			/	/		/	/	/	/	/	/	/	/	/	
			/	/		/	/	/	/	/	/	/	/	/	
			/	/		/	/	/	/	/	/	/	/	/	
			/	/		/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	8	10		12	14	16	18	20	22	24	26	28	
	Cooling	kW	25.2	28.5		33.5	40	45	50.4	56	61.5	68.5	73.5	80	
	Heating	kW	27	31.5		37.5	45	50	56.5	63	69	75	82.5	90	
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	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	5.35	6.8		8.05	10.15	11.8	13.45	15.1	16.5	17.6	18.8	21.3
		Rated current	A	8.89	11.23		13.29	16.76	19.49	22.21	25.5	27.9	29.7	31.7	34.7
		Max. power input	kW	9.8	11.2		13.87	15.7	18.77	19.86	26.3	28.5	29.1	32.78	33.23
		Max. current	A	16.2	18.5		22.9	26	31	32.8	42.4	48.1	49.1	50.3	51
	Heating	Rated power input	kW	5.2	6.3		8	10.3	11.2	13.4	14.6	15.4	16.8	17.7	20.84
		Rated current	A	7.27	8.81		11.18	14.4	15.66	18.73	24.6	26	28.4	29.9	33.95
		Max. power input	kW	8.8	10.04		12.9	14.71	17.08	18.32	22.7	25.5	26.5	30.4	32.6
		Max. current	A	14.5	16.59		21.3	24.3	28.2	30.26	38.3	43	44.7	46.66	50.03
	EER	/	4.71	4.19		4.16	3.94	3.81	3.75	3.71	3.73	3.89	3.91	3.76	
	COP	/	5.19	5		4.69	4.37	4.46	4.22	4.32	4.48	4.46	4.66	4.32	
Dimensions	External dimensions(W/D/H)	mm	980/750/1690			980/750/1690			980/750/1690			1785/830/1858			
	Shipping dimensions(W/D/H)	mm	1070/850/1870			1070/850/1870			1070/850/1870			1886/950/2025			
Refrigerant	Net weight	kg	214	214		214	217	217	225	325	325	325	365	365	
	Shipping weight	kg	239	239		239	242	242	250	355	355	355	395	395	
	Refrigerant type		R410A	R410A		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	7.3	7.3		7.3	10.1	10.1	8.3	14.5	14.5	14.5	15.5	15.5	
Fan	Air flow (H)	m <sup>3</sup> /h	11000	11000		12000	12000	13500	13500	17000	18000	18000	19000	27000	
	External static pressure	Pa	50	50		50	50	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	19.05	22.22		25.4	25.4	28.58	28.58	28.58	28.58	28.58	28.58	31.75	
	Refrigerant liquid pipe	mm	9.52	9.52		12.7	12.7	12.7	15.88	15.88	15.88	15.88	15.88	19.05	
Sound	Sound pressure level (H)	dB(A)	56	57		59	59	60	61	61	61	62	62	63	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130		50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		13	16		20	24	27	30	33	36	40	43	47	
Pipe Length	Max. total pipe length	m	1000	1000		1000	1000	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	260/220	260/220	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90		110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	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	m	30	30		30	30	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18		18	18	18	18	18	18	18	18	18	
Working Temp.	Cooling	°C	-5~54												
	Heating	°C	-26~27												

\*Pending

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under normal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

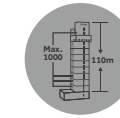


AV20NMVEMS  
AV22NMVEMS  
AV24NMVEMS  
AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV30NMVEMS	AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV38NMVEMS	AV40NMVEMS	AV42NMVEMS	AV44NMVEMS	AV46NMVEMS	
Combination model			/	/	/	/	/	/	/	AV20NMVEMS	AV22NMVEMS	
			/	/	/	/	/	/	/	AV24NMVEMS	AV24NMVEMS	
			/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	30	32	34	36	38	40	42	44	46	
	Cooling	kW	85	90	96	101	106.5	112	117.5	124.5	130	
	Heating	kW	95	100	106.5	112	119	123.5	132	138	144	
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	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	22.75	24.8	25.65	27.7	29.7	31.5	34.92	32.7	34.1
		Rated current	A	37.06	40.89	43.42	46.12	47.87	50.77	56.29	55.2	57.6
		Max. power input	kW	36.62	37.01	41.38	41.64	46.8	47.9	48.3	55.4	57.6
		Max. current	A	56.2	56.8	63.5	63.9	74.2	74.5	78.9	91.5	97.2
	Heating	Rated power input	kW	22.4	24.6	25.3	27	29.2	31.2	32.9	31.4	32.2
		Rated current	A	36.49	40.08	41.22	44.96	47.07	50.29	52.46	53	54.4
		Max. power input	kW	33.7	36.9	38.38	41.5	45.5	46.2	47.8	49.2	52
		Max. current	A	51.72	56.63	58.9	63.69	73.34	74.1	77.05	83	87.7
	EER	/	3.74	3.63	3.74	3.65	3.59	3.56	3.36	3.81	3.81	
	COP	/	4.24	4.07	4.21	4.15	4.08	3.96	4.01	4.39	4.47	
Dimensions	External dimensions(W/D/H)	mm	1785/830/1858				1785/830/1858				(1410/750/1690)+(1410/750/1690)	
	Shipping dimensions(W/D/H)	mm	1886/950/2025				1886/950/2025				(1515/850/1838)+(1515/850/1838)	
Refrigerant	Net weight	kg	446	446	496	496	496	496	496	325+325	325+325	
	Shipping weight	kg	481	481	531	531	531	531	531	355+355	355+355	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	16	16	20.5	20.5	20.5	20.5	20.5	14.5+14.5	14.5+14.5	
Fan	Air flow (H)	m <sup>3</sup> /h	27000	27000	27000	27000	30000	30000	30000	35000	36000	
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	31.75	31.75	31.75	38.1	38.1	38.1	38.1	38.1	38.1	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
Sound	Sound pressure level (H)	dB(A)	64	64	64	64	66	66	68	64.54	64.54	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		50	53	56	60	64	64	64	64	64	
Pipe Length	Max. total pipe length	m	1000	1000	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	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	30	
Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	18		
Working Temp.	Cooling	°C	-5-54									
	Heating	°C	-26-27									

\*Pending

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)

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 in the factory.  
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 design and production in the factory.





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

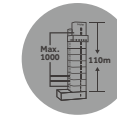


AV20NMVEMS  
AV22NMVEMS  
AV24NMVEMS  
AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV48NMVEMS	AV50NMVEMS	AV52NMVEMS	AV56NMVEMS	AV58NMVEMS	AV60NMVEMS	AV62NMVEMS	AV64NMVEMS	AV66NMVEMS	
Combination model			AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV26NMVEMS	AV32NMVEMS	AV32NMVEMS	
			AV24NMVEMS	AV26NMVEMS	AV30NMVEMS	AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV36NMVEMS	AV32NMVEMS	AV34NMVEMS	
			/	/	/	/	/	/	/	/	/	
			/	/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	48	50	54	56	58	60	62	64	66	
	Cooling	kW	137	142	153.5	158.5	164.5	169.5	174.5	180	186	
	Heating	kW	150	157.5	170	175	181.5	187	194.5	200	206.5	
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	3/380-415/50/60	3/380-415/50/60	
	Cooling	Rated power input	kW	35.2	36.4	40.35	42.4	43.25	45.3	46.5	49.6	50.45
		Rated current	A	59.4	61.4	66.76	70.59	73.12	75.82	77.82	81.79	84.31
		Max. power input	kW	58.2	61.88	65.72	66.11	70.48	70.74	74.42	74.02	78.39
		Max. current	A	98.2	99.4	105.3	105.9	112.6	113	114.2	113.6	120.3
	Heating	Rated power input	kW	33.6	34.5	39.2	41.4	42.1	43.8	44.7	49.2	49.9
		Rated current	A	56.8	58.3	64.89	68.48	69.62	73.36	74.86	80.16	81.3
		Max. power input	kW	53	56.9	60.2	63.4	64.88	68	71.9	73.8	75.28
		Max. current	A	89.4	91.36	96.42	101.33	103.6	108.39	110.35	113.26	115.53
	EER	/	3.89	3.9	3.8	3.74	3.8	3.74	3.75	3.65	3.69	
	COP	/	4.46	4.57	4.34	4.23	4.31	4.27	4.35	4.07	4.14	
	Dimensions	External dimensions(W/D/H)	mm	(1410/750/1690)+(1410/750/1690)				(1410/750/1690)+(1785/830/1858)				
Shipping dimensions(W/D/H)		mm	(1515/850/1838)+(1515/850/1838)				(1515/850/1838)+(1886/950/2025)					
Refrigerant	Net weight	kg	325+325	325+365	325+446	325+446	325+496	325+496	365+496	446+446	446+496	
	Shipping weight	kg	355+355	355+395	355+481	355+481	355+531	355+531	395+531	481+481	481+531	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	14.5+14.5	14.5+15.5	14.5+16	14.5+16	14.5+20.5	14.5+20.5	15.5+20.5	16+16	16+20.5	
Fan	Air flow (H)	m <sup>3</sup> /h	36000	37000	45000	45000	45000	45000	46000	54000	54000	
	External static pressure	Pa	50	50	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	41.3	41.3	41.3	41.3	41.3	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
Sound	Sound pressure level (H)	dB(A)	65.01	65.01	66.12	66.12	66.12	66.12	66.12	67.01	67.01	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	64	
Pipe Length	Max. total pipe length	m	1000	1000	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	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	30	
Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	18		
Working Temp.	Cooling	°C	-5~54									
	Heating	°C	-26~27									

\*Pending

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

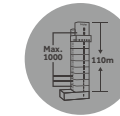


AV20NMVEMS  
AV22NMVEMS  
AV24NMVEMS  
AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV86NMVEMS	AV88NMVEMS	AV90NMVEMS	AV92NMVEMS	AV94NMVEMS	AV96NMVEMS	AV98NMVEMS	
Combination model	AV24NMVEMS		AV24NMVEMS		AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV24NMVEMS	AV26NMVEMS	
	AV26NMVEMS		AV28NMVEMS		AV30NMVEMS	AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV36NMVEMS	
	AV36NMVEMS		AV36NMVEMS		AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	
	/		/		/	/	/	/	/	
Capacity	Capacity range	HP	86	88	90	92	94	96	98	
	Cooling	kW	243	249.5	254.5	259.5	265.5	270.5	275.5	
	Heating	kW	269.5	277	282	287	293.5	299	306.5	
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	
	Cooling	Rated power input	kW	64.1	66.6	68.05	70.1	70.95	73	74.2
		Rated current	A	107.52	110.52	112.88	116.71	119.24	121.94	123.94
		Max. power input	kW	103.52	103.97	107.36	107.75	112.12	112.38	116.06
		Max. current	A	163.3	164	169.2	169.8	176.5	176.9	178.1
	Heating	Rated power input	kW	61.5	64.64	66.2	68.4	69.1	70.8	71.7
		Rated current	A	103.26	107.31	109.85	113.44	114.57	118.31	119.81
		Max. power input	kW	98.4	100.6	101.7	104.9	106.38	109.5	113.4
		Max. current	A	155.05	158.42	160.11	165.02	167.29	172.08	174.04
	EER	/	3.79	3.75	3.74	3.7	3.74	3.71	3.71	
COP	/	4.38	4.29	4.26	4.2	4.25	4.22	4.27		
Dimensions	External dimensions(W/D/H)	mm	(1410/750/1690)+(1410/750/1690)+(1785/830/1858)		(1410/750/1690)+(1785/830/1858)+(1785/830/1858)					
	Shipping dimensions(W/D/H)	mm	(1515/850/1838)+(1515/850/1838)+(1886/950/2025)		(1515/850/1838)+(1886/950/2025)+(1886/950/2025)					
Refrigerant	Net weight	kg	325+365+496	325+365+496	325+446+496	325+446+496	325+496+496	325+496+496	365+496+496	
	Shipping weight	kg	355+395+531	355+395+531	355+481+531	355+481+531	355+531+531	355+531+531	395+531+531	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	14.5+15.5+20.5	14.5+15.5+20.5	14.5+16+20.5	14.5+16+20.5	14.5+20.5+20.5	14.5+20.5+20.5	15.5+20.5+20.5	
Fan	Air flow (H)	m <sup>3</sup> /h	64000	72000	72000	72000	72000	72000	73000	
	External static pressure	Pa	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	50.8	50.8	50.8	50.8	50.8	50.8	54.1	
	Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	
Sound	Sound pressure level (H)	dB(A)	67.54	67.85	68.2	68.2	68.2	68.2	68.2	
Connection Ratio	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130	50~130	50~130	50~130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Pipe Length	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
Standard drop between I.U. *4	m	18	18	18	18	18	18	18		
Working Temp.	Cooling	°C	-5~54							
	Heating	°C	-26~27							

\*Pending

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB; In heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB)





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

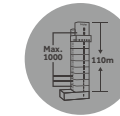


AV20NMVEMS  
AV22NMVEMS  
AV24NMVEMS  
AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV100NMVEMS	AV102NMVEMS	AV104NMVEMS	AV106NMVEMS	AV108NMVEMS	AV110NMVEMS	AV112NMVEMS	
Combination model			AV32NMVEMS	AV32NMVEMS	AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV32NMVEMS	AV32NMVEMS	
			AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV38NMVEMS	
			AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV36NMVEMS	AV42NMVEMS	AV42NMVEMS	
			/	/	/	/	/	/	/	
Capacity	Capacity range	HP	100	102	104	106	108	110	112	
	Cooling	kW	281	287	292	298	303	308.5	314	
	Heating	kW	312	318.5	324	330.5	336	344	351	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60							3/380-415/50/60
	Cooling	Rated power input	kW	77.3	78.15	80.2	81.05	83.1	87.42	89.42
		Rated current	A	127.91	130.43	133.13	135.66	138.36	143.3	145.06
		Max. power input	kW	115.66	120.03	120.29	124.66	124.92	126.95	132.11
		Max. current	A	177.5	184.2	184.6	191.3	191.7	199.6	209.9
	Heating	Rated power input	kW	76.2	76.9	78.6	79.3	81	84.5	86.7
		Rated current	A	125.12	126.25	129.99	131.13	134.87	137.5	139.61
		Max. power input	kW	115.3	116.78	119.9	121.38	124.5	126.2	130.2
		Max. current	A	176.95	179.22	184.01	186.28	191.07	197.37	207.02
	EER	/	3.64	3.67	3.64	3.68	3.65	3.53	3.51	
	COP	/	4.09	4.14	4.12	4.17	4.15	4.07	4.05	
Dimensions	External dimensions(W/D/H)	mm	(1785/830/1858)+(1785/830/1858)+(1785/830/1858)			(1785/830/1858)+(1785/830/1858)+(1785/830/1858)				
	Shipping dimensions(W/D/H)	mm	(1886/950/2025)+(1886/950/2025)+(1886/950/2025)			(1886/950/2025)+(1886/950/2025)+(1886/950/2025)				
Refrigerant	Net weight	kg	446+446+496	446+496+496	446+496+496	496+496+496	496+496+496	446+496+496	446+496+496	
	Shipping weight	kg	481+481+531	481+531+531	481+531+531	531+531+531	531+531+531	481+531+531	481+531+531	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	16+16+20.5	16+20.5+20.5	16+20.5+20.5	20.5+20.5+20.5	20.5+20.5+20.5	16+20.5+20.5	16+20.5+20.5	
Fan	Air flow (H)	m <sup>3</sup> /h	81000	81000	81000	81000	81000	84000	87000	
	External static pressure	Pa	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	54.1	54.1	54.1	54.1	54.1	54.1	66.7	
	Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	
Sound	Sound pressure level (H)	dB(A)	68.77	68.77	68.77	68.77	68.77	70.54	71.07	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Pipe Length	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
Standard drop between I.U. *4	m	18	18	18	18	18	18	18		
Working Temp.	Cooling	°C	-5-54							
	Heating	°C	-26-27							

\*Pending

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)

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 in the factory.  
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 design and production in the factory.





AV08NMVEMS  
AV10NMVEMS  
AV12NMVEMS  
AV14NMVEMS  
AV16NMVEMS  
AV18NMVEMS

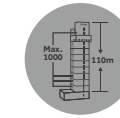


AV20NMVEMS  
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AV26NMVEMS  
AV28NMVEMS



AV30NMVEMS  
AV32NMVEMS  
AV34NMVEMS  
AV36NMVEMS  
AV38NMVEMS  
AV40NMVEMS  
AV42NMVEMS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Auto Addressing  
Indoor Units



Hitachi EVI  
Compressor



Maximum Combination  
136HP

Model			AV114NMVEMS	AV116NMVEMS	AV118NMVEMS	AV120NMVEMS	AV122NMVEMS	AV124NMVEMS	AV126NMVEMS	
Combination model			AV32NMVEMS	AV32NMVEMS	AV34NMVEMS	AV36NMVEMS	AV38NMVEMS	AV40NMVEMS	AV42NMVEMS	
			AV40NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	
			AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	AV42NMVEMS	
			/	/	/	/	/	/	/	
Capacity	Capacity range	HP	114	116	118	120	122	124	126	
	Cooling	kW	319.5	325	331	336	341.5	347	352.5	
	Heating	kW	355.5	364	370.5	376	383	387.5	396	
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	
	Cooling	Rated power input	kW	91.22	94.64	95.49	97.54	99.54	101.34	104.76
		Rated current	A	147.96	153.47	156	158.7	160.45	163.35	168.87
		Max. power input	kW	133.21	133.61	137.98	138.24	143.4	144.5	144.9
		Max. current	A	210.2	214.6	221.3	221.7	232	232.3	236.7
	Heating	Rated power input	kW	88.7	90.4	91.1	92.8	95	97	98.7
		Rated current	A	142.83	145	146.14	149.88	151.99	155.21	157.38
		Max. power input	kW	130.9	132.5	133.98	137.1	141.1	141.8	143.4
		Max. current	A	207.78	210.72	212.99	217.78	227.43	228.19	231.14
	EER	/	3.5	3.43	3.47	3.44	3.43	3.42	3.36	
	COP	/	4.01	4.03	4.07	4.05	4.03	3.99	4.01	
Dimensions	External dimensions(W/D/H)	mm	(1785/830/1858)+(1785/830/1858)+(1785/830/1858)			(1785/830/1858)+(1785/830/1858)+(1785/830/1858)				
	Shipping dimensions(W/D/H)	mm	(1886/950/2025)+(1886/950/2025)+(1886/950/2025)			(1886/950/2025)+(1886/950/2025)+(1886/950/2025)				
Refrigerant	Net weight	kg	446+496+496	446+496+496	496+496+496	496+496+496	496+496+496	496+496+496	496+496+496	
	Shipping weight	kg	481+531+531	481+531+531	531+531+531	531+531+531	531+531+531	531+531+531	531+531+531	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	16+20.5+20.5	16+20.5+20.5	20.5+20.5+20.5	20.5+20.5+20.5	20.5+20.5+20.5	20.5+20.5+20.5	20.5+20.5+20.5	
Fan	Air flow (H)	m <sup>3</sup> /h	87000	87000	87000	87000	90000	90000	90000	
	External static pressure	Pa	50	50	50	50	50	50	50	
Pipe	Refrigerant gas pipe	mm	66.7	66.7	66.7	66.7	66.7	66.7	66.7	
	Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4	
Sound	Sound pressure level (H)	dB(A)	71.07	71.8	71.8	71.8	72.2	72.2	72.77	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Pipe Length	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	
Working Temp.	Cooling	°C	-5-54							
	Heating	°C	-26-27							

\*Pending

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. & O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB)



# MRV5

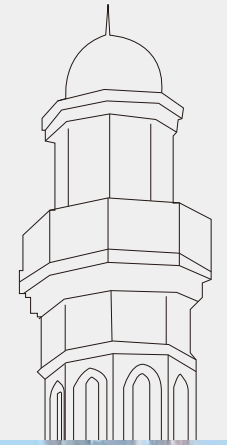
DC INVERTER

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**117** Features & Benefits

**123** MRV 5 Outdoor

**137** Dimensions





# MRV5

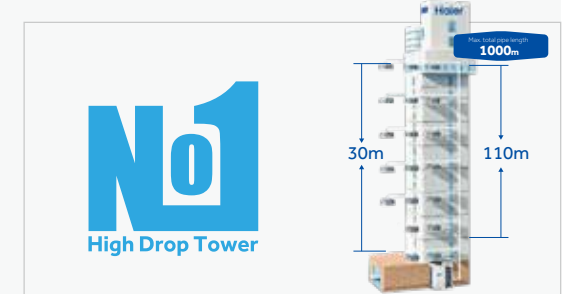


## Advanced Technology

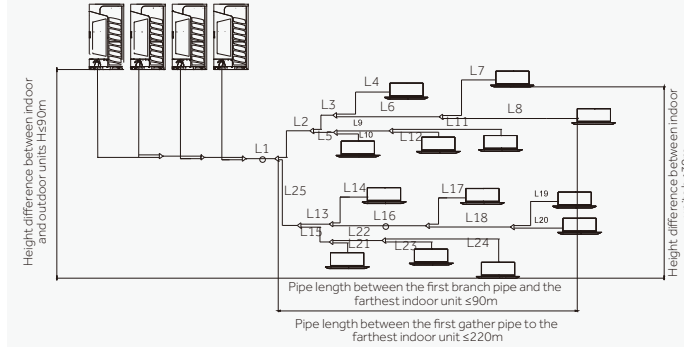
### Total pipe length 1000m, height drop 110m

- 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.



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	$L1+2^{*}+(L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25)$
Pipe length between the first gather pipe to the farthest indoor unit	Actual length	≤220* <sup>1</sup>
	Equivalent length	≤260
Pipe length between the first gather pipe and the first branch pipe (main pipe)	≤130	L1
Pipe length between the first branch pipe and the farthest indoor unit	≤90* <sup>2</sup>	$L2+L3+L6+L8$
Pipe length between indoor units and the nearest branch pipe	≤40* <sup>3</sup>	$L4/L7,8,10,11/L12,14,17/L19,20,21/L23,24$
Pipe length difference between the nearest indoor unit and the farthest indoor unit	≤40	$L2+L3+L6+L8-L2-L5-L10$
Height difference between indoor and outdoor units	Outdoor unit above	≤90* <sup>4</sup>
	Outdoor unit under	≤110* <sup>5</sup>
Height difference between indoor units	≤30* <sup>6</sup>	h

\*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, if  $50m < x \leq 70m$ , 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).

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

## Advanced Technology

### Smart link

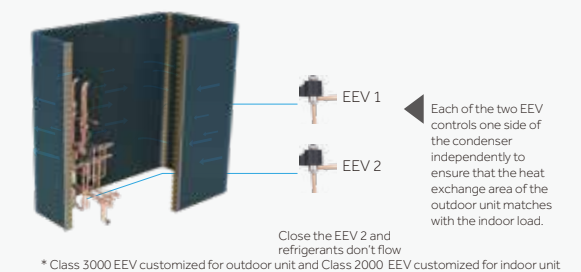
Wireless connection and communication between indoor units.

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



### 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.



\* Class 3000 EEV customized for outdoor unit and Class 2000 EEV customized for indoor unit



# 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.

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

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

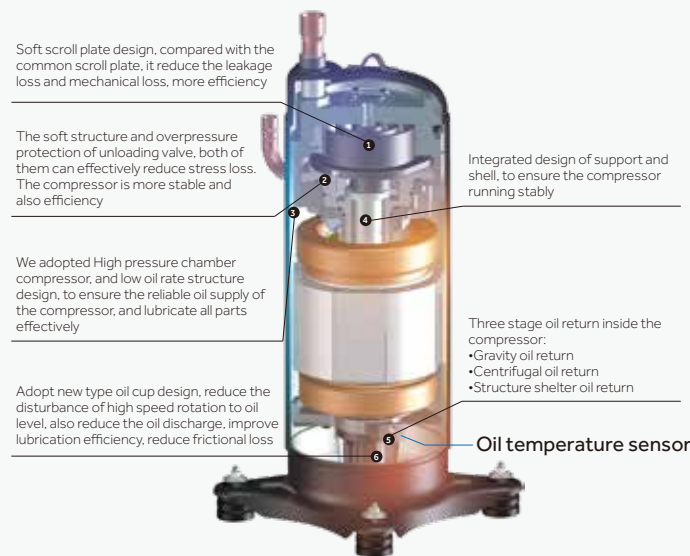
**Energy consumption statistics**  
The bar chart shows the statistics of power consumption in the last seven days, you can query the data in the last 30 days and one year.

# 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.

Exhaust temperature sensor



Each compressor is adopted oil temperature sensor and the discharge temperature sensor, detecting the discharge temperature and oil temperature of compressor, cooperated with the compressor frequency and the EEV control, to ensure exhaust heat and oil temperature superheat kept within the optimal range, ensure that the oil dilution is maintained at a safe level at all times.

# 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.

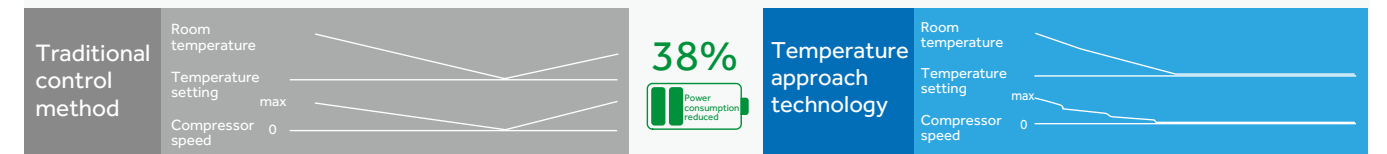


## New one-piece of four-way heat exchanger



## 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. Haier MRV 5 series units adopts 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

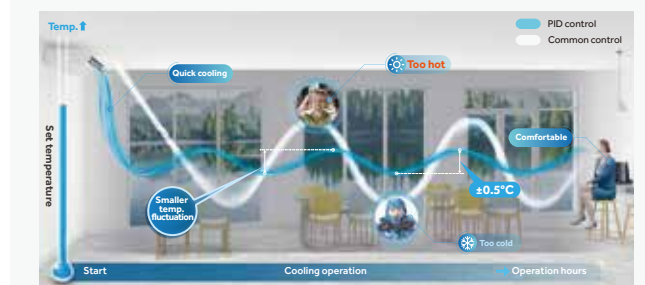
## Wide operation temperature

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 available (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.



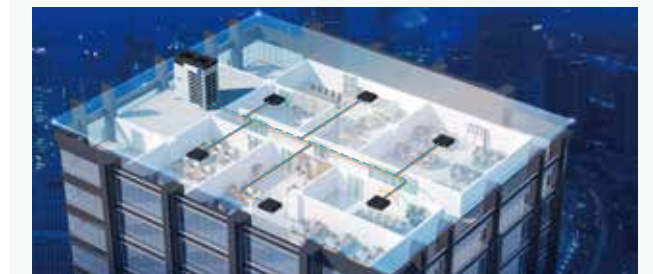
## Automatic snow clearing and dust removal function

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



The outdoor unit is hidden inside the building without affecting the overall image of the building



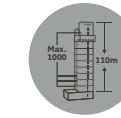
# 3/380~415/50/60



AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor units



Better Cooling Capacity

Model			AV08IMVEVS	AV10IMVEVS	AV12IMVEVS	AV14IMVEVS	AV16IMVEVS	
Combination model			/	/	/	/	/	
			/	/	/	/	/	
			/	/	/	/	/	
			/	/	/	/	/	
Capacity	Capacity range	HP	8	10	12	14	16	
	Cooling	kW	25.2	28.0	33.5	40.0	45.0	
	Heating	kW	27.0	31.5	37.5	45.0	50.0	
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	
	Cooling	Rated power input	kW	5.60	6.80	8.40	10.90	11.80
		Max. power input	kW	12.000	12.900	13.800	16.400	19.200
		Rated current	A	9.45	11.48	14.18	18.40	19.92
		Max. current	A	20.26	21.78	23.30	27.69	32.41
	Heating	Rated power input	kW	5.20	6.30	8.00	10.30	11.20
		Max. power input	kW	10.90	12.20	12.50	15.10	18.40
		Rated current	A	8.78	10.64	13.51	17.39	18.91
		Max. current	A	16.20	18.50	21.10	25.49	31.06
	EER	W/W	4.50	4.12	3.99	3.67	3.81	
COP	W/W	5.19	5.00	4.69	4.37	4.46		
Performance	Air flow (H)	m <sup>3</sup> /h	11000	11000	12000	13500	13500	
	Sound pressure level (H)	dB(A)	56	56	59	59	60	
	Sound power level (H)	dB(A)	67	67	70	70	71	
Installation	External dimensions(W/D/H)	mm	980/750/1690		980/750/1690		980/750/1690	
	Shipping dimensions(W/D/H)	mm	1070/850/1858		1070/850/1858		1070/850/1858	
	Net/Shipping weight	kg	224/250		224/250		244/270	
	Compressor type		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	
	Compressor quantity		1INV	1INV	1INV	1INV	1INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	8.5	8.5	8.5	10	10	
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	12.7	12.7	
	Refrigerant gas pipe	mm	19.05	22.22	25.4	25.4	28.58	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	
	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		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		13	16	20	24	27	
Working Temp.	Cooling	°C	-5~50		-5~50		-5~50	
	Heating	°C	-23~21		-23~21		-23~21	

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB, In heating, indoor Temp. is 20°C DB, outdoor Temp. is 7°C DB/6°CWB)



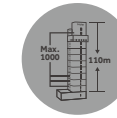


AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV18IMVEVS	AV20IMVEVS	AV22IMVEVS	AV24IMVEVS	AV26IMVEVS	AV28IMVEVS	AV30IMVEVS	AV32IMVEVS	
Combination model			/	/	/	/	/	AV14IMVEVS	AV14IMVEVS	AV16IMVEVS	
			/	/	/	/	/	AV14IMVEVS	AV16IMVEVS	AV16IMVEVS	
			/	/	/	/	/				
			/	/	/	/	/				
Capacity	Capacity range	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	3/380-415/50/60	
	Cooling	Rated power input	kW	14.30	15.10	16.50	17.60	18.80	21.80	22.70	23.60
		Max. power input	kW	21.400	25.100	28.500	29.100	33.000	32.800	35.600	38.400
		Rated current	A	24.14	25.49	27.86	29.71	31.74	36.80	38.32	39.84
		Max. current	A	36.13	42.37	48.11	49.13	55.80	55.37	60.10	64.83
	Heating	Rated power input	kW	13.40	14.60	15.40	16.80	17.70	20.60	21.50	22.40
		Max. power input	kW	17.70	22.70	25.50	26.50	30.40	30.20	33.50	36.80
		Rated current	A	22.62	24.65	26.00	28.36	29.88	34.78	36.30	37.82
		Max. current	A	29.88	38.32	43.05	44.74	51.32	50.98	56.55	62.13
	EER	W/W	3.52	3.71	3.73	3.86	3.91	3.67	3.74	3.81	
	COP	W/W	4.22	4.21	4.48	4.35	4.66	4.37	4.42	4.46	
Performance	Air flow (H)	m³/h	17000	17000	18000	18000	19000	27000	27000	27000	
	Sound pressure level (H)	dB(A)	61	61	61	62	62	62	62.5	63	
	Sound power level (H)	dB(A)	72	72	72	73	73	73	73.5	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	350/377	370/400		244/270+244/270		244/270+244/270	244/270+244/270	
	Compressor type		DC INV. SCROLL	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	mitsubishi electric	
	Compressor quantity		1INV	2INV	2INV	2INV	2INV	2INV	2INV	2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10	10	10	10	10	20	20	20	
	Refrigerant liquid pipe	mm	15.88	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	28.58	31.8	31.8	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	110	
	Connection Ratio	Connectable indoor unit ratio	%	50-130	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
Working Temp.	Cooling	°C	-5-50			-5-50					
	Heating	°C	-23-21			-23-21					

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB; In heating, indoor Temp. is 20°C DB, outdoor Temp. is 7°C DB/6°C WB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.



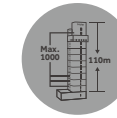


AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

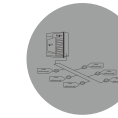
# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV34IMVEVS	AV36IMVEVS	AV38IMVEVS	AV40IMVEVS	AV42IMVEVS	AV44IMVEVS	AV46IMVEVS	
Combination model	AV16IMVEVS			AV18IMVEVS	AV18IMVEVS	AV20IMVEVS	AV20IMVEVS	AV22IMVEVS	AV22IMVEVS	
	AV18IMVEVS			AV18IMVEVS	AV20IMVEVS	AV20IMVEVS	AV22IMVEVS	AV22IMVEVS	AV24IMVEVS	
	/		/	/	/	/	/	/	/	
	/		/	/	/	/	/	/	/	
Capacity	Capacity range	HP	34	36	38	40	42	44	46	
	Cooling	kW	95.4	100.8	106.4	112.0	117.5	123.0	129.5	
	Heating	kW	106.5	113.0	118.0	123.0	130.5	138.0	142.0	
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	
	Cooling	Rated power input	kW	26.10	28.60	29.40	30.20	31.60	33.00	34.10
		Max. power input	kW	40.600	42.800	46.500	50.200	53.60	57.00	57.60
		Rated current	A	44.06	48.28	49.63	50.98	53.35	55.71	57.57
		Max. current	A	68.54	72.26	78.50	84.75	90.49	96.23	97.24
	Heating	Rated power input	kW	24.60	26.80	28.00	29.20	30.00	30.80	32.20
		Max. power input	kW	36.10	35.40	40.40	45.40	48.20	51.00	52.00
		Rated current	A	41.53	45.24	47.27	49.30	50.65	52.00	54.36
		Max. current	A	60.94	59.76	68.20	76.64	81.37	86.10	87.79
	EER	W/W	3.66	3.52	3.62	3.71	3.72	3.73	3.80	
COP	W/W	4.33	4.22	4.21	4.21	4.35	4.48	4.41		
Performance	Air flow (H)	m <sup>3</sup> /h	30500	34000	34000	34000	35000	36000	36000	
	Sound pressure level (H)	dB(A)	63.5	64	64	64	64	64	64.5	
	Sound power level (H)	dB(A)	74.5	75	75	75	75	75		
Installation	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	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	DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	
	Compressor quantity		2INV	2INV	3INV	4INV	4INV	4INV	4INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	20	20	20	20	20	20	20	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	31.8	38.1	38.1	38.1	38.1	38.1	38.1	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		56	59	63	64	64	64	64	
Working Temp.	Cooling	°C	-5-50				-5-50			
	Heating	°C	-23-21				-23-21			

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.

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 indoor units 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 tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)



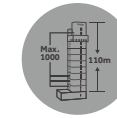


AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV48IMVEVS	AV50IMVEVS	AV52IMVEVS	AV54IMVEVS	AV56IMVEVS	AV58IMVEVS	AV60IMVEVS	AV62IMVEVS	
Combination model			AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	AV18IMVEVS	AV18IMVEVS	AV18IMVEVS	AV20IMVEVS	AV22IMVEVS	
			AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	AV18IMVEVS	AV18IMVEVS	AV20IMVEVS	AV20IMVEVS	AV20IMVEVS	
			/	/	/	AV18IMVEVS	AV20IMVEVS	AV20IMVEVS	AV20IMVEVS	AV20IMVEVS	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	48	50	52	54	56	58	60	62	
	Cooling	kW	136.0	141.5	147.0	151.2	156.8	162.4	168.0	173.5	
	Heating	kW	146.0	155.5	165.0	169.5	174.5	179.5	184.5	192.0	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	35.20	36.40	37.60	42.90	43.70	44.50	45.30	46.70
		Max. power input	kW	58.20	62.10	66.00	64.20	67.90	71.60	75.30	78.70
		Rated current	A	59.42	61.45	63.48	72.42	73.77	75.13	76.48	78.84
		Max. current	A	98.25	104.93	111.60	108.38	114.63	120.88	127.12	132.86
	Heating	Rated power input	kW	33.60	34.50	35.40	40.20	41.40	42.60	43.80	44.60
		Max. power input	kW	53.00	56.90	60.80	53.10	58.10	63.10	68.10	70.90
		Rated current	A	56.72	58.24	59.76	67.87	69.89	71.92	73.94	75.29
		Max. current	A	89.48	96.06	102.64	89.64	98.08	106.53	114.97	119.69
	EER	W/W	3.86	3.89	3.91	3.52	3.59	3.65	3.71	3.72	
COP	W/W	4.35	4.51	4.66	4.22	4.21	4.21	4.21	4.30		
Performance	Air flow (H)	m <sup>3</sup> /h	36000	37000	38000	51000	51000	51000	51000	52000	
	Sound pressure level (H)	dB(A)	65	65	65	65.8	65.8	65.8	65.8	65.8	
	Sound power level (H)	dB(A)	76	76	76	76.5	76.5	76.5	76.5	76.5	
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				
	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				
	Net/Shipping weight	kg	370/400+370/400		370/400+370/400		287/317+287/317+287/317	287/317+287/317+370/400	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	DC INV. SCROLL	DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	
	Compressor quantity		4INV	4INV	4INV	3INV	4INV	5INV	6INV	6INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	20	20	20	30	30	30	30	30	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	38.1	41.3	41.3	41.3	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50				-5-50				
	Heating	°C	-23-21				-23-21				

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.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.

Standard design and production in the factory.

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 design and production in the factory.

\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)



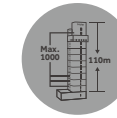


AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV64IMVEVS	AV66IMVEVS	AV68IMVEVS	AV70IMVEVS	AV72IMVEVS	AV74IMVEVS	AV76IMVEVS	AV78IMVEVS	
Combination model			AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	AV26IMVEVS	
			AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	
			AV20IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	
			/	/	/	/	/	/	/	/	
Capacity	Capacity range	HP	64	66	68	70	72	74	76	78	
	Cooling	kW	179.0	184.5	191.0	197.5	204.0	209.5	215.0	220.5	
	Heating	kW	199.5	207.0	211.0	215.0	219.0	228.5	238.0	247.5	
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	3/380-415/50/60	
	Cooling	Rated power input	kW	48.10	49.50	50.60	51.70	52.80	54.00	55.20	56.40
		Max. power input	kW	82.10	85.50	86.10	86.70	87.30	91.20	95.10	99.00
		Rated current	A	81.20	83.57	85.42	87.28	89.14	91.16	93.19	95.21
		Max. current	A	138.60	144.34	145.35	146.37	147.38	154.05	160.73	167.40
	Heating	Rated power input	kW	45.40	46.20	47.60	49.00	50.40	51.30	52.20	53.10
		Max. power input	kW	73.70	76.50	77.50	78.50	79.50	83.40	87.30	91.20
		Rated current	A	76.64	78.00	80.36	82.72	85.09	86.61	88.12	89.64
		Max. current	A	124.42	129.15	130.84	132.52	134.21	140.80	147.38	153.96
	EER	W/W	3.72	3.73	3.77	3.82	3.86	3.88	3.89	3.91	
COP	W/W	4.39	4.48	4.43	4.39	4.35	4.45	4.56	4.66		
Performance	Air flow (H)	m <sup>3</sup> /h	53000	54000	54000	54000	54000	55000	56000	57000	
	Sound pressure level (H)	dB(A)	65.8	65.8	66	66.5	66.8	66.8	66.8	66.8	
	Sound power level (H)	dB(A)	76.5	76.5	77	77.5	77.8	77.8	77.8	77.7	
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				
	Shipping dimensions(W/D/H)	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+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	DC INV. SCROLL	DC INV. SCROLL	
	Compressor brand		mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	
	Compressor quantity		6INV	6INV	6INV	6INV	6INV	6INV	6INV	6INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	30	30	30	30	30	30	30	30	
	Refrigerant liquid pipe	mm	19.05	19.05	22.2	22.2	22.2	22.2	22.2	22.2	
	Refrigerant gas pipe	mm	41.3	41.3	44.5	44.5	44.5	44.5	44.5	44.5	
	Max. total pipe length	m	1000	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	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	110	
	Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	50-130
Maximum number of indoor units			64	64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-50				-5-50				
	Heating	°C	-23-21				-23-21				

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.

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 indoor units 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 tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)



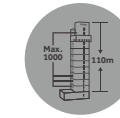


AV08IMVEVS  
AV10IMVEVS  
AV12IMVEVS  
AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV80IMVEVS	AV82IMVEVS	AV84IMVEVS	AV86IMVEVS	AV88IMVEVS	AV90IMVEVS	AV92IMVEVS	
Combination model			AV20IMVEVS	AV20IMVEVS	AV20IMVEVS	AV20IMVEVS	AV22IMVEVS	AV24IMVEVS	AV24IMVEVS	
			AV20IMVEVS	AV20IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV24IMVEVS	
			AV20IMVEVS	AV20IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	
			AV20IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	AV22IMVEVS	
Capacity	Capacity range	HP	80	82	84	86	88	90	92	
	Cooling	kW	224.0	229.5	235.0	240.5	246.0	252.5	259.0	
	Heating	kW	246.0	253.5	261.0	268.5	276.0	280.0	284.0	
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	
	Cooling	Rated power input	kW	60.40	61.80	63.20	64.60	66.00	67.10	68.20
		Max. power input	kW	100.40	103.80	107.20	110.60	114.00	114.60	115.20
		Rated current	A	101.97	104.33	106.69	109.06	111.42	113.28	115.14
		Max. current	A	169.50	175.24	180.98	186.72	192.46	193.47	194.48
	Heating	Rated power input	kW	58.40	59.20	60.00	60.80	61.60	63.00	64.40
		Max. power input	kW	90.80	93.60	96.40	99.20	102.00	103.00	104.00
		Rated current	A	98.59	99.94	101.29	102.64	103.99	106.36	108.72
		Max. current	A	153.29	158.02	162.74	167.47	172.20	173.89	175.57
	EER	W/W	3.71	3.71	3.72	3.72	3.73	3.76	3.80	
	COP		4.21	4.28	4.35	4.42	4.48	4.44	4.41	
Performance	Air flow (H)		68000	69000	70000	71000	72000	72000	72000	
	Sound pressure level (H)	W/W	67	67	67	67	67	67.5	67.5	
	Sound power level (H)	m <sup>3</sup> /h	78	78	78	78	78	78.5	78.5	
Installation	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+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+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	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor brand	kg	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	
	Compressor quantity		8INV	8INV	8INV	8INV	8INV	8INV	8INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	40	40	40	40	40	40	40	
	Refrigerant liquid pipe	mm	22.2	22.2	22.2	25.4	25.4	25.4	25.4	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	50.8	50.8	50.8	50.8	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
	Maximum number of indoor units		64	64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5~50			-5~50				
	Heating	°C	-23~21			-23~21				

Max drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max drop between I.U. \*3  
Standard drop between I.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.

Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition (In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24WB; In heating, indoor Temp. is 20°C DB, outdoor Temp. is 7°C DB/6°CWB)



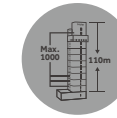


AV08IMVEVS  
AV10IMVEVS  
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AV14IMVEVS  
AV16IMVEVS



AV18IMVEVS  
AV20IMVEVS  
AV22IMVEVS  
AV24IMVEVS  
AV26IMVEVS

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV94IMVEVS	AV96IMVEVS	AV98IMVEVS	AV100IMVEVS	AV102IMVEVS	AV104IMVEVS	
Combination model	AV24IMVEVS		AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	AV26IMVEVS	AV26IMVEVS	
	AV24IMVEVS		AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	AV26IMVEVS	
	AV24IMVEVS		AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	AV26IMVEVS	
	AV22IMVEVS		AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV24IMVEVS	AV26IMVEVS	
Capacity	Capacity range	HP	94	96	98	100	102	104	
	Cooling	kW	265.5	272.0	277.5	283.0	288.5	294.0	
	Heating	kW	288.0	292.0	301.5	311.0	320.5	330.0	
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	
	Cooling	Rated power input	kW	69.30	70.40	71.60	72.80	74.00	75.20
		Max. power input	kW	115.80	116.40	120.30	124.20	128.10	132.00
		Rated current	A	116.99	118.85	120.88	122.90	124.93	126.95
		Max. current	A	195.49	196.51	203.18	209.85	216.53	223.20
	Heating	Rated power input	kW	65.80	67.20	68.10	69.00	69.90	70.80
		Max. power input	kW	105.00	106.00	109.90	113.80	117.70	121.60
		Rated current	A	111.08	113.45	114.97	116.49	118.01	119.53
		Max. current	A	177.26	178.95	185.53	192.12	198.70	205.29
	EER	W/W	3.83	3.86	3.88	3.89	3.90	3.91	
COP	W/W	4.38	4.35	4.43	4.51	4.59	4.66		
Performance	Air flow (H)	m <sup>3</sup> /h	72000	72000	73000	74000	75000	76000	
	Sound pressure level (H)	dB(A)	68	68	68	68	68	68	
	Sound power level (H)	dB(A)	78.8	79	79	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	
	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	
	Net/Shipping weight	kg	370/400+370/400+370/400+370/400		370/400+370/400+370/400+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	DC INV. SCROLL
	Compressor brand		mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric	mitsubishi electric
	Compressor quantity		8INV	8INV	8INV	8INV	8INV	8INV	8INV
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	40	40	40	40	40	40	40
	Refrigerant liquid pipe	mm	25.4	25.4	25.4	25.4	25.4	25.4	25.4
	Refrigerant gas pipe	mm	50.8	50.8	54.1	54.1	54.1	54.1	54.1
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40
	Max. drop between I.U. *3	m	30	30	30	30	30	30	30
	Standard drop between I.U. *4	m	18	18	18	18	18	18	18
External static pressure	Pa	110	110	110	110	110	110	110	
Connection Ratio	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			

Max drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max drop between I.U.&O.U. \*2  
Standard design and production in the factory.  
Max drop between I.U. \*3  
Standard design and production in the factory.  
Max drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. is 35°C DB/24°C WB, In heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°C WB)

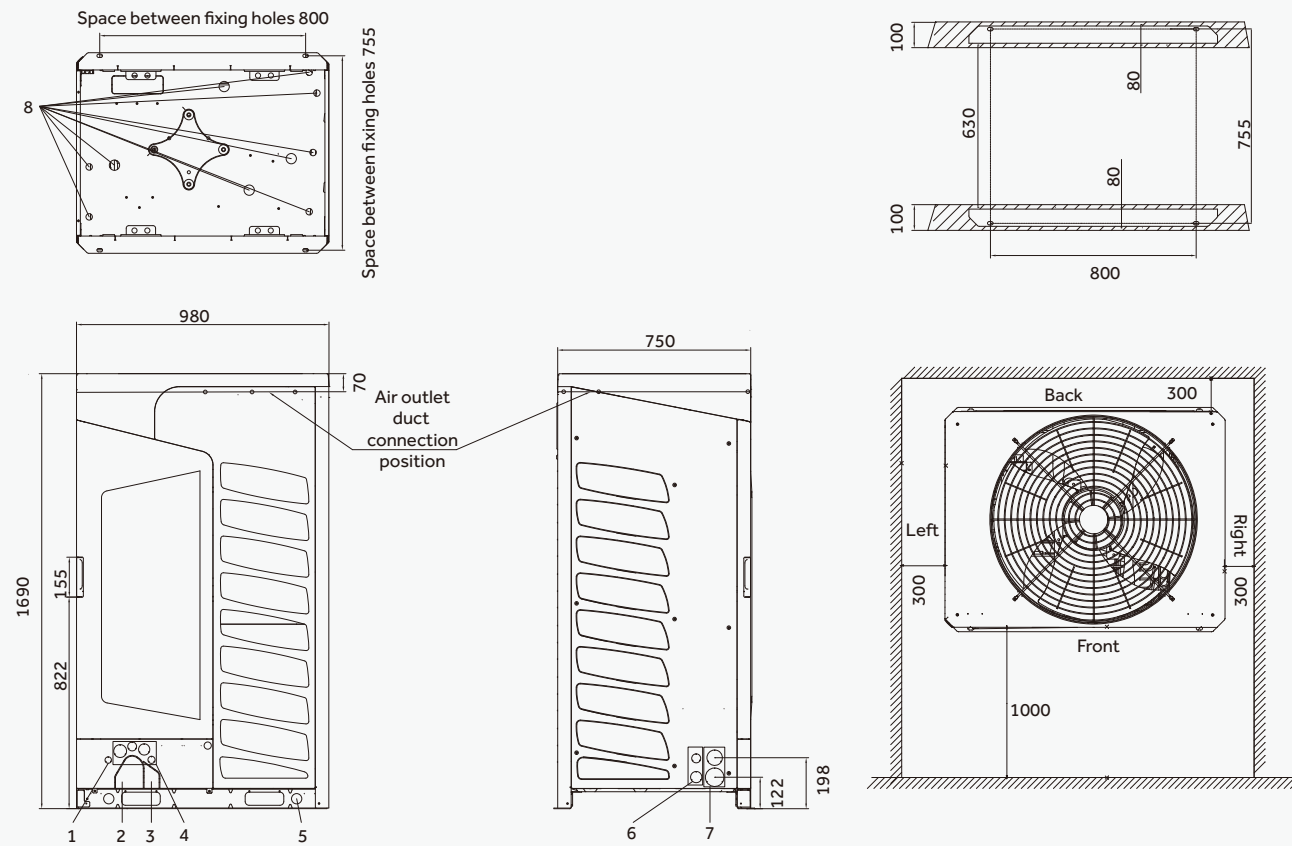
If the height difference between the outdoor and the indoor units is from 50 to 110m, you MUST contact your local distributor/dealer for individual design and production.  
If the height difference between the indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.



# Dimensions

AV08IMVEVS AV10IMVEVS AV12IMVEVS AV14IMVEVS AV16IMVEVS

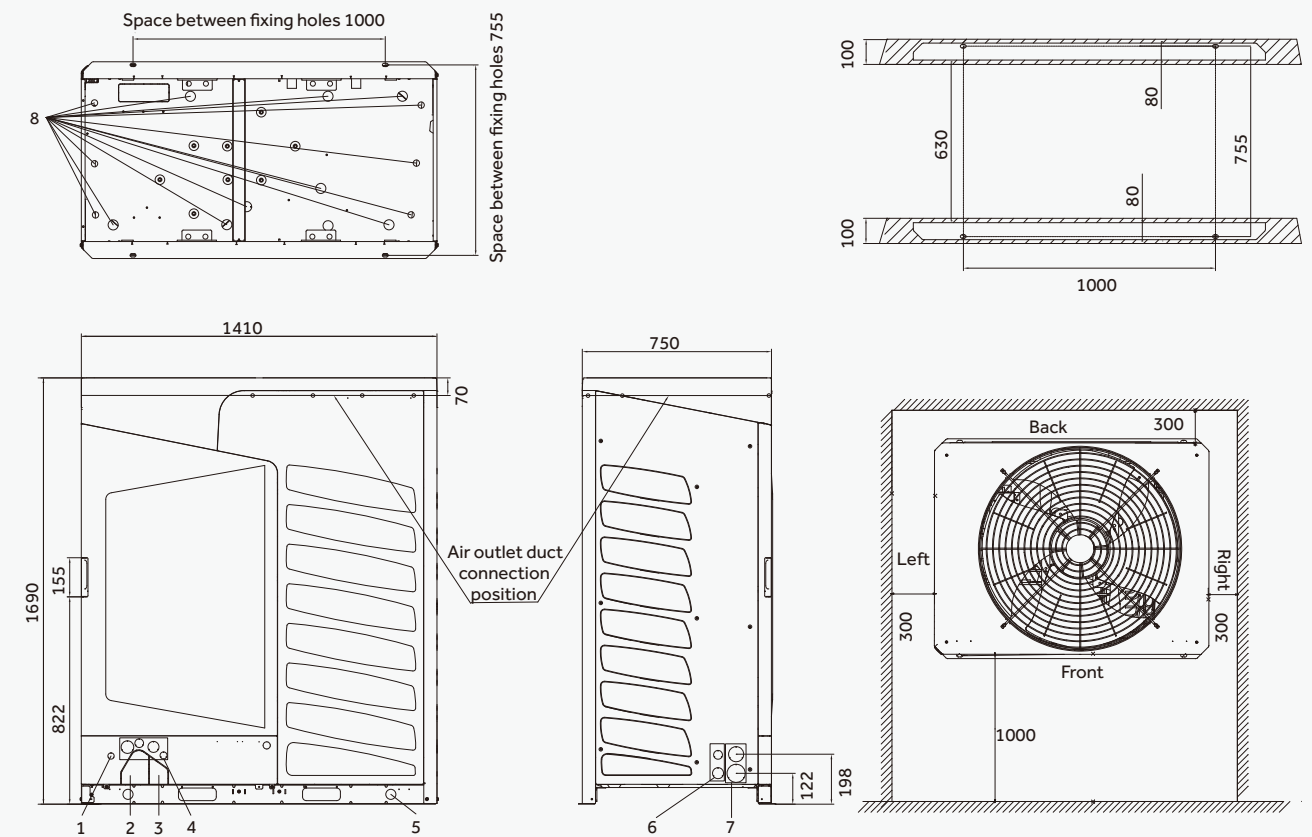
Unit:mm



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	

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	

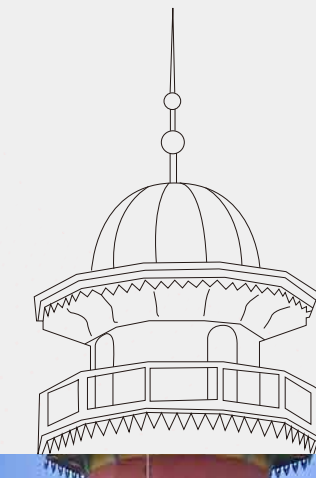


# MRV5-C<sup>T1</sup>

DC INVERTER

**141** Features & Benefits

**146** MRV 5-C Outdoor





 **Cooling Only**



# MRV5-C



Advanced Technology



High Efficiency



Super Comfort

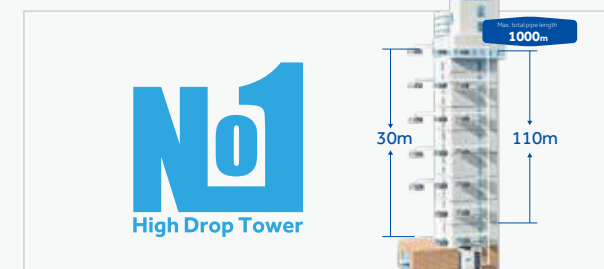


Easy Installation

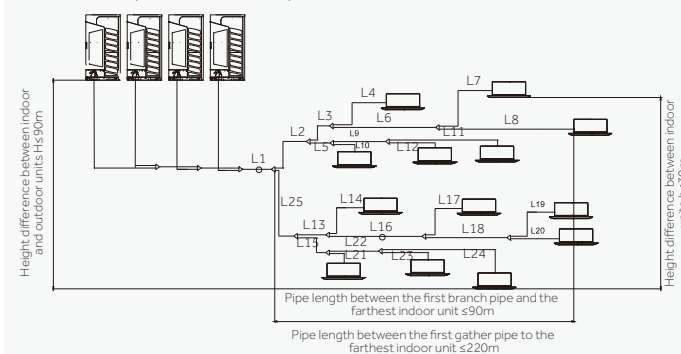
## Advanced Technology

**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 unit (outdoor unit above)



Pipe length and height difference (m)	Allowable value	For example
Single way total pipe length	≤1000	$L1+2^*+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25$
Pipe length between the first gather pipe to the farthest indoor unit	Actual length ≤260 Equivalent length ≤130	$L1+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25$
Pipe length between the first gather pipe and the first branch pipe (main pipe)	≤90**	L1
Pipe length between the first branch pipe and the farthest indoor unit	≤40**	$L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25$
Pipe length between indoor units and the nearest branch pipe	≤40	$L4/L7/L8/L10/L11/L12/L14/L17/L19/L20/L21/L23/L24$
Pipe length difference between the nearest indoor unit and the farthest indoor unit	≤90**	$L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25$
Height difference between indoor and outdoor units	Outdoor unit above Outdoor unit under ≤110**	h
Height difference between indoor units	≤30**	h

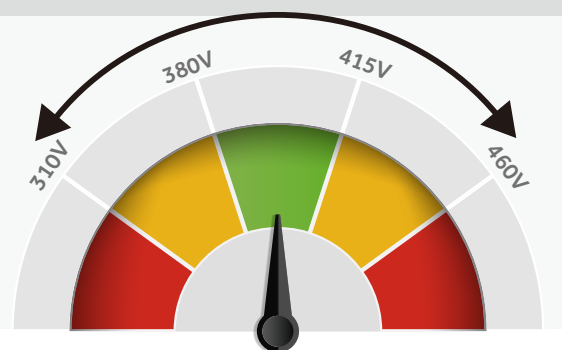
1. Standard length ≤90m, if >90m, enlarge the pipe diameter as pipe "C" diameter rules.
2. Standard length ≤40m, if >40m, the pipe between the first branch and the farthest indoor unit need to enlarge one size (refer to pipe "A" & "B" diameter rules).
3. Standard length ≤15m, if >15m, the pipe between indoor units and the nearest branch pipe need to enlarge one size (refer to pipe "A" diameter rules).
4. Standard height differences ≤50m, if  $50m < x \leq 70m$ , 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).

## Advanced Technology

### Wide voltage operation

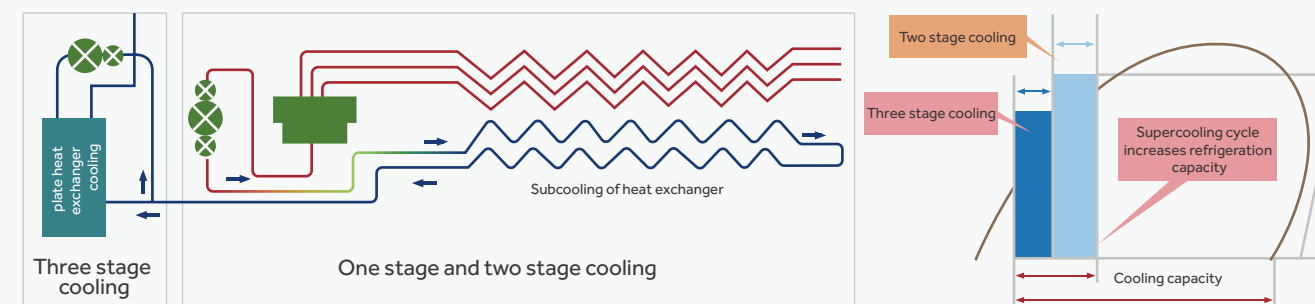
The new MRV 5-C adopt wide voltage filter board, this can insure the unit stable working in voltage range between 310V~460V (note: outdoor unit).



### 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%.







One stage cooling

Two stage cooling

Three stage cooling

## 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.

Haier 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



Competitive refrigerant heat dissipation



Haier direct cooling refrigerant heat dissipation

#### Directly cooling PCB technology:

Cooling refrigerant in to the heat exchanger pipe directly, then the heat exchanger pipe cooled the compressor driver module. reduce heat loss, high cooling effect.

## High Efficiency

### New one-piece of four-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.



DC fan motor

Strong magnetic rotor, small vortex of refrigerant

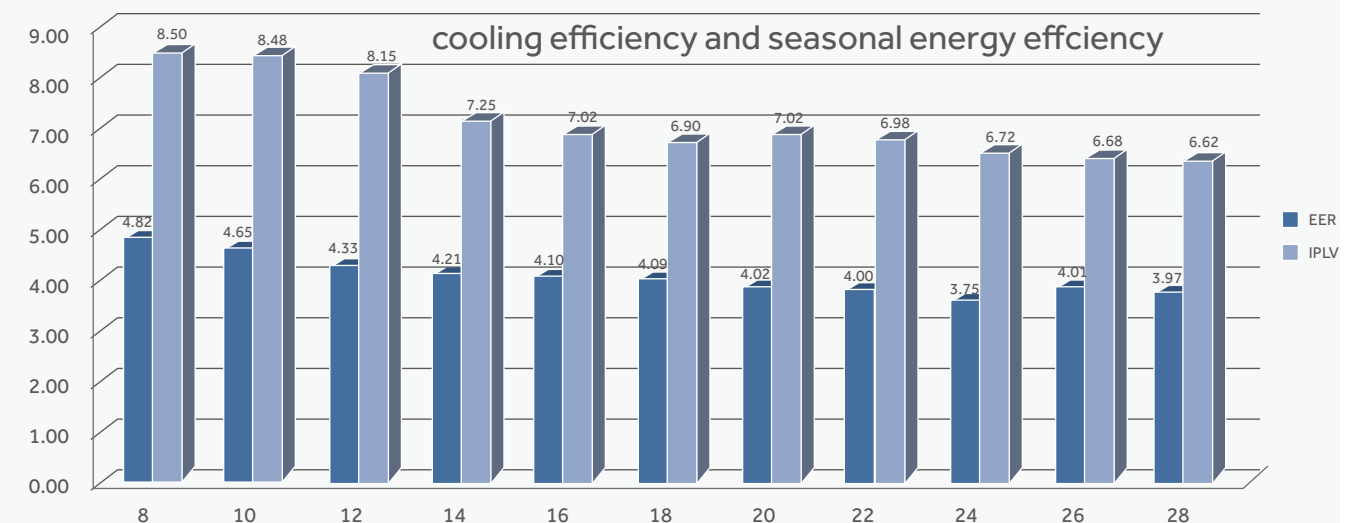
## High Efficiency

### 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.



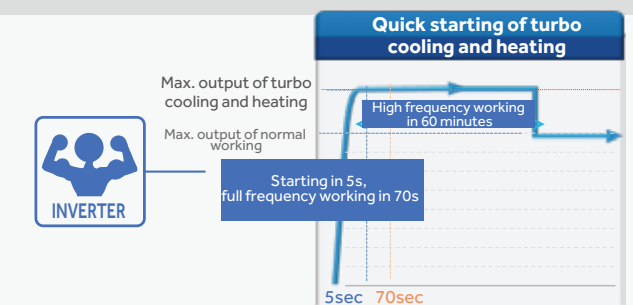
### IPLV up to 8.5 (8HP), EER up to 4.82 (8HP)



## Super Comfort

### Quick cooling

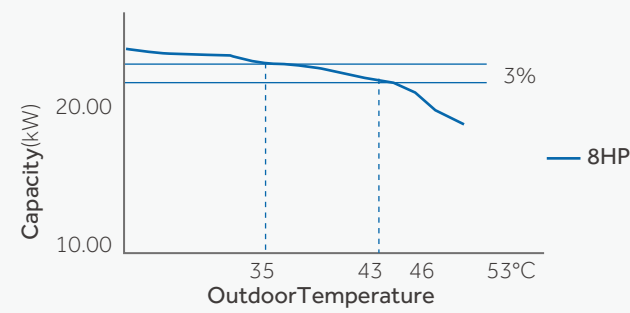
Start up and reaching maximum output in short time, realize quick cooling.





## High temperature performance

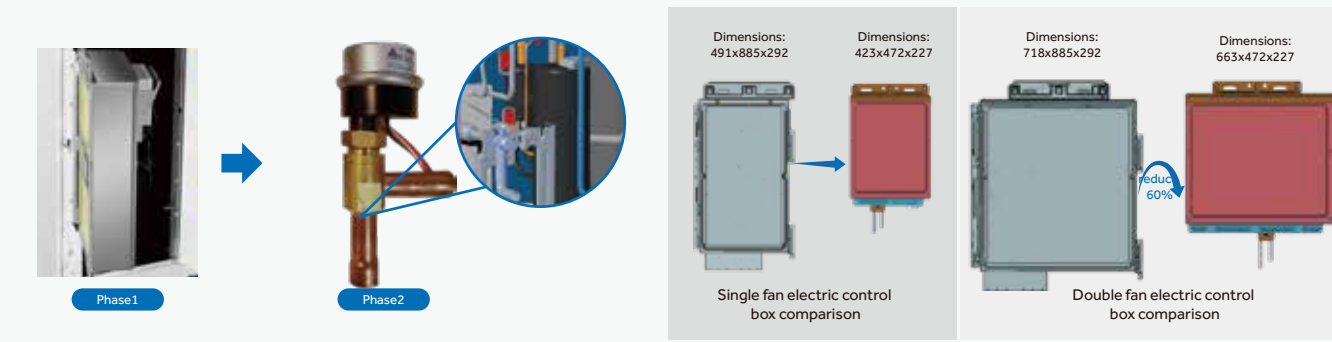
Stable performance in high temperature condition, insure the user comfortable experience. The cooling capacity will be reduced only within 5% under the outdoor working condition of 43°C of the whole series products.



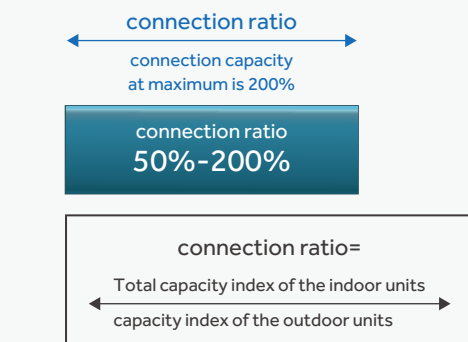
## Easy Installation

### 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



Conditions of MRV indoor unit connection capacity(TBD)	
Applicable MRV indoor units	All indoor units
Single outdoor units	200%
Double outdoor units	150%
TRIPle outdoor units	130%

Note: If the operational capacity of indoor units is more than 130%, low airflow operation is recommend 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	Capacity range	HP	8	10	12	14	16
	Cooling	kW	22.4	28.0	33.5	40.0	45.0
	Power supply	PhV/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	Cooling	Rated power input	kW	4.65	6.02	7.74	9.50
		Max. power input	kW	11.15	11.53	12.09	15.7
		Rated current	A	7.85	10.17	13.06	16.04
		Max. current	A	18.20	18.91	19.74	26.62
	EER		4.82	4.65	4.33	4.21	
	ISEER		8.5	8.75	8.3	7.4	
Performance	Air flow (H)	m <sup>3</sup> /h	11000	11000	12000	13500	
	Sound pressure level (H)	dB(A)	59.0	59.0	59.0	60.0	
	Sound power level (H)	dB(A)	73.0	73.0	73.0	74.0	
Installation	External dimensions(W/D/H)	mm	980/750/1690				
	Shipping dimensions(W/D/H)	mm	1070/850/1858				
	Net/shipping weight	kg	201/226	201/226	201/226	202/227	
	Compressor type		DC INV. Twin-Rotary				
	Compressor brand		MITSUBISHI ELECTRIC				
	Compressor quantity		1INV	1INV	1INV	1INV	
	Refrigerant type		R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	9	9	9	10	
	Refrigerant liquid pipe	mm	9.52	9.52	12.70	12.70	
	Refrigerant gas pipe	mm	19.05	22.22	25.40	25.40	
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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90		
Standard drop between I.U.&O.U (O.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		
External static pressure	Pa	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-200 with limitation				
	Maximum number of indoor units		20	25	30	36	
Working Temp.	Cooling	°C	-5-53				



 Cooling Only

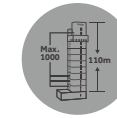


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model		AV20NMVQVA	AV22NMVQVA	AV24NMVQVA	AV26NMVQVA	AV28NMVQVA	AV30NMVQVA	AV32NMVQVA		
Combination model		/	/	/	/	/	AV14NMVQVA	AV16NMVQVA		
		/	/	/	/	/	AV16NMVQVA	AV16NMVQVA		
		/	/	/	/	/	/	/		
		/	/	/	/	/	/	/		
Capacity	Capacity range	HP	20	22	24	26	28	30	32	
	Cooling	kW	56.0	61.5	67.0	73.0	78.0	85.0	90.0	
	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	Cooling	Rated power input	kW	13.93	15.38	17.87	18.20	19.65	20.5	22.0
		Max. power input	kW	33.01	33.31	33.64	33.92	34.24	34.1	36.8
		Rated current	A	23.52	25.96	30.16	30.73	33.17	34.6	37.1
		Max. current	A	53.55	54.21	54.70	55.23	55.7	56.9	60.6
	EER		4.02	4.00	3.75	4.01	3.97	4.15	4.10	
	ISEER		7.02	6.98	6.72	6.68	6.62	7.18	7.02	
	IPLV		7.02	6.98	6.72	6.68	6.62	7.13	7.00	
Performance	Air flow (H)	m <sup>3</sup> /h	17000	18000	19000	19000	19000	13500+13500	13500+13500	
	Sound pressure level (H)	dB(A)	63.0	63.0	64.0	64.0	64.0	63.5	64.0	
	Sound power level (H)	dB(A)	77.0	77.0	78.0	78.0	78.0	77.5	78.0	
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	310/339	310/339	329/359	329/359	329/359	203/228+220/245	220/245+220/245	
	Compressor type		DC INV. Twin-Rotary			DC INV. Twin-Rotary		DC INV. Twin-Rotary		
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC		
	Compressor quantity		2INV	2INV	2INV	2INV	2INV	1INV+1INV	1INV+1INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10	10	10	10	10	9+10	10+10	
	Refrigerant liquid pipe	mm	15.88	15.88	15.88	15.88	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	28.58	28.58	28.58	28.58	31.75	31.75	31.75	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	18	
	External static pressure	Pa	110	110	110	110	110	110	110	
Connection Ratio	Connectable indoor unit ratio	%	50-200 with limitation			50-200 with limitation		50-150 with limitation		
	Maximum number of indoor units		50	55	60	64	64	64	64	
Working Temp.	Cooling	°C	-5-53			-5-53		-5-53		

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB, in heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.



 Cooling Only

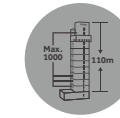


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model		AV34NMVQVA	AV36NMVQVA	AV38NMVQVA	AV40NMVQVA	AV42NMVQVA	AV44NMVQVA		
Combination model		AV16NMVQVA	AV18NMVQVA	AV18NMVQVA	AV20NMVQVA	AV20NMVQVA	AV22NMVQVA		
		AV18NMVQVA	AV18NMVQVA	AV20NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA		
		/	/	/	/	/	/		
		/	/	/	/	/	/		
Capacity	Capacity range	HP	34	36	38	40	42	44	
	Cooling	kW	95.0	100.0	106.0	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	Cooling	Rated power input	kW	23.2	24.4	26.2	27.9	29.3	30.8
		Max. power input	kW	40.3	43.7	54.9	66.0	66.3	66.6
		Rated current	A	39.2	41.3	44.2	47.0	49.5	51.9
		Max. current	A	64.6	68.5	87.8	107.1	107.8	108.4
	EER		4.09	4.09	4.05	4.02	4.01	4.00	
	ISEER		7.11	7.20	7.09	6.99	6.96	6.93	
	IPLV		6.95	6.90	7.02	7.13	7.06	6.99	
Performance	Air flow (H)	m <sup>3</sup> /h	13500+13500	13500+13500	13500+17000	17000+17000	17000+18000	18000+18000	
	Sound pressure level (H)	dB(A)	64.5	65.0	65.5	66.0	66.0	66.0	
	Sound power level (H)	dB(A)	78.5	79.0	79.5	80.0	80.0	80.0	
Installation	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				
	Net/shipping weight	kg	220/245+224/249	224/249+224/249	224/249+310/339	310/339+310/339	310/339+310/339	310/339+310/339	
	Compressor type		DC INV. Twin-Rotary			DC INV. Twin-Rotary			
	Compressor brand		MITSUBISHI ELECTRIC			MITSUBISHI ELECTRIC			
	Compressor quantity		1INV+1INV	1INV+1INV	1INV+2INV	2INV+2INV	2INV+2INV	2INV+2INV	
	Refrigerant type		R410A	R410A	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	19.05	19.05	
	Refrigerant gas pipe	mm	31.75	38.1	38.1	38.1	38.1	38.1	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-150 with limitation			50-150 with limitation			
	Maximum number of indoor units		64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-53			-5-53			

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB, in heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.  
Standard design and production in the factory.



 Cooling Only

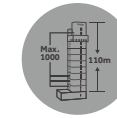


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model		AV46NMVQVA	AV48NMVQVA	AV50NMVQVA	AV52NMVQVA	AV54NMVQVA	AV56NMVQVA		
Combination model		AV22NMVQVA	AV24NMVQVA	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA		
		AV24NMVQVA	AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA	AV28NMVQVA		
		/	/	/	/	/	/		
		/	/	/	/	/	/		
Capacity	Capacity range	HP	46	48	50	52	54	56	
	Cooling	kW	128.5	134.0	140.0	146.0	151.0	156.0	
	Power supply	PhV/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	33.2	35.7	36.1	36.4	37.9	39.3
		Max. power input	kW	67.0	67.3	67.6	67.8	68.2	68.5
		Rated current	A	56.1	60.3	60.9	61.5	63.9	66.3
		Max. current	A	108.9	109.4	109.9	110.5	110.9	111.4
	EER		3.87	3.75	3.88	4.01	3.99	3.97	
	ISEER		6.81	6.69	6.67	6.65	6.62	6.60	
	IPLV		6.84	6.70	6.70	6.71	6.68	6.65	
Performance	Air flow (H)	m <sup>3</sup> /h	18000+19000	19000+19000	19000+19000	19000+19000	19000+19000	19000+19000	
	Sound pressure level (H)	dB(A)	66.5	67.0	67.0	67.0	67.0	67.0	
	Sound power level (H)	dB(A)	80.5	81.0	81.0	81.0	81.0	81.0	
Installation	External dimensions(W/D/H)	mm	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				
	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		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	
	Refrigerant type		R410A	R410A	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	19.05	19.05	
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	38.1	38.1	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	
	Standard drop between I.U *4	m	18	18	18	18	18	18	
External static pressure	Pa	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-150 with limitation			50-150 with limitation			
	Maximum number of indoor units		64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-53			-5-53			

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.



 Cooling Only

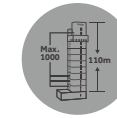


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

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	Capacity range	HP	58	60	62	64	66	68		
	Cooling	kW	162.0	168.0	173.5	179.0	184.5	190.0		
	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	Cooling	Rated power input	kW	40.1	41.8	43.2	44.7	46.1	48.6	
		Max. power input	kW	87.9	99.0	99.3	99.6	99.9	100.3	
		Rated current	A	67.7	70.6	73.0	75.4	77.9	82.1	
		Max. current	A	141.4	160.7	161.3	162.0	162.6	163.1	
		EER		4.04	4.02	4.01	4.01	4.00	3.91	
	ISEER		7.05	6.99	6.97	6.95	6.93	6.85		
	IPLV		7.06	7.13	7.08	7.04	6.99	6.89		
Performance	Air flow (H)	m <sup>3</sup> /h	13500+17000+17000	17000+17000+17000	17000+17000+18000	17000+18000+18000	18000+18000+18000	18000+18000+19000		
	Sound pressure level (H)	dB(A)	67.5	67.5	67.5	67.5	67.5	68.0		
	Sound power level (H)	dB(A)	81.5	81.5	81.5	81.5	81.5	82.0		
Installation	External dimensions(W/D/H)	mm	980/750/1690+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						
	Net/shipping weight	kg	224/249+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			
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC			
	Compressor quantity		1INV+2INV+2INV	2INV+2INV+2INV	2INV+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+10	10+10+10	10+10+10	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	19.05	22.2	
	Refrigerant gas pipe	mm	41.3	41.3	41.3	41.3	41.3	41.3	44.5	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	30	
Standard drop between I.U *4	m	18	18	18	18	18	18	18		
External static pressure	Pa	110	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130 with limitation				50-130 with limitation			
	Maximum number of indoor units		64	64	64	64	64	64		
Working Temp.	Cooling	°C	-5-53				-5-53			

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.



 Cooling Only

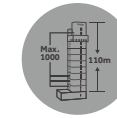


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

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	AV26NMVQVA	AV28NMVQVA	
			/	/	/	/	/	/	
Capacity	Capacity range	HP	70	72	74	76	78	80	
	Cooling	kW	195.5	201.0	207.0	213.0	219.0	224.0	
	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	Cooling	Rated power input	kW	51.1	53.6	53.9	54.3	54.6	56.1
		Max. power input	kW	100.6	100.9	101.2	101.5	101.8	102.1
		Rated current	A	86.3	90.5	91.1	91.6	92.2	94.6
		Max. current	A	163.6	164.1	164.6	165.2	165.7	166.2
	EER		3.82	3.75	3.84	3.92	4.01	4.00	
	ISEER		6.77	6.69	6.68	6.66	6.65	6.63	
	IPLV		6.79	6.70	6.70	6.71	6.71	6.69	
Performance	Air flow (H)	m <sup>3</sup> /h	18000+19000+19000	19000+19000+19000	19000+19000+19000	19000+19000+19000	19000+19000+19000	19000+19000+19000	
	Sound pressure level (H)	dB(A)	68.5	68.5	68.5	68.5	68.5	68.5	
	Sound power level (H)	dB(A)	82.5	82.5	82.5	82.5	82.5	82.5	
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			
	Shipping dimensions(W/D/H)	mm	1515/850/1858+1515/850/1858+1515/850/1858			1515/850/1858+1515/850/1858+1515/850/1858			
	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	2INV+2INV+2INV	2INV+2INV+2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10+10+10	10+10+10	10+10+10	10+10+10	10+10+10	10+10+10	
	Refrigerant liquid pipe	mm	22.2	22.2	22.2	22.2	22.2	22.2	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	44.5	44.5	44.5	
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90	110/90	110/90	110/90	110/90	
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40	50/40	50/40	50/40	50/40	
	Max. drop between I.U *3	m	30	30	30	30	30	30	
Standard drop between I.U *4	m	18	18	18	18	18	18		
External static pressure	Pa	110	110	110	110	110	110		
Connection Ratio	Connectable indoor unit ratio	%	50-130 with limitation			50-130 with limitation			
	Maximum number of indoor units		64	64	64	64	64	64	
Working Temp.	Cooling	°C	-5-53			-5-53			

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp.is 27°C DB/19°C WB,Outdoor Temp.35°C DB/24WB;in heating, indoor Temp.is 20°C DB;in heating, outdoor Temp.is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.  
Standard design and production in the factory.



❄️ Cooling Only

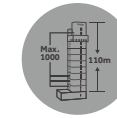


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV82NMVQVA	AV84NMVQVA	AV86NMVQVA	AV88NMVQVA	AV90NMVQVA	
Combination model			AV26NMVQVA	AV28NMVQVA	AV20NMVQVA	AV22NMVQVA	AV22NMVQVA	
			AV28NMVQVA	AV28NMVQVA	AV22NMVQVA	AV22NMVQVA	AV22NMVQVA	
			AV28NMVQVA	AV28NMVQVA	AV22NMVQVA	AV22NMVQVA	AV22NMVQVA	
			/	/	AV22NMVQVA	AV22NMVQVA	AV24NMVQVA	
Capacity	Capacity range	HP	82	84	86	88	90	
	Cooling	kW	229.0	234.0	240.5	246.0	251.5	
	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	Cooling	Rated power input	kW	57.5	58.9	60.1	61.5	64.0
		Max. power input	kW	102.4	102.7	132.9	133.2	133.6
		Rated current	A	97.1	99.5	101.4	103.8	108.0
		Max. current	A	166.6	167.1	216.2	216.8	217.3
	EER		3.98	3.97	4.00	4.00	3.93	
	ISEER		6.61	6.60	6.95	6.93	6.87	
	IPLV		6.67	6.65	7.03	6.99	6.91	
Performance	Air flow (H)	m <sup>3</sup> /h	19000+19000+19000	19000+19000+19000	17000+18000+18000+18000	18000+18000+18000+18000	18000+18000+18000+19000	
	Sound pressure level (H)	dB(A)	68.5	68.5	69.0	69.0	69.0	
	Sound power level (H)	dB(A)	82.5	82.5	82.5	82.5	83.0	
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		
	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		
	Net/shipping weight	kg	329/359+329/359+329/359			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	
	Compressor brand		MITSUBISHI ELECTRIC				MITSUBISHI ELECTRIC	
	Compressor quantity		2INV+2INV+2INV	2INV+2INV+2INV		2INV+2INV+2INV+2INV		
	Refrigerant type		R410A	R410A		R410A	R410A	R410A
	Refrigerant charge	kg	10+10+10	10+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	25.4
	Refrigerant gas pipe	mm	44.5	44.5		50.8	50.8	50.8
	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 I.U.&O.U (O.U down/up) *1	m	110/90	110/90		110/90	110/90	110/90
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40	50/40		50/40	50/40	50/40
	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	
Connection Ratio	Connectable indoor unit ratio	%	50-130 with limitation			50-130 with limitation		
	Maximum number of indoor units		64	64	64	64	64	
Working Temp.	Cooling	°C	-5-53			-5-53		

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
Max. drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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 indoor units is from 18 to 30m, you MUST contact your local distributor/dealer for individual design and production.



❄️ Cooling Only

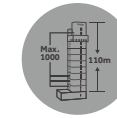


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

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	Capacity range	HP	92	94	96	98	100	
	Cooling	kW	257.0	262.5	268.0	274.0	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	
Electrical Parameters	Cooling	Rated power input	kW	66.5	69.0	71.5	71.8	72.1
		Max. power input	kW	133.9	134.2	134.6	134.8	135.1
		Rated current	A	112.2	116.4	120.7	121.2	121.8
		Max. current	A	217.8	218.3	218.8	219.3	219.9
	EER		3.87	3.81	3.75	3.82	3.88	
	ISEER		6.81	6.75	6.69	6.68	6.67	
	IPLV		6.84	6.77	6.70	6.70	6.70	
Performance	Air flow (H)	m³/h	18000+18000+19000+19000	18000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	
	Sound pressure level (H)	dB(A)	69.5	69.5	70.0	70.0	70.0	
	Sound power level (H)	dB(A)	83.5	83.5	84.0	84.0	84.0	
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		
	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		
	Net/shipping weight	kg	310/339+310/339+329/359+329/359	310/339+329/359+329/359+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		
	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
	Max. total pipe length	m	1000			1000		1000
	Max. pipe length( Equivalent/Actual)	m	260/220			260/220		260/220
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90			110/90		110/90
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40			50/40		50/40
	Max. drop between I.U *3	m	30			30		30
Standard drop between I.U *4	m	18			18		18	
External static pressure	Pa	110			110		110	
Connection Ratio	Connectable indoor unit ratio	%	50-130 with limitation			50-130 with limitation		
	Maximum number of indoor units		64			64		64
Working Temp.	Cooling	°C	-5-53			-5-53		

Max. drop between I.U.&O.U \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
Max. drop between I.U. \*4  
Standard design and production in the factory.  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB)

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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.



 Cooling Only

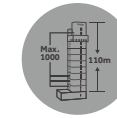


AV08NMVQVA  
AV10NMVQVA  
AV12NMVQVA  
AV14NMVQVA  
AV16NMVQVA  
AV18NMVQVA



AV20NMVQVA  
AV22NMVQVA  
AV24NMVQVA  
AV26NMVQVA  
AV28NMVQVA

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



Space Saving



Auto Addressing  
Indoor Units



Better Cooling Capacity

Model			AV102NMVQVA	AV104NMVQVA	AV106NMVQVA	AV108NMVQVA	AV110NMVQVA	AV112NMVQVA	
Combination model			AV24NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA	
			AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA	AV28NMVQVA	
			AV26NMVQVA	AV26NMVQVA	AV26NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	
			AV26NMVQVA	AV26NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	AV28NMVQVA	
Capacity	Capacity range	HP	102	104	106	108	110	112	
	Cooling	kW	286.0	292.0	297.0	302.0	307.0	312.0	
	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	Cooling	Rated power input	kW	72.5	72.8	74.3	75.7	77.1	78.6
		Max. power input	kW	135.4	135.7	136.0	136.3	136.6	137.0
		Rated current	A	122.4	122.9	125.4	127.8	130.2	132.7
		Max. current	A	220.4	220.9	221.4	221.9	222.3	222.8
	EER		3.95	4.01	4.00	3.99	3.98	3.97	
	ISEER		6.66	6.65	6.64	6.62	6.61	6.60	
	IPLV		6.71	6.71	6.69	6.68	6.67	6.65	
Performance	Air flow (H)	m <sup>3</sup> /h	19000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	19000+19000+19000+19000	
	Sound pressure level (H)	dB(A)	70.0	70.0	70.0	70.0	70.0	70.0	
	Sound power level (H)	dB(A)	84.0	84.0	84.0	84.0	84.0	84.0	
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		
	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		
	Net/shipping weight	kg	329/359+329/359+329/359+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		
	Refrigerant type		R410A				R410A		
	Refrigerant charge	kg	10+10+10+10				10+10+10+10		
	Refrigerant liquid pipe	mm	25.4				28.58		
	Refrigerant gas pipe	mm	54.1				66.70		
	Max. total pipe length	m	1000				1000		
	Max. pipe length( Equivalent/Actual)	m	260/220				260/220		
	Max. drop between I.U.&O.U (O.U down/up) *1	m	110/90				110/90		
	Standard drop between .U.&O.U (O.U up/down) *2	m	50/40				50/40		
	Max. drop between I.U *3	m	30				30		
Standard drop between I.U *4	m	18				18			
External static pressure	Pa	110				110			
Connection Ratio	Connectable indoor unit ratio	%	50-130 with limitation				50-130 with limitation		
	Maximum number of indoor units		64				64		
Working Temp.	Cooling	°C	-5-53				-5-53		

Max. drop between I.U.&O.U \*1  
Standard drop between I.U.&O.U \*2  
Max. drop between I.U. \*3  
Standard drop between I.U. \*4  
\* All the specifications are tested under nominal condition(In cooling, indoor Temp.is 27°C DB/19°C WB,Outdoor Temp.35°C DB/24WB;in heating, indoor Temp.is 20°C DB;in heating, outdoor Temp.is 7°C DB/6°CWB)

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 in the factory.  
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 design and production in the factory.

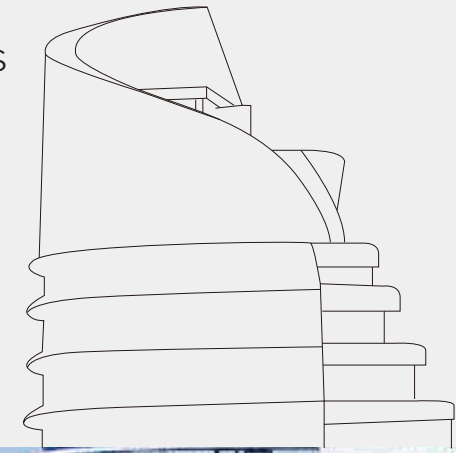


# MRV W **T1**

**165** Features & Benefits

**174** MRV W Outdoor

**178** Dimensions





# MRV W



System Introduction



Unit structure

## System Introduction

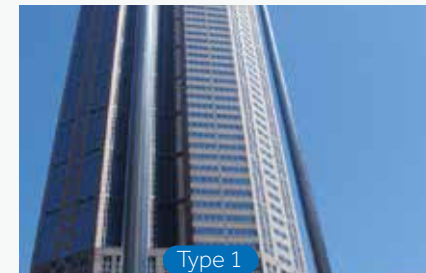
### What is MRV W series

- MRV W series system is a VRF air conditioning system that adopts water as a cooling or heating source.
- MRV W series can combine water system and refrigerant system together.



### 3 types typical high-rise buildings

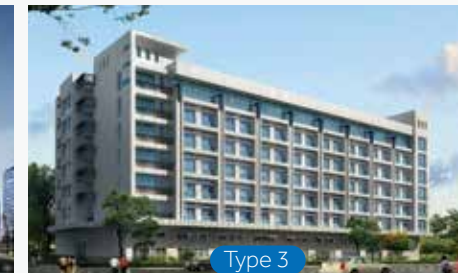
Compact inner structure and core parts.



Type 1  
High rise building without podium



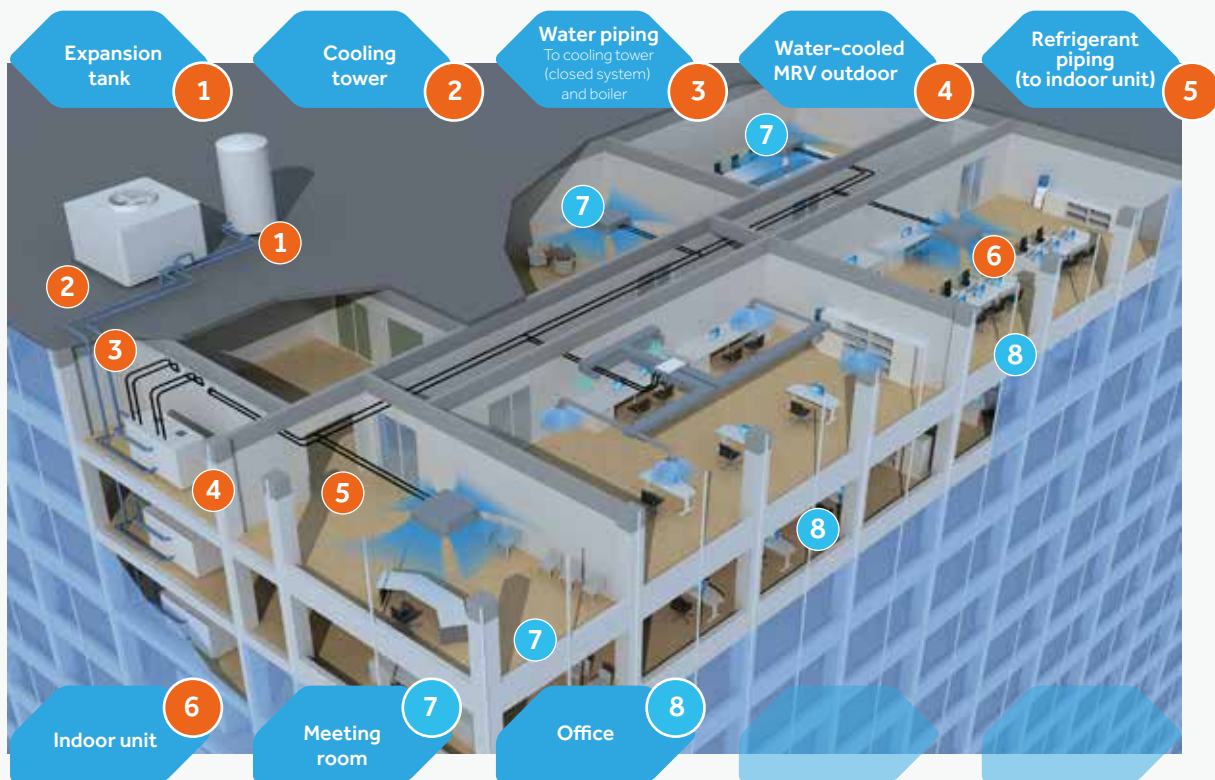
Type 2  
High rise building with podium



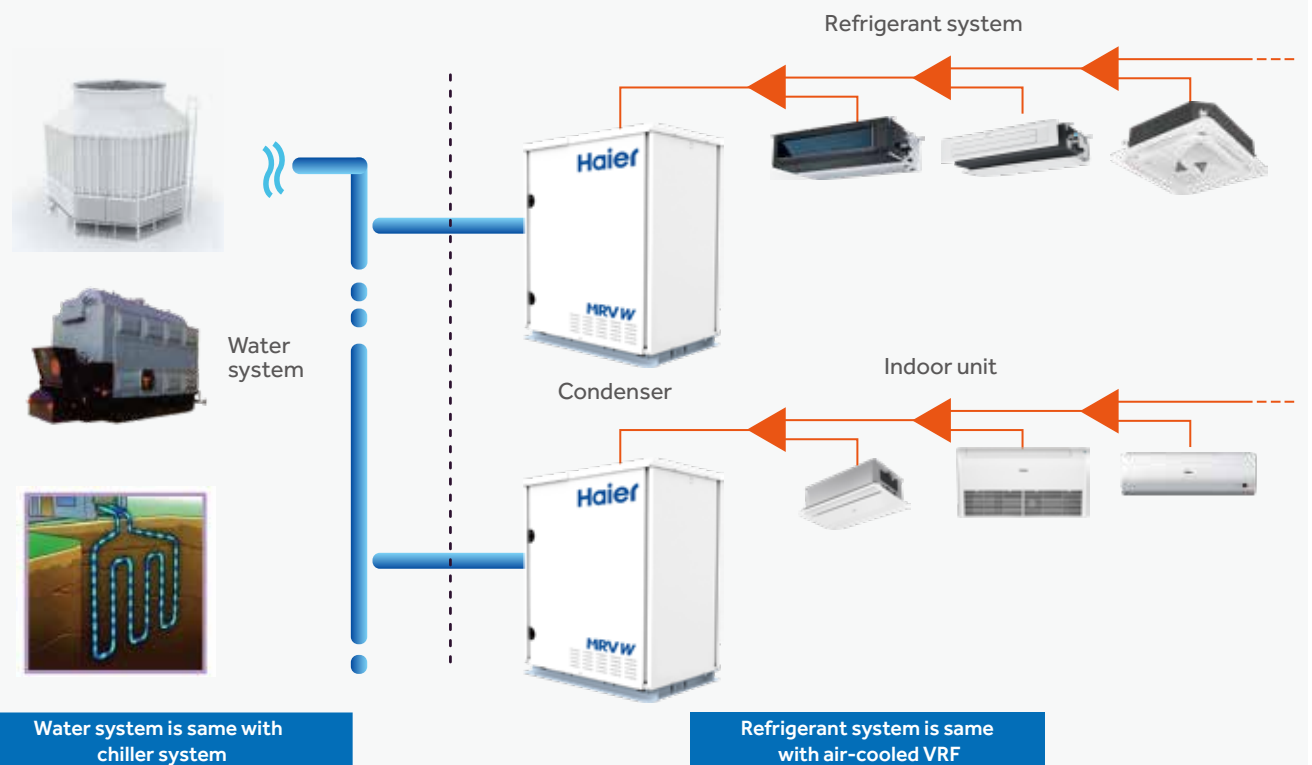
Type 3  
Single layer with a large area

## System Introduction

### System introduction



### Working principle

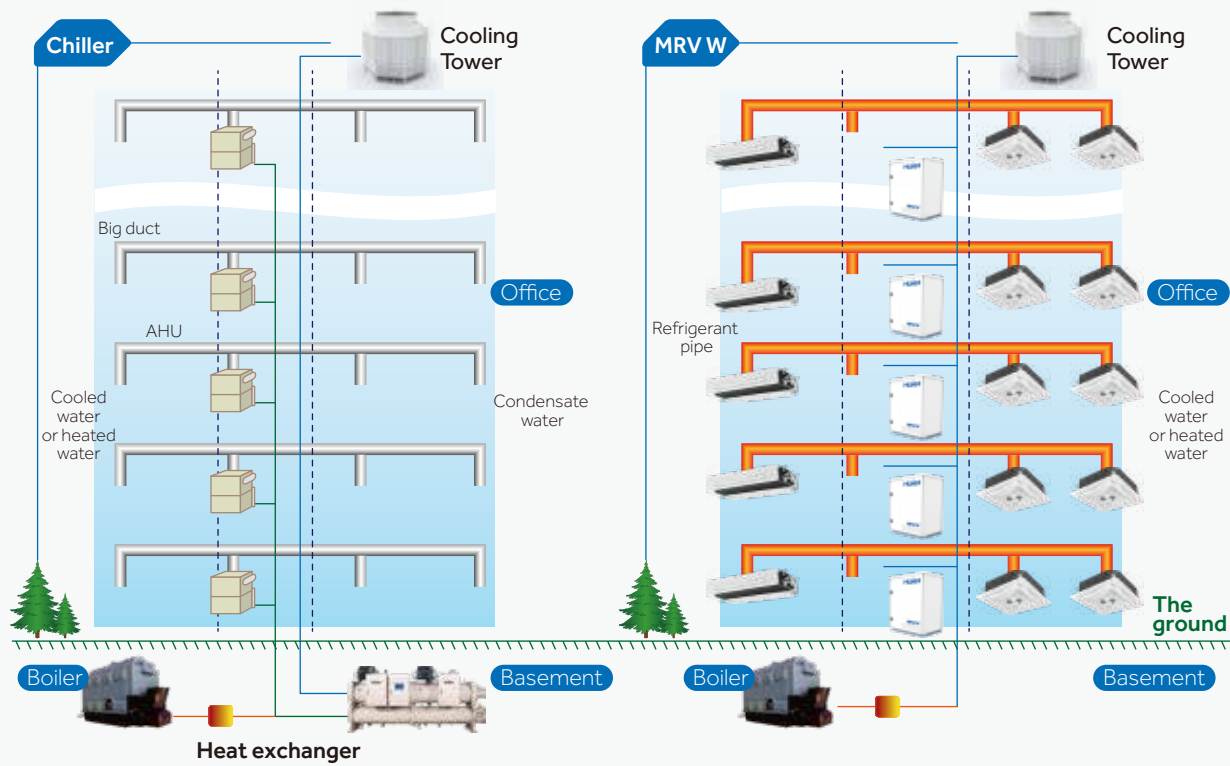




# System Introduction

## Type 1 high-rise buildings

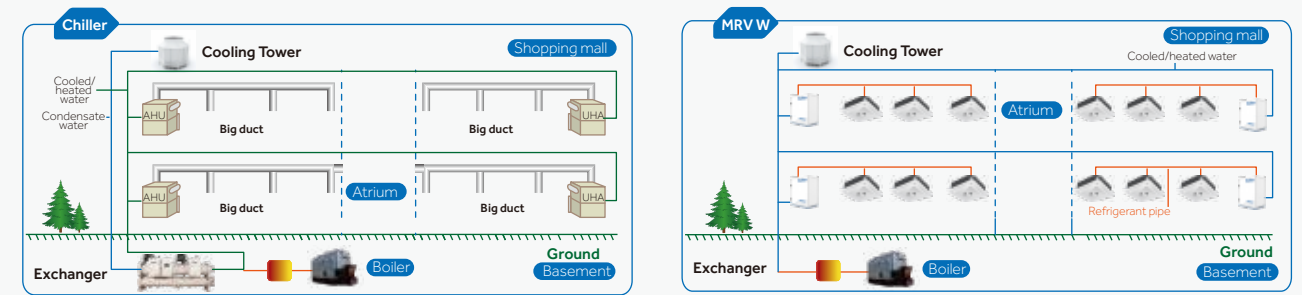
Conventional chiller system, and new water-cooled MRV solution.



# System Introduction

## Type 3 high-rise buildings

Conventional chiller system, and water-cooled MRV solution.



## Suitable buildings

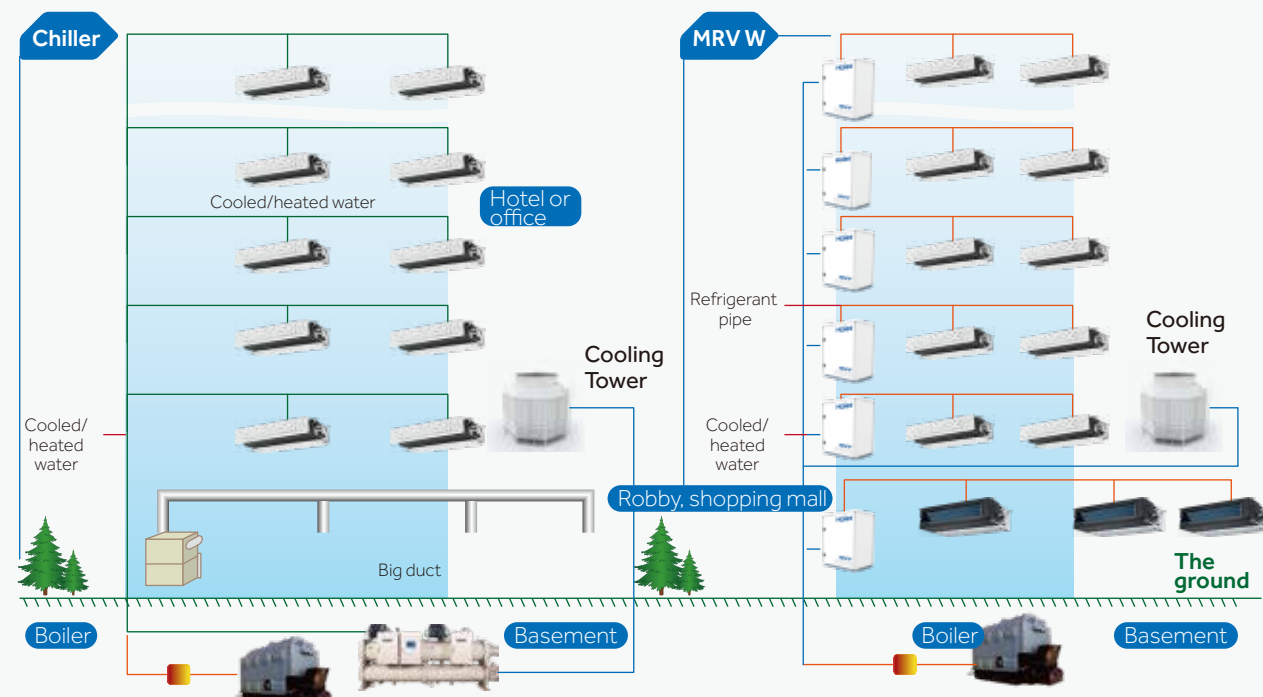
- New construction or retrofit building: MRV W provides an energy efficient solution anywhere that could use a water-cooled chiller or replacing water source heat pump design by enabling them to afford the water-cooled chiller benefits. It is especially true for high-rise buildings such as condos, offices, medical centers, schools.
- High-rise building that didn't design with VRF system.
- Glass curtain wall or special design building.
- No enough space to put the outdoor unit even accept the VRF system.
- Building which required to renewable energy sources.

## Benefit

- Lower initial cost for the developer and builder.
- Client or developer can add air conditioning to match load requirement.
- No rebalancing of water systems if commissioning valves are installed on each floor.
- Connect to the full suite of MRV control solution A/C management system.
- Separate control to every indoor unit.

## Type 2 high-rise buildings

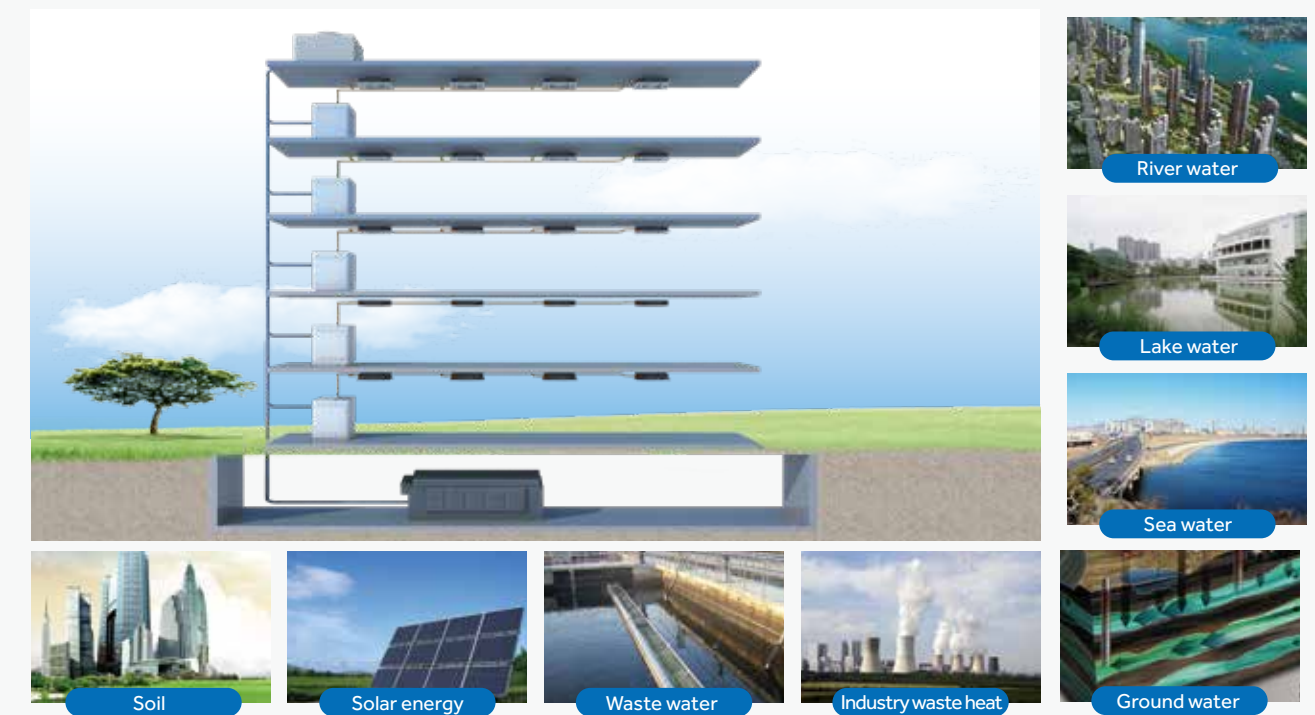
Conventional chiller system, and water-cooled MRV solution.



# Unit Structure

## 8/10/12HP side discharge

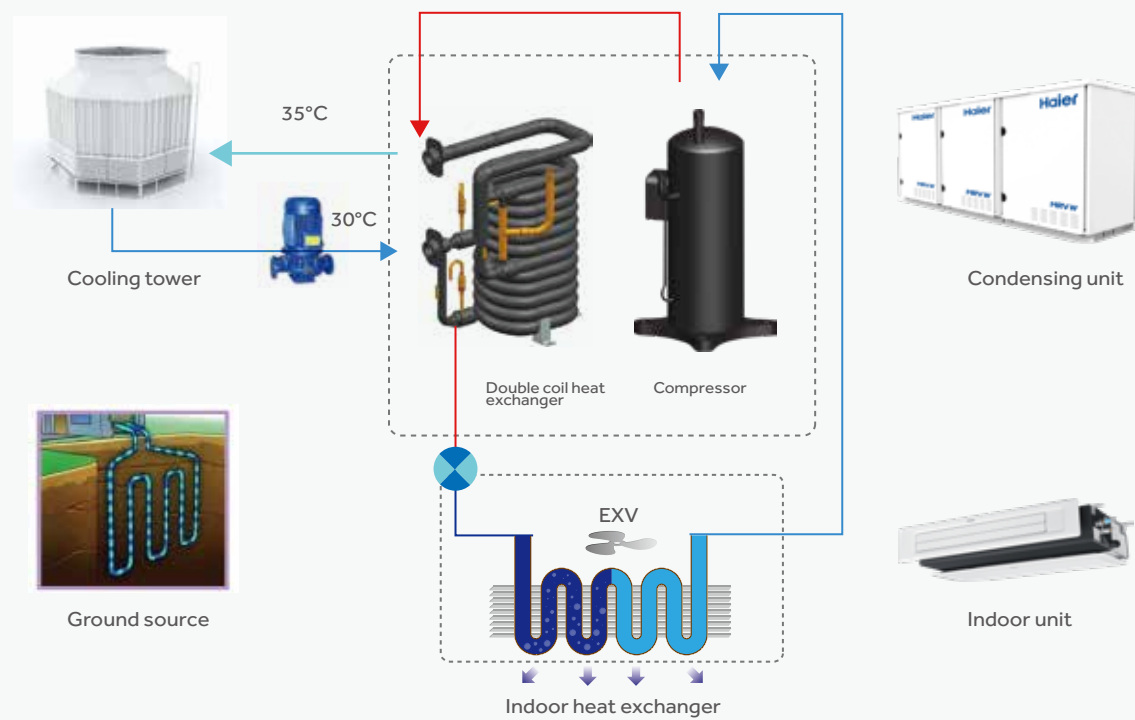
Much bigger outdoor capacity, more flexible application.



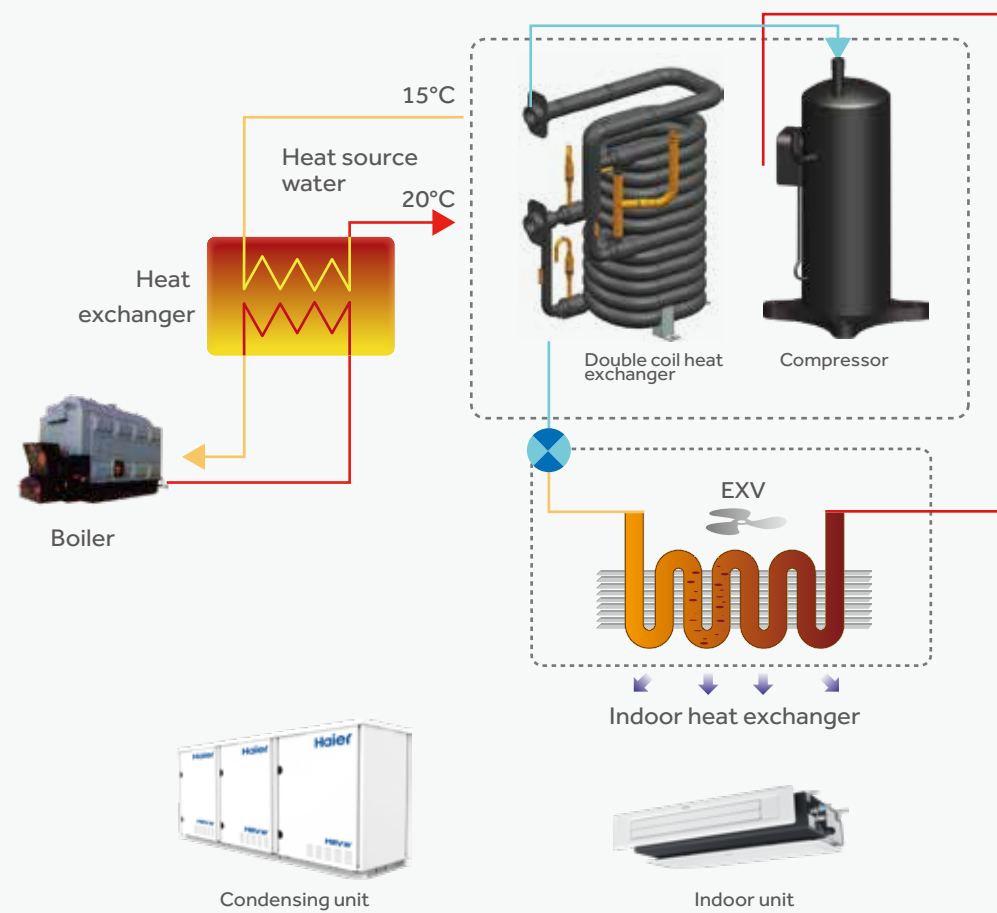


# Unit Structure

## Working principle in cooling mode

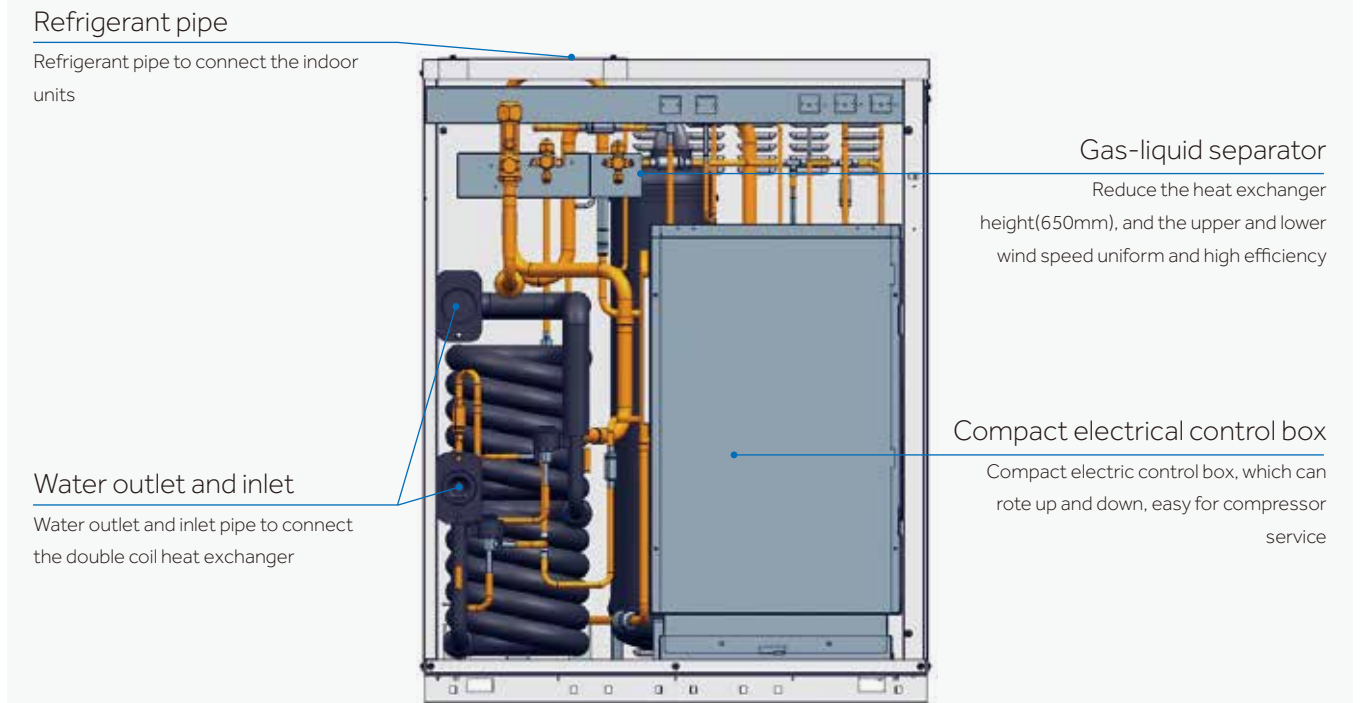


## Working principle in heating mode

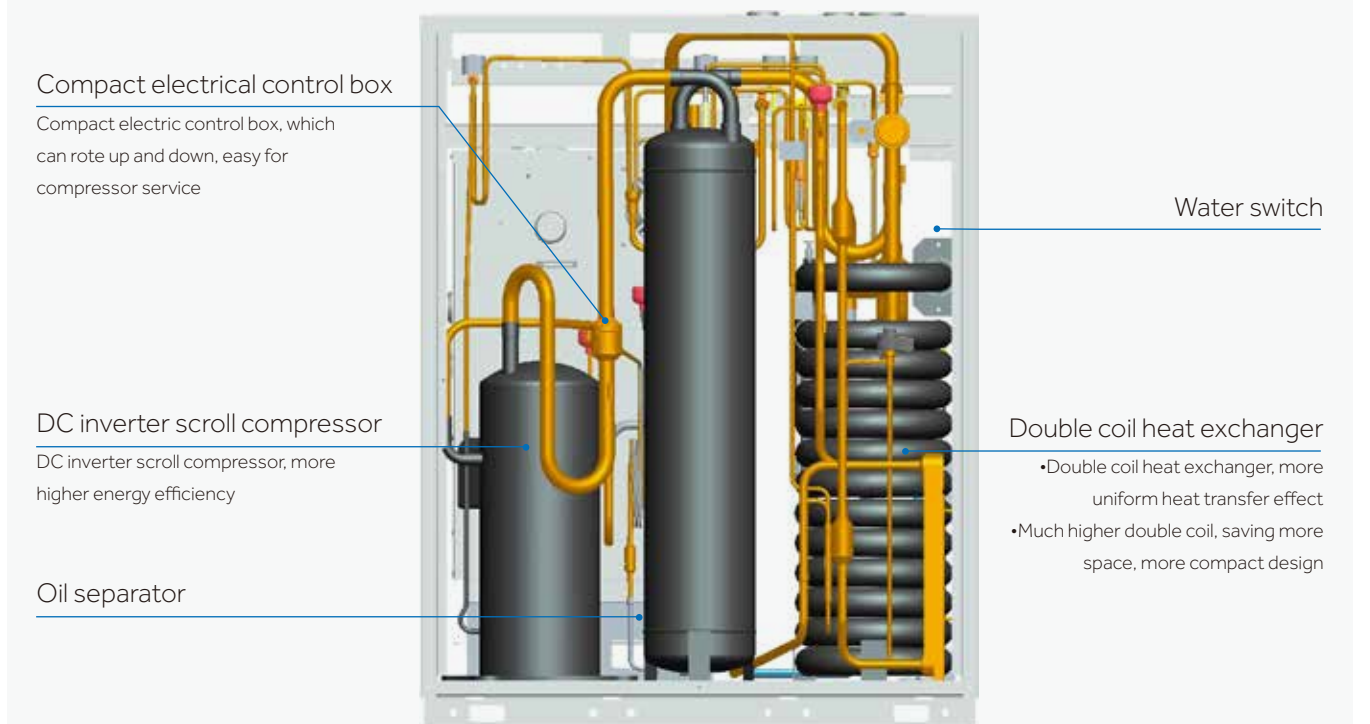


# Unit Structure

## Core technologies and parts (front side)



## Core technologies and parts(back side)





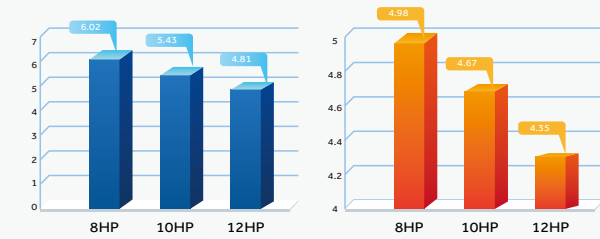
# MRVW



## High Efficiency

### Energy saving

- COP can be up to 6.02, much more higher energy level than air system.
- EER can be up to 4.98, more higher energy level than air system.



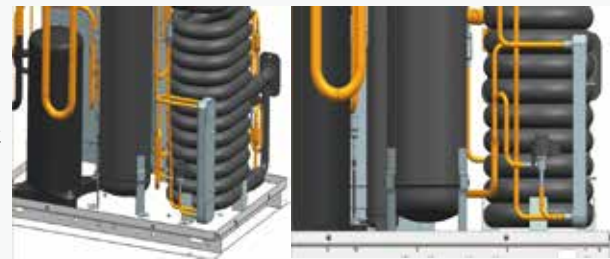
### Double EEV control

The double EEV control the 2 stages heat exchanger separately, which can adjust the condenser volume.



### Two stage deep sub cooling technology

- 1st stage sub cooling added a sub cooling coil to condenser
- 2nd stage sub cooling added a stand alone sub cooler.
- After further cooling, sub-cooling degree can be up to 30°C, with the heat exchanging capacity per unit mass of refrigerant improved by 46% and flow resistance reduced by 55%, and running efficiency improved by 9%.



### High efficiency DC inverter compressor

High efficiency DC inverter compressor from mitsubishi electric.



### High efficiency double coil heat exchanger

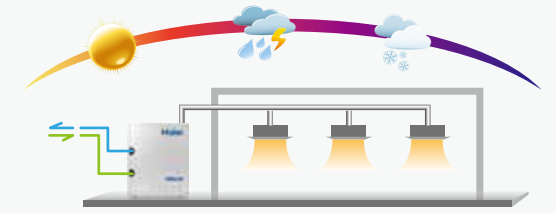
Double coil heat-exchanger, more uniform heat transfer effect.



## Super Comfort

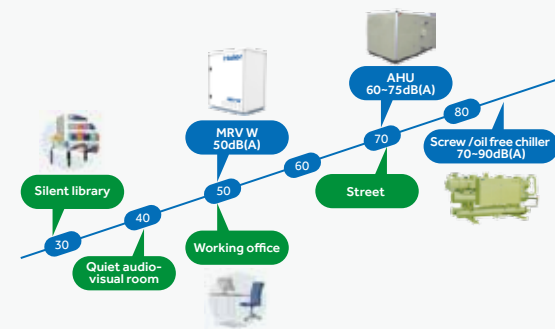
### No influence from ambient temperature

- Thanks to the stable water source, the capacity and efficiency will not reduce with extreme ambient conditions compare with air-cooled system.
- Especially in heating mode, water cooling means no defrost operation is required, the resultant rapid start up time assures quick and comfortable heating, even in cold environment.



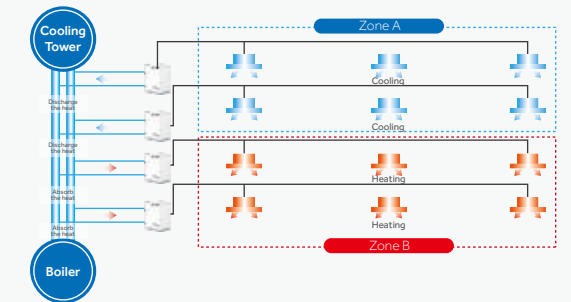
### Low noise level

Comparing with air system, without fan in the outdoor and with full insulation design, the noise level can be reduced to only 50dB(A), much lower than the air system and conventional chiller.



### Heat recovery between different refrigerant systems

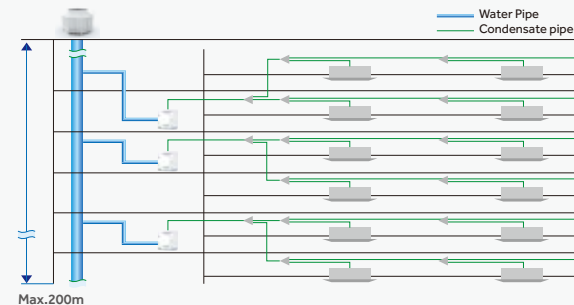
- Heat recovery is achieved within the water loop between different refrigerant system, more higher total COP.
- Cooling and heating at the same time in different refrigerant system.



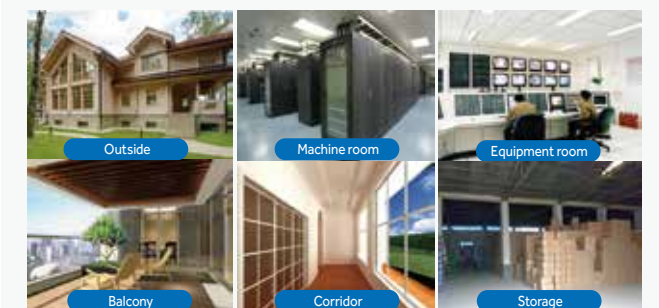
## Easy Installation

### Flexible water pipe design

- Max. water pressure can be up to 1.96MPa.
- Condensate pipe length can be up to 200m.

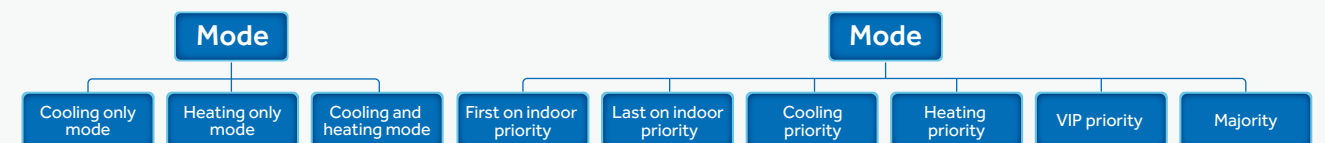


### Flexible installation location



### Various mode and priority selection

The condensers are smaller and can be staked, reducing the installation space and increasing the customers usable square footage.





# Easy Installation

## Long pipe length and high height drop

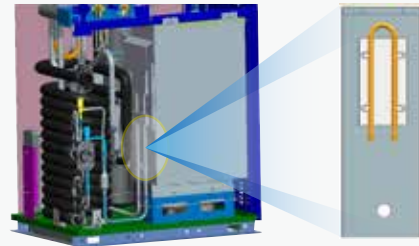
The condensers are smaller and can be stacked, reducing the installation space.



# High Reliability

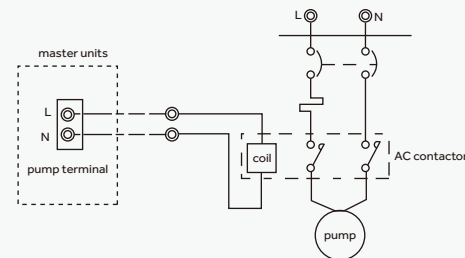
## Chilled electric control module

- Using refrigerant to reduce the module temperature, to realize stable module temperature, more reliable operation.
- Canceling heat dissipation fan of the module, reduce the power consumption and noise level.



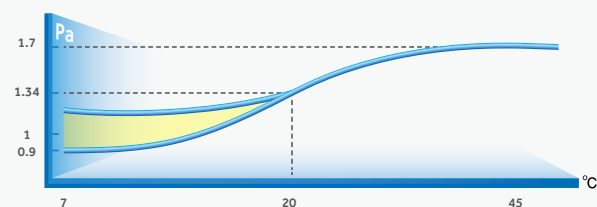
## Water pump controlled together with the outdoor

The reserved water pump linkage control, realize the pump linkage control, reduce the energy consumption and eliminate hidden dangers.

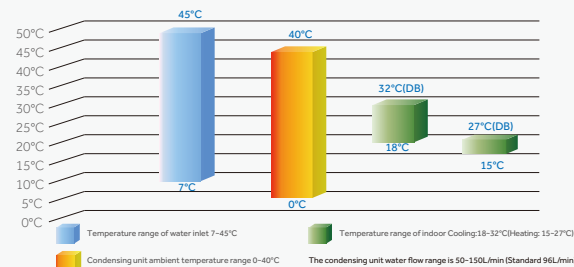


## Stable pressure setting

Stable pressure setting design, to make the high pressure keep above the required pressure, ensure the compressor reliability and stable capacity output.



## Wide operation range



Model		AV08IMWEWA	AV10IMWEWA	AV12IMWEWA		
Combination model		/	/	/		
		/	/	/		
		/	/	/		
Capacity	Capacity range	HP	8	10	12	
	Cooling capacity	kW	22.4	28	33.5	
	Heating capacity	kW	25	31.5	37.5	
Electrical Parameters	Power supply	PhV/Hz	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	
	Cooling	Rated power input	kW	4.50	6.00	7.70
		Max. power input	kW	13.00	15.00	17.00
		Rated current	A	7.20	9.60	12.32
		Max. current	A	20.79	23.99	27.19
	Heating	Rated power input	kW	4.15	5.80	7.80
		Max. power input	kW	13.00	15.00	17.00
		Rated current	A	6.64	9.28	12.47
		Max. current	A	20.79	23.99	27.19
	EER / COP		4.98/6.02	4.67/5.43	4.35/4.81	
	SEER		5.87	5.76	5.69	
	SCOP		6.13	6.01	5.96	
Performance	Water flow (H)	m <sup>3</sup> /h	4.8	6	7.2	
	Sound pressure level (H)	dB(A)	50	51	53	
	Sound power level (H)	dB(A)	61	62	64	
Installation	External dimensions(W/D/H)	mm	775/545/995	775/545/995	775/545/995	
	Shipping dimensions(W/D/H)	mm	875/655/1182	875/655/1182	875/655/1182	
	Net/Shipping weight	kg	172/183	172/183	172/183	
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor quantity		1 INV	1 INV	1 INV	
	Refrigerant type		R410A	R410A	R410A	
	Refrigerant charge	kg	2	2	2	
	Refrigerant liquid pipe	mm	9.52	9.52	12.7	
	Refrigerant gas pipe	mm	19.05	22.2	25.4	
	Oil equalization pipe	mm	9.52	9.52	9.52	
Total pipe length	m	300	300	300		
Max. pipe length(equivalent/actual)	m	150/120	150/120	150/120		
Max. drop between I.U.&O.U.	m	50/40	50/40	50/40		
Heat Exchanger	Type		Double coil	Double coil	Double coil	
	Material		Copper	Copper	Copper	
Water Side	Inlet water connection pipe	mm	DN32	DN32	DN32	
	Outlet water connection pipe	mm	DN32	DN32	DN32	
	Drain outlet pipe	mm	/	/	/	
	Pressure drop(inlet and outlet)	Kpa	35	50	70	
	Connection type		inner grooved	inner grooved	inner grooved	
	Max. system water pressure	Mpa	1.6	1.6	1.6	
	Inlet water temperature range (cooling & heating)	°C	7-45	7-45	7-45	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	
	Maximum number of indoor units	unit	13	16	19	

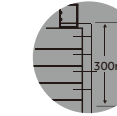
\*1 outdoor above 50m, outdoor below 40 m.  
 \*All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°CWB)  
 \*The specification may change according to the further product development.





AV08IMWEWA  
AV10IMWEWA  
AV12IMWEWA

# 3/380V-415V/50/60



3 Basic Single Module: Most Compact Size Outdoor Water cooled VRF, Total 300m Long Pipe Length,  
8/10/12HP, Max. 3 Design in The Industry Higher Efficiency Easy for Installation  
Modules Combination up to 36HP

Model			AV16IMWEWA	AV18IMWEWA	AV20IMWEWA	AV22IMWEWA	AV24IMWEWA	AV26IMWEWA	AV28IMWEWA	
Combination model			AV08IMWEWA	AV08IMWEWA	AV10IMWEWA	AV10IMWEWA	AV12IMWEWA	AV08IMWEWA	AV08IMWEWA	
			AV08IMWEWA	AV10IMWEWA	AV10IMWEWA	AV12IMWEWA	AV12IMWEWA	AV08IMWEWA	AV10IMWEWA	
			/	/	/	/	/	AV10IMWEWA	AV10IMWEWA	
Capacity	Capacity range	HP	16	18	20	22	24	26	28	
	Cooling capacity	kW	44.8	50.4	56	61.5	67.0	72.8	78.4	
	Heating capacity	kW	50.0	56.5	63	69.0	75.0	81.5	88.0	
Electrical Parameters	Power supply	Ph/V/Hz	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	
	Cooling	Rated power input	kW	9.00	10.50	12.00	13.70	15.40	15.00	16.50
		Max. power input	kW	26.00	28.00	30.00	32.00	34.00	41.00	43.00
		Rated current	A	14.39	16.79	19.19	21.91	24.63	23.99	26.39
		Max.current	A	41.58	44.78	47.98	51.18	54.38	65.57	68.77
	Heating	Rated power input	kW	8.30	9.95	11.60	13.60	15.60	14.10	15.75
		Max. power input	kW	26.00	28.00	30.00	32.00	34.00	41.00	43.00
		Rated current	A	13.27	15.91	18.55	21.75	24.95	22.55	25.19
		Max.current	A	41.58	44.78	47.98	51.18	54.38	65.57	68.77
	EER /COP		4.98/6.02	4.8/5.68	4.67/5.43	4.49/5.07	4.35/4.81	4.85/5.78	4.75/5.59	
	SEER		5.87	5.82	5.76	5.73	5.69	5.84	5.80	
SCOP		6.13	6.10	6.01	5.98	5.96	6.11	6.10		
Performance	Water flow (H)	m <sup>3</sup> /h	9.6	10.8	12	13.2	14.4	15.6	16.8	
	Sound pressure level (H)	dB(A)	53	54	54	55	56	55	55	
	Sound power level (H)	dB(A)	64	65	65	66	67	66	66	
Installation	External dimensions(W/D/H)	mm	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*2	(775/545/995)*3	(775/545/995)*3	
	Shipping dimensions(W/D/H)	mm	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*2	(875/655/1182)*3	(875/655/1182)*3	
	Net/Shipping weight	kg	344/366	344/366	344/366	344/366	344/366	516/549	516/549	
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor quantity		2 INV	2 INV	2 INV	2 INV	2 INV	3 INV	3 INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	4	4	4	4	4	6	6	
	Refrigerant liquid pipe	mm	12.7	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	
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52	9.52	
	Total pipe length	m	300	300	300	300	300	300	300	
Max. pipe length(equivalent/actual)	m	150/120	150/120	150/120	150/120	150/120	150/120	150/120		
Max drop between I.U.&O.U.	m	50/40	50/40	50/40	50/40	50/40	50/40	50/40		
Heat Exchanger	Type		Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	Double coil	
	Material		Copper	Copper	Copper	Copper	Copper	Copper	Copper	
Water Side	Inlet water connection pipe	mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	
	Outlet water connection pipe	mm	DN32	DN32	DN32	DN32	DN32	DN32	DN32	
	Drain outlet pipe	mm	/	/	/	/	/	/	/	
	Pressure drop(inlet and outlet)	Kpa	35+35	35+50	50+50	50+70	70+70	35+35+50	35+50+50	
	Connection type		inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	inner grooved	
Connection Ratio	Max. system water pressure	Mpa	1.6	1.6	1.6	1.6	1.6	1.6	1.6	
	Inlet water temperature range (cooling & heating)	°C	7-45	7-45	7-45	7-45	7-45	7-45	7-45	
	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130	50-130	
Maximum number of indoor units	unit	23	29	33	36	39	43	46		

\*1 outdoor above 50m, outdoor below 40m.

\*All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB; in heating, outdoor Temp. is 7°C DB/6°CWB)

\*The specification may change according to the further product development.





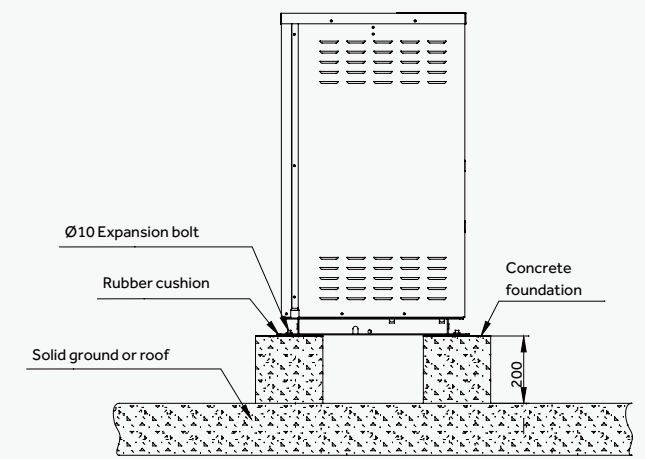
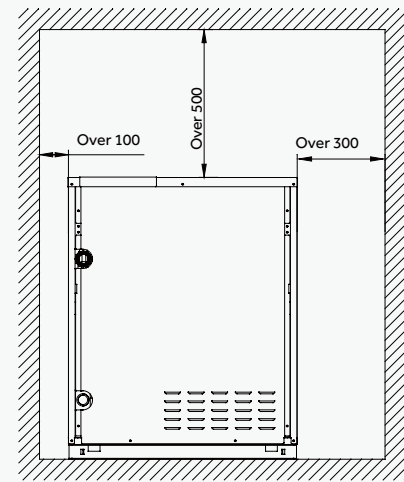
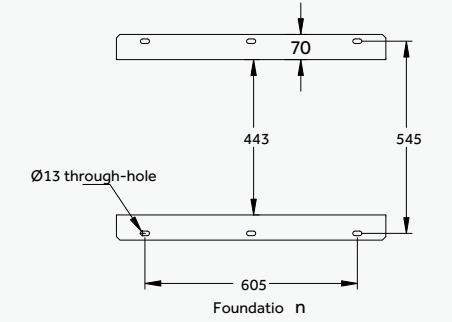
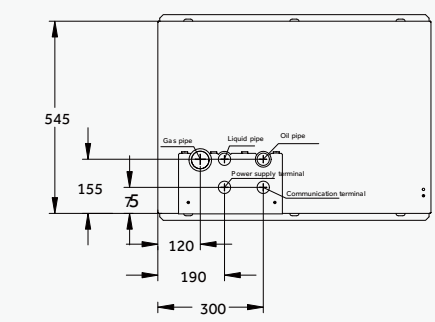
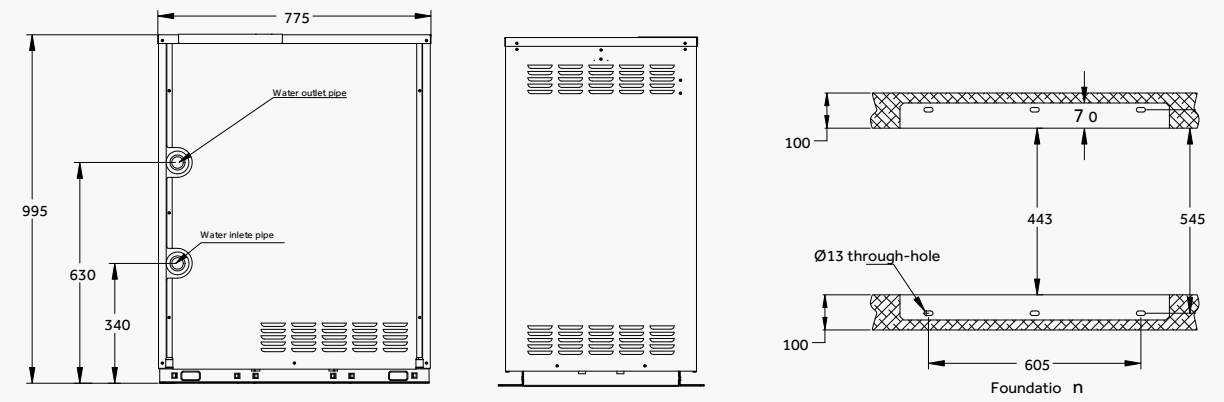
AV08IMWEWA  
AV10IMWEWA  
AV12IMWEWA

# Dimensions

Model			AV30IMWEWA	AV32IMWEWA	AV34IMWEWA	AV36IMWEWA	
Combination model			AV10IMWEWA	AV10IMWEWA	AV10IMWEWA	AV12IMWEWA	
			AV10IMWEWA	AV10IMWEWA	AV12IMWEWA	AV12IMWEWA	
			AV10IMWEWA	AV12IMWEWA	AV12IMWEWA	AV12IMWEWA	
Capacity	Capacity range	HP	30	32	34	36	
	Cooling capacity	kW	84.0	89.5	95.0	100.5	
	Heating capacity	kW	94.5	100.5	106.5	112.5	
Electrical Parameters	Power supply	Ph/V/Hz	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	3/380V-415V/50/60	
	Cooling	Rated power input	kW	18.00	19.70	21.40	23.10
		Max. power input	kW	45.00	47.00	49.00	51.00
		Rated current	A	28.79	31.51	34.23	36.95
		Max. current	A	71.97	75.17	78.37	81.57
	Heating	Rated power input	kW	17.40	19.40	21.40	23.40
		Max. power input	kW	45.00	47.00	49.00	51.00
		Rated current	A	27.83	31.03	34.23	37.42
		Max. current	A	71.97	75.17	78.37	81.57
	EER /COP			4.67/5.43	4.54/5.18	4.44/4.98	4.35/4.81
	SEER			5.76	5.74	5.72	5.69
	SCOP			6.01	5.99	5.97	5.96
Performance	Water flow (H)	m <sup>3</sup> /h	18.0	19.2	20.4	21.6	
	Sound pressure level (H)	dB(A)	56	57	57	58	
	Sound power level (H)	dB(A)	67	68	68	69	
Installation	External dimensions(W/D/H)	mm	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	(775/545/995)*3	
	Shipping dimensions(W/D/H)	mm	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3	(875/655/1182)*3	
	Net/Shipping weight	kg	516/549	516/549	516/549	516/549	
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	
	Compressor quantity		3 INV	3 INV	3 INV	3 INV	
	Refrigerant type		R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	6	6	6	6	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	31.8	31.8	31.8	38.1	
	Oil equalization pipe	mm	9.52	9.52	9.52	9.52	
	Total pipe length	m	300	300	300	300	
	Max. pipe length(Equivalent/Actual)	m	150/120	150/120	150/120	150/120	
Max drop between I.U.&O.U.	m	50/40	50/40	50/40	50/40		
Heat Exchanger	Type		Double coil	Double coil	Double coil	Double coil	
	Material		Copper	Copper	Copper	Copper	
Water Side	Inlet water connection pipe	mm	DN32	DN32	DN32	DN32	
	Outlet water connection pipe	mm	DN32	DN32	DN32	DN32	
	Drain outlet pipe	mm	/	/	/	/	
	Pressure drop(inlet and outlet)	Kpa	50+50+50	50+50+70	50+70+70	70+70+70	
	Connection type		inner grooved	inner grooved	inner grooved	inner grooved	
	Max. system water pressure	Mpa	1.6	1.6	1.6	1.6	
Inlet water temperature range (Cooling & Heating)	°C	7-45	7-45	7-45	7-45		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	
	Maximum number of indoor units	unit	50	53	56	59	

\*1 outdoor above 50m, outdoor below 40 m.  
\*All the specifications are tested under nominal condition(in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB, in heating, outdoor Temp. is 7°C DB/6°CWB)  
\*The specification may change according to the further product development.

AV08IMWEWA AV10IMWEWA AV12IMWEWA

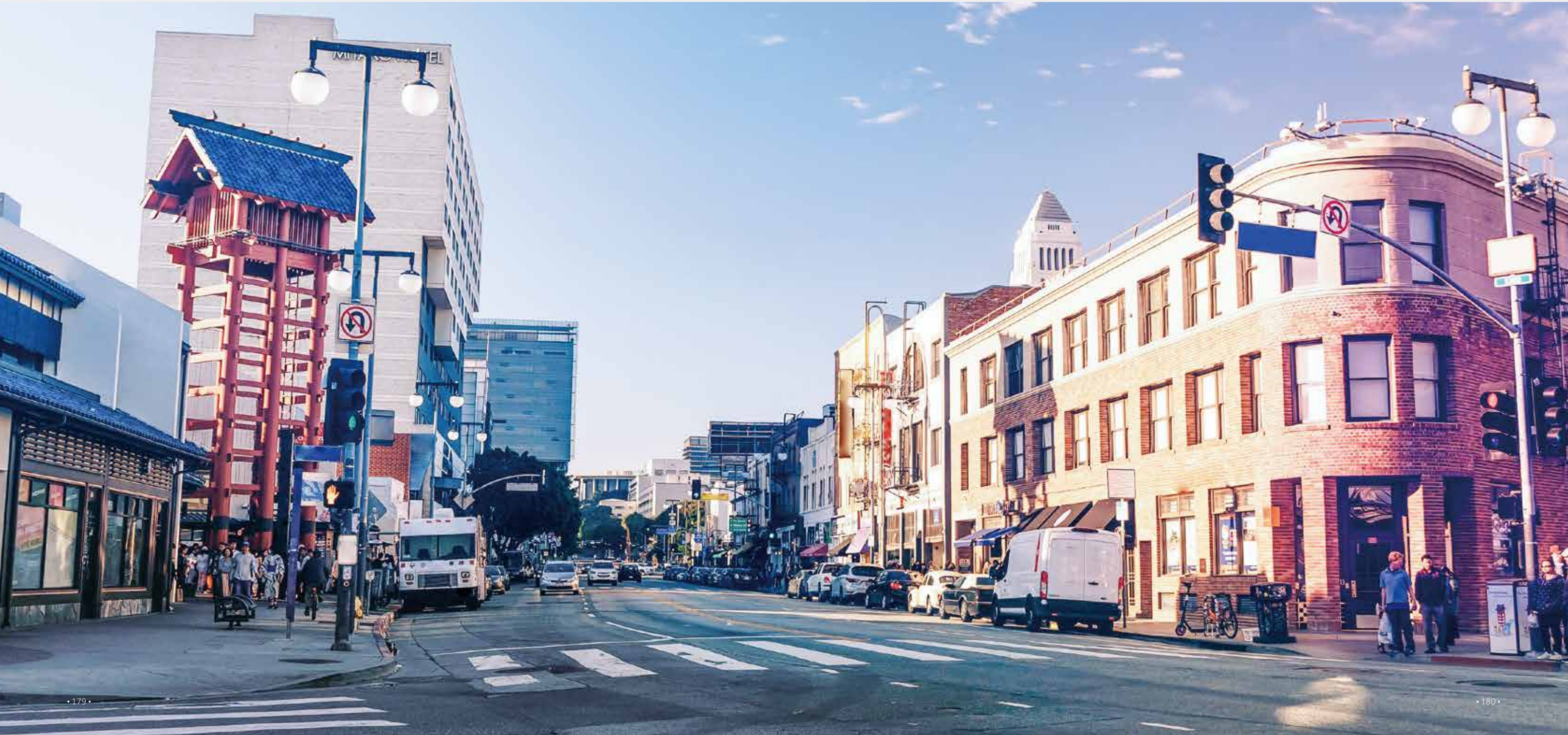




# MRV S<sup>I</sup> T1

**181** Features & Benefits

**184** MRV S' Outdoor







# MRV SI



Advanced Technology High Efficiency Super Comfort Easy Installation

## Advanced Technology

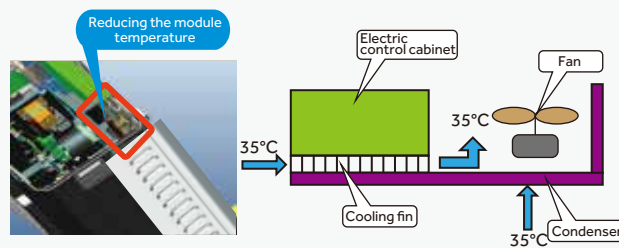
### Full DC inverter twin rotary compressor

Compressor 15~140 RPM wide operating range, can effective against low load output. The compressor adopts keel motor technology, the energy efficiency is increased by 10%.



### Air inlet grill design on right side panel

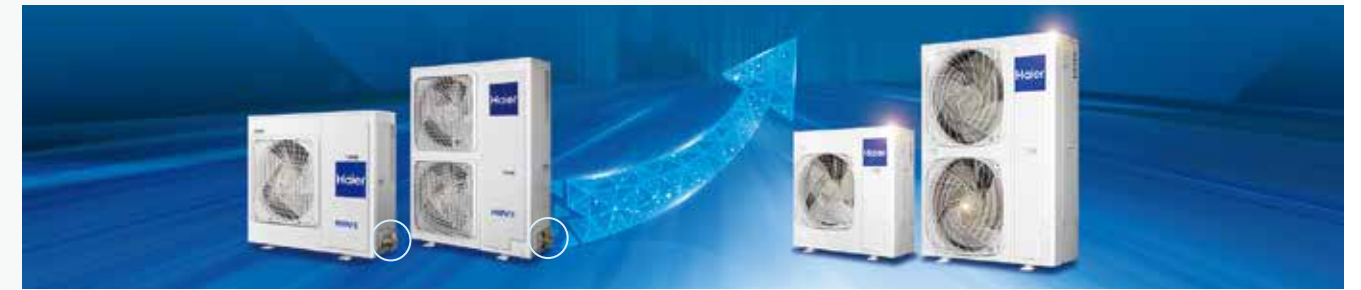
The unit adopts louver at right side panel for better heat dissipation to guarantee high frequency operation at high temperature. The air inlet grill design, reduces the module temperature and avoids air dust into air conditioner.



## Advanced Technology

### New update

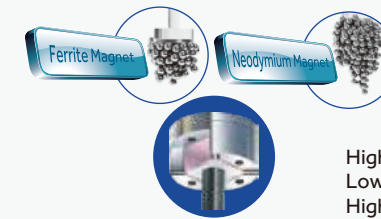
- We upgraded the whole series and launched new capacity of 3, 5 and 7 HP modules. The overall rounded corner design refreshes you visually;
- The stop-valve of new module is build-in, easier installation;
- Equipped with super large diameter 550mm fan, in sawtooth shape type design, heat transfer of units more powerful;
- The heat transfer area of the condensed is increased by 15%, and the heat transfer effect is increased by 10% (5/7HP): The original heat exchanger was 1197\*970mm. The current heat exchanger area is 1302\*1005mm;
- Standard self-cleaning technology, in addition to the new module upgrade 56°C high temperature cleaning technology;The heat exchanger of IDU can realize high temperature of 56°, effectively remove mold, and make the air supply more healthy.



## High Efficiency

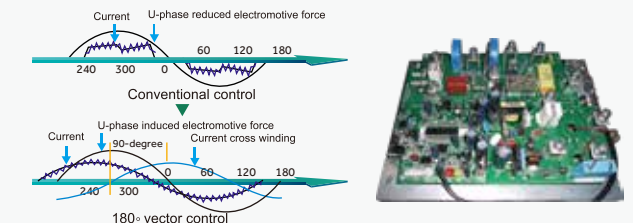
### DC inverter technology

DC fan motor speed can be adjusted from 0~960r/min, it can improve the unit efficiency, at the same time, the unit can realize low ambient cooling operation.



### 180° vector control technology

Haier using power resistance to detect the rotor position of compressor, results in the consistency of the compressor working current and current sine waves, improve power efficiency about 17%.



## Super Comfort

### Operation range

Relying on the compressor upgraded by MRV SI and optimized pipeline upgrade, the operating temperature range of the new model is expanded, including -5°C~50°C for cooling and -20°C~27°C for heating.

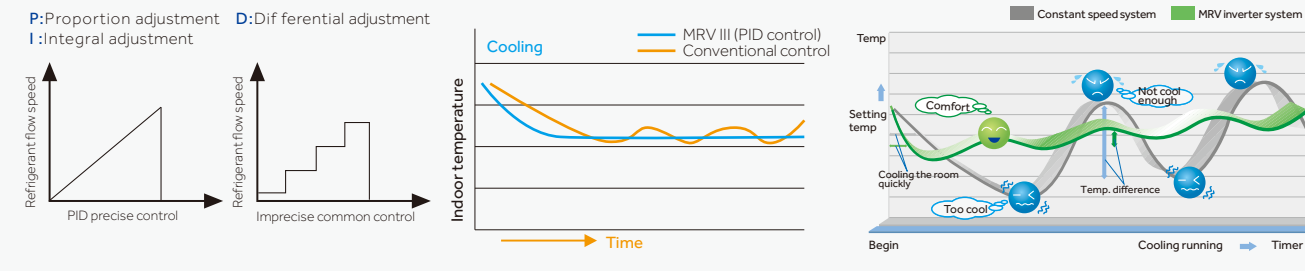




# Super Comfort

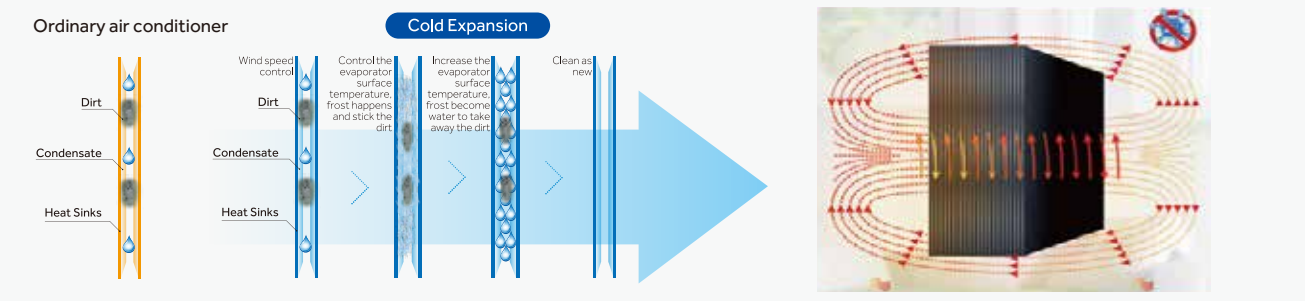
## Precise control

PID control adjusts the output of compressor and the open degree of EEV, balances the indoor refrigerant flow, realizes the linear output, creates a comfortable environment. The temperature could be controlled precisely.



## Self-cleaning technology

- Cooling expansion technology— Easily remove dirt from heat exchanger
- Condensate water technology —Increase condensate water by 30%
- Sapphire coating —The hydrophilic ability is increased by 50%, and the flow speed is increased by 20%
- Antibacterial technology—Silver ion antibacterial coating, effectively prevent the growth of bacteria
- 56°C high temperature technology—The temperature of IDU heat exchanger is improved by using the condensing heat of high pressure refrigerant. The temperature is up to 56°C, effectively prevent mold breeding(5/7HP).



## Easy Installation

### Side discharge MRV SI outdoor units

Dual frequency 50/60Hz / DC inverter TWIN rotary compressor / BL DC fan ( Brush Less DC motor )

- 1 Control the compressor running frequency by temp. Sensor, more precise and prompt than conventional control system.
- 1 Protections: Pressure, temp, compressor, fan motor, refrigerant, oil quantity etc. Realize perfect performance.
- 1 Malfunction self-diagnose.
- 2 DC fan motor (AU48/60).
- 3 DC inverter compressor, high efficiency.
- 4 Single set valve, easy to installation and save installation time.



Model			AU032FSEUA	AU052FPEUA	AU072FPEUA	AU07NFPEUA
Capacity	Capacity range	HP	3	5	7	7
	Cooling	kBtu/h	27.3	51.2	61.4	61.4
		kW	8	14	18	18
	Heating	kBtu/h	32.4	58	68.2	68.2
kW		9.5	16	20	20	
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	3/380-400/50/60
	Power input (Cooling)	kW	2.2	3.7	4.75	4.75
	Power input (Heating)	kW	2.2	3.73	4.56	4.56
	EER/COP		3.64/4.32	3.78/4.29	3.79/4.39	3.79/4.39
Performance	Air flow (H)	m <sup>3</sup> /h	4500	7200	7200	7200
	Sound pressure level (H)	dB(A)	50	52	54	59
	Sound power level (H)	dB(A)	61	63	65	70
Installation	External dimensions(W/D/H)	mm	920/372/760	950/370/1350	950/370/1350	950/370/1350
	Shipping dimensions(W/D/H)	mm	1036/478/820	1023/483/1492	1023/483/1492	1023/483/1492
	Net/Shipping weight	kg	61/67	108/123	108/123	108/123
	Compressor type		Rotary	Rotary	Rotary	Rotary
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1	1	1	1
	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	2.1	4	4	4
	Refrigerant liquid pipe	mm	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	19.05	19.05	15.88
	Total pipe length	m	120	150	150	300
	Max. pipe length(Equivalent/Actual)	m	70	70	70	175/150
	Max. drop between indoor and outdoor:Outdoor in the top/ Indoor unit in the bottom	m	30/20	30/20	30/20	50
	Max drop between I.U.&I.U	m	10	10	10	15
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130
	Maximum number of indoor units		4	8	9	13
Working Temp.	Cooling	°C	-5°C-50°C	-5°C-50°C	-5°C-50°C	-5°C-50°C
	Heating	°C	-20°C-27°C	-20°C-27°C	-20°C-27°C	-20°C-27°C

\*All the specifications are tested under nominal condition(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)



# MRV S<sup>II</sup> T1

**187** Features & Benefits

**192** MRV S<sup>II</sup> Outdoor

**196** Dimensions



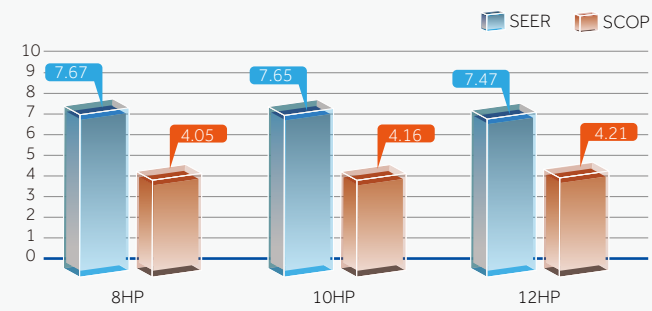




## Advanced Technology

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

The promotion of energy efficiency.



### 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%.



### Upgraded configuration, upgraded performance (8/10/12HP side discharge)

Bigger outdoor capacity, more flexible application

#### High efficiency DC fan motor

- DC fan motor with stepless inverter control, efficiency increase 45% comparing with AC motor and power input largely decrease

#### Large diameter fan

- $\varnothing 570$ mm big diameter axial flow fan
- Zigzag design, reduce airflow disturbance, air volume is bigger, the noise is lower

#### High efficiency condenser

- New type high efficiency  $\varnothing 7$  inner grooved tube
- New hydrophilic corrugated fissure fin, high efficiency

#### Vector inverter control

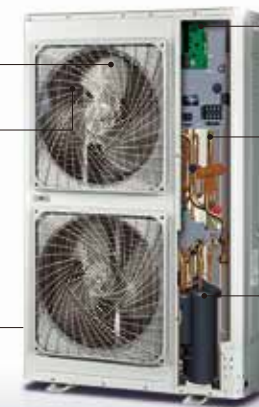
- 180 degrees sine wave vector control, 64-bit operation
- High precision control, to achieve high efficiency and lower noise

#### Double pressure sensor

- Equipped with high and low voltage, pressure double sensors
- Accurate pressure control, the system run more smoothly, more energy efficiency

#### Twin rotary DC Inverter compressor

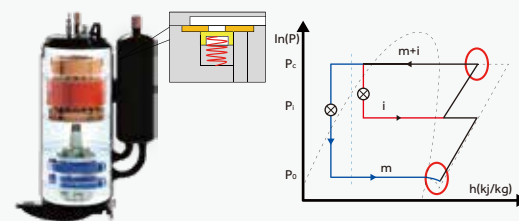
- High chamber DC inverter twin rotary compressor
- Small vibration, low noise, high energy efficiency



## Advanced Technology

### Increasing enthalpy by 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 is reduced, Increase the amount of refrigerant in the heating cycle of the indoor unit heat exchanger, thereby achieving improved heating capacity.



### DC inverter fan motor

- DC inverter fan motor more higher efficiency in part 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)



### 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

Haier 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%

### Charge valve

Built-in charge valve enables safer and easier maintenance

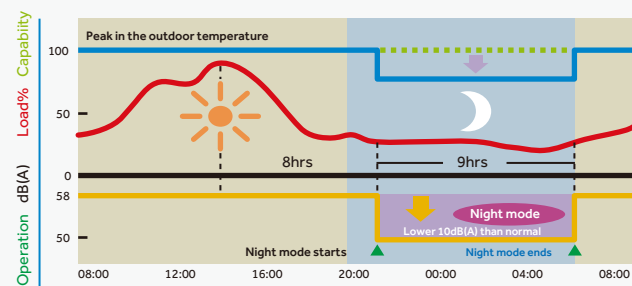
### Low standby power

New PCB programme, reduce 20% standby power consumption

## Low noise level

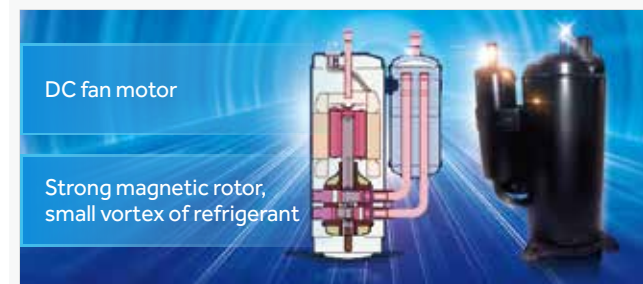
Night quiet operation function

Noise can be reduced to 45dB(A).



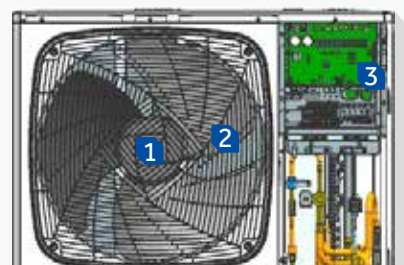
## New DC inverter twin rotary compressor

- 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.



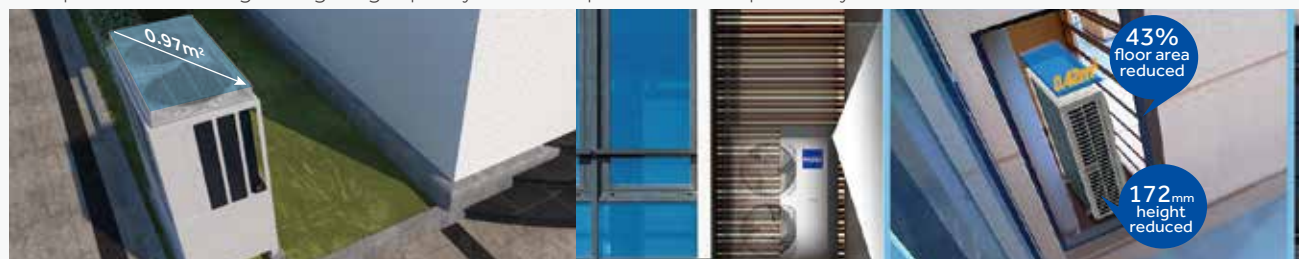
## Low noise operation

- 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 0.42m<sup>2</sup>, 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



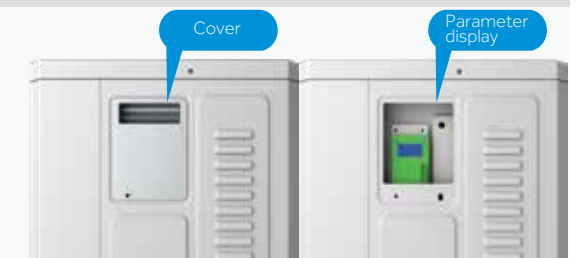
## Long pipe length, high height drop

- 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.



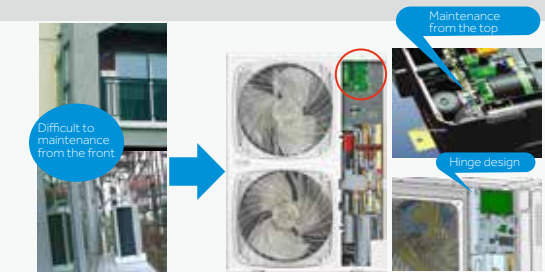
## Parameter display panel

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).



## Compact side discharge design

No need additional ventilation hood comparing with top discharge unit.



## Separate refrigerant charging valve

Easy for refrigerant charging.

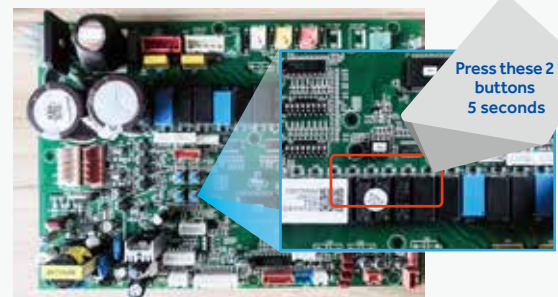




# High Reliability

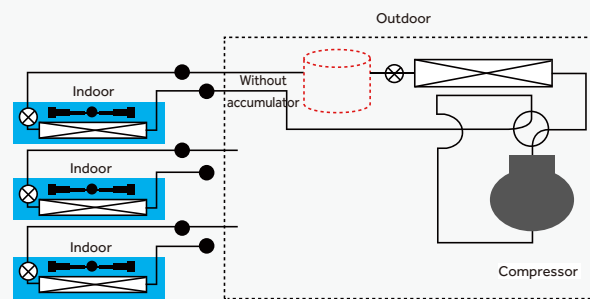
## Refrigerant automatically reclaim technology

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.



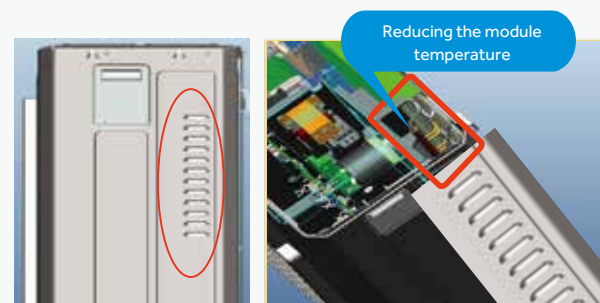
## Refrigerant control technology

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



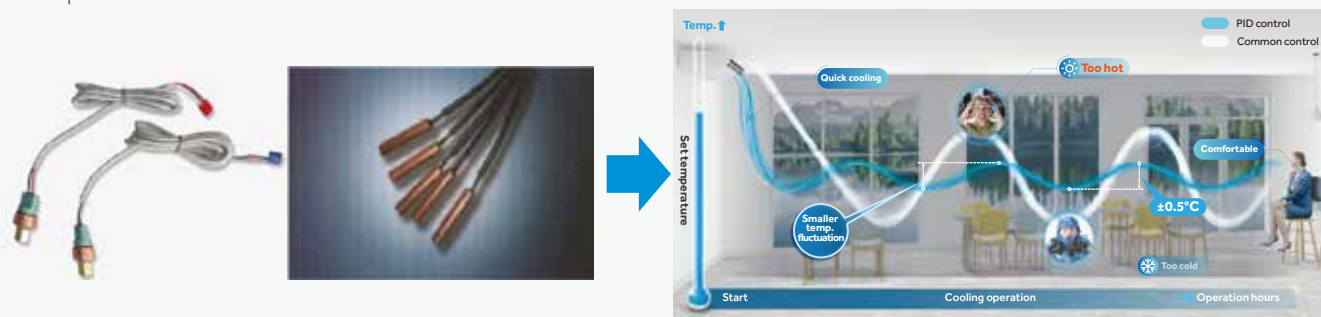
## Air inlet grill design on right side panel

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  $\pm 0.5^\circ\text{C}$ .



Model			AU042FPERS	AU052FNERS
Capacity <sup>(1)</sup>	Capacity range	HP	4	5
	Cooling	kW	12.1	14
	Heating	kW	12.1	14
	Heating(Max.)	kW	14	15.5
	EER	/	2.85	2.8
	SEER	/	4.9	4.85
	$\eta$ s	%	193	191
	COP	/	2.95	2.9
	SCOP(1)	/	3.5	3.55
	$\eta$ s	%	137	139
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Rated power input (Cooling)	kW	4.25	5
	Rated power input (Heating)	kW	4.1	4.83
Dimensions	External (W/D/H)	mm	950/370/965	950/370/965
	Shipping (W/D/H)	mm	1010/458/990	1010/458/990
Weight	Net/Shipping weight	kg	90/102	90/102
	Compressor type	/	Rotary	Rotary
Compressor	Motor power	W	4130	4130
	Compressor quantity	/	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	5400	5400
Pressure Sound level	Cooling	dB(A)	58	60
	Heating	dB(A)	60	62
Refrigerant	Type	/	R410A	R410A
	Charge	kg	3.3	3.3
Piping	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
	Total pipe length	m	120	120
	Max. pipe length(Equivalent/Actual)	m	70/60	70/60
	Max. drop between I.U.&O.U (ODU above / below)	m	30/20	30/20
	Max. drop between I.U.&I.U	m	10	10
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130
	Maximum number of indoor units	/	7	8
Working Temp.	Cooling	°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 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)

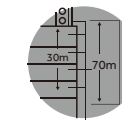




AU042FPERS  
 AU052FPERS  
 AU062FPERS  
 AU04IFPERS  
 AU05IFPERS  
 AU06IFPERS



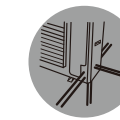
Double Fan Series



Total Pipe Length 300m



Two Stage Sub-cooling



Easy Connection With 4-way

Model			AU042FPERS	AU052FPERS	AU062FPERS	AU04IFPERS	AU05IFPERS	AU06IFPERS
Capacity <sup>(1)</sup>	Capacity range	HP	4	5	6	4	5	6
	Cooling	kW	12.1	14	15.5	12.1	14	15.5
	Heating	kW	14.2	16	18	14.2	16	18
	Heating(Max.)	kW	/	/	/	/	/	/
	EER	/	4.05	3.99	3.6	4.05	3.99	3.6
	SEER	/	6.82	6.63	6.45	6.82	6.63	6.45
	η s	%	269.8	262.2	255	269.8	262.2	255
	COP	/	4.47	4.3	4.1	4.47	4.3	4.1
	SCOP(1)	/	3.92	3.85	3.8	3.92	3.85	3.8
	η s	%	153.8	151	149	153.8	151	149
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	3/380-415/50/60
	Rated power input (Cooling)	kW	2.99	3.51	4.31	2.99	3.51	4.31
	Rated power input (Heating)	kW	3.18	3.72	4.39	3.18	3.72	4.39
Dimensions	External (W/D/H)	mm	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350
	Shipping (W/D/H)	mm	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492
Weight	Net/Shipping weight	kg	108/123	108/123	108/123	108/123	108/123	108/123
Compressor	Compressor type	/	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Motor power	W	4130	4130	4130	4060	4060	4060
	Compressor quantity	/	1	1	1	1	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	7200	7200	7200	7200	7200	7200
Pressure Sound level	Cooling	dB(A)	57	58	59	57	58	59
	Heating	dB(A)	57	58	59	57	58	59
Refrigerant	Type	/	R410A	R410A	R410A	R410A	R410A	R410A
	Charge	kg	4	4	4	4	4	4
Piping	Refrigerant liquid pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88	15.88	15.88	15.88
	Total pipe length	m	300	300	300	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150
	Max. drop between I.U.&O.U (ODU above / below)	m	50/40	50/40	50/40	50/40	50/40	50/40
	Max. drop between I.U.&I.U	m	15	15	15	15	15	15
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units	/	8	10	13	8	10	13
Working Temp.	Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50	-5-50
	Heating	°C	-20-27	-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. 35°C DB/24°C WB; In heating, Indoor Temp. is 20°C DB, Outdoor temp is 7°C DB/6°C WB)





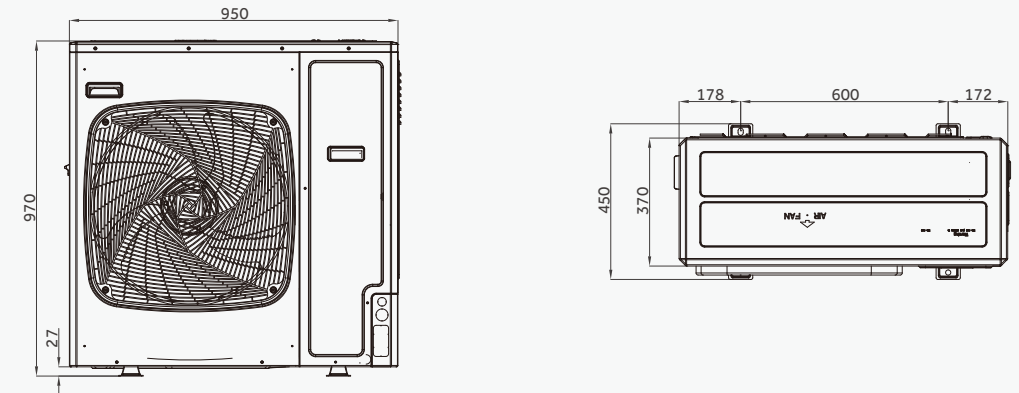
AU08NFKERS  
AU10NFKERS  
AU12NFKERS

Model			AU08NFKERS	AU10NFKERS	AU12NFKERS
Capacity <sup>(1)</sup>	Capacity range	HP	8HP	10HP	12HP
	Cooling	kW	22.6	28	33.5
	Heating	kW	25	31.5	37.5
	Heating(Max.)	kW	/	/	/
	EER	/	3.9	3.62	3.6
	COP	/	4.6	4.2	3.9
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Rated power input (Cooling)	kW	5.79	7.73	9.3
	Rated power input (Heating)	kW	5.43	7.5	9.62
Dimensions	External (W/D/H)	mm	1050/400/1636	1050/400/1636	1050/400/1636
	Shipping (W/D/H)	mm	1150/510/1790	1150/510/1790	1150/510/1790
Weight	Net/Shipping weight	kg	149/168	149/168	149/168
	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary
Compressor	Motor power	W	6270	6270	6270
	Compressor quantity	/	1	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	10000	10000	10000
Pressure Sound level	Cooling	dB(A)	55	58	60
	Heating	dB(A)	57	60	62
Refrigerant	Type	/	R410A	R410A	R410A
	Charge	kg	5.1	5.1	5.1
Piping	Refrigerant liquid pipe	mm	9.52	9.52	12.7
	Refrigerant gas pipe	mm	19.05	22.22	25.4
	Total pipe length	m	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150
	Max. drop between I.U.&O.U (ODU above / below)	m	50/40	50/40	50/40
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130
	Maximum number of indoor units	/	13	16	19
Working Temp.	Cooling	°C	-5-48	-5-48	-5-48
	Heating	°C	-20-27	-20-27	-20-27

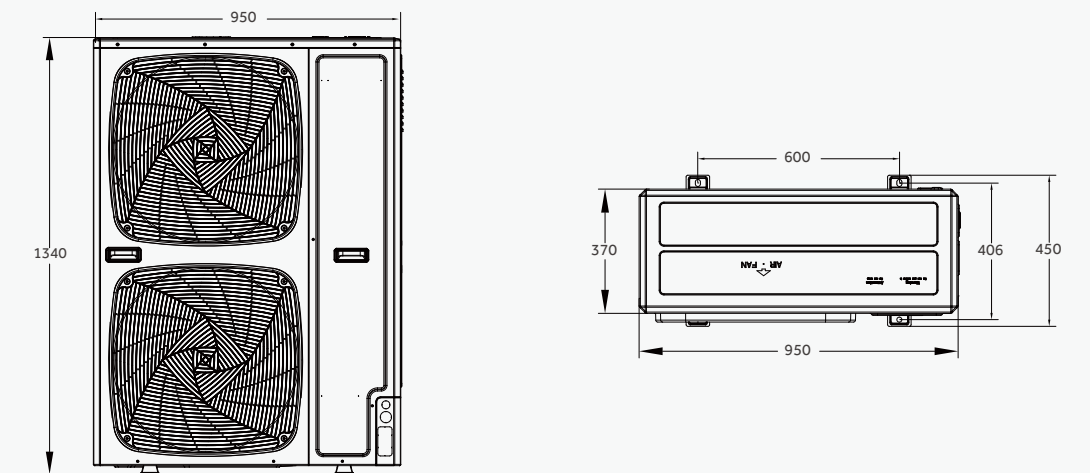
(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, Indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24°C WB; In heating, Indoor Temp. is 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)

# Dimensions

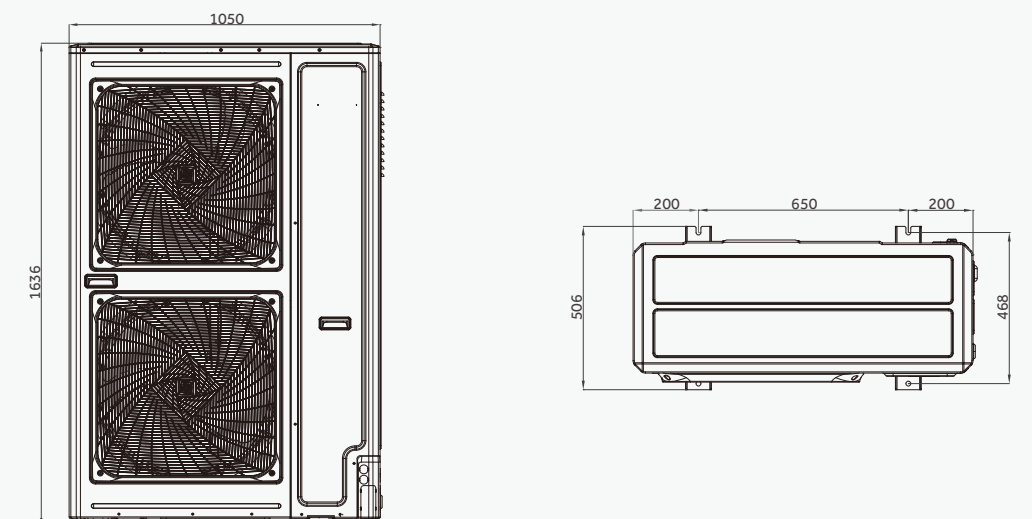
AU042FNERA AU052FNERA



AU042FPERA AU052FPERA AU062FPERA AU04IFPERA AU05IFPERA AU06IFPERA



AU08NFKERA AU10NFKERA AU12NFKERA







# MRV5T3

DC INVERTER

**199** Features & Benefits

**204** MRV 5-T3 Outdoor





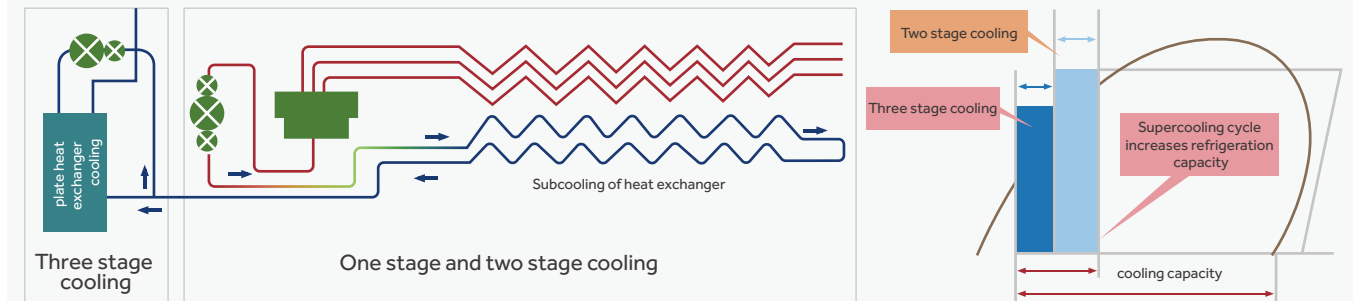


## High Efficiency

### 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%.



One stage cooling

Two stage cooling

Three stage cooling

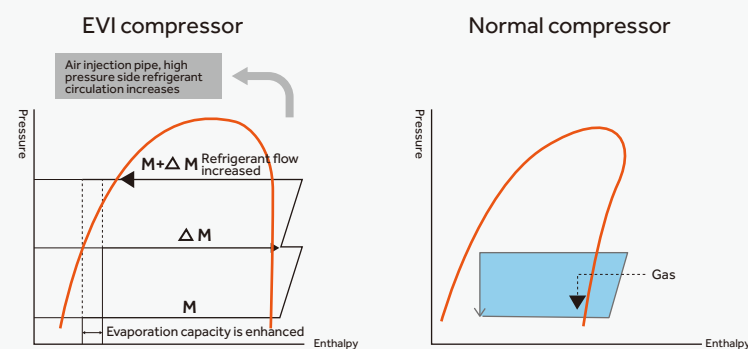
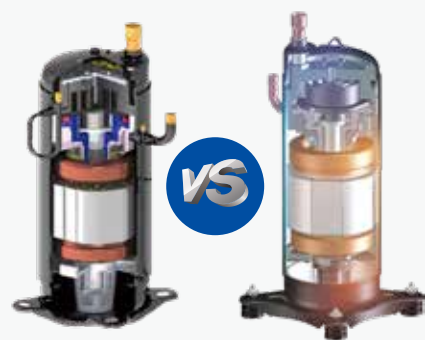
- High Efficiency
- Super Comfort
- Advanced Technology
- Easy Installation

## High Efficiency

### EVI compressor

#### Enhancedapor Injection technology, low temperature heating and high temperature cooling

The unit adopts EVI compressor, which can increase the refrigerant circulation by 15%, and improve the heating effect by 30% compared with the normal type. Meanwhile, the one-way valve built in, and the efficiency of the unit can be increased by 5%. The cooling temperature can be 53°C.



### 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.



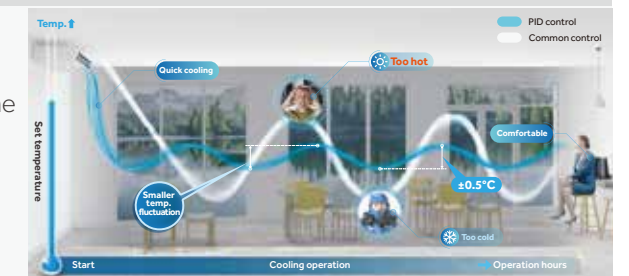
### New one-piece of four-way heat exchanger



## Super Comfort

### 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.

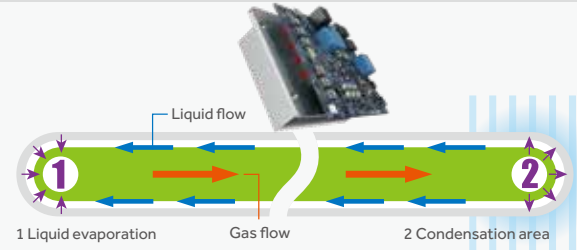




# Super Reliable

## Superconducting refrigerant cooling technology

Adopt innovative super heat conduction cooling PCB technology, heat transfer media conduct heat 100 times better than copper. Does not occupy the refrigerant amount of the system, no additional refrigerant loss. At the same time, this cooling mode will not affect the rotation of the electric control box, easy maintain.



## 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.



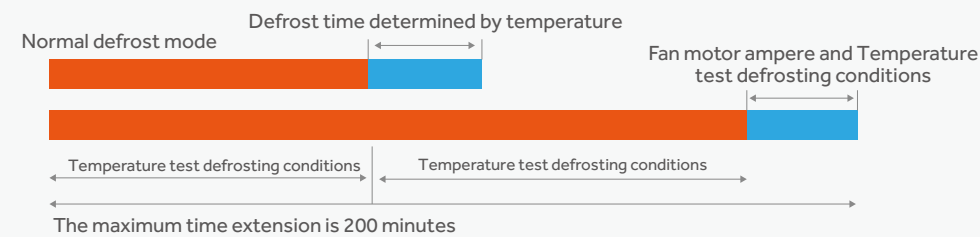
## Automatic oil balancing

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



## Patented intelligent frost measurement technology

According to the airflow resistance changes of the air supply system, the frost layer can be accurately detected in real time, so as to enter the defrost properly; Avoid false defrosting, defrosting is not clean and other problems. The defrosting period of  $-10^{\circ}\text{C}$  is prolonged by 1h, and the heat production capacity is increased by 25%.



# Super Reliable

## Wide operation temperature

Wide operating range: refrigeration operating range  $-5^{\circ}\text{C}$  to  $55^{\circ}\text{C}$ , heating  $-27^{\circ}\text{C}$  to  $21^{\circ}\text{C}$

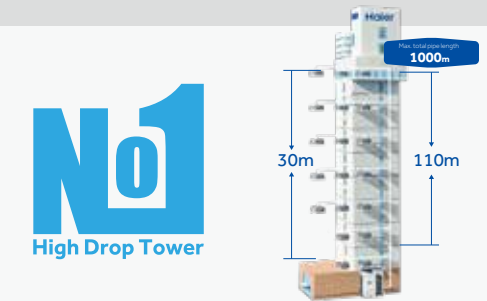


# Super Convenience

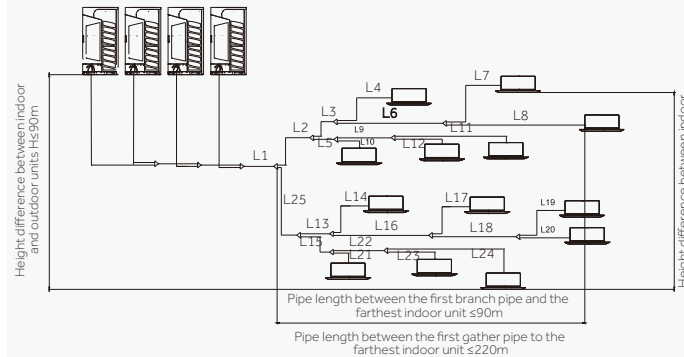
## Total pipe length 1000m, height drop 110m

- 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 unit (outdoor unit above)



Pipe length and height difference (m)	Allowable value	For example
Single way total pipe length	$\leq 1000$	$L1+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15+L16+L17+L18+L19+L20+L21+L22+L23+L24+L25$
Pipe length between the first gather pipe to the farthest indoor unit	Actual length	$\leq 220^{*1}$
	Equivalent length	$\leq 260$
Pipe length between the first branch pipe and the farthest indoor unit	$\leq 130$	$L1$
Pipe length between the first branch pipe and the farthest indoor unit	$\leq 90^{*2}$	$L2+L3+L6+L8$
Pipe length between indoor units and the nearest branch pipe	$\leq 40^{*3}$	$L4/L7/L8/L10/L11/L12/L14/L17/L19/L20/L21/L23/L24$
Pipe length difference between the nearest indoor unit and the farthest indoor unit	Outdoor unit above	$\leq 90^{*4}$
	Outdoor unit under	$\leq 110^{*5}$
Height difference between indoor units	$\leq 30^{*6}$	$h$

## Smart link

Wireless connection and communication between indoor units.

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





# Super Convenience

## 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.



## 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.



## Automatic 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.



## 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

The outdoor unit is hidden inside the building without affecting the overall image of the building



Model		AV08NMVETB	AV10NMVETB	AV12NMVETB			
Combination model		/	/	/			
		/	/	/			
		/	/	/			
		/	/	/			
Capacity	Capacity range	HP	8	10	12		
	Cooling@T1	kW	25.2	27.9	33.3		
	Cooling@T3	kW	23.1	25.2	30		
	Heating	kW	27.0	33.5	37.5		
Electrical Parameters	Power supply		Ph/V/Hz		3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Cooling @T1	Rated power input	kW	5.93	6.83	8.48	
		Max. power input	kW	15.10	16.32	20.69	
		Rated current	A	9.90	11.40	14.16	
		Max. current	A	25.14	27.17	34.50	
	Cooling @T3	Rated power input	kW	7.03	8.40	10.24	
		Rated current	A	11.74	14.03	17.10	
	Heating	Rated power input	kW	5.78	7.28	8.63	
		Max. power input	kW	12.19	12.69	19.56	
		Rated current	A	9.64	12.16	14.41	
		Max. current	A	20.30	21.13	32.57	
	Performance	EER@T1	W/W	4.25	4.09	3.93	
EER@T3		W/W	3.29	3.00	2.93		
COP		W/W	4.65	4.60	4.35		
Air flow (H)		m³/h	12000	12000	13500		
Sound pressure level (H)		dB(A)	58	59	60		
Sound power level (H)		dB(A)	72	73	74		
Installation	External dimensions(W/D/H)	mm	980/750/1690	980/750/1690	980/750/1690		
	Shipping dimensions(W/D/H)	mm	1070/850/1858	1070/850/1858	1070/850/1858		
	Net weight	kg	255	255	255		
	Shipping weight	kg	280	280	280		
	Compressor type		DC INV. SCROLL				
	Compressor brand		MITSUBISHI ELECTRIC				
	Compressor quantity		1INV	1INV	1INV		
	Refrigerant type		R410A	R410A	R410A		
	Refrigerant charge	kg	10	10	10		
	Refrigerant liquid pipe	mm	9.52	9.52	12.7		
Refrigerant gas pipe	mm	19.05	22.22	25.4			
Max. total pipe length	m	1000	1000	1000			
Max. pipe length(Equivalent/Actual)	m	260/220	260/220	260/220			
Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90			
Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40			
Max. drop between I.U. *3	m	30	30	30			
Standard drop between I.U. *4	m	18	18	18			
External static pressure	Pa	110	110	110			
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130		
	Maximum number of indoor units		13	16	20		
Working Temp.	Cooling	°C	-5-55				
	Heating	°C	-20-15.5				

\* Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.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. Standard design and production in the factory.  
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 design and production in the factory.  
\* All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB, Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°CWB



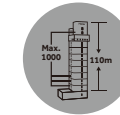


AV08NMVETB  
AV10NMVETB  
AV12NMVETB



AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB

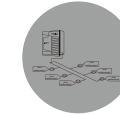
# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV14NMVETB	AV16NMVETB	AV18NMVETB	AV20NMVETB	AV22NMVETB		
Combination model			/	/	/	/	AV10NMVETB		
			/	/	/	/	AV12NMVETB		
			/	/	/	/	/		
			/	/	/	/	/		
Capacity	Capacity range	HP	14	16	18	20	22		
	Cooling@T1	kW	40	45	50	56	61.2		
	Cooling@T3	kW	36	40.5	43	45	55.2		
	Heating	kW	45.0	50.0	56.0	63.0	71.00		
Electrical Parameters	Power supply		Ph/V/Hz		3/380-415/50/60		3/380-415/50/60		
	Cooling @T1	Rated power input	kW	10.23	11.66	13.19	14.74	15.31	
		Max. power input	kW	25.90	28.91	32.81	35.35	37.0	
		Rated current	A	17.08	19.46	22.03	24.61	25.56	
		Max. current	A	40.30	46.30	54.12	58.86	61.79	
	Cooling @T3	Rated power input	kW	12.55	14.16	15.09	16.07	18.64	
		Rated current	A	20.95	23.64	25.19	26.83	31.12	
		Rated power input	kW	10.44	11.81	13.40	15.37	15.91	
		Max. power input	kW	21.93	24.70	30.40	32.45	32.3	
	Heating	Rated current	A	17.42	19.71	22.37	25.66	26.57	
		Max. current	A	36.51	41.13	50.62	54.03	53.85	
		EER@T1	W/W	3.91	3.86	3.79	3.80	4.00	
EER@T3		W/W	2.87	2.86	2.85	2.80	2.96		
Performance	COP	W/W	4.30	4.20	4.15	4.10	4.45		
	Air flow (H)	m <sup>3</sup> /h	17000	17000	18000	19000	25500		
	Sound pressure level (H)	dB(A)	61	62	63	64	59+60		
	Sound power level (H)	dB(A)	75	76	77	78	73+74		
Installation	External dimensions(W/D/H)		mm		1410/750/1690		1410/750/1690		
	Shipping dimensions(W/D/H)		mm		1515/850/1858		1515/850/1858		
	Net weight		kg		385		385		
	Shipping weight		kg		410		410		
	Compressor type				DC INV. SCROLL		DC INV. SCROLL		
	Compressor brand				MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC		
	Compressor quantity				2INV		2INV		
	Refrigerant type				R410A		R410A		
	Refrigerant charge		kg		10		10		
	Refrigerant liquid pipe		mm		12.7		15.88		
	Refrigerant gas pipe		mm		25.4		28.58		
	Max. total pipe length		m		1000		1000		
	Max. pipe length(Equivalent/Actual)		m		260/220		260/220		
	Max. drop between I.U.&O.U. (O.U. down/up) *1		m		110/90		110/90		
	Standard drop between I.U.&O.U. (O.U. up/down) *2		m		50/40		50/40		
	Max. drop between I.U. *3		m		30		30		
	Standard drop between I.U. *4		m		18		18		
	External static pressure		Pa		110		110		
	Connection Ratio	Connectable indoor unit ratio	%	50-130		50-130		50-130	
		Maximum number of indoor units		24		27		30	
Working Temp.	Cooling	°C	-5-55		-5-55		-5-55		
	Heating	°C	-20-15.5		-20-15.5		-20-15.5		

Max. drop between I.U.&O.U. \*1  
Standard drop between I.U.&O.U. \*2  
Max. drop between I.U. \*3  
Standard drop between I.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.  
Standard design and production in the factory.  
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 design and production in the factory.

\*All the specifications are tested under nominal condition(In cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; In heating, indoor Temp. is 20°C DB; in heating, outdoor Temp. is 7°C DB/6°C WB)



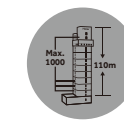
# 3/380~415/50/60



AV08NMVETB  
AV10NMVETB  
AV12NMVETB



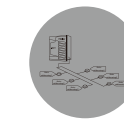
AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV24NMVETB	AV26NMVETB	AV28NMVETB	AV30NMVETB	AV32NMVETB		
Combination model			AV12NMVETB	AV12NMVETB	AV12NMVETB	AV14NMVETB	AV16NMVETB		
			AV12NMVETB	AV14NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB		
			/	/	/	/	/		
			/	/	/	/	/		
Capacity	Capacity range	HP	24	26	28	30	32		
	Cooling@T1	kW	66.6	73.3	78.3	85	90		
	Cooling@T3	kW	60	66	70.5	76.5	81		
	Heating	kW	75.00	82.50	87.50	95.00	100.00		
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60						
	Cooling @T1	Rated power input	kW	16.96	18.71	20.14	21.89	23.32	
		Max. power input	kW	41.38	46.59	49.60	54.81	57.82	
		Rated current	A	28.32	31.24	33.62	36.55	38.93	
		Max. current	A	69.09	77.79	82.81	91.51	96.54	
	Cooling @T3	Rated power input	kW	20.48	22.79	24.40	26.71	28.32	
		Rated current	A	34.19	38.05	40.74	44.59	47.29	
		Heating	Rated power input	kW	17.26	19.07	20.44	22.24	23.61
			Max. power input	kW	39.12	41.49	44.26	46.63	49.40
	Rated current		A	28.82	31.83	34.12	37.14	39.43	
		Max. current	A	65.32	69.27	73.90	77.86	82.48	
	Performance	EER@T1	W/W	3.93	3.92	3.89	3.88	3.86	
EER@T3		W/W	2.93	2.90	2.89	2.86	2.86		
COP		W/W	4.35	4.35	4.30	4.25	4.20		
Air flow (H)		m³/h	27000	30500	30500	34000	34000		
Sound pressure level (H)		dB(A)	60+60	60+61	60+62	61+62	62+62		
Sound power level (H)		dB(A)	74+74	74+75	74+76	75+76	76+76		
Installation	External dimensions(W/D/H)	mm	980/750/1690+980/750/1690	980/750/1690+1410/750/1690	980/750/1690+1410/750/1690	1410/750/1690+1410/750/1690	1410/750/1690+1410/750/1690		
	Shipping dimensions(W/D/H)	mm	1070/850/1858+1070/850/1858	1070/850/1858+1515/850/1858	1070/850/1858+1515/850/1858	1515/850/1858+1515/850/1858	1515/850/1858+1515/850/1858		
	Net weight	kg	255+255	255+385	255+385	385+385	385+385		
	Shipping weight	kg	280+280	280+410	280+410	410+410	410+410		
	Compressor type		DC INV. SCROLL						
	Compressor brand		MITSUBISHI ELECTRIC						
	Compressor quantity		1INV+1INV	1INV+2INV	1INV+2INV	2INV+2INV	2INV+2INV		
	Refrigerant type		R410A	R410A	R410A	R410A	R410A		
	Refrigerant charge	kg	10+10	10+10	10+10	10+10	10+10		
	Refrigerant liquid pipe	mm	15.88	15.88	15.88	19.05	19.05		
	Refrigerant gas pipe	mm	28.58	28.58	28.58	31.8	31.8		
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90		
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40		
	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		
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130		
	Maximum number of indoor units		40	43	47	50	53		
Working Temp.	Cooling	°C	-5-55						
	Heating	°C	-20-15.5						

Max. drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.

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 in the factory.  
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 design and production in the factory.

\* All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB



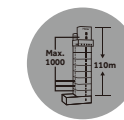


AV08NMVETB  
AV10NMVETB  
AV12NMVETB



AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV34NMVETB	AV36NMVETB	AV38NMVETB	AV40NMVETB	AV42NMVETB	
Combination model			AV16NMVETB	AV18NMVETB	AV18NMVETB	AV20NMVETB	AV14NMVETB	
			AV18NMVETB	AV18NMVETB	AV20NMVETB	AV20NMVETB	AV14NMVETB	
			/	/	/	/	AV14NMVETB	
			/	/	/	/	/	
Capacity	Capacity range	HP	34	36	38	40	42	
	Cooling@T1	kW	95	100	106	112	120	
	Cooling@T3	kW	83.5	86	88	90	108	
	Heating	kW	106.00	112.00	119.00	126.00	135.00	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60		3/380-415/50/60		3/380-415/50/60	
	Cooling @T1	Rated power input	kW	24.85	26.39	27.93	29.48	30.69
		Max. power input	kW	61.72	65.62	68.16	70.70	77.70
		Rated current	A	41.49	44.06	46.64	49.22	51.24
		Max. current	A	103.05	109.56	113.80	118.04	129.73
	Cooling @T3	Rated power input	kW	29.25	30.18	31.16	32.14	37.64
		Rated current	A	48.84	50.38	52.02	53.66	62.85
		Rated power input	kW	25.20	26.79	28.76	30.73	31.31
		Max. power input	kW	55.10	60.80	62.85	64.90	65.79
	Heating	Rated current	A	42.08	44.74	48.02	51.31	52.27
		Max. current	A	92.00	101.52	104.94	108.36	109.85
		EER@T1	W/W	3.82	3.79	3.79	3.80	3.91
EER@T3		W/W	2.85	2.85	2.82	2.80	2.87	
Performance	COP	W/W	4.20	4.15	4.15	4.10	4.30	
	Air flow (H)	m <sup>3</sup> /h	35000	36000	37000	38000	51000	
	Sound pressure level (H)	dB(A)	62+63	63+63	63+64	64+64	61+61+61	
	Sound power level (H)	dB(A)	76+77	77+77	77+78	78+78	75+75+75	
	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	
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		
Net weight	kg	385+385	385+385	385+385	385+385	385+385+385		
Shipping weight	kg	410+410	410+410	410+410	410+410	410+410+410		
Installation	Compressor type		DC INV. SCROLL		DC INV. SCROLL			
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC			
	Compressor quantity		2INV+2INV	2INV+2INV	2INV+2INV	2INV+2INV	2INV+2INV+2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10+10	10+10	10+10	10+10	10+10+10	
	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	
	Max. pipe length(Equivalent/Actual)	m	260/220	260/220	260/220	260/220	260/220	
	Max. drop between I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	
	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	
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	-5-55				-5-55	
	Heating	°C	-20-15.5				-20-15.5	

Max. drop between I.U. & O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.

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 in the factory.  
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 design and production in the factory.

\* All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB; in heating, indoor Temp. is 20°C DB; in heating, outdoor Temp. is 7°C DB/6°C WB



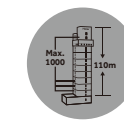
# 3/380~415/50/60



AV08NMVETB  
AV10NMVETB  
AV12NMVETB



AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV44NMVETB	AV46NMVETB	AV48NMVETB	AV50NMVETB	AV52NMVETB	
Combination model			AV14NMVETB	AV14NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB	
			AV14NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB	AV18NMVETB	
			AV16NMVETB	AV16NMVETB	AV16NMVETB	AV18NMVETB	AV18NMVETB	
			/	/	/	/	/	
Capacity	Capacity range	HP	44	46	48	50	52	
	Cooling@T1	kW	125	130	135	140	145	
	Cooling@T3	kW	112.5	117	121.5	124	126.5	
	Heating	kW	140.00	145.00	150.00	156	162	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60		3/380-415/50/60		3/380-415/50/60	
	Cooling @T1	Rated power input	kW	32.12	33.55	34.97	36.51	38.05
		Max. power input	kW	80.71	83.72	86.73	90.63	94.53
		Rated current	A	53.63	56.01	58.39	60.96	63.52
		Max. current	A	134.76	139.78	144.81	151.32	157.83
	Cooling @T3	Rated power input	kW	39.26	40.87	42.48	43.41	44.34
		Rated current	A	65.55	68.24	70.93	72.48	74.03
		Rated power input	kW	32.68	34.05	35.42	37.01	38.60
		Max. power input	kW	68.56	71.33	74.10	79.8	85.5
	Heating	Rated current	A	54.56	56.85	59.14	61.79	64.45
		Max. current	A	114.47	119.10	123.72	133.24	142.76
		EER@T1	W/W	3.89	3.88	3.86	3.83	3.81
EER@T3		W/W	2.87	2.86	2.86	2.86	2.85	
Performance	COP	W/W	4.30	4.25	4.20	4.20	4.20	
	Air flow (H)	m³/h	51000	51000	51000	52000	53000	
	Sound pressure level (H)	dB(A)	61+61+62	61+62+62	62+62+62	62+62+63	62+63+63	
	Sound power level (H)	dB(A)	75+75+76	75+76+76	76+76+76	76+76+77	76+77+77	
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	
	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	
	Net weight	kg	385+385+385	385+385+385	385+385+385	385+385+385	385+385+385	
	Shipping weight	kg	410+410+410	410+410+410	410+410+410	410+410+410	410+410+410	
	Compressor type		DC INV. SCROLL		DC INV. SCROLL		DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10+10+10	10+10+10	10+10+10	10+10+10	10+10+10	
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1	38.1	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	
	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	
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	-5-55		-5-55		-5-55	
	Heating	°C	-20-15.5		-20-15.5		-20-15.5	

Max. drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.

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 in the factory.  
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 design and production in the factory.

\*All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB



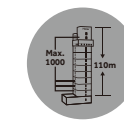


AV08NMVETB  
AV10NMVETB  
AV12NMVETB



AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB

# 3/380~415/50/60



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV54NMVETB	AV56NMVETB	AV58NMVETB	AV60NMVETB		
Combination model			AV18NMVETB	AV18NMVETB	AV18NMVETB	AV20NMVETB		
			AV18NMVETB	AV18NMVETB	AV20NMVETB	AV20NMVETB		
			AV18NMVETB	AV20NMVETB	AV20NMVETB	AV20NMVETB		
			/	/	/	/		
Capacity	Capacity range	HP	54	56	58	60		
	Cooling@T1	kW	150	156	162	168		
	Cooling@T3	kW	129	131	133	135		
	Heating	kW	168	175	182	189		
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60					
	Cooling @T1	Rated power input	kW	39.58	41.13	42.67	44.22	
		Max. power input	kW	98.43	100.97	103.51	106.05	
		Rated current	A	66.09	68.67	71.25	73.83	
		Max. current	A	164.34	168.59	172.83	177.07	
	Cooling @T3	Rated power input	kW	45.26	46.25	47.23	48.21	
		Rated current	A	75.57	77.21	78.85	80.49	
		Heating	Rated power input	kW	40.19	42.16	44.13	46.10
			Max. power input	kW	91.2	93.25	95.3	97.35
	Rated current		A	67.11	70.39	73.68	76.97	
	Max. current		A	152.27	155.70	159.12	162.54	
	Performance	EER@T1	W/W	3.79	3.79	3.80	3.80	
EER@T3		W/W	2.85	2.83	2.82	2.80		
COP		W/W	4.15	4.15	4.10	4.10		
Air flow (H)		m³/h	54000	55000	56000	57000		
Sound pressure level (H)		dB(A)	63+63+63	63+63+64	63+64+64	64+64+64		
Sound power level (H)		dB(A)	77+77+77	77+77+78	77+78+78	78+78+78		
Installation	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					
	Net weight	kg	385+385+385	385+385+385	385+385+385	385+385+385		
	Shipping weight	kg	410+410+410	410+410+410	410+410+410	410+410+410		
	Compressor type		DC INV. SCROLL					
	Compressor brand		MITSUBISHI ELECTRIC					
	Compressor quantity		2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV	2INV+2INV+2INV		
	Refrigerant type		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	38.1	38.1	41.3	41.3		
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90		
	Standard drop between I.U.&O.U. (O.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		
	External static pressure	Pa	110	110	110	110		
Connection Ratio	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	-5-55					
	Heating	°C	-20-15.5					

Max. drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.

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Standard design and production in the factory.  
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 design and production in the factory.

\*All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB



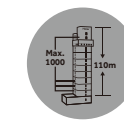
# 3/380~415/50/60



AV08NMVETB  
AV10NMVETB  
AV12NMVETB



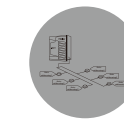
AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV62NMVETB	AV64NMVETB	AV66NMVETB	AV68NMVETB	AV70NMVETB	
Combination model			AV14NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB	
			AV16NMVETB	AV16NMVETB	AV16NMVETB	AV16NMVETB	AV18NMVETB	
			AV16NMVETB	AV16NMVETB	AV16NMVETB	AV18NMVETB	AV18NMVETB	
			AV16NMVETB	AV16NMVETB	AV18NMVETB	AV18NMVETB	AV18NMVETB	
Capacity	Capacity range	HP	62	64	66	68	70	
	Cooling@T1	kW	175	180	185	190	195	
	Cooling@T3	kW	157.5	162	164.5	167	169.5	
	Heating	kW	195	200	206	212	218	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60		3/380-415/50/60		3/380-415/50/60	
	Cooling @T1	Rated power input	kW	45.20	46.63	48.17	49.70	51.24
		Max. power input	kW	112.63	115.64	119.54	123.44	127.34
		Rated current	A	75.48	77.86	80.42	82.99	85.55
		Max. current	A	188.05	193.08	199.59	206.10	212.61
	Cooling @T3	Rated power input	kW	55.03	56.64	57.57	58.50	59.42
		Rated current	A	91.88	94.57	96.12	97.67	99.22
		Rated power input	kW	45.86	47.23	48.82	50.41	52.00
		Max. power input	kW	96.03	98.8	104.5	110.2	115.9
	Heating	Rated current	A	76.56	78.85	81.51	84.16	86.82
		Max. current	A	160.34	164.96	174.48	184.00	193.51
		EER@T1	W/W	3.87	3.86	3.84	3.82	3.81
EER@T3		W/W	2.86	2.86	2.86	2.85	2.85	
Performance	COP	W/W	4.25	4.20	4.20	4.20	4.20	
	Air flow (H)	m <sup>3</sup> /h	68000	68000	69000	70000	71000	
	Sound pressure level (H)	dB(A)	61+62+62+62	62+62+62+62	62+62+62+63	62+62+63+63	62+63+63+63	
	Sound power level (H)	dB(A)	75+76+76+76	76+76+76+76	76+76+76+77	76+76+77+77	76+77+77+77	
	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		
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			
Net weight	kg	385+385+385+385	385+385+385+385	385+385+385+385	385+385+385+385	385+385+385+385		
Shipping weight	kg	410+410+410+410	410+410+410+410	410+410+410+410	410+410+410+410	410+410+410+410		
Compressor type		DC INV. SCROLL		DC INV. SCROLL				
Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC				
Compressor quantity		2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV		
Refrigerant type		R410A		R410A				
Refrigerant charge	kg	10+10+10+10	10+10+10+10	10+10+10+10	10+10+10+10	10+10+10+10		
Refrigerant liquid pipe	mm	19.05	19.05	19.05	22.22	22.22		
Refrigerant gas pipe	mm	41.3	41.3	41.3	44.5	44.5		
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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90		
Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40		
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		
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	-5-55				-5-55	
	Heating	°C	-20-15.5				-20-15.5	

Max. drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.  
\*All the specifications are tested under nominal condition in cooling, indoor Temp. is 27°C DB/19°C WB; Outdoor Temp. 35°C DB/24WB in heating, indoor Temp. is 20°C DB in heating, outdoor Temp. is 7°C DB/6°C WB

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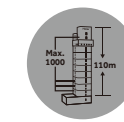
# 3/380~415/50/60



AV08NMVETB  
AV10NMVETB  
AV12NMVETB



AV14NMVETB  
AV16NMVETB  
AV18NMVETB  
AV20NMVETB



Total Pipe Length 1000m,  
Height Drop 110m



EVI Compressors



Auto Addressing  
Indoor Units



Stable Working Under High  
Temperature

Model			AV72NMVETB	AV74NMVETB	AV76NMVETB	AV78NMVETB	AV80NMVETB	
Combination model			AV18NMVETB	AV18NMVETB	AV18NMVETB	AV18NMVETB	AV20NMVETB	
			AV18NMVETB	AV18NMVETB	AV18NMVETB	AV20NMVETB	AV20NMVETB	
			AV18NMVETB	AV18NMVETB	AV20NMVETB	AV20NMVETB	AV20NMVETB	
			AV18NMVETB	AV20NMVETB	AV20NMVETB	AV20NMVETB	AV20NMVETB	
Capacity	Capacity range	HP	72	74	76	78	80	
	Cooling@T1	kW	200	206	212	218	224	
	Cooling@T3	kW	172	174	176	178	180	
	Heating	kW	224	231	238	245	252	
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60		3/380-415/50/60		3/380-415/50/60	
	Cooling @T1	Rated power input	kW	52.77	54.32	55.87	57.41	58.96
		Max. power input	kW	131.24	133.78	136.32	138.86	141.4
		Rated current	A	88.12	90.70	93.28	95.86	98.44
		Max. current	A	219.13	223.37	227.61	231.85	236.09
	Cooling @T3	Rated power input	kW	60.35	61.33	62.32	63.30	64.28
		Rated current	A	100.77	102.41	104.05	105.69	107.33
		Rated power input	kW	53.59	55.56	57.53	59.49	61.46
		Max. power input	kW	121.6	123.65	125.7	127.75	129.8
	Heating	Rated current	A	89.47	92.76	96.05	99.34	102.62
		Max. current	A	203.03	206.45	209.88	213.30	216.72
		EER@T1	W/W	3.79	3.79	3.79	3.80	3.80
EER@T3		W/W	2.85	2.84	2.82	2.81	2.80	
Performance	COP	W/W	4.15	4.15	4.15	4.10	4.10	
	Air flow (H)	m³/h	72000	73000	74000	75000	76000	
	Sound pressure level (H)	dB(A)	63+63+63+63	63+63+63+64	63+63+64+64	63+64+64+64	64+64+64+64	
	Sound power level (H)	dB(A)	77+77+77+77	77+77+77+78	77+77+78+78	77+78+78+78	78+78+78+78	
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			
	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			
	Net weight	kg	385+385+385+385	385+385+385+385	385+385+385+385	385+385+385+385	385+385+385+385	
	Shipping weight	kg	410+410+410+410	410+410+410+410	410+410+410+410	410+410+410+410	410+410+410+410	
	Compressor type		DC INV. SCROLL		DC INV. SCROLL			
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC			
	Compressor quantity		2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	2INV+2INV+2INV+2INV	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	10+10+10+10	10+10+10+10	10+10+10+10	10+10+10+10	10+10+10+10	
	Refrigerant liquid pipe	mm	22.22	22.22	22.22	22.22	22.22	
	Refrigerant gas pipe	mm	44.5	44.5	44.5	44.5	44.5	
	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 I.U.&O.U. (O.U. down/up) *1	m	110/90	110/90	110/90	110/90	110/90	
	Standard drop between I.U.&O.U. (O.U. up/down) *2	m	50/40	50/40	50/40	50/40	50/40	
	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	
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	-5-55		-5-55			
	Heating	°C	-20-15.5		-20-15.5			

Max. drop between I.U.&O.U. \*1  
Standard design and production in the factory.  
Max. drop between I.U. \*3  
Standard design and production in the factory.

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Standard design and production in the factory.  
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 design and production in the factory.

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# MRV S<sup>II</sup>-T3

**221** Features & Benefits

**226** MRV S<sup>II</sup> Outdoor

**230** Dimensions



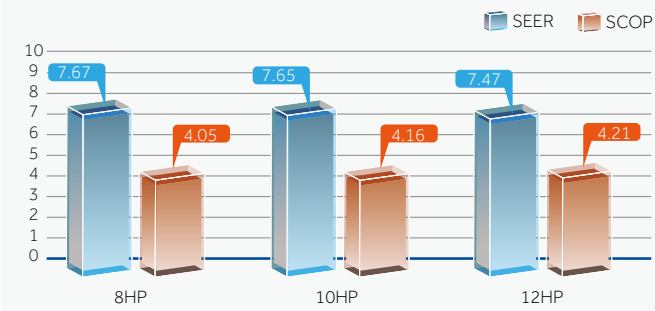




## Advanced Technology

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

The promotion of energy efficiency.



### 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%.



### Upgraded configuration, upgraded performance (8/10/12HP side discharge)

Bigger outdoor capacity, more flexible application

#### High efficiency DC fan motor

- DC fan motor with stepless inverter control, efficiency increase 45% comparing with AC motor and power input largely decrease

#### Large diameter fan

- $\varnothing 570$ mm big diameter axial flow fan
- Zigzag design, reduce airflow disturbance, air volume is bigger, the noise is lower

#### High efficiency condenser

- New type high efficiency  $\varnothing 7$  inner grooved tube
- New hydrophilic corrugated fissure fin, high efficiency

#### Vector inverter control

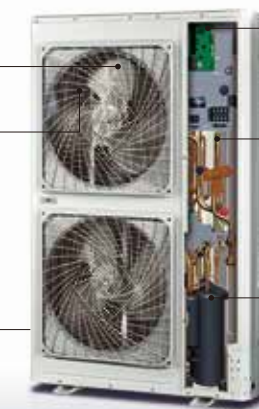
- 180 degrees sine wave vector control, 64-bit operation
- High precision control, to achieve high efficiency and lower noise

#### Double pressure sensor

- Equipped with high and low voltage, pressure double sensors
- Accurate pressure control, the system run more smoothly, more energy efficiency

#### Twin rotary DC Inverter compressor

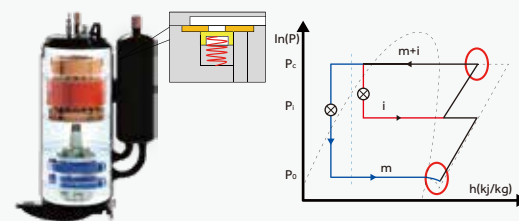
- High chamber DC inverter twin rotary compressor
- Small vibration, low noise, high energy efficiency



## Advanced Technology

### Increasing enthalpy by 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 is reduced, increase the amount of refrigerant in the heating cycle of the indoor unit heat exchanger, thereby achieving improved heating capacity.



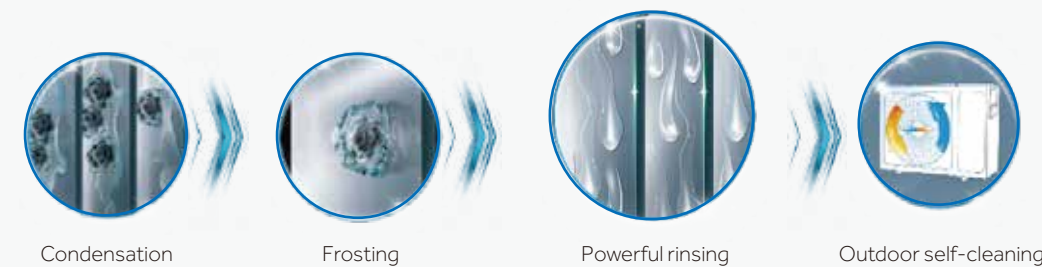
### DC inverter fan motor

- DC inverter fan motor more higher efficiency in part 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)



### 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

Haier 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%

### Charge valve

Built-in charge valve enables safer and easier maintenance

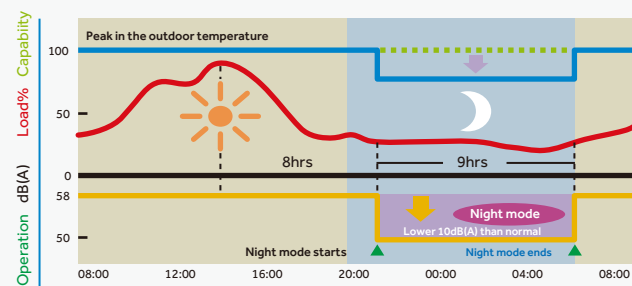
### Low standby power

New PCB programme, reduce 20% standby power consumption

## Low noise level

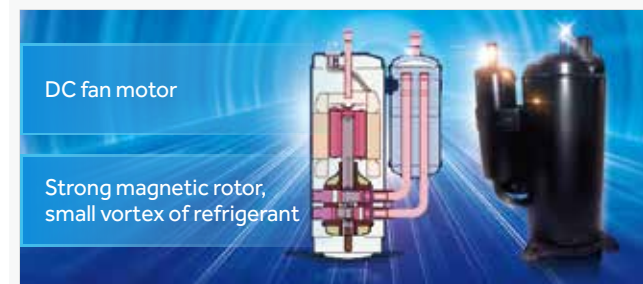
Night quiet operation function

Noise can be reduced to 45dB(A).



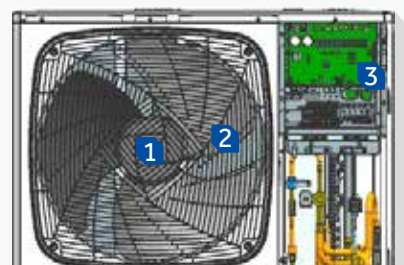
## New DC inverter twin rotary compressor

- 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 2-4dB(A).
- 3 Automatic sound-lowering programme night mode set by PCB, 8dB(A) lower.



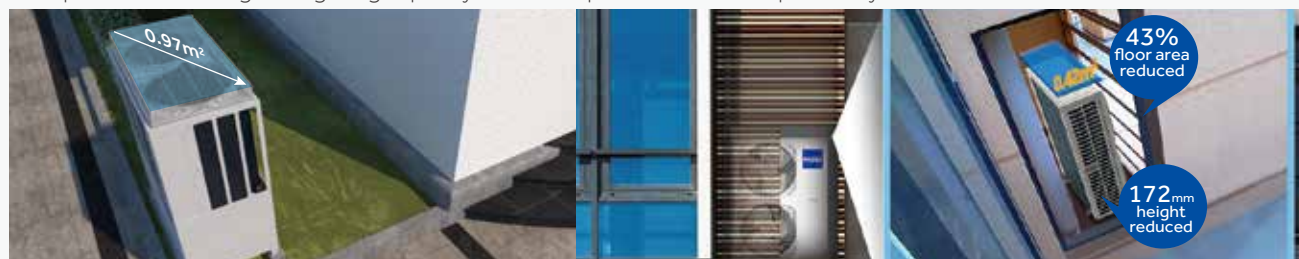
## Low noise operation

- 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 0.42m<sup>2</sup>, 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



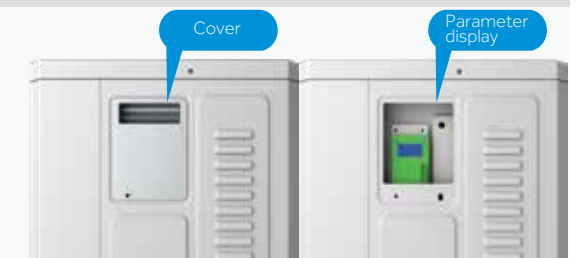
## Long pipe length, high height drop

- 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.



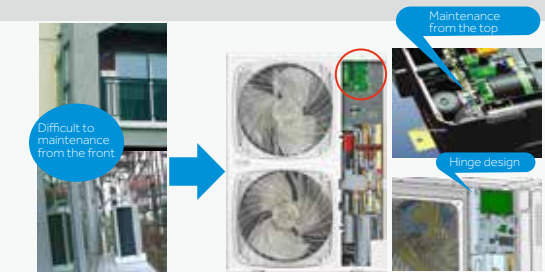
## Parameter display panel

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).



## Compact side discharge design

No need additional ventilation hood comparing with top discharge unit.



## Separate refrigerant charging valve

Easy for refrigerant charging.

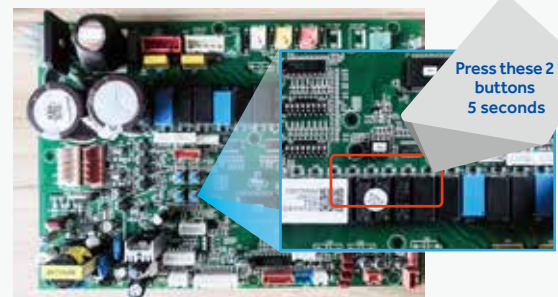




# High Reliability

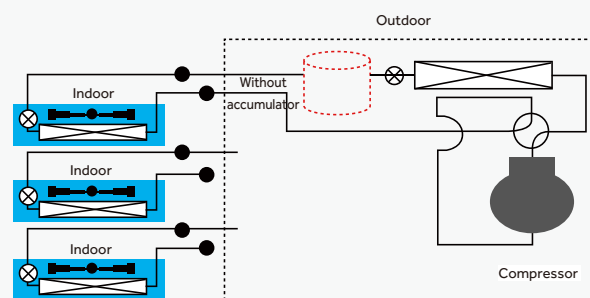
## Refrigerant automatically reclaim technology

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.



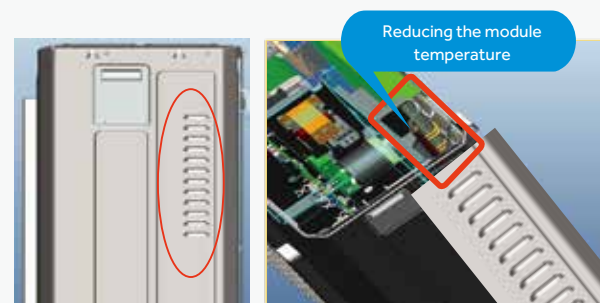
## Refrigerant control technology

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



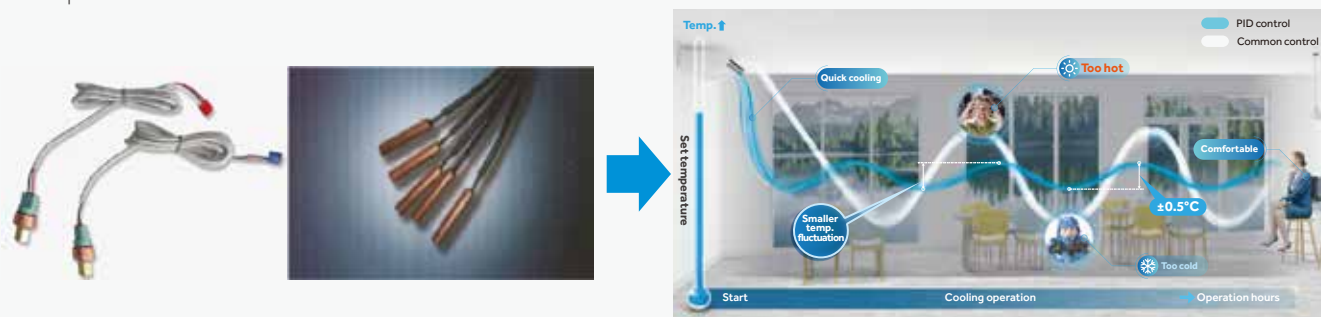
## Air inlet grill design on right side panel

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  $\pm 0.5^{\circ}\text{C}$ .



Model		AU042FNERA	AU052FNERA	
Capacity (1)	Capacity range	HP	4	5
	Cooling	kW	12.1	14.0
	Heating	kW	12.1	14.0
	Heating(Max.)	kW	14.0	15.5
	SEER(T1)	/	4.90	4.85
	$\eta$ s.c	%	193	191
	SCOP(T1)	/	3.50	3.55
Electrical Parameters	$\eta$ s.h	%	137	139
	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Rated power input (Cooling)	kW	4.25	5.00
Dimensions	Rated power input (Heating)	kW	4.10	4.83
	External (W/D/H)	mm	950/370/965	950/370/965
Weight	Shipping (W/D/H)	mm	1010/458/990	1010/458/990
	Net/Shipping weight	kg	90/102	90/102
Compressor	Compressor type	/	Rotary	Rotary
	Motor power	W	4130	4130
	Compressor quantity	/	1	1
Fan	Air flow (H)	m <sup>3</sup> /h	5400	5400
Pressure Sound level	Cooling	dB(A)	58	60
	Heating	dB(A)	60	62
Refrigerant	Type	/	R410A	R410A
	Charge	kg	3.3	3.3
Piping	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
	Total pipe length	m	120	120
	Max. pipe length(Equivalent/Actual)	m	70/60	70/60
	Max. drop between I.U.&O.U.(ODU above / below)	m	30/20	30/20
Connection Ratio	Max. drop between I.U.&I.U.	m	10	10
	Connectable indoor unit ratio	%	50-130	50-130
Working Temp.	Maximum number of indoor units	/	7	8
	Cooling	$^{\circ}\text{C}$	-5-50	-5-50
	Heating	$^{\circ}\text{C}$	-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 20°C DB, Outdoor Temp. is 7°C DB/6°C WB)

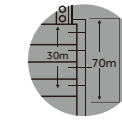




AU042FPERA  
 AU052FPERA  
 AU062FPERA  
 AU04IFPERA  
 AU05IFPERA  
 AU06IFPERA



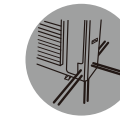
Double Fan Series



Total Pipe Length 300m



Two Stage Sub-cooling



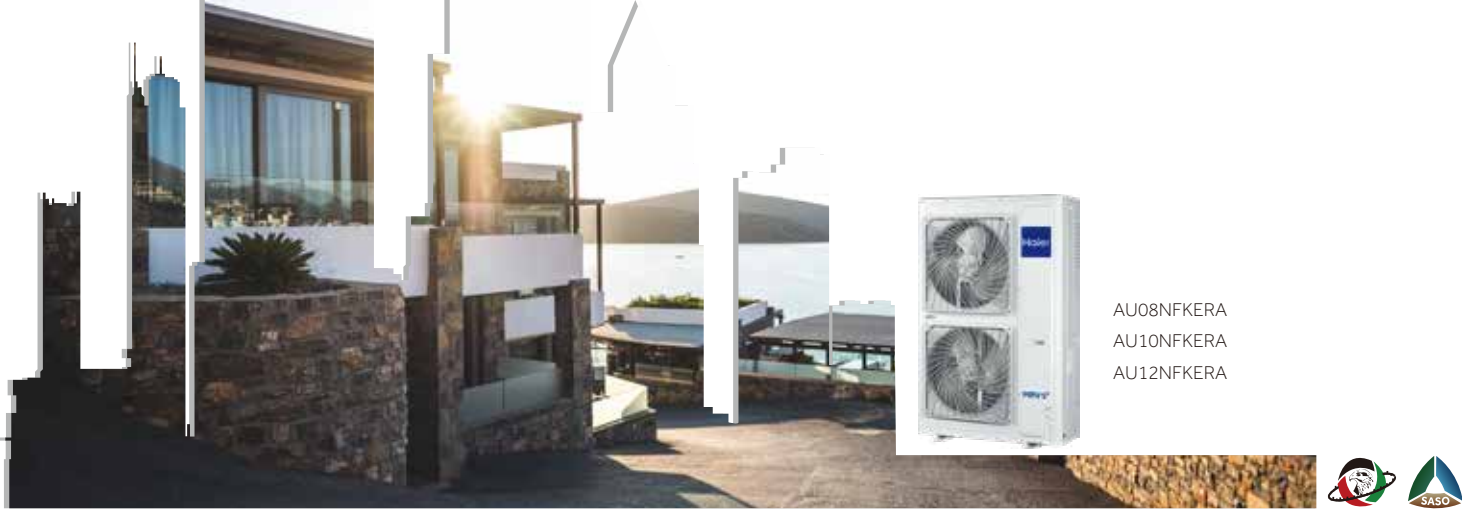
Easy Connection With 4-way



Model			AU042FPERB	AU052FPERB	AU062FPERB	AU04IFPERB	AU05IFPERB	AU06IFPERB
Capacity <sup>(1)</sup>	Capacity range	HP	4HP	5HP	6HP	4HP	5HP	6HP
	Cooling@T1	kW	12	14.1	15.6	12	14.1	15.6
	Cooling@T3	kW	11.1	12.6	14.1	11.1	12.6	14.1
	Heating	kW	14.2	15.9	18	14.2	15.9	18
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	3/380-415/50/60
	Rated power input (Cooling)	kW	2.99	3.51	4.31	2.99	3.51	4.31
	Rated power input (Heating)	kW	3.77	4.25	5.22	3.77	4.25	5.22
Performance	EER@T1	W/W	4.07	3.99	3.6	4.07	3.99	3.6
	EER@T3	W/W	2.99	2.96	2.70	2.99	2.96	2.70
	COP	W/W	4.45	4.30	4.10	4.45	4.30	4.10
	Air flow (H)	m <sup>3</sup> /h	7200	7200	7200	7200	7200	7200
Installation	External dimensions (H/W/D)	mm	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350	950/370/1350
	Shipping dimensions (H/W/D)	mm	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492	1023/483/1492
	Net Weight/Shipping weight	kg	108/123	108/123	108/123	108/123	108/123	108/123
	Compressor type	/	Rotary	Rotary	Rotary	Rotary	Rotary	Rotary
	Motor power	W	4130	4130	4130	4130	4130	4130
	Compressor quantity	/	1INV	1INV	1INV	1INV	1INV	1INV
	Refrigerant type	/	R410A	R410A	R410A	R410A	R410A	R410A
	Refrigerant charge	kg	4	4	4	4	4	4
	Refrigerant liquid pipe	mm	9.52	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88	15.88	15.88	15.88
	Total pipe length	m	300	300	300	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150	175/150	175/150	175/150
	Max. drop between IDU & ODU	m	50	50	50	50	50	50
Max. drop between IDU & IDU	m	15	15	15	15	15	15	
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of indoor units		8	10	13	8	10	13
Pressure Sound level	Cooling	dB(A)	57	58	59	57	58	59
	Heating	dB(A)	57	58	59	57	58	59
Working Temp.	Cooling	°C	-5-53	-5-53	-5-53	-5-53	-5-53	-5-53
	Heating	°C	-20-27	-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.35°C DB/24°C WB; In heating, Indoor Temp.is 20°C DB, Outdoor Temp.is 7°C DB/6°C WB)





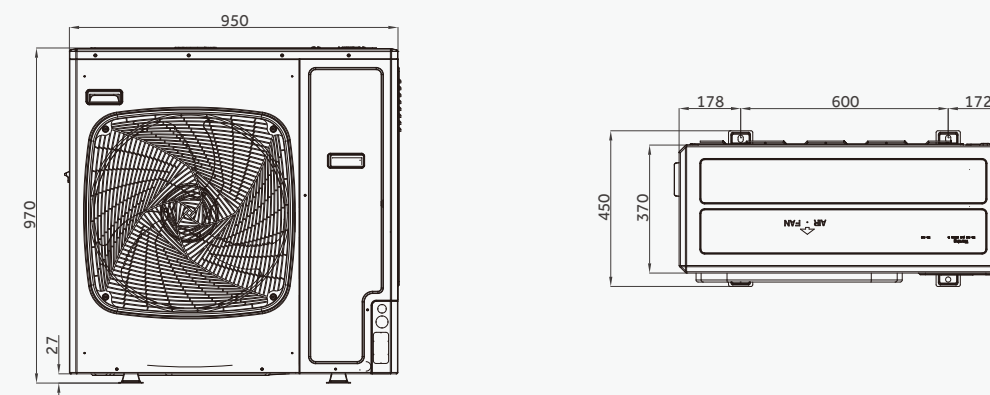
AU08NFKERA  
AU10NFKERA  
AU12NFKERA

Model			AU08NFKERB	AU10NFKERB	AU12NFKERB
Capacity <sup>(1)</sup>	Capacity range	HP	8HP	10HP	12HP
	Cooling@T1	kW	22.5	28.2	31.5
	Cooling@T3	kW	18	22.5	25.2
	Heating	kW	22.5	28.2	31.5
Electrical Parameters	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Rated power input (Cooling)	kW	5.92	7.94	9.24
	Rated power input (Heating)	kW	5.36	7.42	9.00
Performance	EER@T1	W/W	3.80	3.55	3.41
	EER@T3	W/W	3.21	3.05	3.00
	COP	W/W	4.20	3.80	3.50
	Air flow (H)	m <sup>3</sup> /h	10000	10000	10000
Installation	External dimensions (H/W/D)	mm	1050/400/1636	1050/400/1636	1050/400/1636
	Shipping dimensions (H/W/D)	mm	1150/510/1790	1150/510/1790	1150/510/1790
	Net Weight/Shipping weight	kg	149/168	149/168	149/168
	Compressor type	/	Inverter Twin Rotary	Inverter Twin Rotary	Inverter Twin Rotary
	Motor power	W	6270	6270	6270
	Compressor quantity	/	1INV	1INV	1INV
	Refrigerant type	/	R410A	R410A	R410A
	Refrigerant charge	kg	5.1	5.1	5.1
	Refrigerant liquid pipe	mm	9.52	9.52	12.7
	Refrigerant gas pipe	mm	19.05	22.22	25.4
	Total pipe length	m	300	300	300
	Max. pipe length(Equivalent/Actual)	m	175/150	175/150	175/150
	Max. drop between IDU & ODU	m	50	50	50
	Max. drop between IDU & IDU	m	15	15	15
Connection Ratio	Connectable indoor unit ratio	%	50-130	50-130	50-130
	Maximum number of indoor units		13	16	19
Pressure Sound level	Cooling	dB(A)	57	59	61
	Heating	dB(A)	58	60	62
Working Temp.	Cooling	°C	-5-52	-5-52	-5-52
	Heating	°C	-20-21	-20-21	-20-21

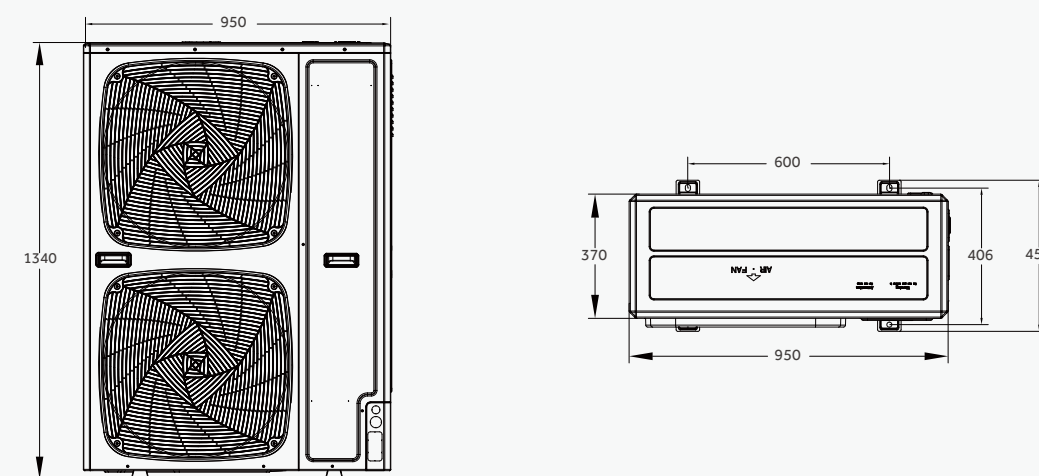
(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, Indoor Temp.is 27°C DB/19°C WB; Outdoor Temp.35°C DB/24°C WB; In heating, Indoor Temp.is 20°C DB, Outdoor Temp.is 7°C DB/6°C WB)

# Dimensions

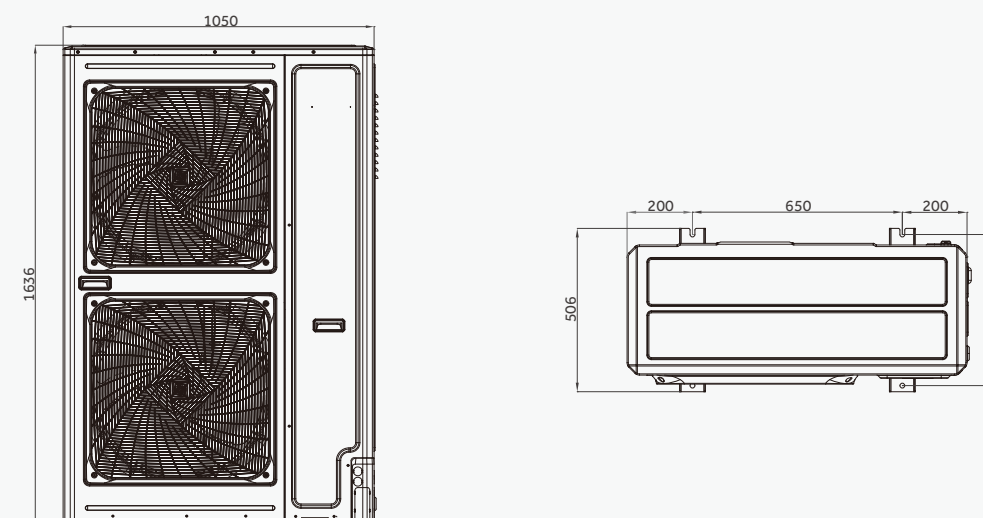
AU042FNERA AU052FNERA



AU042FPERA AU052FPERA AU062FPERA AU04IFPERA AU05IFPERA AU06IFPERA



AU08NFKERA AU10NFKERA AU12NFKERA





# Anti-Corrosion VRF Solution

Haier anti-corrosion VRF solution, with higher corrosion resistant black fin and rust inhibitor coating, is the preferable choice for conditions like seaside, industrial area with high salt & humidity & chemical.

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




- 1 Front Panel :** Galvanized steel treated with zirconium & 80µm-120µm epoxy zinc rich Primer+pure polyester paint coating **500h**  
Neutral salt mist
- 2 Heat Exchanger:** Black fin with epoxy resin & hydrophilic film **1500h**  
Neutral salt mist
- 3 Fan Motor:** Motor surface with rust preventive coating, the coating thickness is 50µm or more **72h**  
Neutral salt mist
- 4 Top Grill :** Steel with 80µm-120µm epoxy zinc rich Primer+pure polyester paint coating 80µm-120µm **500h**  
Neutral salt mist
- 5 Piping :** Piping (including the exposed U pipe and other heat exchanging pipe )with the rust inhibitor coating **500h**  
Neutral salt mist
- 6 Compressor\Accumulator\Liquid-gas Separator :** appearance with rust preventive coating, the coating thickness is 50µm or more **500h**  
Neutral salt mist
- 7 Screw:** All screws are with dacromet coating **1000h**  
Neutral salt mist



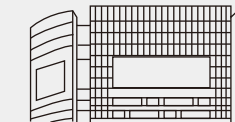
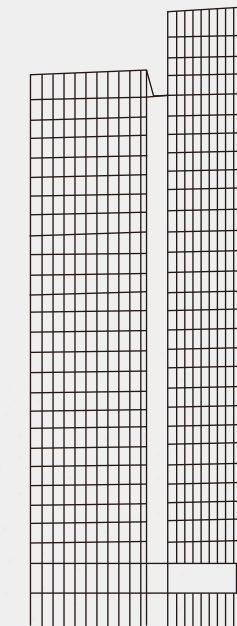


# EASY MRV Connection Kit

**235** Features & Benefits

**238** Specification

**238** Dimensions





# EASY MRV Connection Kit

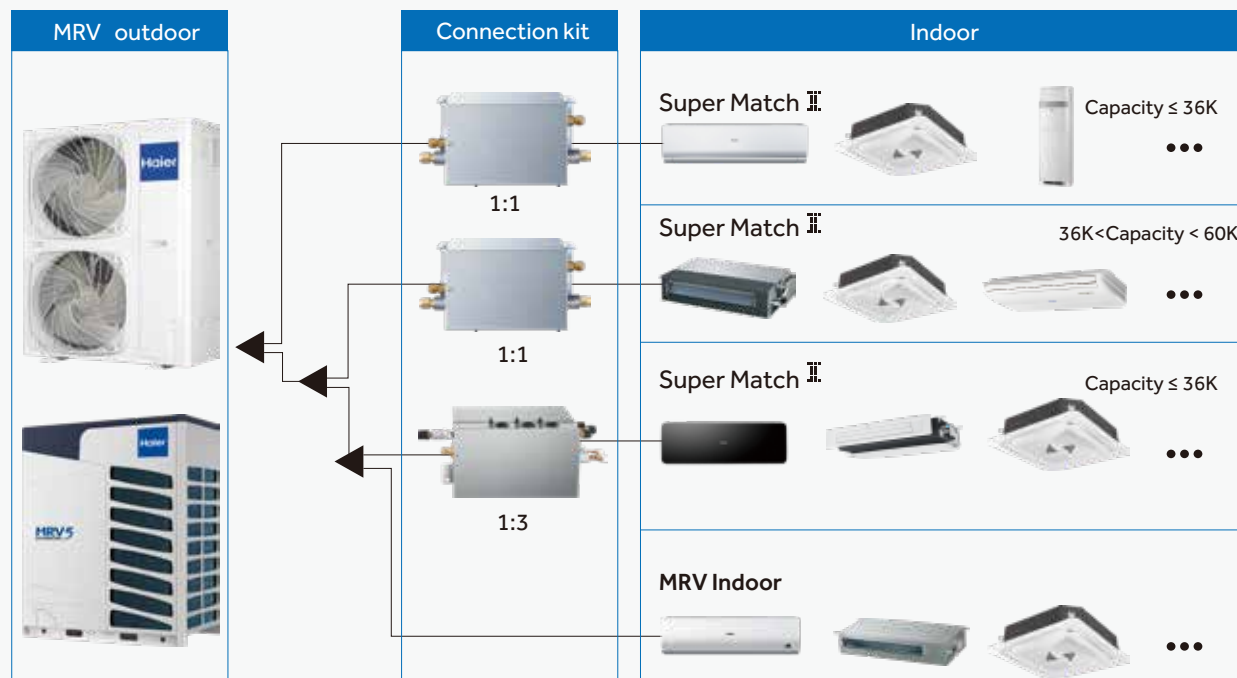


System Introduction Unit structure

## System Introduction

### Easy MRV system introduction

Haier easy MRV kit provides a solution to connect super match indoor units with MRV outdoor units.



## System Introduction

### Intergraded system solution

Connect MRV with super match together.



### Easy MRV line-up

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

OUTDOOR	MRV5-H	MRV5	MRV IV	MRV III-C <sup>PLUS</sup> MRV III(2-Pipe)	MRV S <sup>I</sup>			MRV S <sup>I</sup>							
HP	8-26	8-26	8-24	8-16	4	5	4	5	6	8	10	12	3	5	7
Power supply	3Ph/380-415V/50Hz 3Ph/380-415V/60Hz	3Ph/380-415V/50Hz 3Ph/380-415V/60Hz	3Ph/380-400V/50(60)Hz 3Ph/208-230V/50(60)Hz	3Ph/380-400V/50(60)Hz 3Ph/208-230V/60Hz 3Ph/460V/60Hz	1Ph/220-240V/50Hz 1Ph/220-240V/60Hz	3Ph/380-415V/50(60)Hz 1Ph/220-240V/50(60)Hz	3Ph/380-400V/50Hz 3Ph/380-400V/60Hz	1Ph/220-230V/50Hz 1Ph/220-230V/60Hz	3Ph/380-400V/50(60)Hz 1Ph/220-230V/60Hz	3Ph/380-400V/50(60)Hz 1Ph/220-230V/60Hz					

### Valve Box



MS1-036A(1:1)



MS1-060A(1:1)



MS3-036A(1:3)

### Easy MRV super match indoor

Easy MRV indoor is universal indoor unit with super match.

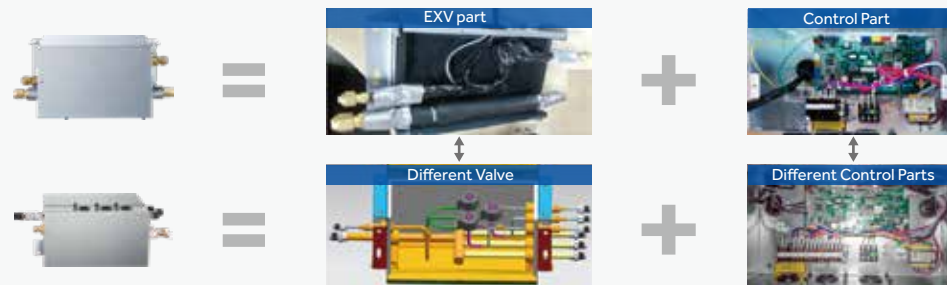
RAC Indoor Unit				
Flexis	Expert	Jade	Pearl	IES
AS20S2SF1FA-MB(M) AS20S2SF1FA-MW(M) AS25S2SF1FA-MB AS25S2SF1FA-MW AS35S2SF1FA-MB AS35S2SF1FA-MW	AS50S2SF1FA-MB AS50S2SF1FA-MW AS20XCAHRA AS25XCAHRA AS35XCAHRA AS50XCAHRA	AS25S2SJ1FA-3 AS35S2SJ1FA-3 AS50S2SJ1FA-3	AS20PBAHRA AS25PBAHRA AS35PBAHRA AS50PDAHRA AS68PDAHRA	AS20S2SF2FA-3 AS25S2SF2FA-3 AS35S2SF2FA-3 AS50S2SF2FA-3 AS70S2SF2FA-3
Super Match Indoor Unit				
Compact Cassette	Round Way Cassette	Slim Duct	M ESP Duct	H ESP Duct
AB25S2SC2FA-1 AB35S2SC2FA-1 AB50S2SC2FA-1	AB71S2SG1FA ABH105H1ERG ABH125K1ERG ABH140K1ERG ABH160K1ERG	AD25S2S1FA(H) AD35S2S1FA(H) AD50S2S1FA(H) AD71S2S1FA(H)	AD25S2M1FA(H) AD35S2M1FA(H) AD50S2M1FA(H) AD71S2M1FA(H) AD35S2M3FA(H) AD160S2M3FA	ADH125H1ERG ADH140H1ERG
Console	Convertible	Cabinet		
AF25S2SD1FA(H) AF35S2SD1FA(H) AF42S2SD1FA(H)	AC35S2SG1FA AC50S2SG1FA AC71S2SG1FA AC105S2SH1FA AC125S2SK1FA	AP48K1ER(A)(S) AP60K1ER(A)(S) AP140S2SK1FA(H)		



# Unit Structure

## Valve box inner structure

Haier 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

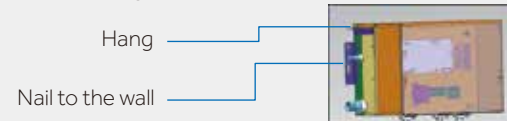
EXV part and control part integration, easy for translation and installation. Gas pipe is integrated into the valve box

Gas pipe no need the bend and welding, easy installation



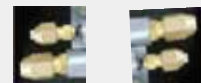
Optional installation location  
EEV box inlet and outlet pipe can be left or right

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



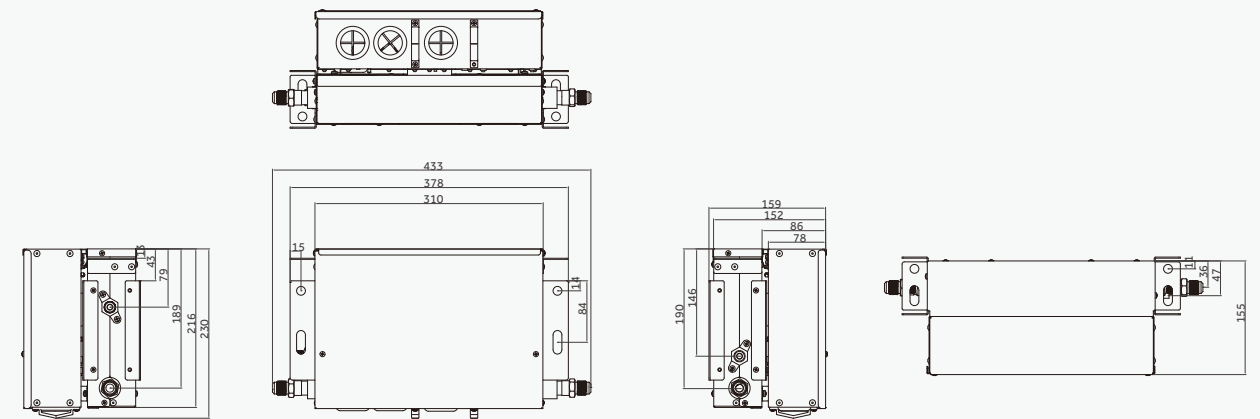
MS1-036A/MS1-060A



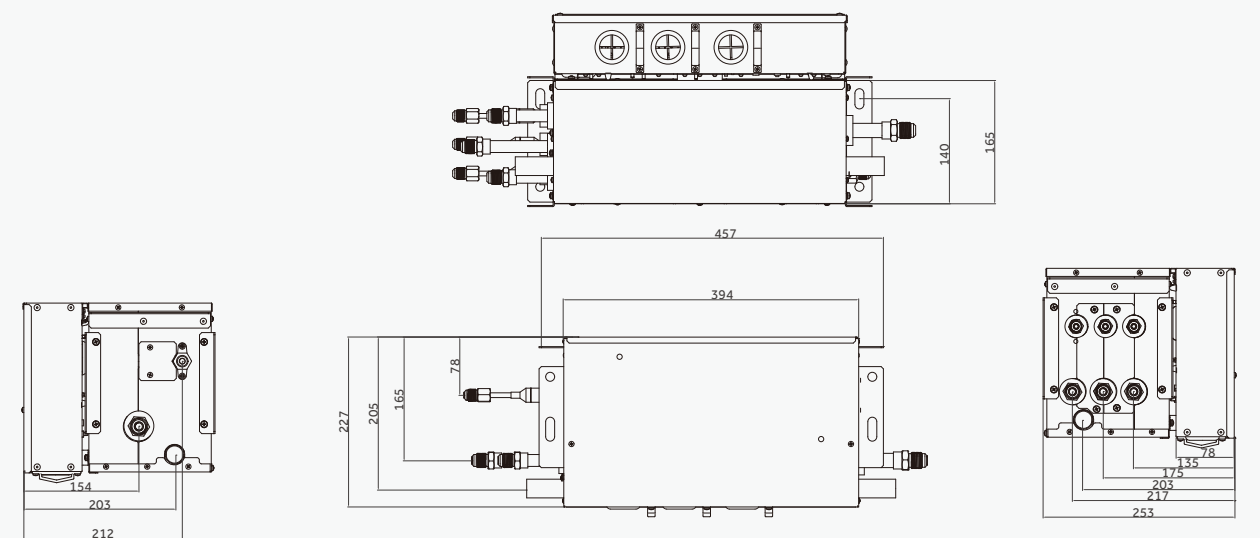
MS3-036A

Model		MS1-036A	MS1-060A	MS3-036A
Connected indoor quantity	/	1	1	3
Connected indoor capacity	Btu/h	x ≤36K	36K < x ≤60K	x ≤36K (each indoor unit)
Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
Size(W/D/H)	mm	310/217/155	310/217/155	394/227/253
Shipping dimensions	mm	509/285/209	509/285/209	687/295/303
Material	/	Galvanized steel	Galvanized steel	Galvanized steel
Color	/	Grey	Grey	Grey
Net/shipping weight	kg	5/7	5/7	9/12
Liquid pipe	mm	9.52 (Main) / 6.35	9.52 (Main) / 12.7	6.35(Main)/9.52 9.52(Main)/12.7
Gas pipe (mm)	mm	15.88(Main)/ 12.7 / 9.52	19.05(Main)/ 15.88	19.05(Main)/ 15.88 15.88(Main)/ 12.7 / 9.52
Pipe connection method	/	Flare connection	Flare connection	Flare connection
Brand box- Indoor Max. single pipe length	m	15	15	15
Branch box- indoor Max. drop	m	15	15	15
Height drop between branch box	m	15	15	15

MS1-036A MS1-060A



MS3-036A





# MRV AHU Connection Kit

**241** The 2<sup>nd</sup> Generation AHU Kit

**244** Specification

**244** Dimensions





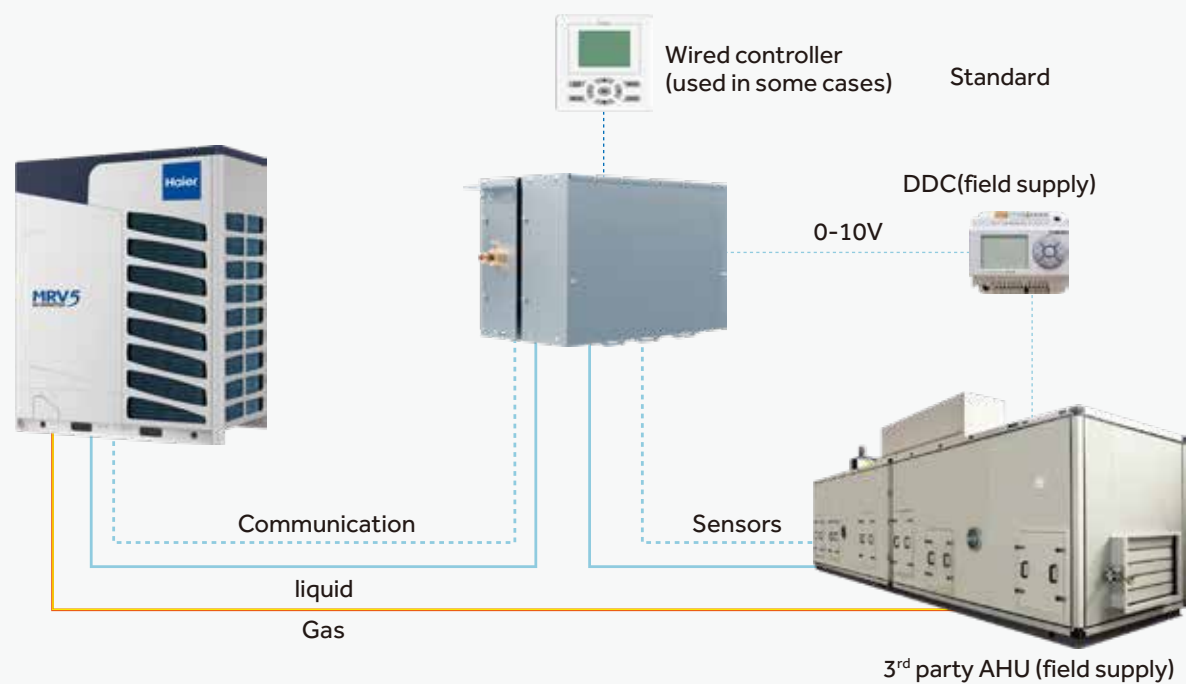
# MRV AHU Connection Kit



## System Introduction

### System introduction

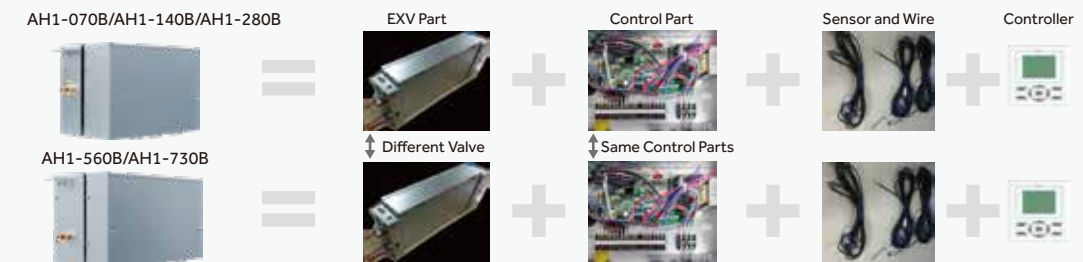
Haier offers a range of connection kit to connect MRV outdoor units to third party DX air handling units.



## System Introduction

### AHU kit configuration

Haier 2<sup>nd</sup> generation AHU kit also contains the following 4 parts: The controller model is HW-AA101DBK, special for Haier 2<sup>nd</sup> generation AHU kit as standard accessory, no need to be purchased separately.



### System line-up

Haier AHU kit provides a wide range solution for Haier MRV outdoor unit connecting with the 3<sup>rd</sup> party AHU.

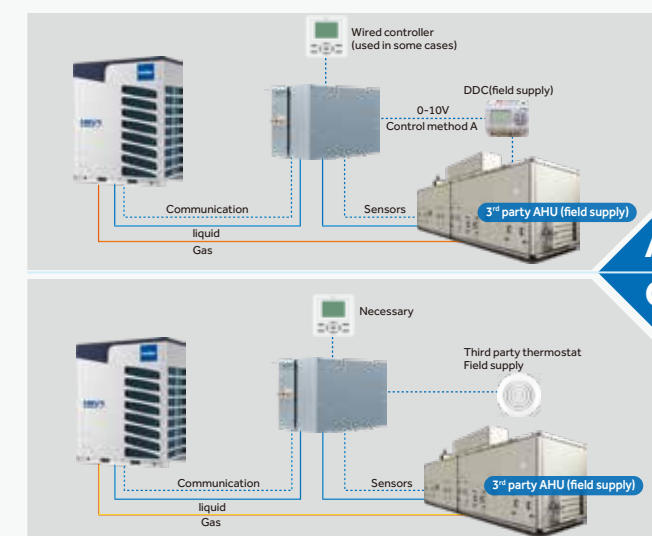
DX AHU <sup>2</sup> Connection kit					Special design for MRV S, MRV SII		
Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B		
Capacity	3.5<Connected AHU capacity ≤7kW	7<Connected AHU capacity ≤14kW	14<Connected AHU capacity ≤28kW	28<Connected AHU capacity ≤56kW	56<Connected AHU capacity ≤73kW		
<b>Compatibility</b>							
Outdoor	MRV5-H	MRV5		MRV S <sup>1</sup>			
HP	8-26	8-26		4	5	6	8 10 12
Power supply	3Ph/380-415V/50/60Hz		3Ph/380-415V/50/60Hz	3Ph/220-230V/50/60Hz		3Ph/380-400V/50/60Hz	3Ph/380-400V/50/60Hz
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.

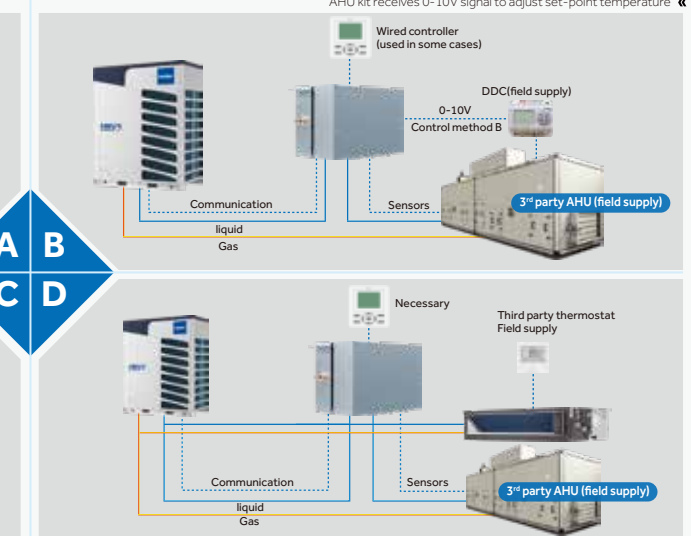
#### Control method A

- 0-10V signal output from DDC
- AHU kit receives 0-10V signal to adjust the ODU capacity



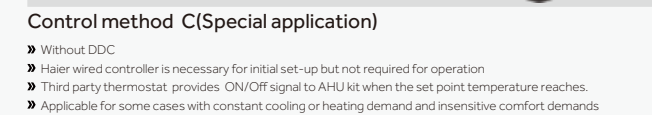
#### Control method B

- Control temperature via DDC
- 0-10V signal output from DDC
- AHU kit receives 0-10V signal to adjust set-point temperature



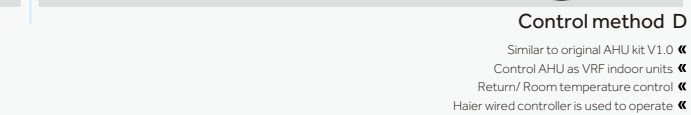
#### Control method C(Special application)

- Without DDC
- Haier wired controller is necessary for initial set-up but not required for operation
- Third party thermostat provides ON/Off signal to AHU kit when the set point temperature reaches.
- Applicable for some cases with constant cooling or heating demand and insensitive comfort demands



#### Control method D

- Similar to original AHU kit V1.0
- Control AHU as VRF indoor units
- Return/ Room temperature control
- Haier wired controller is used to operate
- Control method for combination VRF indoor units and 3<sup>rd</sup> party AHU system



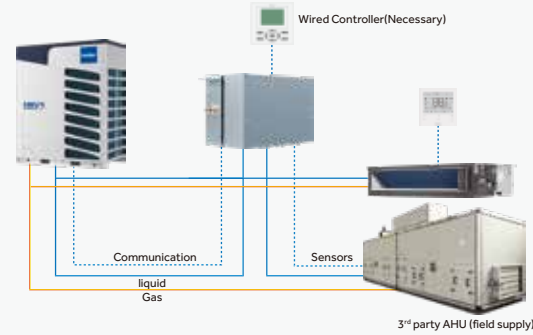


# System Introduction

## Central control

Note:

- MRV 5 and upgraded MRV SII(8/10/12HP) can directly connect with central controller HC-SA164DBT and YCZ-A004.
- Other MRV systems need the HA-MA164AD gateway.
- For new webserver controller, the new gateway HA-MA1ADB.
- 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

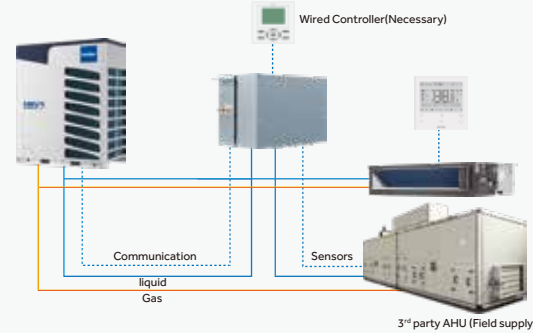
Note:

- Integrate haier remote monitoring and controlling system via PC and BMS interface
- HCM-01A:Modbus rtu
- HCM-03A:Modbus ip/ Bacnet ip
- HCM-06: BACnet ip



Note:

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

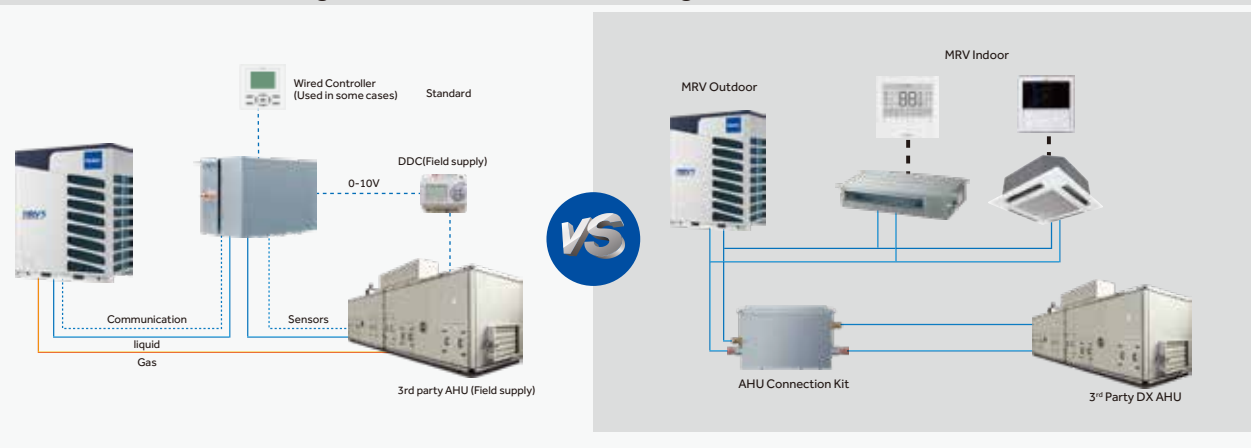


# Unit Structure

## 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.

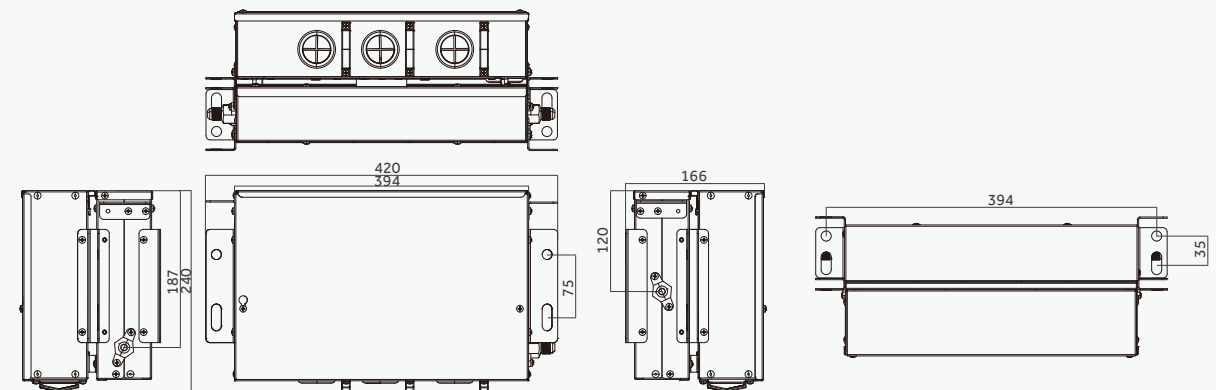
### The 2<sup>nd</sup> generation AHU kit VS The 1<sup>st</sup> generation AHU kit



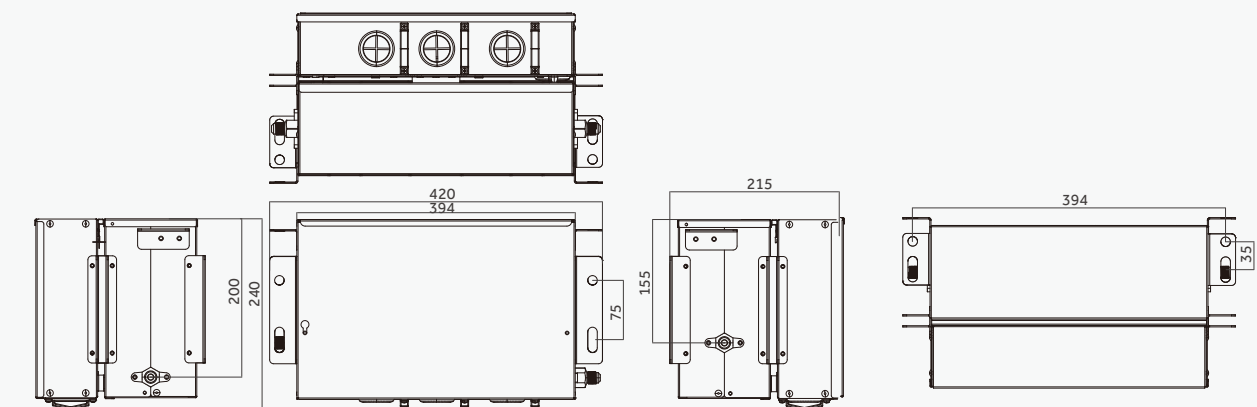
# Specification

Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B
Connected	3.5≤X≤7KW	7<X≤14KW	14<X≤28KW	28<X≤56KW	56<X≤73KW
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

AH1-070B AH1-140B AH1-280B



AH1-560B AH1-730B





# MRV HOT WATER

## Hydro Box

247 Features

250 Hydro Box







# MRV HOT WATER

## Hydro Box



System Introduction



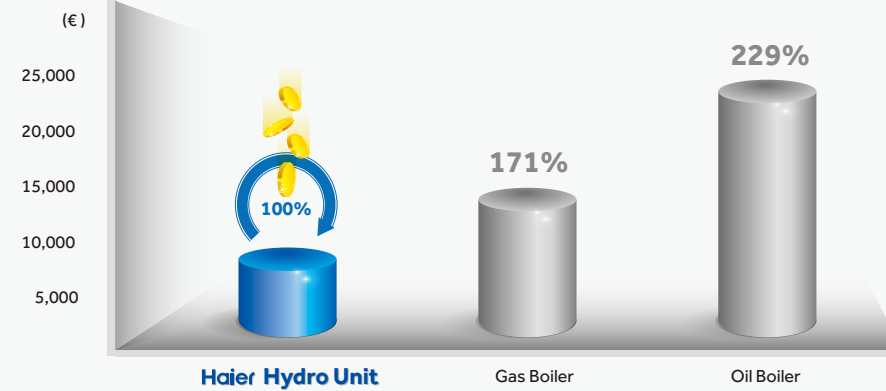
Unit Structure



Haier hydro unit makes it possible using VRF system to provide users with comfortable air conditioner, hot water heating and domestic hot water. This solution is suitable for both residential area and commercial area, such as residences, office buildings, hotels, hospitals, etc.

## Low Operating Cost

### Operating cost



## Comfort

The hydro unit has a heating capacity of up to 28 kW per module which can be used in combination for bigger system demand. and leaving water temperature range from 5°C to 55°C provides comfort air to users. connectable to MRV 5, MRV 5-H, MRV 5-RC and MRV SII



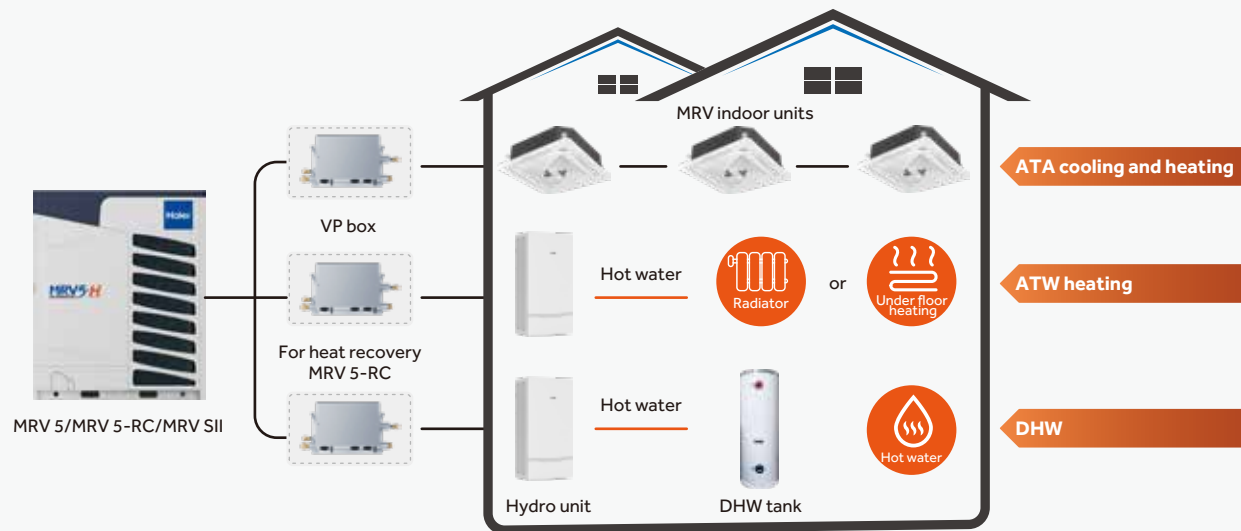


# Main Operation Patterns

Multiple heating and cooling solutions can be selected to provide

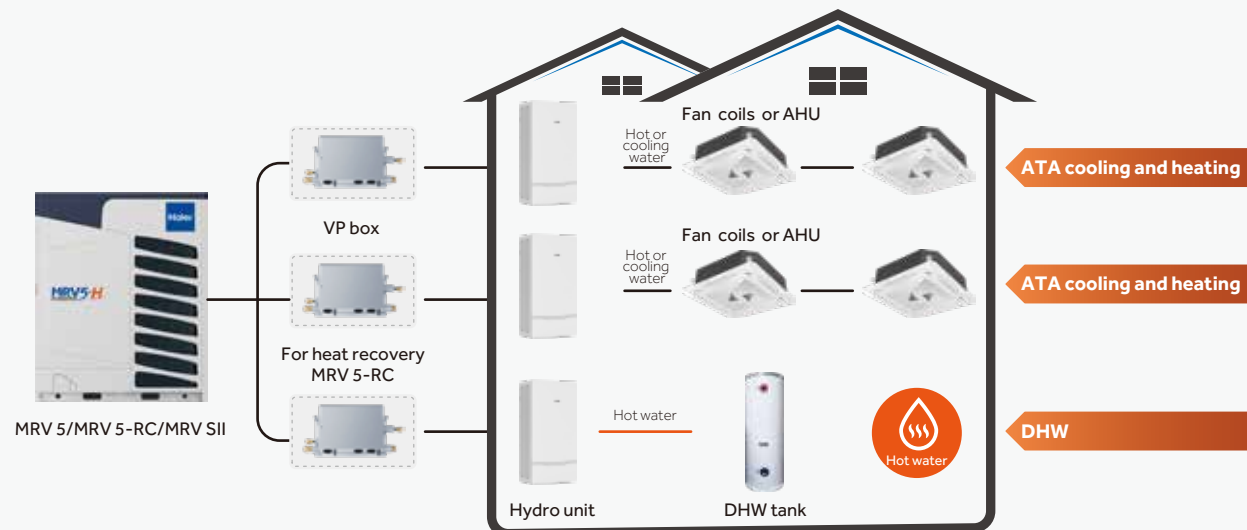
## 1. ATA and ATW

- In summer, ATA cooling and DHW can be used. The heat pump outdoor and hydro unit can provide hot water to heat up water stored in the DHW tank when the MRV indoor units cooling is not operated. The heat recovery outdoor can realize ATA indoor units cooling and hydro unit hot water supply at the same time.
- In winter, ATA heating or hot water heating can be selected to warm the rooms, while the DHW is heated up at the same time.



## 2. Only ATW

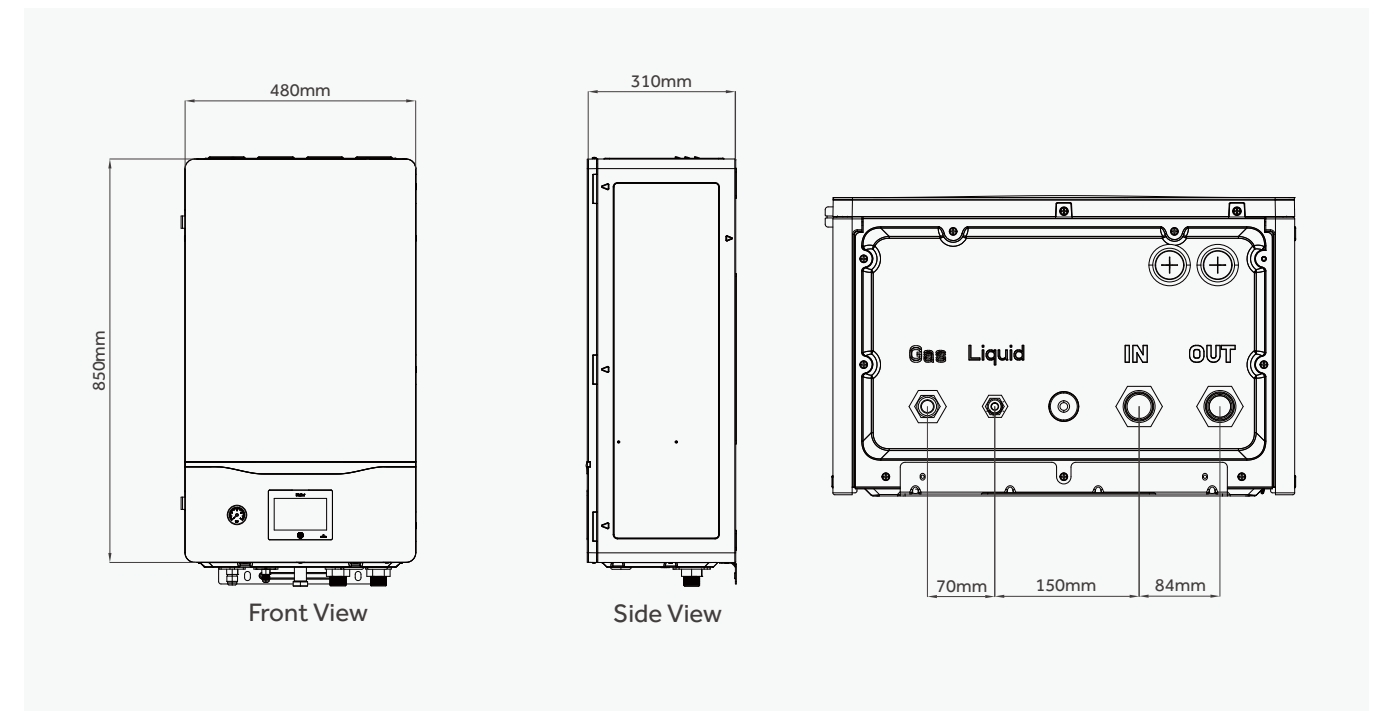
- In summer, the heat pump outdoor and hydro unit can provide hot water to heat up water stored in the DHW tank when the fan coils or AHU cooling is not operated. The heat recovery outdoor and hydro unit can provide hot water when the fan coils or AHU cooling is operating.
- In winter, fan coils provide heating to warm the rooms, while the DHW is heated up at the same time.



# Specification

Model/Indoor unit			HU092WVLNA	HU162WVLNA	HU312WVLNA
Nominal Capacity	Cooling (1)	kW	7	14	28
	Heating (2)	kW	9	16	31
Dimensions Unit	H/W/D	mm	850/480/310	850/480/310	850/480/310
Weight Unit		kg	56	56	52
Installation Place	Indoor/outdoor		Indoor	Indoor	Indoor
Combination Ratio	Only hydro module	%	80-100%	80-100%	80-100%
	Hydro box+IDUs	%	Total 50-130% (Hydro box 0-80%)	Total 50-130% (Hydro box 0-80%)	Total 50-130% (Hydro box 0-80%)
Cooling Ambient	Min. - Max.	°CDB	10-43	10-43	10-43
Cooling Water Side	Min. - Max.	°C	5-20	5-20	5-20
Heating Ambient	Min. - Max.	°C	-20-24	-20-24	-20-24
Water Side	Min. - Max.	°C	20-50	20-50	20-50
Sound Pressure Level	Cooling/Heating	dB(A)	29/32	29/32	29/32
Sound Power Level		dB(A)	42	46	48
Water Flow Rate	Min-Standard	L/min	18/26	32/46	63/90
Water Circuit Piping Diameter	Inlet	inch "	1	1	1-1/4
	Outlet	inch "	1	1	1-1/4
Refrigerant Type			R410A	R410A	R410A
Gas Side - Connection Type		mm	15.88	15.88	19.05
Liquid Side - Connection Type		mm	9.52	9.52	9.52
Power Supply		Ph/Hz/V	1/50/220-240	1/50/220-240	1/50/220-240
Odu Compatibility			MRV 5, MRV 5-RC, MRV 5-H, MRV S 8-10-12HP		

(1) Tamb 35°C - LWE 18°C (DT=5°C)  
 (2) DB/WB 7°C/6°C - LWC 35°C (DT=5°C)





# MRV INDOOR

(Air Guard)

**253** Air Guard Features

**255** Slim Duct(0/15/30Pa)

**257** High ESP Duct (20/200Pa)







# MRV INDOOR

## (Air Guard)



Healthy



Easy Installation

## Healthy

### UVC sterilization

The built-in LED UV lights kill airborne hazards when the air circulates from air inlet, ensuring the clean air out.



### Antibacterial filter

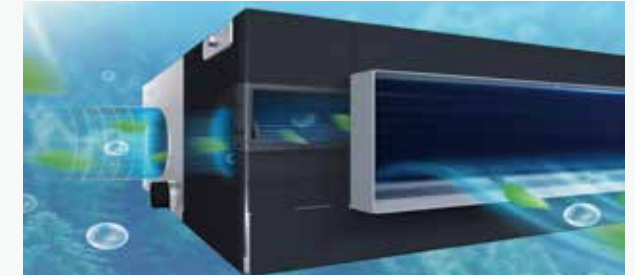
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction. Haier antibacterial filter has added silver ions and antibacterial organics to kill escherichia coli & staphylococcus aureus effectively, with long lasting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



## 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.



## Easy Installation

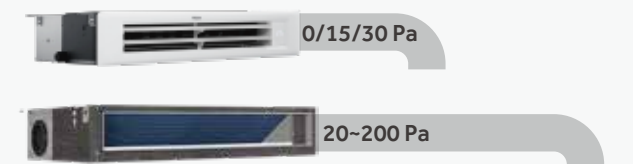
### Multi dimensions

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 designs 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<sup>T</sup> (0/15/30Pa)



Reserved fresh air inlet



Friendly design of rear or bottom air return



Super slim design, only 185mm



Built-in high head drain pump



Model/Indoor unit			AD052MSERA(H)	AD072MSERA(H)	AD092MSERA(H)	AD122MSERA(H)	AD162MSERA(H)	AD182MSERA(H)	AD242MSERA(H)
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3	19.1	24.2
		kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kBtu/h	5.8	8.5	10.9	13.6	17.1	21.5	27.3
kW		1.7	2.5	3.2	4	5	6.3	8	
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	1/220-230/50/60
	Air flow (H/M/L)	m <sup>3</sup> /h	430/370/310	480/420/360	480/420/360	550/430/370	600/540/460	800/690/580	930/850/750
	Sound pressure level(H/M/L)	dB(A)	26/22/19	27/23/20	27/23/20	30/27/24	32/29/26	33/30/27	36/33/30
	Sound power level(H/M/L)	dB(A)	40/36/33	41/37/34	41/37/34	44/41/38	46/43/40	47/44/41	50/47/43
Installation	External dimensions(W/D/H)	mm	850/420/185	850/420/185	850/420/185	850/420/185	850/420/185	1170/420/185	1170/420/185
	Shipping dimensions(W/D/H)	mm	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1365/540/270	1365/540/270
	Net/Shipping weight	kg	16.5/21.5	17.5/22.5	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	6.35	9.52
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7	15.88
	Static pressure(Standard/Max.)	Pa	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30
Panel	Panel model	/	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-1210IA/D	P1B-1210IA/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)	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)	890/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)
	Shipping dimensions(W/D/H)	mm	938/335/220	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	4/5	5/6	5/6
Drain pump	O-optional,S-standard,W-without		S	S	S	S	S	S	S
		/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# High ESP DUCT (20/200Pa)

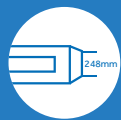


20/200Pa

20/200Pa



Built-in drain pump



Only 248mm thick

50/60Hz

All module can realize 50/60Hz



HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01

Model/Indoor unit			AD052MJERA(H)	AD072MJERA(H)	AD092MJERA(H)	AD122MJERA(H)	AD162MJERA(H)	AD182MJERA(H)	AD242MJERA(H)	AD282MJERA(H)	AD302MJERA(H)	AD382MJERA(H)	AD482MJERA(H)	AD542MJERA(H)
Capacity	Cooling	kBtu/h	5.1	7.5	9.6	12.3	15.3	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
	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
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	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 (W/D/H)	Net product	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	1100/700/248	1500/700/248	1500/700/248
Shipping product		mm	932/835/280	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	1698/857/305
Weight	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	48.3/56.5	51.3/59.5	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	20/180	20/180	20/180	20/180
	Air flow (H/M/L)	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(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	42/38/34
	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	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	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	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
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	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	HW-BA101ABT	HW-BA101ABT
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# MRV INDOOR

- 261** Features
- 275** 1-way Cassette
- 279** 2-way Cassette
- 281** Compact Cassette
- 283** Round Way Cassette
- 287** 4-way Cassette
- 289** Convertible Type
- 291** Slim Duct
- 295** Medium ESP Duct (50/100Pa)
- 297** High ESP Duct (20/200Pa)
- 299** Compact Air Duct (50/120Pa)
- 301** High ESP Duct (100/250Pa)
- 303** High ESP Duct (0/300Pa)
- 305** Built-in Floor Standing
- 307** Console
- 309** High Wall
- 321** Dimensions





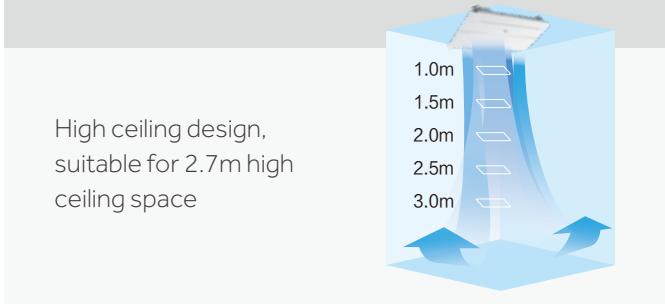


# 1-way Cassette 2-way Cassette

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

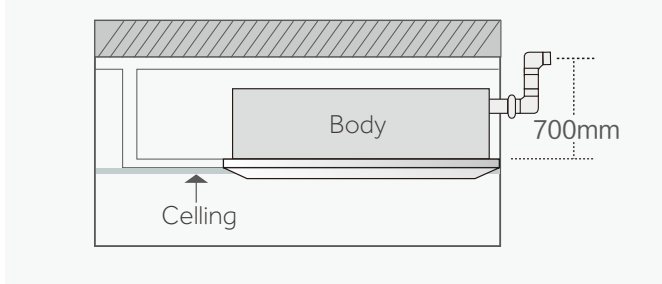


High ceiling design the air reaches the ground



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.



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.

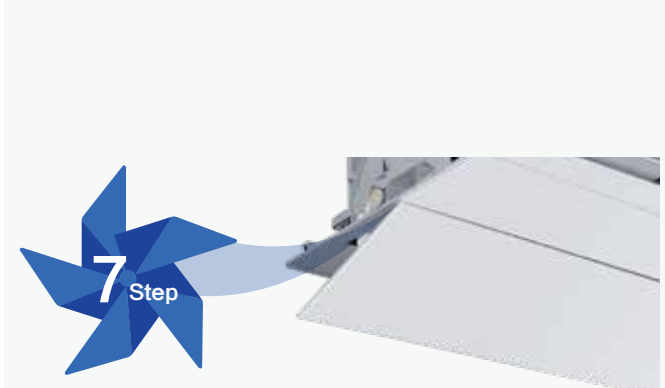


Suitable for corner installation for comfortable and uniform air supply

Compact design, full use of corner space installation, such as small meeting rooms, corridors, etc.; 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.

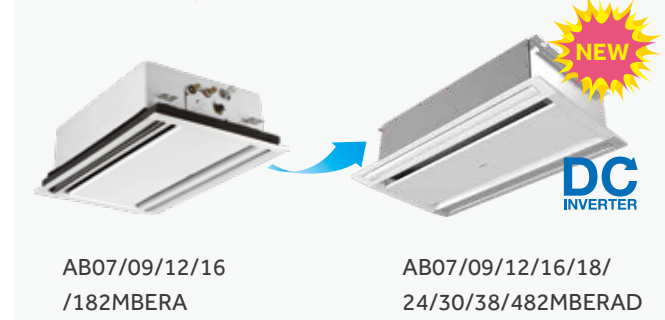


New butterfly wing air supply, 5 step fan speed is optional, enjoy healthy air



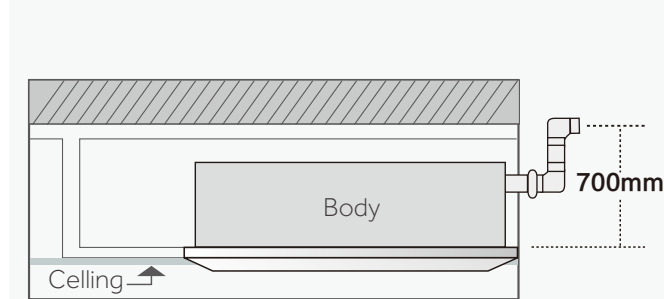
New DC series

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



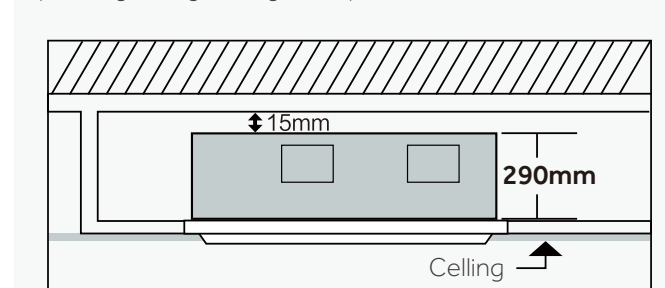
The drain pump lift is 750mm

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



Thin and light design for easy installation

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



Antibacterial filter

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







# Round Way Cassette



# 4-way Cassete

## 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.



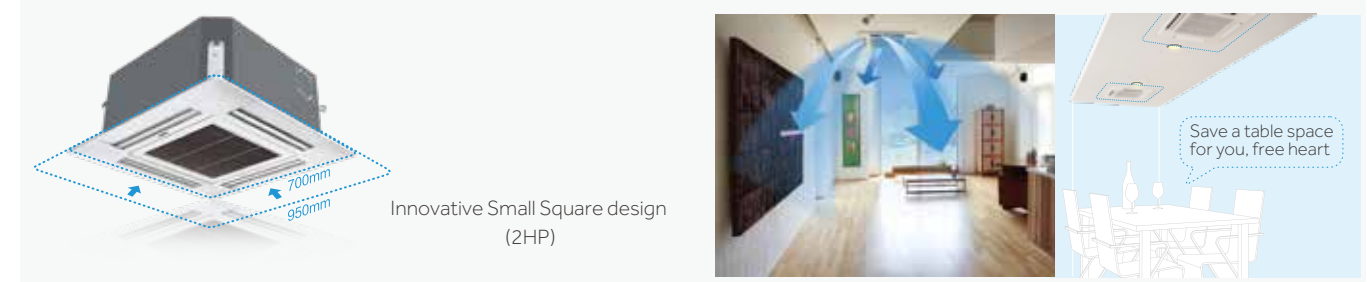
## Streamlined outlook design

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.



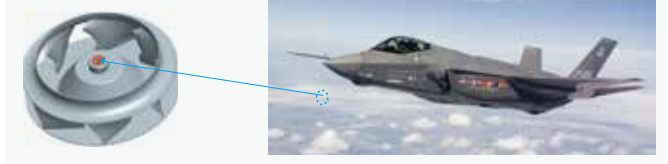
## Square panel the whole product unified more beautiful

- 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.



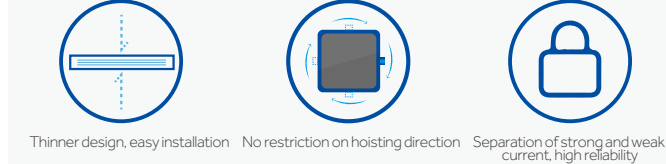
## Quiet operation, create a peaceful space

- 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.



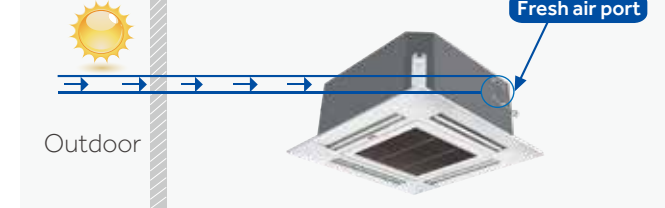
## Energy saving control

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.



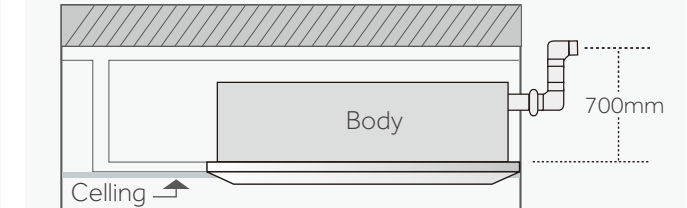
## Healthy fresh air function

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

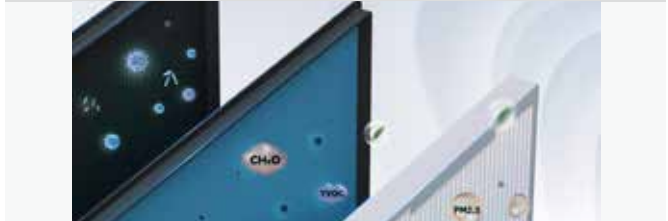


## Standard condensate lift pump

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.

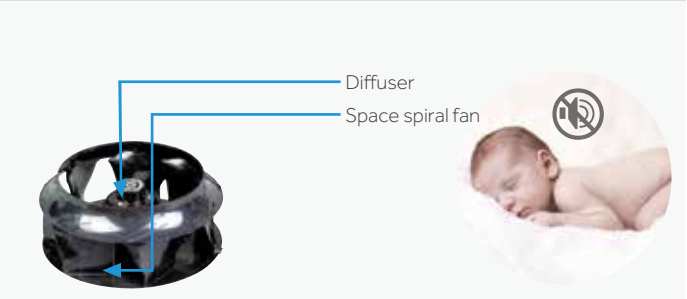


## Antibacterial filter



## Quiet operation, comfortable experience

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





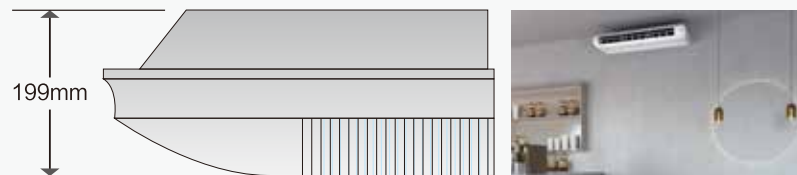


## Convertible Type

## Slim Duct

### Thinner body design, good value option

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



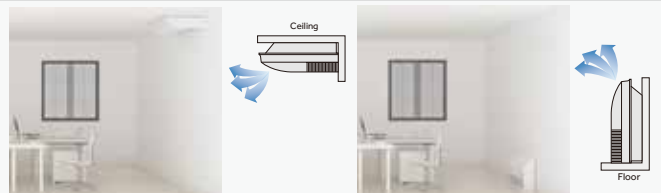
### Standard with filter, easy installation

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.



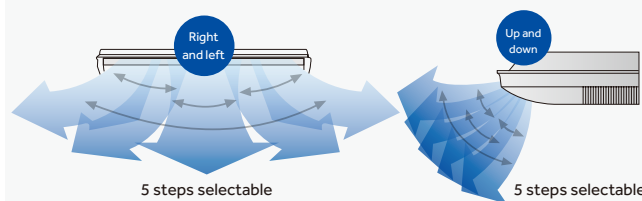
### Multiple installation modes flexible optional

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



### 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.



### Antibacterial filter

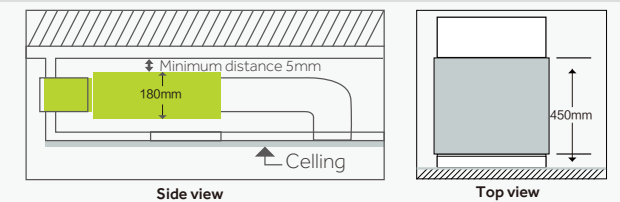
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

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



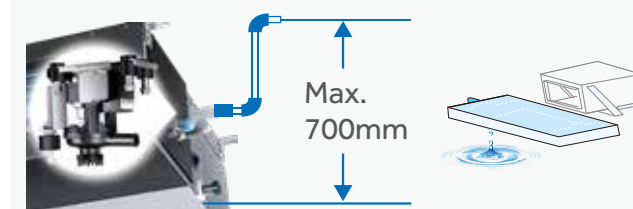
### Adjusted ESP super slim save installation space agile and convenient

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.



### 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.

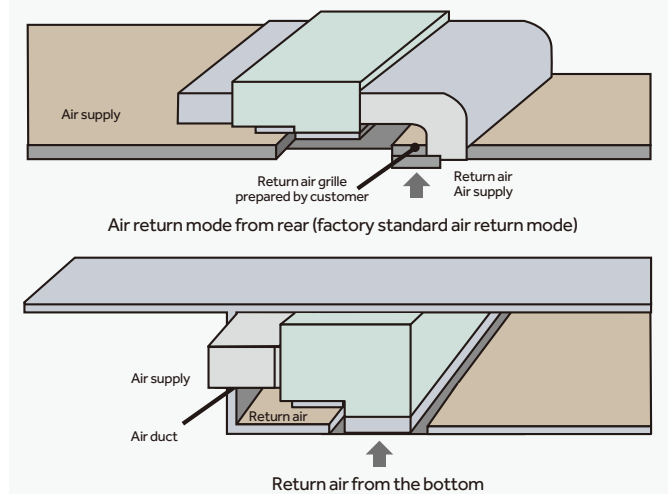


### Antibacterial filter



### 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.



### 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.





# Slim Duct Medium ESP Duct(50~100Pa)

### 3D three-dimension air supply

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

**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.

**Details of the outstanding using at ease**  
The air inlet grille can be dismantled and cleaned by pulling the buckle, which is more convenient.

The horizontal louver is driven by two motors, which makes it easier to run.

Vertical louvers are driven by an electric motor and run freely.

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

**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.

### 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.

Air ducts need to be installed between the indoor unit and the air outlet. When producing long air supply distance, please choose high static pressure.

### Antibacterial filter

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

Haier antibacterial filter has added silver ions and antibacterial organics to kill escherichia coli & staphylococcus aureus effectively, with long lasting effects.

### 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, 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.

MRV Indoor Unit

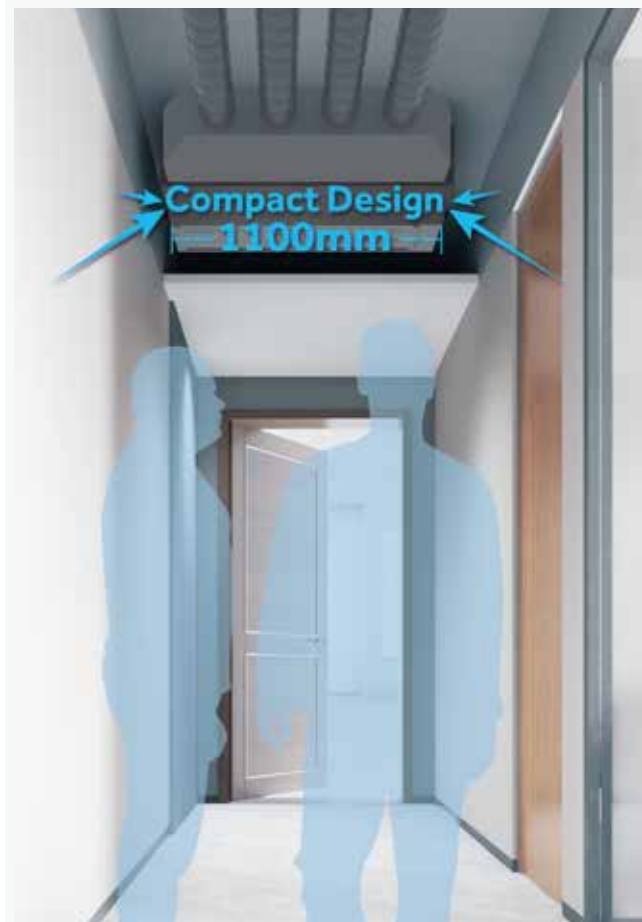




# Compact Duct (50~120Pa) High ESP Duct (20~200Pa)

## 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 50m<sup>2</sup>-100 m<sup>2</sup> 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

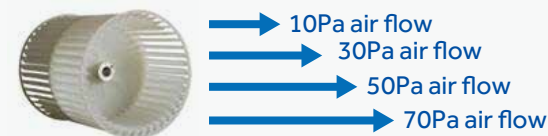
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

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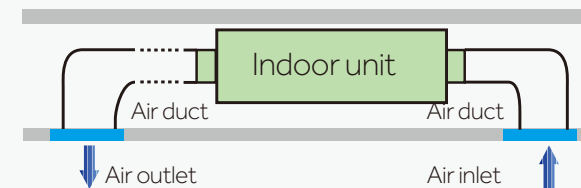
## Five steps pressure choice

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



## 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 200Pa for model AD05/07/09/12/16/18/24/28MJERAD, 180Pa for model AD30/38/48/54MJERAD



Air ducts need to be installed between the indoor unit and the air outlet. When producing long air supply distance, please choose High static pressure.

## Antibacterial filter

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

Haier 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.



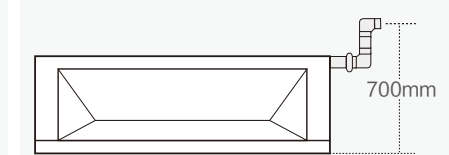
## Free setting air outlet humanization setting

Due to the use of pipe air supply, 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.



## 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.



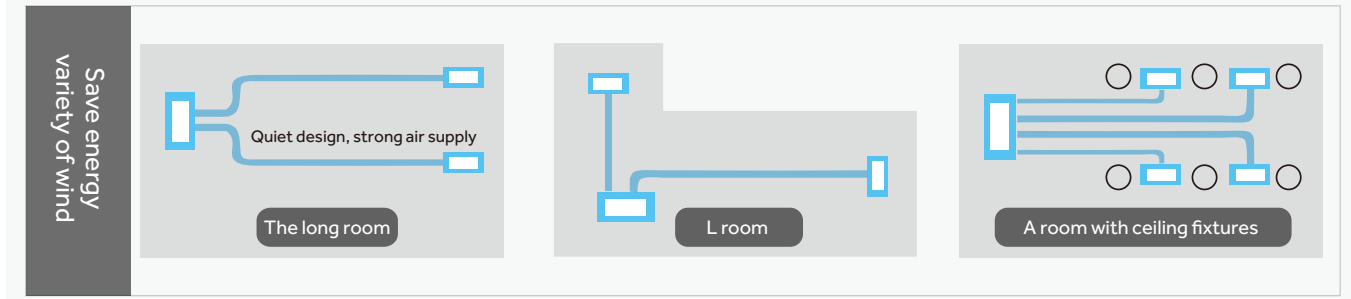




# High ESP Duct(100~250Pa) High ESP Duct (300Pa)

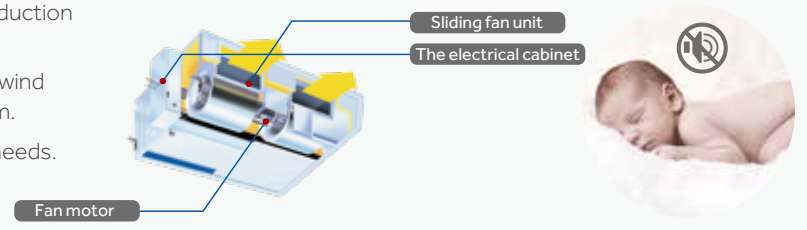
## High static pressure design, more room to share

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.



## 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.



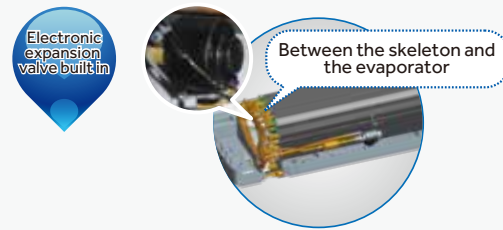




## High Wall

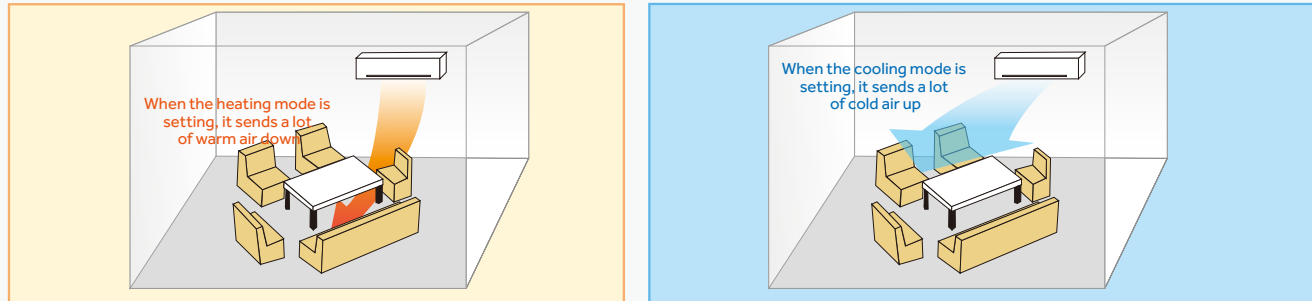
Built-in electronic expansion valve for easy installation (for AS\*\*\*MNERAB/ AS\*\*\*MFERAB/ AS\*\*\*MNERA/AS\*\*\*MFERA)

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



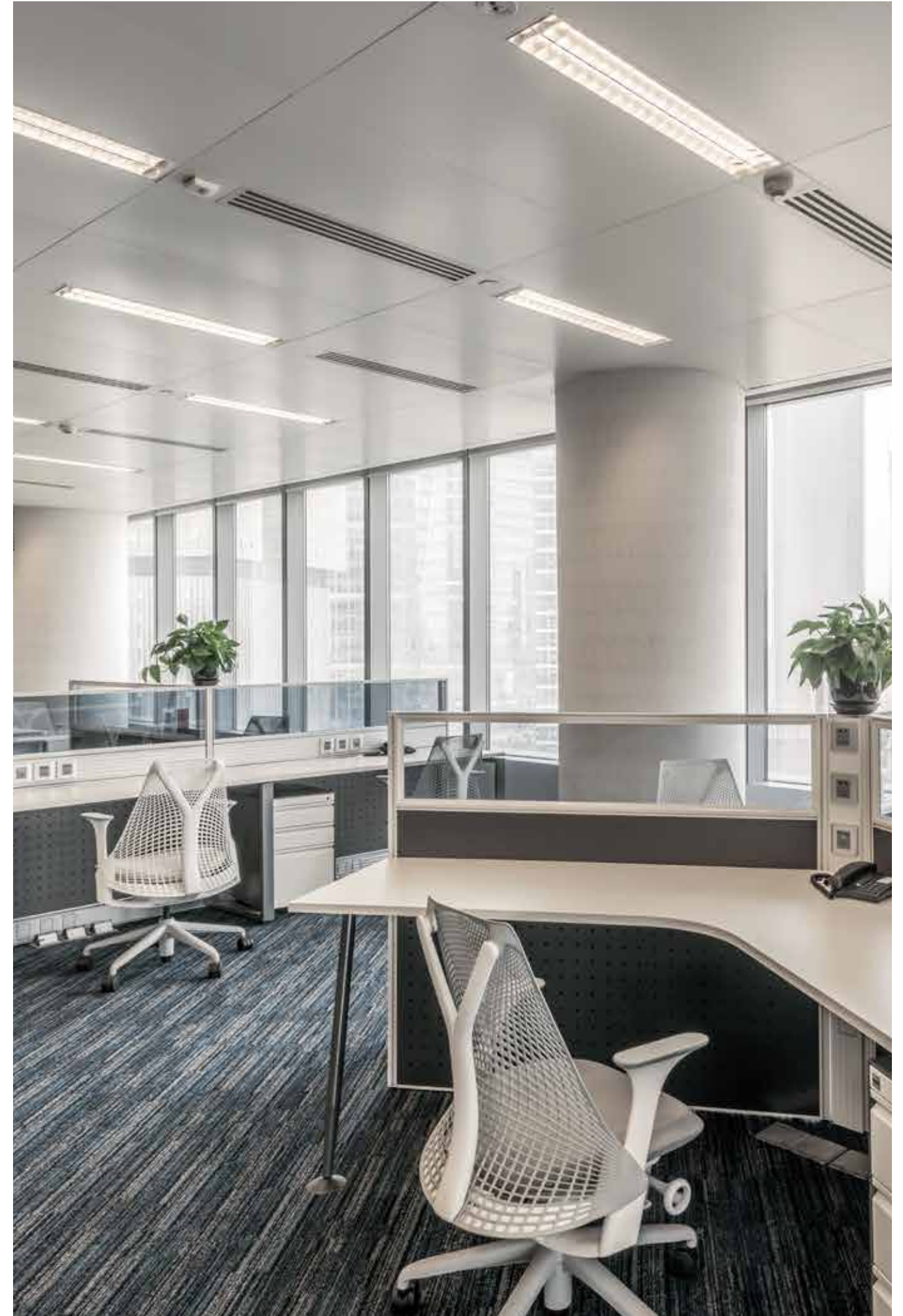
### Flexible wind control, quick cooling and heating

In heating and cooling condition, the unit can supply large volume air to quick warm and cold every where 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 pump maxi. 1000mm



HW-BA116ABK



HW-SA201ABK



HW-BA101ABT



HW-PA201ABK



YR-HRS01

Model/Indoor unit			AB052MAERA	AB072MAERA	AB092MAERA	AB122MAERA
Capacity	Cooling	kBtu/h	5.1	7.5	9.6	12.3
		kW	1.5	2.2	2.8	3.6
Capacity	Heating	kBtu/h	5.8	8.5	10.9	13.6
		kW	1.7	2.5	3.2	4
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
	Air flow (H/M/L)	m³/h	530/490/450	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
	External dimensions(W/D/H)	mm	875/505/185	875/505/185	875/505/185	875/505/185
Installation	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
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7
	Model name		P1B-1050IB	P1B-1050IB	P1B-1050IB	P1B-1050IB
Panel	External dimensions(W/D/H)	mm	1050/560/122	1050/560/122	1050/560/122	1050/560/122
	Shipping dimensions(W/D/H)	mm	1133/623/197	1133/623/197	1133/623/197	1133/623/197
	Net/Shipping weight	kg	5.3/8.3	5.3/8.3	5.3/8.3	5.3/8.3
Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# 1-way CASSETTE



DC fan motor

**7.1  
kW**

Capacity up to 7.1kW



Ultra thin design 185mm



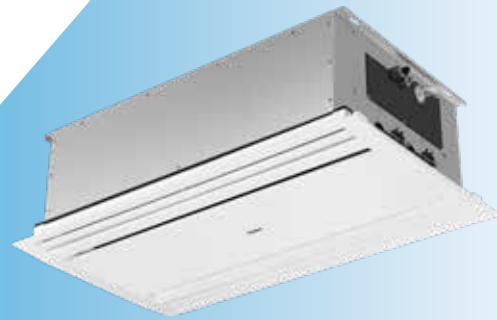
Built-in high head  
drain pump maxi. 700mm

Model/Indoor unit			AB052MAERAD	AB072MAERAD	AB092MAERAD	AB122MAERAD	AB162MAERAD	AB182MAERAD	AB242MAERAD
Capacity	Cooling	kBtu/h	5.1	7.5	9.6	12.3	15.4	19.1	24.2
		kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kBtu/h	5.8	8.5	10.9	13.7	17.1	21.5	27.3
		kW	1.7	2.5	3.2	4	5	6.3	8
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	1/220-240/50/60	1/220-240/50/60
	Air flow (H/M/L)	m <sup>3</sup> /h	540/400/270	540/400/270	540/400/270	650/510/390	700/530/410	820/660/510	870/690/510
Performance	Sound pressure level(H/M/L)	dB(A)	38/33/28	38/33/28	38/33/28	40/36/31	41/36/32	40/36/32	42/36/32
	Sound power level(H/M/L)	dB	52/47/42	52/47/42	52/47/42	54/50/45	55/50/46	54/50/46	56/50/46
	External dimensions(W/D/H)	mm	850/540/185	850/540/185	850/540/185	850/540/185	850/540/185	1170/540/185	1170/540/185
Installation	Shipping dimensions(W/D/H)	mm	1043/648/270	1043/648/270	1043/648/270	1043/648/270	1043/648/270	1363/648/270	1363/648/270
	Net/Shipping weight	kg	20.5/24.7	20.5/24.7	20.5/24.7	20.8/24.9	21.3/25.5	26.0/31.4	27.1/32.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35	9.52
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7	15.88
Panel	Panel model	/	P1B-1028IB	P1B-1028IB	P1B-1028IB	P1B-1028IB	P1B-1028IB	P1B-1348IB	P1B-1348IB
	External dimensions(W/D/H)	mm	1028/600/45	1028/600/45	1028/600/45	1028/600/45	1028/600/45	1348/600/45	1348/600/45
	Shipping dimensions(W/D/H)	mm	1143/688/170	1143/688/170	1143/688/170	1143/688/170	1143/688/170	1463/688/170	1463/688/170
	Net/Shipping weight	kg	3.9/8.0	3.9/8.0	3.9/8.0	3.9/8.0	3.9/8.0	5.1/9.8	5.1/9.8
Drain pipe	O-optional,S-standard,W-without	/	S	S	S	S	S	S	S
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	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
	Infrared(Optional)	/	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01

\* Pending



# 2-way CASSETTE



HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01

\*1. In case of using YR-HRS01 alone, HA-SB101DB needs to be purchased.  
 2. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function

- Built-in high head drain pump maxi. 700mm
- Ceiling antifouling design unique antifouling design
- DC fan motor
- 14 kW**  
Capacity up to 14kW

Model/Indoor unit			AB072MBERAD	AB092MBERAD	AB122MBERAD		AB162MBERAD	AB182MBERAD	AB242MBERAD	AB282MBERAD	AB302MBERAD	AB382MBERAD	AB482MBERAD
Capacity	Cooling	kBtu/h	7.5	9.6	12.3		15.4	19.1	24.2	27.3	30.7	38.2	47.8
		kW	2.2	2.8	3.6		4.5	5.6	7.1	8	9	11.2	14
	Heating	kBtu/h	8.5	10.9	13.7		17.1	21.5	27.3	30.7	34.1	42.7	54.6
		kW	2.5	3.2	4		5	6.3	8	9	10	12.5	16
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	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/M/L)	m³/h	650/550/390	700/600/410	730/600/430		800/650/450	950/780/500	1000/850/700	1100/950/800	1500/1350/1110	1700/1450/1200	1950/1750/1350
Performance	Sound pressure level (H/M/L)	dB(A)	32/30/28	34/31/29	35/32/30		37/34/32	39/37/34	40/38/35	41/39/36	42/39/36	44/40/36	46/42/38
	Sound power level (H/M/L)	dB(A)	48/46/44	50/47/45	51/48/46		53/50/48	55/53/50	56/54/51	57/55/52	58/55/52	60/56/52	62/58/54
	External dimensions (W/D/H)	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	1400/600/290
Installation	Shipping dimensions (W/D/H)	mm	1201/680/377	1201/680/377	1201/680/377		1201/680/377	1201/680/377	1201/680/377	1601/680/377	1601/680/377	1601/680/377	1601/680/377
	Net/Shipping weight	kg	33/40	33/40	33/40		34/41	34/41	34/41	45/54	45/54	45/54	45/54
	Refrigerant liquid pipe	mm	6.35	6.35	6.35		6.35	6.35	9.52	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	15.88
	Model name		P2B-1160IB	P2B-1160IB	P2B-1160IB		P2B-1160IB	P2B-1160IB	P2B-1160IB	P2B-1160IB	P2B-1560IB	P2B-1560IB	P2B-1560IB
	External dimensions (W/D/H)	mm	1160/665/60	1160/665/60	1160/665/60		1160/665/60	1160/665/60	1160/665/60	1160/665/60	1560/665/60	1560/665/60	1560/665/60
Panel	Shipping dimensions (W/D/H)	mm	1244/748/159	1244/748/159	1244/748/159		1244/748/159	1244/748/159	1244/748/159	1644/748/159	1644/748/159	1644/748/159	1644/748/159
	Net/Shipping weight	kg	6.3/12	6.3/12	6.3/12		6.3/12	6.3/12	6.3/12	8/14.5	8/14.5	8/14.5	8/14.5
Controller	Wired (Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK		HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK		HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	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
	Infrared (Optional)	/	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01		YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01	YR(L)-HQS01

\* Pending



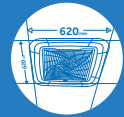
# Compact CASSETTE



DC fan motor



Fresh air outlet



New panel design  
620\*620mm



Low sound level

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	19.1
		kW	1.5	2.2	2.8	3.6	4.5	5.6
	Heating	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	1/220-240/50/60	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/M/L)	m <sup>3</sup> /h	650/540/430	700/590/480	700/590/480	700/590/480	700/590/480	700/590/480
Performance	Sound pressure level(H/M/L)	dB(A)	32/30/29	32/30/29	32/30/29	33/30/29	33/30/29	34/32/30
	Sound power level(H/M/L)	dB(A)	46/44/43	46/44/43	46/44/43	47/44/43	47/44/43	48/46/44
	External dimensions(W/D/H)	mm	570/570/260	570/570/260	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	718/680/380	718/680/380
	Net/Shipping weight	kg	16/19	16/19	16/19	19/22	19/22	19/22
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7
	Model name		PB-620KB	PB-620KB	PB-620KB	PB-620KB	PB-620KB	PB-620KB
Panel	External dimensions(W/D/H)	mm	620/620/60	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	660/660/115
Controller	Wired(Optional)	/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared (Optional)	/	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01
		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Round Way CASSETTE



DC fan motor



Innovative 4 independent air flow control



Unique round-way air outlet, no blind spot



6 adjustable louver positions, 1296 air flow combinations

Model/Indoor unit			AB072MNERAB	AB092MNERAB	AB122MNERAB		AB162MNERAB	AB182MNERAB	AB242MNERAB	AB282MNERAB	AB302MNERAB	AB382MNERAB	AB482MNERAB	AB602MNERAB
Capacity	Cooling	kBtu/h	7.5	9.5	12.3		15.3	19.1	24.2	27.3	30.7	38.2	47.8	54.6
		kW	2.2	2.8	3.6		4.5	5.6	7.1	8	9	11.2	14	16
	Heating	Btu/h	8.5	10.9	13.6		17.1	21.5	27.3	30.7	34.1	42.7	54.6	61.2
		kW	2.5	3.2	4		5	6.3	8	9	10	12.5	16	18
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	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
Performance	Air flow (H)	m <sup>3</sup> /h	1000/750/660	1000/750/660	1000/850/720		1000/850/720	1000/850/720	1380/1000/780	1380/1050/830	1380/1100/900	2050/1500/1100	2100/1600/1300	2100/1600/1300
	Sound pressure level(H/M/L)	dB(A)	30/27/25	30/27/25	30/27/25		33/30/27	33/30/27	35/33/30	37/34/30	37/34/30	37/34/30	44/39/35	44/39/35
Installation	External dimensions(W/D/H)	mm	840/840/180	840/840/180	840/840/180		840/840/180	840/840/180	840/840/204	840/840/204	840/840/204	840/840/246	840/840/288	840/840/288
	Shipping dimensions(W/D/H)	mm	978/978/247	978/978/247	978/978/247		978/978/247	978/978/247	978/978/269	978/978/269	978/978/269	978/978/312	978/978/353	978/978/353
	Net/Shipping weight	kg	19/24	19/24	21/26		21/26	21/26	22/27	22/27	22/27	25/31	26/32	26/32
	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	12.7		12.7	12.7	15.88	15.88	15.88	15.88	15.88	15.88
Panel	Model name		PB-950QB	PB-950QB	PB-950QB		PB-950QB	PB-950QB	PB-950QB	PB-950QB	PB-950QB	PB-950QB	PB-950QB	PB-950QB
	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	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	1013/1025/123	1013/1025/123
	Net/Shipping weight	kg	5.5/8.0	5.5/8.0	5.5/8.0		5.5/8.0	5.5/8.0	5.5/8.0	5.5/8.0	5.5/8.0	5.5/8.0	5.5/8.0	5.5/8.0
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK		HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK		HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
	Infrared(Optional)	/	YR-HQS01	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	YR-HRS01



# Round Way CASSETTE



DC fan motor



Innovative 4 independent air flow control



Unique round-way air outlet, no blind spot



6 adjustable louver positions, 1296 air flow combinations

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	47.7	54.6
		kW	2.2	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14	16
	Heating	Btu/h	8.5	10.9	13.6	17.1	21.5	27.3	30.7	34.1	42.6	54.6	61.2
		kW	2.5	3.2	4	5	6.3	8	9	10	12.5	16	18
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	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	1000/810/620	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	2100/1910/1720
	Sound pressure level(H/M/L)	dB(A)	30/27/25	30/27/25	30/27/25	32/29/27	33/30/29	35/34/31	37/35/31	37/35/31	37/35/31	37/35/31	44/40/36
Installation	External dimensions(W/D/H)	mm	840/840/180	840/840/180	840/840/180	840/840/180	840/840/180	840/840/204	840/840/204	840/840/246	840/840/246	840/840/288	840/840/288
	Shipping dimensions(W/D/H)	mm	983/983/268	983/983/268	983/983/268	983/983/268	983/983/268	983/983/290	983/983/290	983/983/331	983/983/331	983/983/373	983/983/373
	Net/Shipping weight	kg	25/28	25/28	25/28	25/28	25/28	27/30	27/30	31/36	31/36	33/38	33/38
	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	12.7	12.7	12.7	15.88	15.88	15.88	15.88	15.88	15.88
Panel	Model name		PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	PB-950KB/PB-950KB(H)	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	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	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	6.5/9
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
	Infrared(Optional)	/	YR-HQS01	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	YR-HRS01



# 4-way CASSETTE



700x700mm panel design



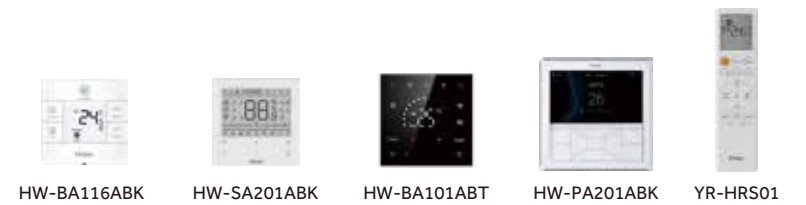
Built-in high head drain pump



Pre-set fresh air inlet



Quiet operation



HW-BA116ABK

HW-SA201ABK

HW-BA101ABT

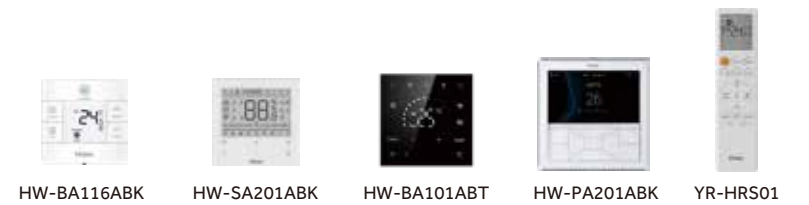
HW-PA201ABK

YR-HRS01

Model/Indoor unit			AB052MCERA	AB072MCERA	AB092MCERA	AB122MCERA	AB162MCERA	AB182MCERA(C)
Capacity	Cooling	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
	Heating	Btu/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	1/220-230/50/60
	Air flow (H)	m <sup>3</sup> /h	650/540/430	700/590/480	700/590/480	700/590/480	700/590/480	700/590/480
Performance	Sound pressure level(H/M/L)	dB(A)	31/29/28	32/30/29	32/30/29	32/30/29	33/30/29	33/30/29
	Sound power level(H/M/L)	dB(A)	45/43/42	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	570/570/260
Installation	Shipping dimensions(W/D/H)	mm	718/680/380	718/680/380	718/680/380	718/680/380	718/680/380	718/680/380
	Net/Shipping weight	kg	16/19	16/19	16/19	19/22	19/22	19/22
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7
	Model name		PB-700IB	PB-700IB	PB-700IB	PB-700IB	PB-700IB	PB-700IB
Panel	External dimensions(W/D/H)	mm	700/700/60	700/700/60	700/700/60	700/700/60	700/700/60	700/700/60
	Shipping dimensions(W/D/H)	mm	740/740/115	740/740/115	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	2.8/4.5	2.8/4.5
	Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
/			HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
/			HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
/			HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
Infrared (Optional)		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# ONVERTIBLE



DC fan motor



Flexible installation, on the floor or on the ceiling



Automatic horizontal and vertical swing



Reserved fresh air inlet

Model/Indoor unit			AC092MDERA	AC122MDERA	AC162MDERA	AC182MDERA	AC242MDERA	AC282MDERA	AC302MDERA	AC382MDERA	AC482MDERA
Capacity	Cooling	kBtu/h	9.5	12.3	15.4	19.1	24.2	27.3	30.7	38.2	48.0
		kW	2.8	3.6	4.5	5.6	7.1	8	9	11.2	14.0
	Heating	Btu/h	10.9	13.6	17.1	21.5	27.3	30.7	34.1	42.6	55.0
		kW	3.2	4.0	5	6.3	8	9	10	12.5	16.0
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	1,220-230.50/60	1,220-230.50/60	1,220-230.50/60
	Air flow (H)	m <sup>3</sup> /h	820/750/690	820/750/690	950/820/690	950/820/690	1420/1270/1240	1570/1420/1240	1570/1420/1240	2110/1990/1750	2110/1990/1750
Performance	Sound pressure level(H/M/L)	dB(A)	38/36/34	38/36/34	42/38/35	42/38/35	46/44/41	47/44/41	47/44/41	50/46/43	50/46/43
	Sound power level(H/M/L)	dB(A)	52/50/47	52/50/47	55/51/48	55/51/48	60/58/54	61/58/54	61/58/55	63/60/57	63/60/57
	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	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	1425/305/779	1750/305/779	1750/305/779
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	35.8/42.1	43.5/50.5	43.5/50.5
Refrigerant liquid pipe		mm	6.35	6.35	6.35	6.35	9.52	9.52	9.52	9.52	9.52
	Refrigerant gas pipe	mm	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88	15.88
Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Slim DUCT (0/15/30Pa)



DC fan motor



Friendly design of rear or bottom air return



Super slim design, only 185mm



Built-in high head drain pump



HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01

\*1. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function  
 2. The units with panel can directly use the remote controller YR-HRS01 and no need to purchase HA-SB101DB

Model/Indoor unit			AD052MSERA(D)	AD072MSERA(D)	AD092MSERA(D)	AD122MSERA(D)	AD162MSERA(D)	AD182MSERA(D)	AD242MSERA(D)
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3	19.1	24.2
		kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	kBtu/h	5.8	8.5	10.9	13.6	17.1	21.5	27.3
		kW	1.7	2.5	3.2	4	5	6.3	8
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	1/220-230/50/60
	Air flow (H/M/L)	m <sup>3</sup> /h	430/370/310	480/420/360	480/420/360	550/430/370	600/540/460	800/690/580	930/850/750
Performance	Sound pressure level(H/M/L)	dB(A)	26/22/19	27/23/20	27/23/20	30/27/24	32/29/26	33/30/27	36/33/30
	Sound power level(H/M/L)	dB(A)	40/36/33	41/37/34	41/37/34	44/41/38	46/43/40	47/44/41	50/47/43
	External dimensions(W/D/H)	mm	850/420/185	850/420/185	850/420/185	850/420/185	850/420/185	1170/420/185	1170/420/185
Installation	Shipping dimensions(W/D/H)	mm	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1365/540/270	1365/540/270
	Net/Shipping weight	kg	16.5/21.5	17.5/22.5	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	6.35	9.52
	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7	12.7	12.7	15.88
	Static pressure(Standard/Max.)	Pa	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30
	Panel model	/	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-1210IA/D	P1B-1210IA/D
Panel	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)	890/190/100 (outlet panel)	1210/190/100 (outlet panel)	1210/190/100 (outlet panel)
	External dimensions(W/D/H)		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)	890/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)
	Shipping dimensions(W/D/H)	mm	938/335/220	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	4/5	5/6	5/6
Drain pump	O-optional,S-standard,W-without		S	S	S	S	S	S	S
	Controller	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
Controller	Wired(Optional)	/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01
		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Slim DUCT (0/30Pa)



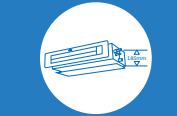
HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01  
 \*1. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function  
 2. The units with panel can directly use the remote controller YR-HRS01 and no need to purchase HA-SB101DB



Reserved fresh air inlet



Friendly design of rear or bottom air return



Super slim design, only 185mm



Built-in high head drain pump

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
		kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1
Capacity	Heating	kBtu/h	5.8	8.5	10.9	13.6	17.1	21.5	27.3
		kW	1.7	2.5	3.2	4	5	6.3	8
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	1/220-230/50/60
	Air flow (H/M/L)	m <sup>3</sup> /h	430/370/310	480/420/360	480/420/360	550/430/370	600/540/460	800/690/580	930/850/750
Performance	Sound pressure level(H/M/L)	dB(A)	26/23/20	27/24/21	27/24/21	30/28/25	33/30/27	33/30/28	36/33/31
	Sound power level(H/M/L)	dB(A)	40/37/34	41/38/35	41/38/35	44/42/39	47/44/41	47/44/42	50/47/44
Installation	External dimensions(W/D/H)	mm	850/420/185	850/420/185	850/420/185	850/420/185	850/420/185	1170/420/185	1170/420/185
	Shipping dimensions(W/D/H)	mm	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1045/540/270	1365/540/270	1365/540/270
	Net/Shipping weight	kg	16.5/21.5	17.5/22.5	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	6.35	9.52
	Refrigerant gas pipe	mm	9.52	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	0/30
Panel	Panel model	/	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-1210IA/D	P1B-1210IA/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)	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)	890/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)	1210/290.5/32.4 (inlet panel)
	Shipping dimensions(W/D/H)	mm	938/335/220	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	4/5	5/6	5/6
Drain pump	O-optional,S-standard,W-without		S	S	S	S	S	S	
Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Medium ESP DUCT (50/100Pa)



HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01  
\*1. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function

50/100Pa

50/100Pa



Built-in drain pump



Only 248mm thick

50/60Hz

All module can realize 50/60Hz

Model/Indoor unit			AD052MJERAB	AD072MJERAB	AD092MJERAB	AD122MJERAB	AD162MJERAB	AD182MJERAB	AD242MJERAB	AD282MJERAB	AD302MJERA	AD382MJERA	AD482MJERA	AD542MJERA
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3	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
	Heating	Btu/h	5.8	8.5	10.9	13.6	17.1	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
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	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 <sup>3</sup> /h	630/510/424	630/510/424	630/510/424	630/510/424	740/550/442	980/840/760	1174/1080/960	1174/1080/960	1500/1180/930	1700/1300/900	2000/1700/1250	2000/1700/1250
Performance	Sound pressure level(H/M/L)	dB(A)	35/33/31	35/33/31	35/33/31	35/33/31	35/33/31	35/34/32	35/34/32	40/37/34	42/38/34	42/39/35	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	40/38/36	44/41/38	46/42/38	46/33/39	44/41/38	47/44/39
	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	1100/700/248	1500/700/248	1500/700/248	1500/700/248
Installation	Shipping dimensions(W/D/H)	mm	932/835/280	932/835/280	932/835/280	932/835/280	901/853/305	1301/853/305	1301/853/305	1301/853/305	1301/853/305	1701/853/305	1701/853/305	1701/853/305
	Net/Shipping weight	kg	27/29.5	27/29.5	27/29.5	27/29.5	27/29.5	36.8/39.8	37/40	37/40	39.4/42.4	48.3/55.5	51.3/58.5	51.3/58.5
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35	9.52	9.52	9.52	9.52	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	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	50/100	50/100
	Drain pump	O-optional,S-standard,W-without		S	S	S	S	S	S	S	S	S	S	S
Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

MRV Indoor Unit



# High ESP DUCT (20/200Pa)



DC fan motor



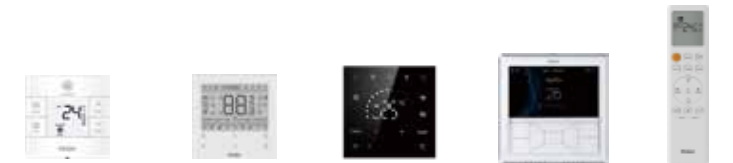
Built-in drain pump



Only 248mm thick



All module can realize 50/60Hz



HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01

\*1. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function

Model/Indoor unit			AD052MJERAD	AD072MJERAD	AD092MJERAD		AD122MJERAD	AD162MJERAD	AD182MJERAD	AD242MJERAD	AD282MJERAD	AD302MJERAD	AD382MJERAD	AD482MJERAD	AD542MJERAD
Capacity	Cooling	HP	0.5	0.8	1.0		1.25	1.7	2.0	2.5	3.0	3.2	4.0	5.0	6.0
		kBtu/h	5.1	7.5	9.6		12.3	15.3	19.1	24.2	27.3	30.7	38.2	47.8	54.6
	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
Electrical Parameters	Power supply	PhV/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	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	1100/700/248	1100/700/248	1100/700/248	1100/700/248	1500/700/248	1500/700/248	1500/700/248
Dimensions	Shipping product	mm	901/853/305	901/853/305	901/853/305		901/853/305	901/853/305	1301/853/305	1301/853/305	1301/853/305	1301/853/305	1701/853/305	1701/853/305	1701/853/305
	Product Net/Shipping	kg	25/30.7	25/30.7	25/30.7		25/30.7	26.2/31.9	34/40.5	34/40.5	34/40.5	36/42.5	44.2/53.5	47.2/56.5	47.2/56.5
Fan	Static Pressure(Standard/Max)	Pa	20/200	20/200	20/200		20/200	20/200	20/200	20/200	20/200	20/180	20/180	20/180	20/180
	Air flow (H/M/L)	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(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	42/38/34
	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	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	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	15.88	15.88	15.88
Drain pump	O-optional, S-standard, N-not	/	S	S	S		S	S	S	S	S	S	S	S	S
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK		HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK		HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	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	HW-BA101ABT	HW-BA101ABT
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Compact Air DUCT (50/120)



HW-BA116ABK HW-SA201ABK HW-BA101ABT HW-PA201ABK YR-HRS01

\*1. HW-BA116ABK, HW-SA201ABK and HW-BA101ABT have built-in infrared signal receiver. HW-PA201ABK no such function

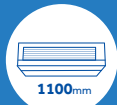
Model/Indoor unit			AD302MJERN	AD382MJERN	AD482MJERN
Capacity	Cooling	kBtu/h	30.7	38.2	47.8
		kW	9.0	11.2	14.0
	Heating	Btu/h	34.1	44.3	55.6
		kW	10.0	13.0	16.3
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow(H/M/L)	m <sup>3</sup> /h	2050/1500/1150	2050/1500/1150	2050/1500/1150
Performance	Sound pressure level (H/M/L)	dB(A)	48/46/43	49/46/44	49/46/44
	Sound power level(H/M/L)	dB(A)	64/62/58	66/62/59	66/62/59
	External dimensions(W/D/H)	mm	1100/700/248	1100/700/248	1100/700/248
Installation	Shipping dimensions(W/D/H)	mm	1301/853/305	1301/853/305	1301/853/305
	Net/Shipping weight	kg	35/38	41/44	41/44
	Refrigerant liquid pipe	mm	9.52	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88	15.88
	Static pressure(Standard/Max.)	Pa	50/120	50/120	50/120
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
		/	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01



DC fan motor



Standard with anti-bacterial filter



1100mm width design, suitable for hallway installation



Large airflow, increased by 20%



# High ESP DUCT (100/250Pa)



HW-SA201ABK YR-HQS01



DC fan motor

28kw

Max. capacity 28kw

250 Pa

Max. ESP 250Pa

50/60Hz

All module can realize 50/60Hz

Model/Indoor unit			AD722MTERAB	AD962MTERAB
Capacity	Model capacity	HP	8	10
	Cooling	kBtu/h	77.1	95.5
		kW	22.6	28.0
	Heating	kBtu/h	86	107.5
kW		25.2	31.5	
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50	1/220-240/50
	Net product	mm	1333/748/495	1333/748/495
Dimensions (W/D/H)	Shipping product	mm	1558/896/668	1558/896/668
	Product Net/Shipping	kg	87/109	87/109
Fan	Static pressure(Standard/Max)	Pa	100/250	100/250
	Indoor air flow(S/H/M/L)	m³/h	4200/3750/3330/2800	4200/3750/3330/2800
Sound level	Sound pressure level (S/H/M/L)	dB(A)	54/51/49/47	54/51/49/47
	Sound power level(S/H/M/L)	dB(A)	68/65/63/61	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	/	25	25
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK
	Infrared(Optional)	/	YR-HQS01	YR-HQS01



# High ESP DUCT (0/300Pa)



HW-SA201ABK YR-HQS01



DC fan motor

28kw

Max. capacity 28kw

300 Pa

Max. ESP 300Pa

50/60Hz

All module can realize 50/60Hz

Model/Indoor unit			AD722MTERAD	AD962MTERAD
Capacity	Model capacity	HP	8	10
	Cooling	kBtu/h	77.1	95.5
		kW	22.6	28.0
	Heating	kBtu/h	86	107.5
kW		25.2	31.5	
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	88/110
Fan		Static pressure(Standard/Max)	Pa	100/300
	Indoor 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)	dB(A)	53/50/48/46	54/51/49/47
	Sound power level(S/H/M/L)	dB(A)	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	/	25	25
Controller	Wired(Optional)	/	HW-SA201ABK	HW-SA201ABK
	Infrared(Optional)	/	YR-HQS01	YR-HQS01



# Built-in FLOOR STANDING



- Require very little installation space: only 220mm
- High efficiency filter fitted as standard
- Good solution for installation beneath a window
- 50/60Hz**  
All module can realize 50/60Hz



Model/Indoor unit			AE072MLERA	AE092MLERA	AE122MLERA	AE162MLERA	AE182MLERA	AE242MLERA
Capacity	Cooling	kBtu/h	7.5	9.5	12.3	15.3	19.1	24.2
		kW	2.2	2.8	3.6	4.5	5.6	7.1
	Heating	Btu/h	8.5	10.9	13.6	17.1	21.5	27.3
		kW	2.5	3.2	4	5	6.3	8
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 (H)	m³/h	750/650/550	750/650/550	750/650/550	950/830/720	950/830/720	950/830/720
Performance	Sound pressure level(H/M/L)	dB(A)	38/35/33	38/35/33	40/37/35	40/37/35	42/39/36	42/39/36
	Sound power level(H/M/L)	dB(A)	51/48/46	51/48/46	53/50/48	53/50/48	55/52/49	55/52/49
	External dimensions(W/D/H)	mm	1116/221/624	1116/221/624	1116/221/624	1116/221/624	1116/221/624	1116/221/624
Installation	Shipping dimensions(W/D/H)	mm	1425/315/685	1425/315/685	1425/315/685	1425/315/685	1425/315/685	1425/315/685
	Net/Shipping weight	kg	29/37	29/37	29/37	31/39	31/39	31/39
	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
	Static pressure	Pa	0/30	0/30	0/30	0/30	0/30	0/30
	Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
/			HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
/			HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
/			HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
Infrared (Optional)		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# Console



HW-SA201ABK YR-HRS01



DC fan motor



Space saving



Air discharge through top and bottom



Quiet operation

Model/Indoor unit			AF052MBERA	AF072MBERA	AF092MBERA	AF122MBERA	AF162MBERA	AF182MBERA
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3	17
		kW	1.5	2.2	2.8	3.6	4.5	5
	Heating	Btu/h	5.8	8.5	10.9	13.6	17	18.5
		kW	1.7	2.6	3.2	4	5	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	1/220-230/50/60
	Air flow (H)	m <sup>3</sup> /h	540/460/390/310/270	540/460/390/310/270	540/460/390/310/270	580/500/420/350/270	620/540/460/390/270	620/540/460/390/270
Performance	Sound pressure level(H/M/L)	dB(A)	45/42/38/33/30	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
	External dimensions(W/D/H)	mm	700/210/600	700/210/600	700/210/600	700/210/600	700/210/600	700/210/600
Installation	Shipping dimensions(W/D/H)	mm	783/303/695	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	15.2/18.7
	Refrigerant liquid pipe	mm	6.35	6.35	6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	12.7	12.7	12.7	12.7	12.7	12.7
Controller	Wired (Optional)	/	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
	Infrared(Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01



# N High WALL



DC fan motor

EEV

Built in EEV, easy to installation



Stylish design & LED display



Comfortable Sleep

Model/Indoor unit			AS052MNERAB AS052MFERAB AS052MN(F)ERAC	AS072MNERAB AS072MFERAB AS072MN(F)ERAC	AS092MNERAB AS092MFERAB AS092MN(F)ERAC	AS122MNERAB AS122MFERAB AS122MN(F)ERAC	AS162MNERA AS162MFERA AS162MN(F)ERAC	AS182MNERA AS182MFERA AS182MN(F)ERAC	AS242MNERA AS242MFERA AS242MN(F)ERAC	AS282MNERA AS282MNERAC	AS302MNERA AS302MNERAC
Capacity	Cooling	kBtu/h	5.1	7.5	9.5	12.3	15.3	19.1	24.2	27.3	30.7
		kW	1.5	2.2	2.8	3.6	4.5	5.6	7.1	8	9
	Heating	Btu/h	5.8	8.5	10.9	13.6	17.1	21.5	27.3	30.7	34.1
		kW	1.7	2.5	3.2	4	5	6.3	8	9	10
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	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	1500/1400/1300	1600/1500/1400
Performance	Sound pressure level(H/M/L)	dB(A)	33/31/29	35/31/29	36/31/29	37/33/29	39/36/34	40/39/35	44/40/36	48/43/40	49/44/41
	Sound power level(H/M/L)	dB(A)	49/46//41	50/47/42	52/48/44	54/51/50	56/53/51	57/54/52	58/56/54	60/57/53	61/58/54
	External dimensions(W/D/H)	mm	855/208/280	855/208/280	855/208/280	855/208/280	1115/243/336	1115/243/336	1115/243/336	1316/270/365	1316/270/365
Installation	Shipping dimensions(W/D/H)	mm	954/279/355 *1054/279/355	954/279/355 *1054/279/355	954/279/355 *1054/279/355	954/279/355 *1054/279/355	1206/342/418 *1306/342/418	1206/342/418 *1306/342/418	1206/342/418 *1306/342/418	1403/384/463 *1503/384/463	1403/384/463 *1503/384/463
	Net/Shipping weight	kg	9.9/12 *9.9/14.2	9.9/12 *9.9/14.2	9.9/12 *9.9/14.2	9.9/12 *9.9/14.2	15.8/18.9 *15.8/21.2	15.8/18.9 *15.8/21.2	15.8/18.9 *15.8/21.2	21.8/26.3 *21.8/27.2	21.8/26.3 *21.8/27.2
	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
	Controller	Wired(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
/			HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK	HW-PA201ABK
/			HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
/			HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK	HW-SA201ABK
Infrared(Optional)		/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

\*Note: Please choose AV\*\*\*MN(F)ERAC series for quiet required environment.  
The electronic expansion valve of AV\*\*\*MN(F)ERAC series is outside.  
\*For AS\*\*\*MN(F)ERAC



# MRV INDOOR Ventilation

## 313 VENTILATION

Fresh Air Duct

HRV





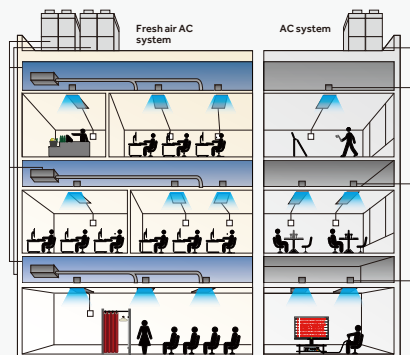
# MRV INDOOR Ventilation



## Ventilation

### Introduction of fresh air, indoor air supply more comfortable

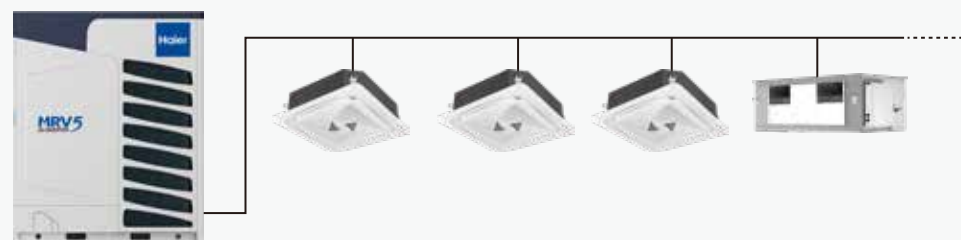
Haier fresh air duct can heat or cool the outdoor fresh air to close to the indoor temperature and transport fresh air to the room. In spring and autumn, fresh air can be filtered without passing through the coil, directly sent into the room to save the energy.



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)

## HRV

### Design standard

Accord with CE, ROSH and REACH, more safety.



### Super comfortable

DC brushless motor and fan simulation volute design, lower noise.



### Easy maintenance

The hydrophilic material is added to the functional film used by the pellet, and its surface friction coefficient is obtained; Smaller, dust particles will not adhere to the surface of the film, no need to frequent cleaning, if you need to clean, you can simply clean with tap water, dry and then use again (can be washed multiple times). The heat exchange core and filter can be pulled out of the structure design, more convenient maintenance.

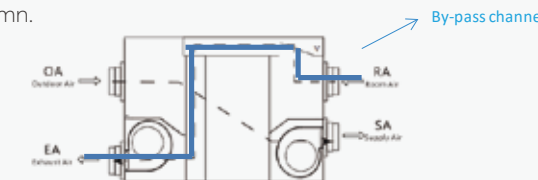
### High efficiency

Graphene material heat exchange core, the effective air exchange rate is up to 95%, and energy saving is achieved through efficient heat recovery technology.



Heat exchange core

This device has a bypass function (the return air can be directly discharged from the outdoor through the bypass without passing through the heat exchanger), which can effectively extend the service life of the heat exchanger. We suggest that you turn on the bypass function in spring or autumn.



### Easy control

Indoor units linkage function, can be connected with indoor units, according to the operation of the indoor units automatic interlock control HRV on off operation.

The heat exchange core of the heat recovery fresh air main engine sold on the market is mainly divided into three kinds according to the material: paper, aluminum, graphene.

Item	Paper	Aluminum	Graphen
Heat recovery efficiency	★★★	★★★★★	★★★★★
Anti-microbial		★★★	★★★★★
Life time	★	★★★★★	★★★★★
Maintenance	Change	Water wash	Water wash



# Fresh Air DUCT



100~  
350Pa

Variable static pressure  
100~350Pa setting



DC fan motor



Fresh air

50/60Hz

All module can realize  
50/60Hz



HW-BA116ABK HW-SA201ABK YR-HRS01

Model/Indoor unit			AD482MJERAF	AD722MTERAF	AD962MTERAF
Capacity	Cooling	kBtu/h	47.7	77.1	95.5
		kW	14	22.6	28
	Heating	Btu/h	34.1	68.2	83.5
		kW	10	20	24.5
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow (H)	m³/h	1900/1600/1460/1200	2800/2300/1800/1500	3200/2800/2400/2000
Performance	Sound pressure level(H/M/L)	dB(A)	48/46/44/42	48/46/44/42	49/47/45/42
	Sound power level(H/M/L)	dB(A)	61/59/57/55	61/59/57/55	62/60/58/55
	External dimensions(W/D/H)	mm	1500/700/248	1333/748/495	1333/748/495
Installation	Shipping dimensions(W/D/H)	mm	1698/857/305	1558/896/668	1558/896/668
	Net/Shipping weight	kg	45.4/52.6	88/110	88/110
	Refrigerant liquid pipe	mm	9.52	12.7	12.7
	Refrigerant gas pipe	mm	15.88	22.22	22.22
	Static pressure(Standard/Max.)	Pa	100/200	100/350	100/350
	Controller	Wired (Optional)	/	HW-SA201ABK	HW-SA201ABK
/			YR-HQS01	YR-HQS01	YR-HQS01
/			HW-BA116ABK	HW-BA116ABK	HW-BA116ABK



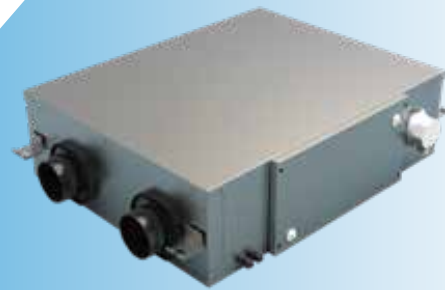


W9301

- Be controlled with other indoor units together
- Heat recovery media element
- Efficient heat recovery air processing
- 1000 m<sup>3</sup>/h  
Max. air flow 1000m<sup>3</sup>/h

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	1/220-240/50/60
	Rated power input	W	135	165	280	360	420
	Rated current	A	0.65	0.79	1.34	1.72	2.01
Enthalpy exchange effectiveness	Cooling condition		58%	57%	61%	68%	61%
	Heating condition		65%	65%	68%	72%	65%
Performance	Air flow (H/M/L)	m <sup>3</sup> /h	150/110/70	250/200/160	500/430/375	800/680/600	1000/810/730
	Sound pressure level (H/M/L)	dB(A)	38/35/30	40/38/35	45/42/40	48/46/43	50/48/45
	Sound power level (H/L)	dB(A)	48/45/40	50/48/45	55/52/50	58/58/53	60/58/55
Installation	External dimensions(W/D/H)	mm	750/530/240	750/530/270	1000/710/270	1200/940/324	1250/935/350
	Shipping dimensions(W/D/H)	mm	955/575/305	955/575/335	1205/755/335	1405/985/389	1455/980/415
	Net weight/Shipping weight	kg	26/28	30/32	40/42	55/59	56/60
	Static pressure	Pa	80	80	100	100	100
Controller	Wired (Standard)	/	W9301	W9301	W9301	W9301	W9301





ESTB-XF

MODEL			ERV0150BNN	ERV0250BNN	ERV0350BNN	ERV0500BNN	ERV0800BNN	ERV1000BNN	ERV2000BNN	
<b>Power supply</b>		Ph/V/Hz	1/220/50/60	1/220/50/60	1/220/50/60	1/220/50/60	1/220/50/60	1/220/50/60	1/220/50/60	
	Airflow ※ 1	m³/h	150	250	350	500	800	1000	2000	
<b>Cooling</b>	Temperature exchange efficiency(H/M/L) ※ 2	%	71.20/72.50/73.60	67.50/68.90/69.30	67.60/68.90/72.10	71.10/73.50/73.90	68.10/72.40/72.90	70.50/72.60/73.80	67.70/71.90/72.50	
	Enthalpy exchange efficiency(H/M/L) ※ 2	%	56.30/60.40/67.20	55.00/59.10/66.20	55.40/60.50/65.40	59.00/60.50/64.00	58.90/62.70/68.30	63.10/65.40/68.80	62.40/65.80/64.80	
	Power input ※ 1	W	60	105	185	315	385	620	950	
	Current	A	0.50	0.80	1.30	2.60	3.52	4.28	5.94	
<b>Heating</b>	Airflow ※ 1	m³/h	150	250	350	500	800	1000	2000	
	Temperature exchange efficiency(H/M/L) ※ 3	%	73.60/75.10/77.30	73.00/74.40/76.20	73.00/73.10/75.90	73.00/75.30/76.90	73.60/74.80/75.10	74.00/75.60/76.80	73.00/73.80/75.60	
	Enthalpy exchange efficiency(H/M/L) ※ 3	%	67.60/69.90/74.50	64.40/68.30/70.10	66.80/70.30/73.90	67.40/68.00/70.10	67.40/72.10/73.20	71.36/72.20/75.40	66.70/70.20/73.20	
	Power input ※ 1	W	60	105	185	315	385	620	950	
	Current	A	0.50	0.80	1.30	2.60	3.52	4.28	5.94	
<b>Operating current</b>		A	0.50	0.80	1.30	2.60	3.52	4.28	5.94	
<b>Indoor motor</b>	Type		DC	DC	DC	DC	DC	DC	EC	
	Insulation class		Class B	Class B	Class B	Class B	Class B	Class B	Class B	
	IP class		IP42	IP42	IP42	IP42	IP42	IP42	IP44	
	Power input	W	65	80	160	180	350	350	500	
	Power output	W	49	61	126	137	298	298	425	
<b>Indoor fan</b>	Quantity		2	2	2	2	2	2		
<b>Cabinet</b>	Cabinet coating type		Q235	Q235	Q235	Q235	Q235	Q235	Q235	
	Cabinet salt spray test duration	Hour	72h	72h	72h	72h	72h	72h	72h	
	Control box IP class		IP2X	IP2X	IP2X	IP2X	IP2X	IP2X	IP2X	
<b>Construction</b>	Sheet metal thickness	mm	1	1	1	1	1	1		
<b>Air filter</b>	Material		Non-woven Fabric/ Ultrafine Synthetic Fiber							
	Class		G4/F7	G4/F7	G4/F7	G4/F7	G4/F7	G4/F7	G4/F7	
	Pressure drop	Pa	90	90	90	90	90	90	90	
Air return dimension	mm	110	150	150	150	200	200	300*260(mm)		
Air outlet dimension	mm	110	150	150	150	200	200	300*260(mm)		
Sound pressure level(H/M/L)	dB(A)	33/29/26	35/31/27	38/36/31	43/40/34	46/30/37	48/45/39	55/50/44		
Sound power level(H/M/L)	dB	36/35/32	41/37/33	44/42/37	49/46/40	52/36/43	54/51/45	61/56/50		
Standard static pressure ※ 1	Pa	65	75	80	90	90	75	70		
Max. Static pressure	Pa	65	75	80	90	90	75	70		
Indoor airflow(h/m/l) ※ 1	m³/h	150/120/90	250/200/150	350/280/210	500/400/300	800/640/480	1000/800/600	2000/1600/1200		
Unit dimension (W*D*H)	mm	820/650/235	835/750/235	876/750/235	1100/800/280	1138/1000/385	1295/1150/385	1450/1150/600		
Packing dimension (W*D*H)	mm	1065/750/335	1080/850/335	1080/850/335	1345/900/380	1545/1100/485	1545/1250/485	1695/1250/700		
Net weight	kg	36	41	43	52	81	91	142		
Remote wired controller	/				ESTB-XF					
Operation range	/				-15-43					

Note: The noise level will be measured in the third octave band limited values, using a Real Time Analyser calibrated sound intensity meter. It is a sound pressure noise level.  
 Condition: 1. Indoor temperature: 20DB (°C)/15.8WB (°C), outdoor temperature: 20DB (°C)/15.8WB (°C); 2. Indoor temperature: 27DB (°C)/19.5WB (°C), outdoor temperature: 35DB (°C)/28WB (°C);  
 3. Indoor temperature: 21DB (°C)/13WB (°C), outdoor temperature: 2DB (°C)/1WB (°C);



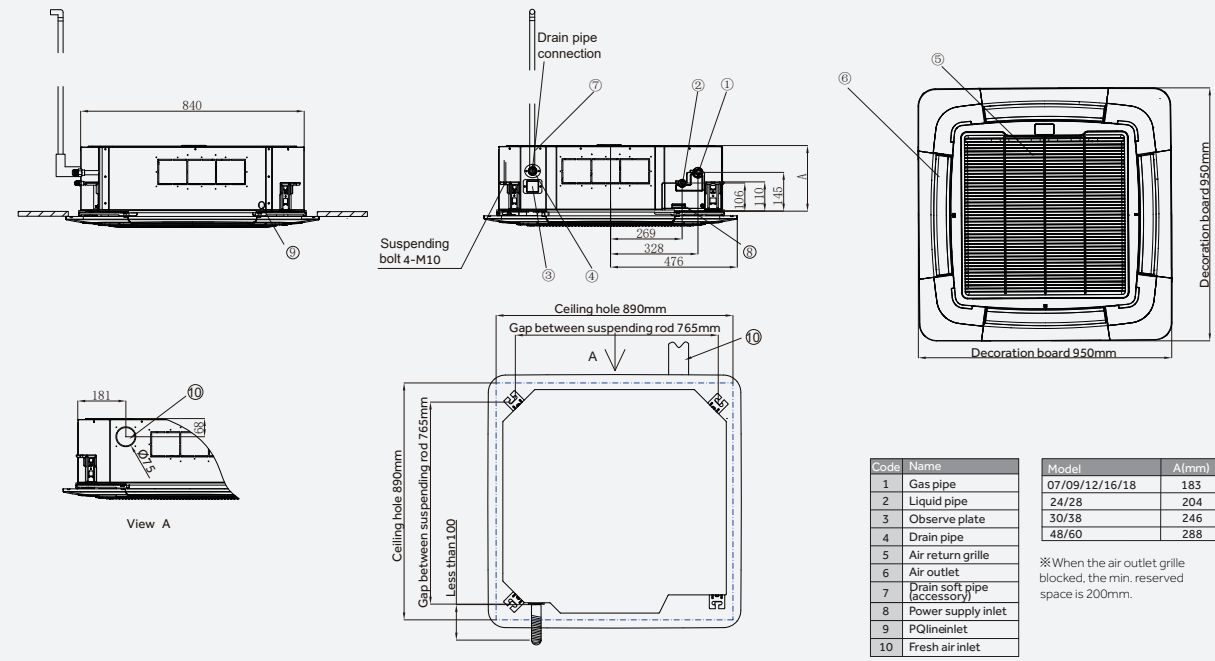




# Dimensions

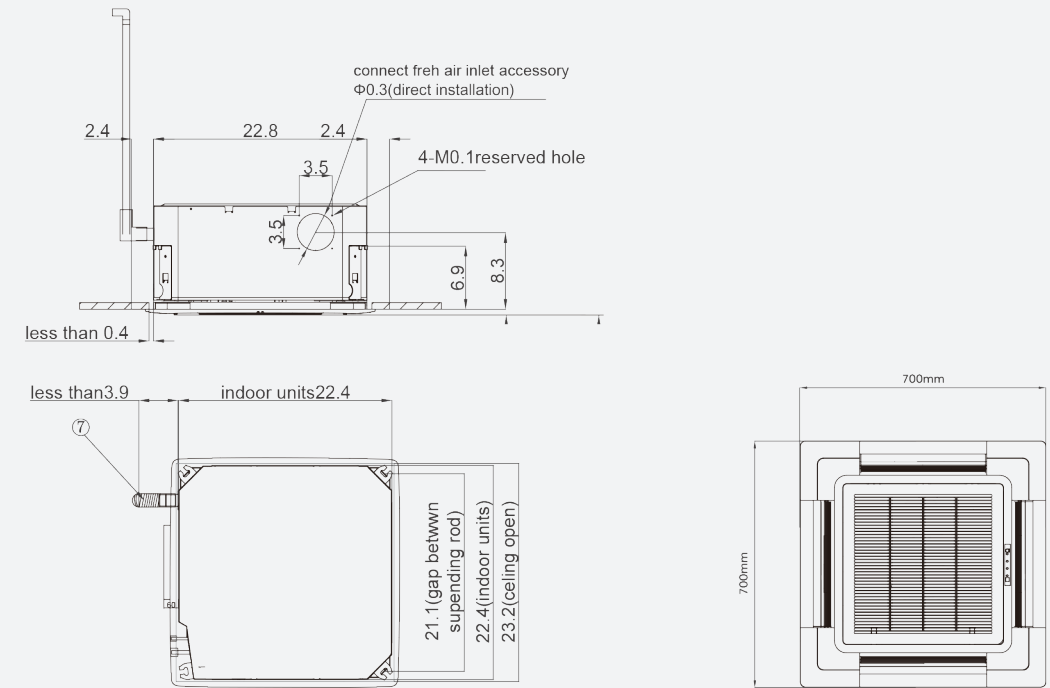
## Round Way Cassette

AB072MNERAB AB092MNERAB AB122MNERAB AB162MNERAB AB182MNERAB AB242MNERAB  
 AB282MNERAB AB302MNERAB AB382MNERAB AB482MNERAB AB602MNERAB



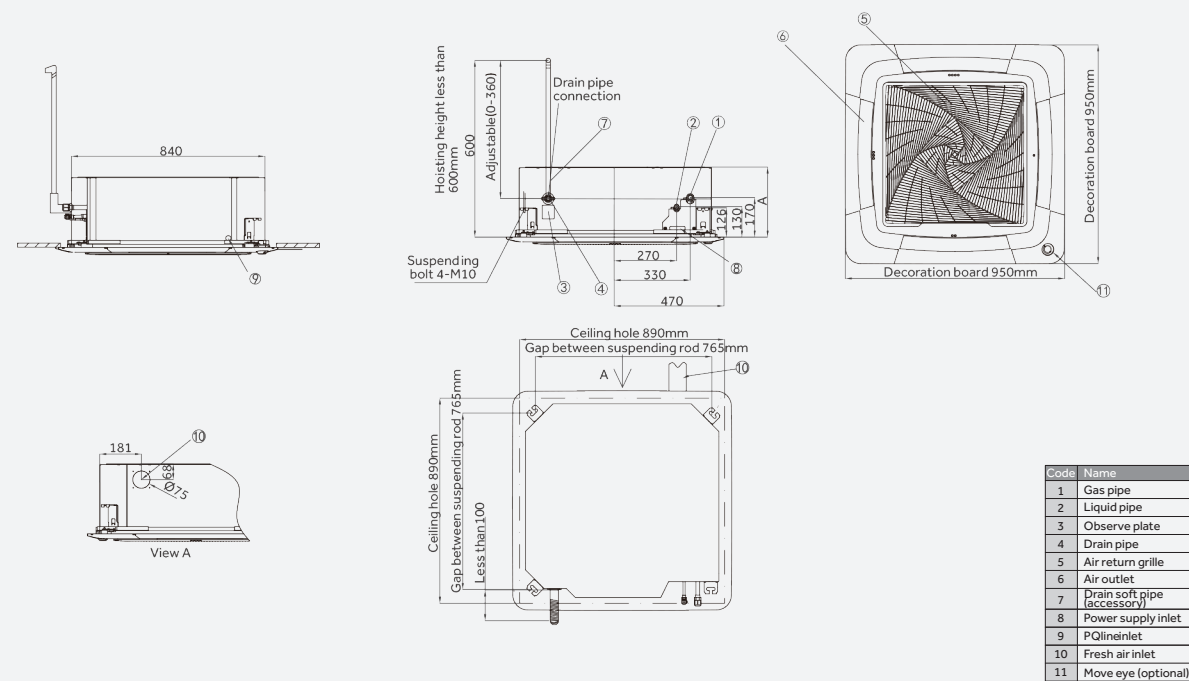
## 4-way Cassette

AB052MCERA AB072MCERA AB092MCERA AB122MCERA AB162MCERA AB182MCERA(C)



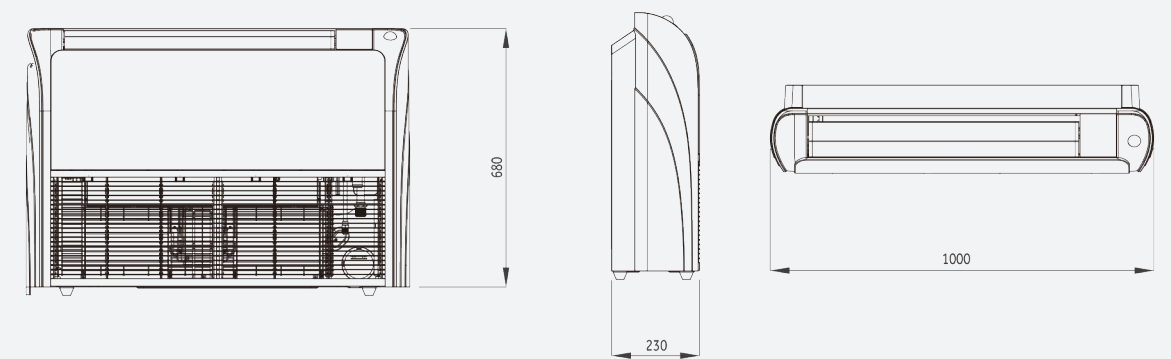
## Round Way Cassette

AB072MRERA AB092MRERA AB122MRERA AB162MRERA AB162MRERA AB242MRERA  
 AB282MRERA AB302MRERA AB302MRERA AB482MRERA AB602MRERA



## Convertible

AC092MDERA AC122MDERA AC162MDERA AC182MDERA

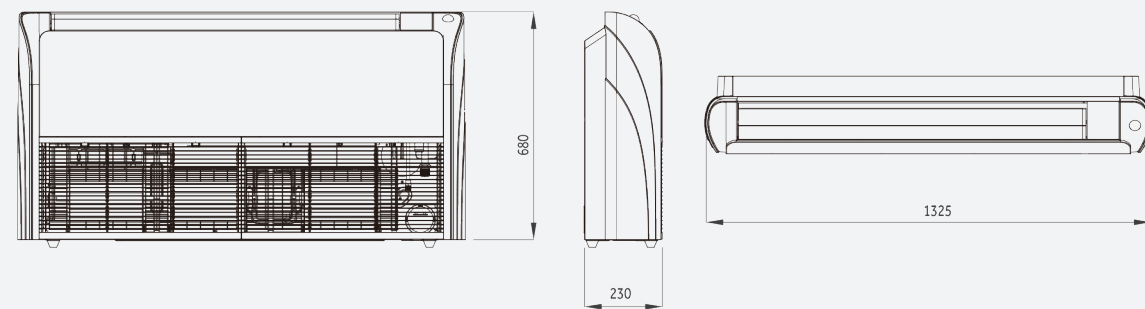




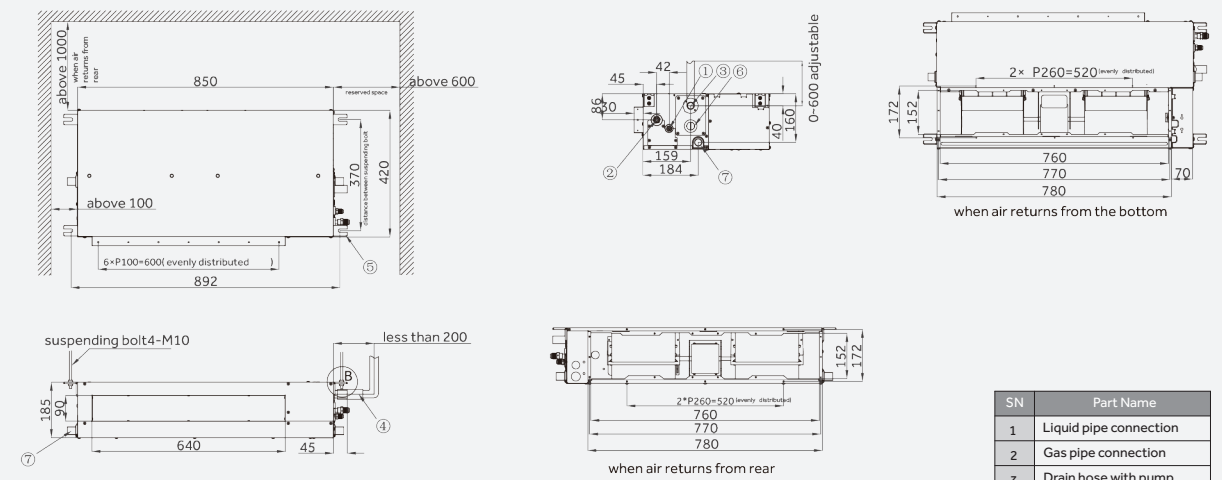
# Dimensions

## Convertible

AC242MDERA AC282MDERA AC302MDERA



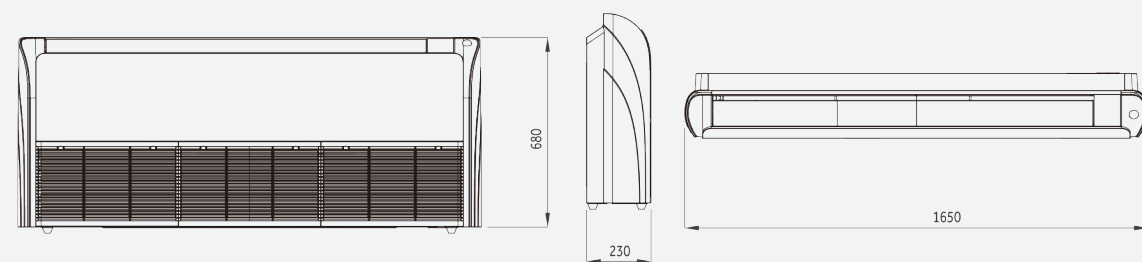
**Slim Duct**(0/15/30Pa) AD052MSERA(H) AD072MSERA(H) AD092MSERA(H) AD122MSERA(H) AD162MSERA(H)  
**Slim Duct**(0/15/30Pa) AD052MSERA(D) AD072MSERA(D) AD092MSERA(D) AD122MSERA(D) AD162MSERA(D)  
**Slim Duct**(0/30Pa) AD052MSERA AD072MSERA AD092MSERA AD122MSERA AD162MSERA



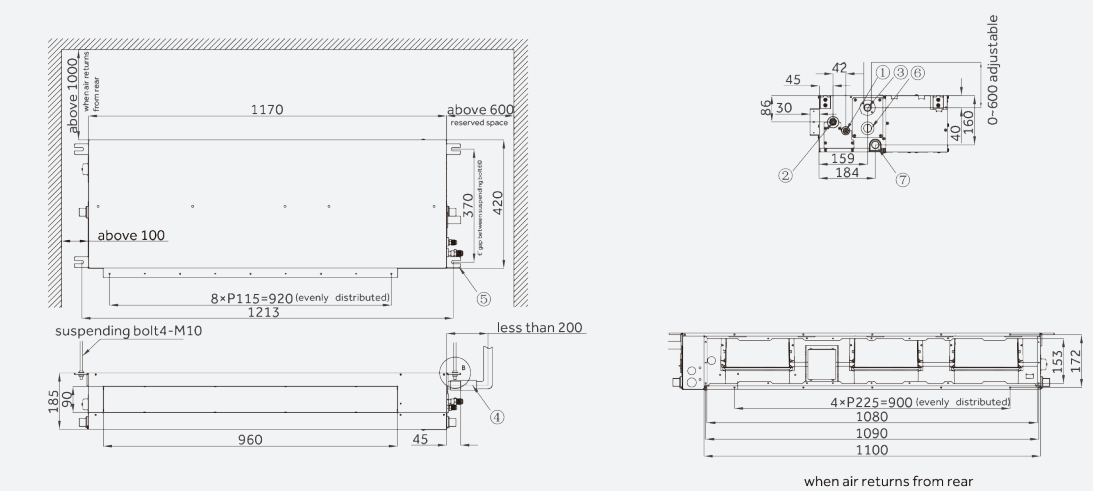
SN	Part Name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose with pump
4	Drain hose(accessory)
5	sSuspending point
6	checking hole
7	Water drainage outlet

## Convertible

AC382MDERA AC482MDERA



**Slim Duct**(0/15/30Pa) AD182MSERA(H) AD242MSERA(H)  
**Slim Duct**(0/15/30Pa) AD182MSERA(D) AD242MSERA(D)  
**Slim Duct**(0/30Pa) AD182MSERA AD242MSERA

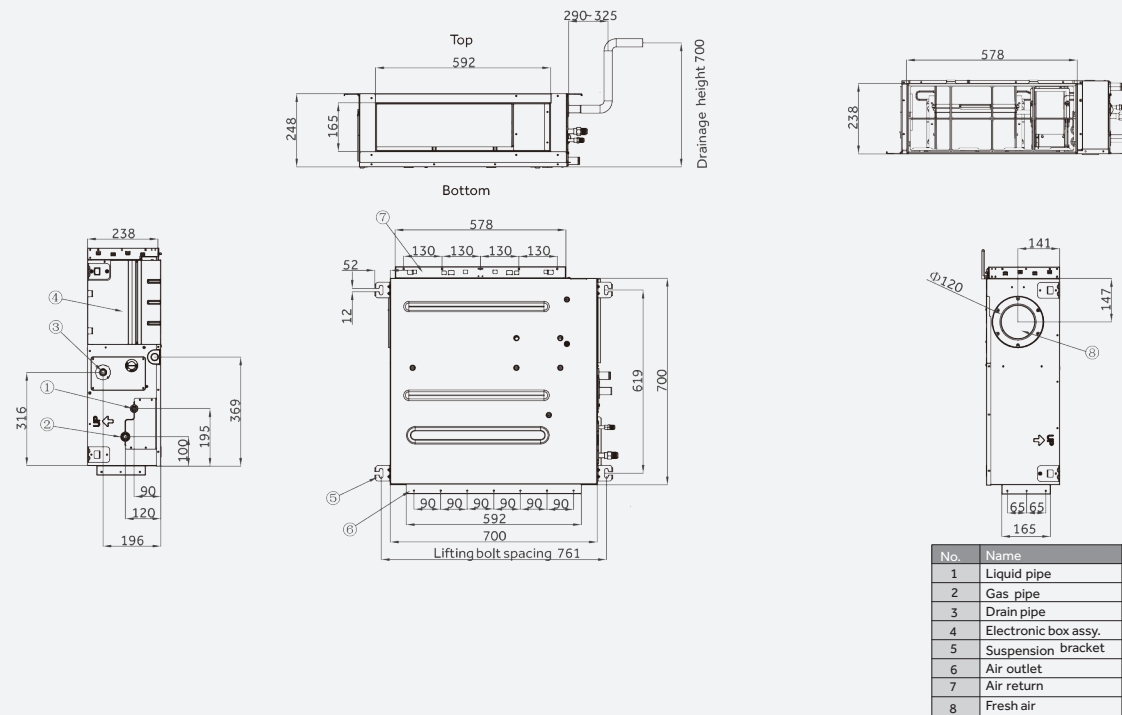


SN	Part Name
1	liquid pipe connection
2	gas pipe connection
3	drain hose with pump
4	drain hose(accessory)
5	suspending point
6	checking hole
7	water drainage outlet



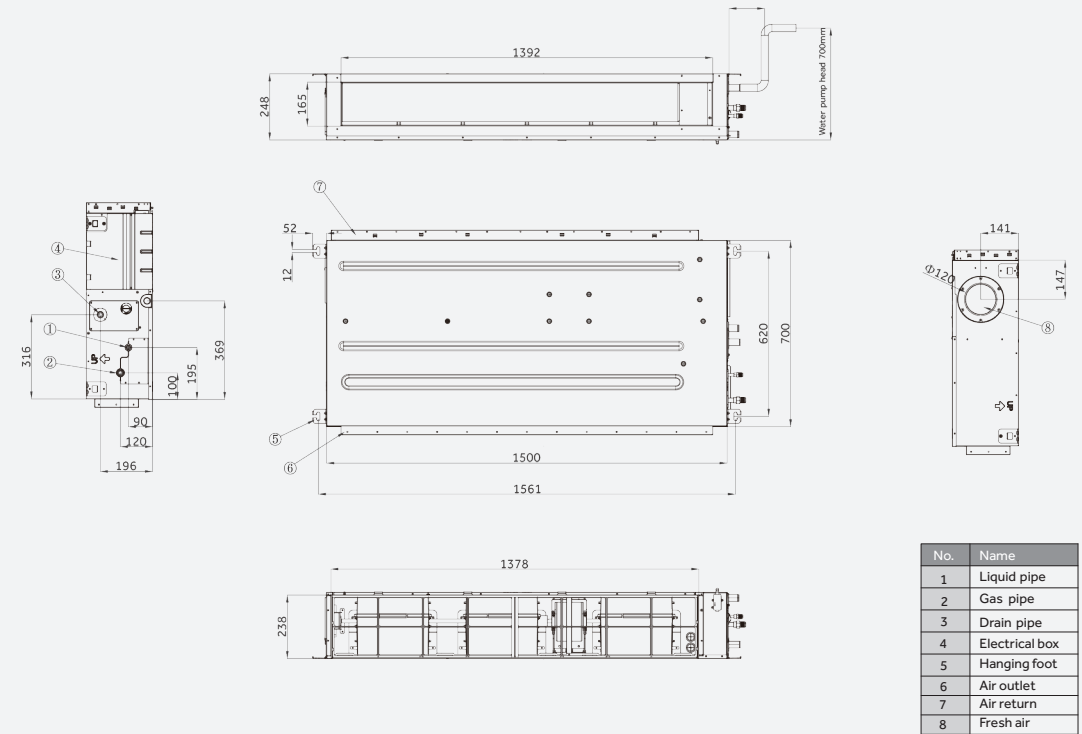
# Dimensions

**High ESP Duct(20/200Pa)** AD052MJERA(H) AD072MJERA(H) AD092MJERA(H) AD122MJERA(H) AD162MJERA(H)  
**Medium ESP Duct(50/100Pa)** AD052MJERAB AD072MJERAB AD092MJERAB AD122MJERAB AD162MJERAB  
**High ESP Duct(20/200Pa)** AD52MJERAD AD72MJERAD AD92MJERAD AD122MJERAD AD162MJERAD



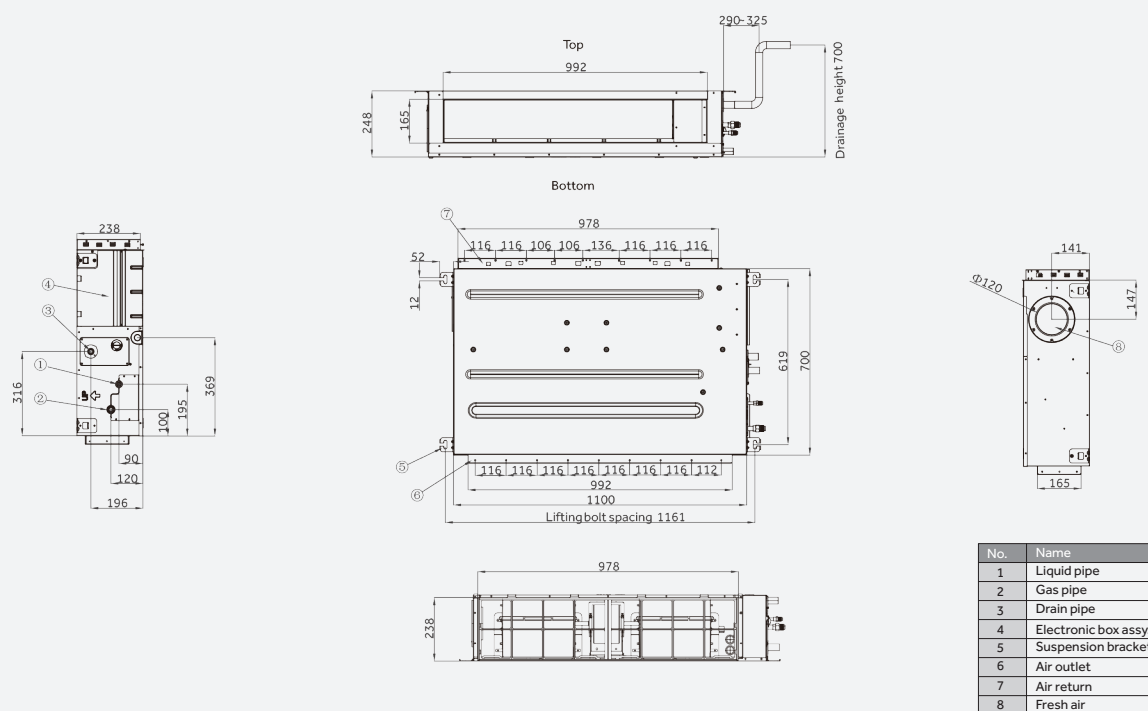
No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electronic box assy.
5	Suspension bracket
6	Air outlet
7	Air return
8	Fresh air

**High ESP Duct(20/200Pa)** AD382MJERA(H) AD482MJERA(H) AD542MJERA(H)  
**Medium ESP Duct(50/100Pa)** AD382MJERAB AD482MJERAB AD542MJERAB  
**High ESP Duct(20/200Pa)** AD382MJERAD AD482MJERAD AD542MJERAD



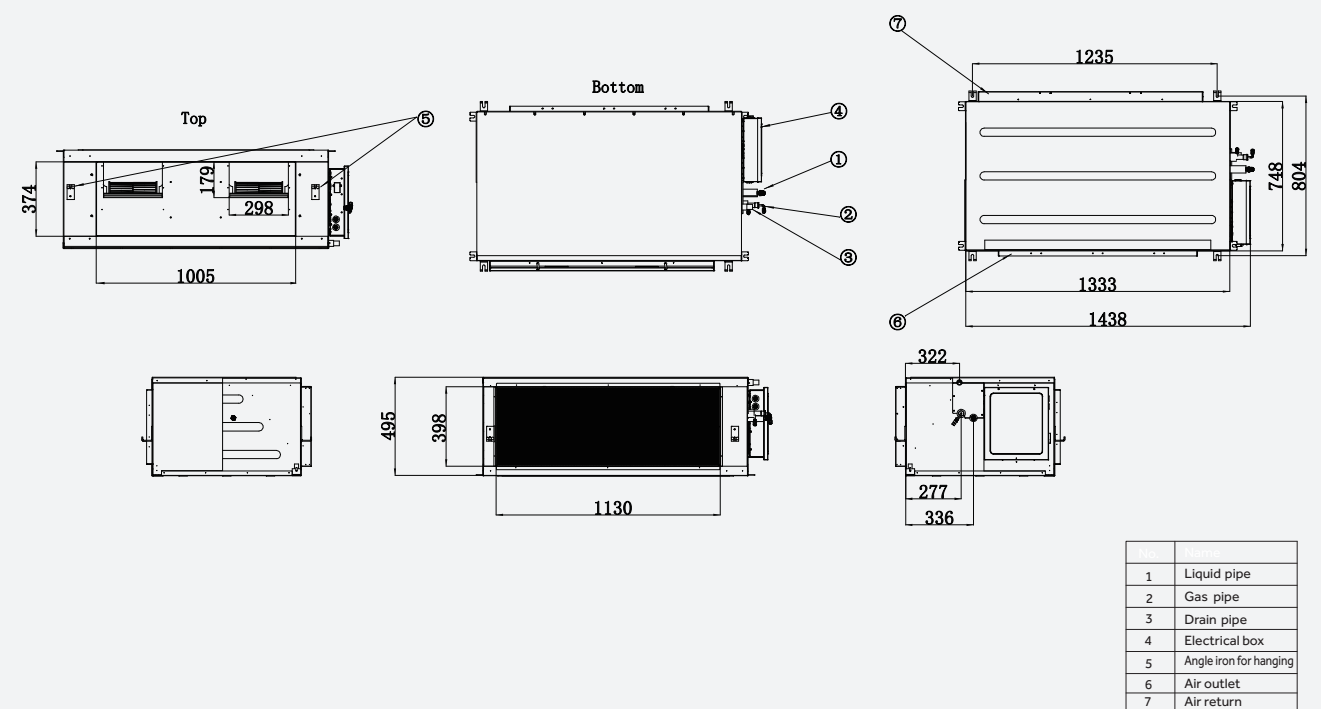
No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Hanging foot
6	Air outlet
7	Air return
8	Fresh air

**High ESP Duct(20/200Pa)** AD182MJERA(H) AD242MJERA(H) AD282MJERA(H) AD302MJERA(H)  
**Medium ESP Duct(50/100Pa)** AD182MJERAB AD242MJERAB AD282MJERAB AD302MJERAB  
**High ESP Duct(20/200Pa)** AD182MJERAD AD242MJERAD AD282MJERAD AD302MJERAD



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

**High ESP Duct (100/250Pa)** AD722MTERAB AD962MTERAB  
**High ESP Duct (0-300Pa)** AD722MTERAD AD962MTERAD



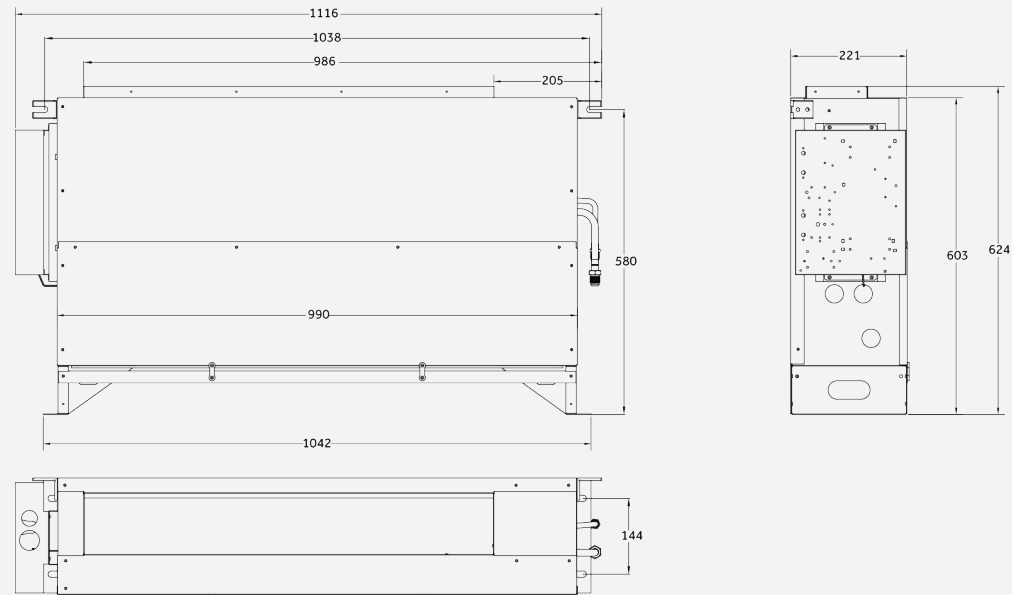
No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Angle iron for hanging
6	Air outlet
7	Air return



# Dimensions

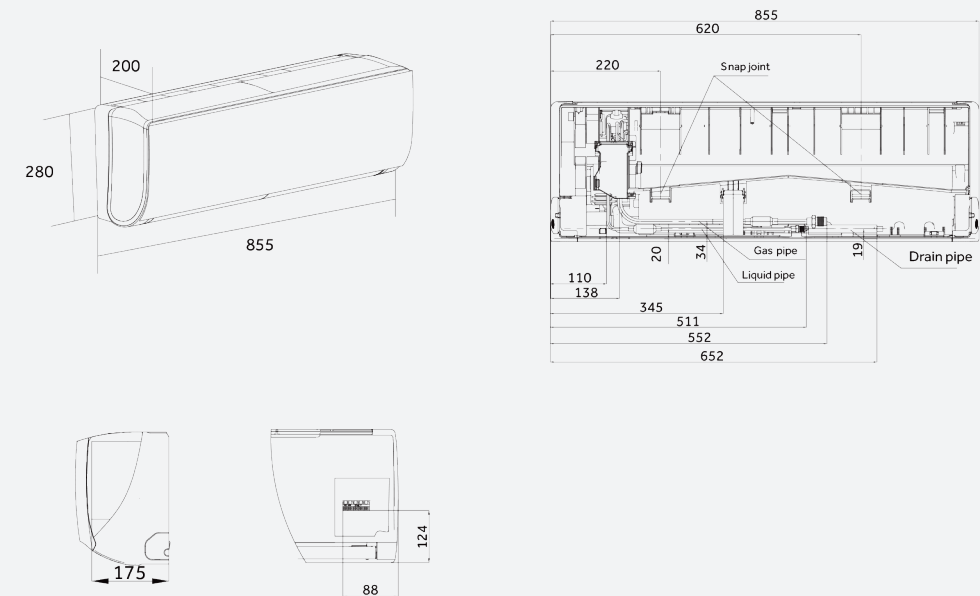
## Built-in Floor Standing

AE072MLERA AE092MLERA AE122MLERA AE162MLERA AE182MLERA AE242MLERA



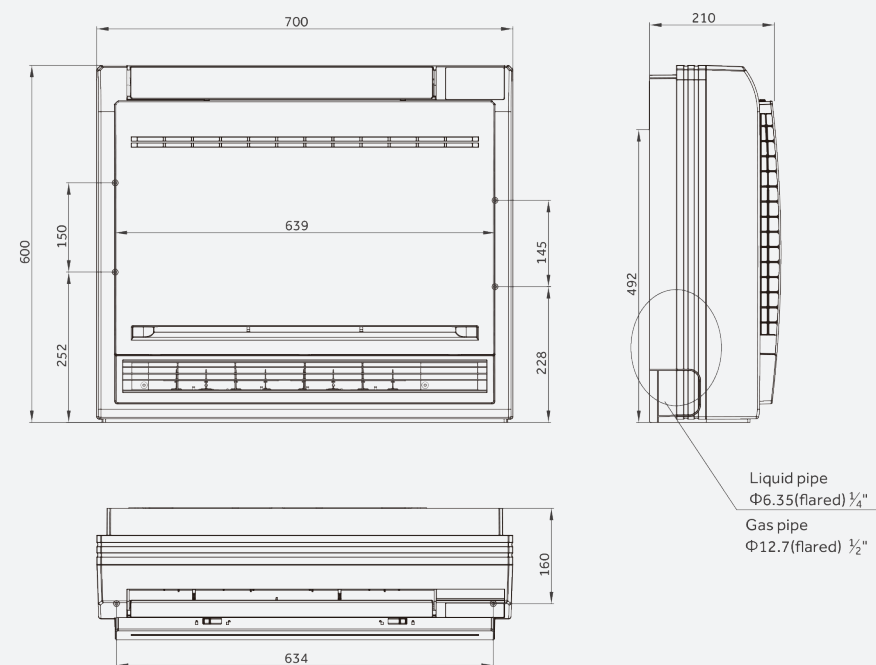
## N High Wall

AS052MNERAB AS072MNERAB AS092MNERAB AS122MNERAB  
AS052MFERAB AS072MFERAB AS092MFERAB AS122MFERAB



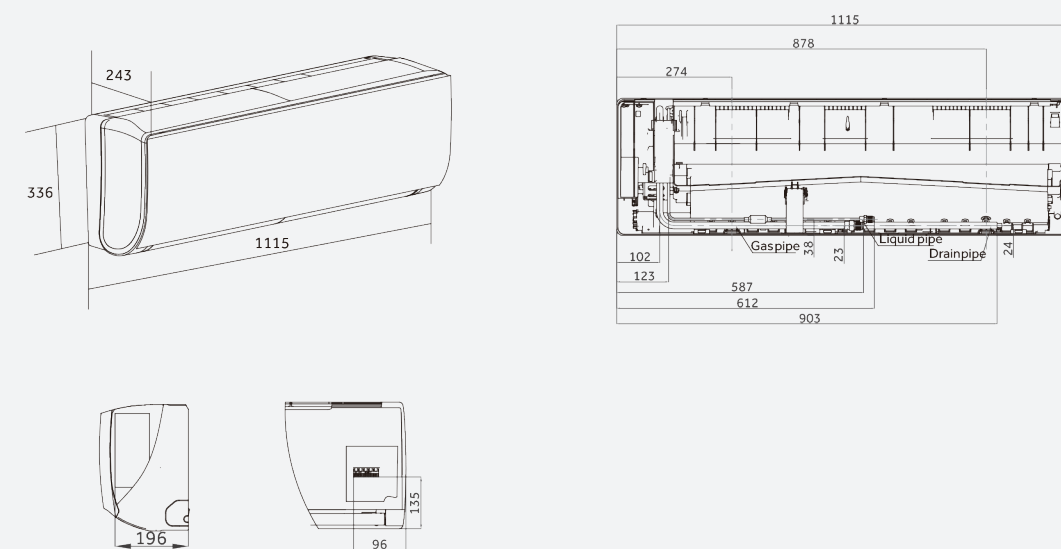
## Console

AF052MBERA AF072MBERA AF092MBERA AF122MBERA AF162MBERA AF182MBERA



## N High Wall

AS162MNERA AS182MNERA AS242MNERA  
AS162MFERA AS182MFERA AS242MFERA

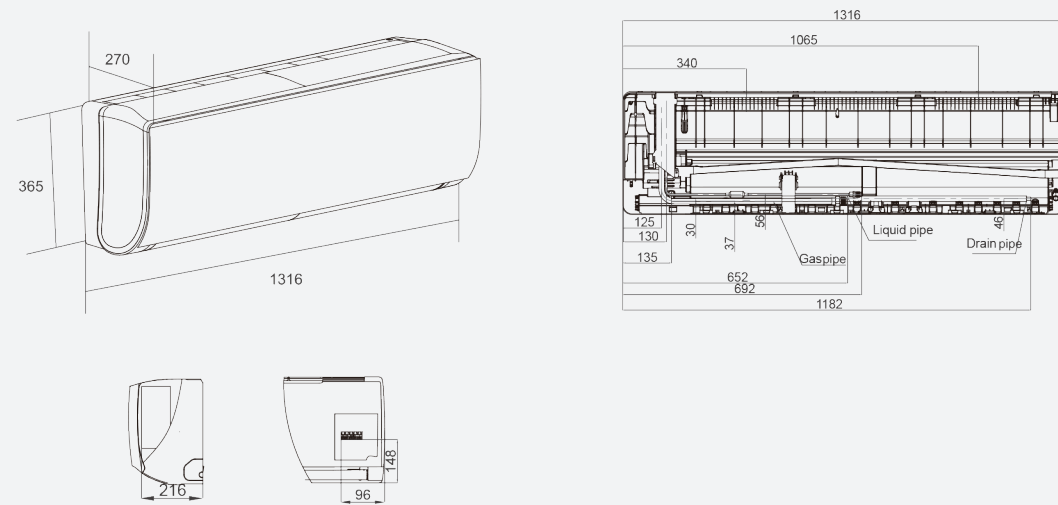




# Dimensions

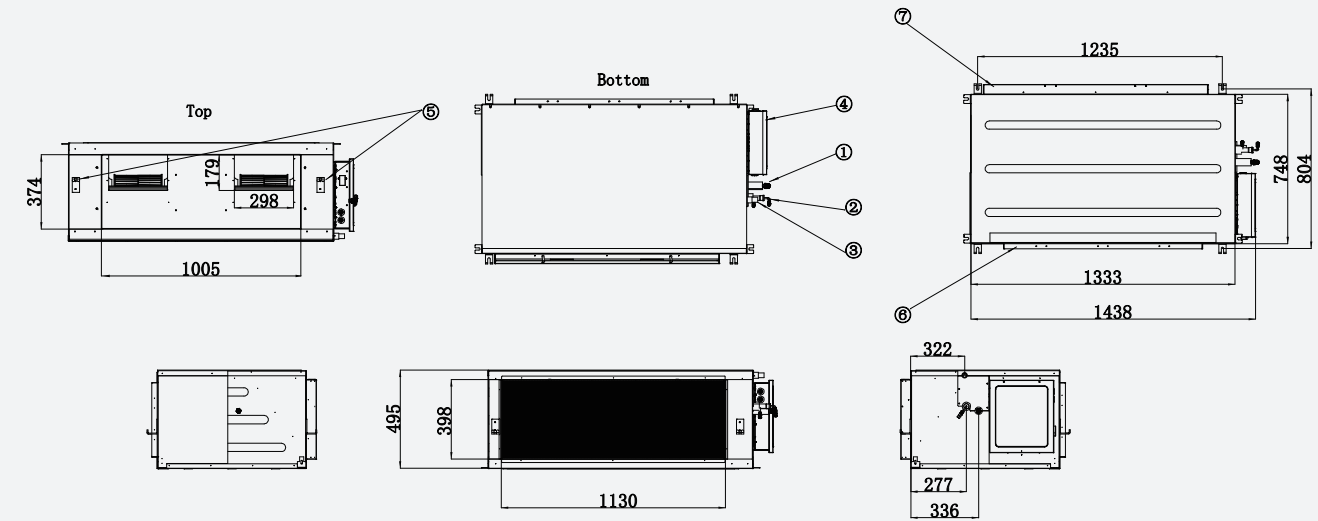
## N High Wall

AS282MNERA AS302MNERA



## Fresh Air Duct

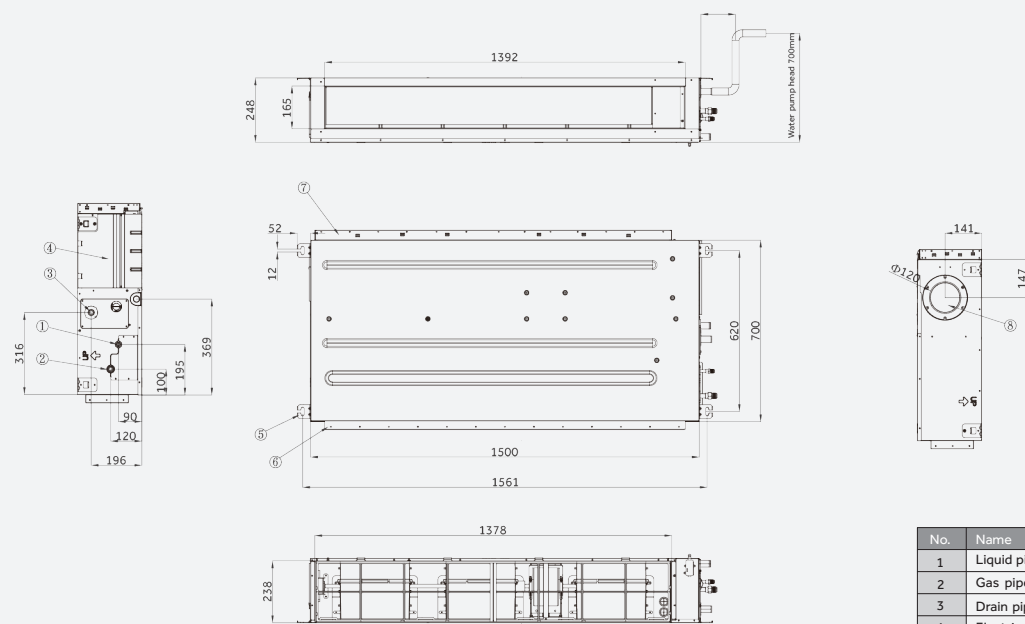
AD722MTERAF AD962MTERAF



No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Angle iron for hanging
6	Air outlet
7	Air return

## Fresh Air Duct

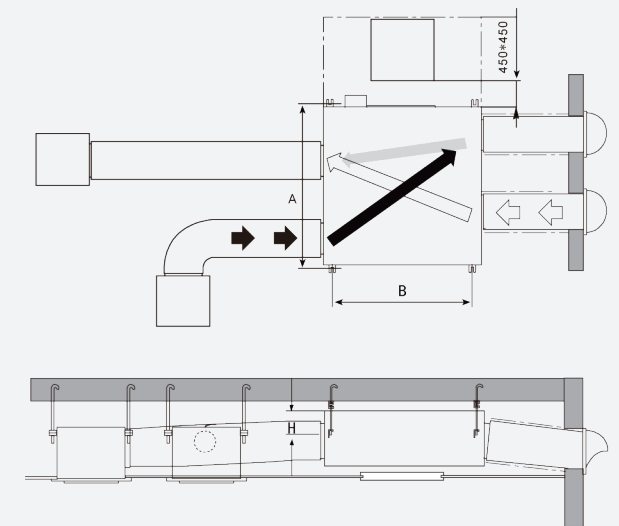
AD482MJERF



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

## HRV

ERV0150ANW ERV0260ANW ERV0500ANW ERV0800ANW ERV1000ANW



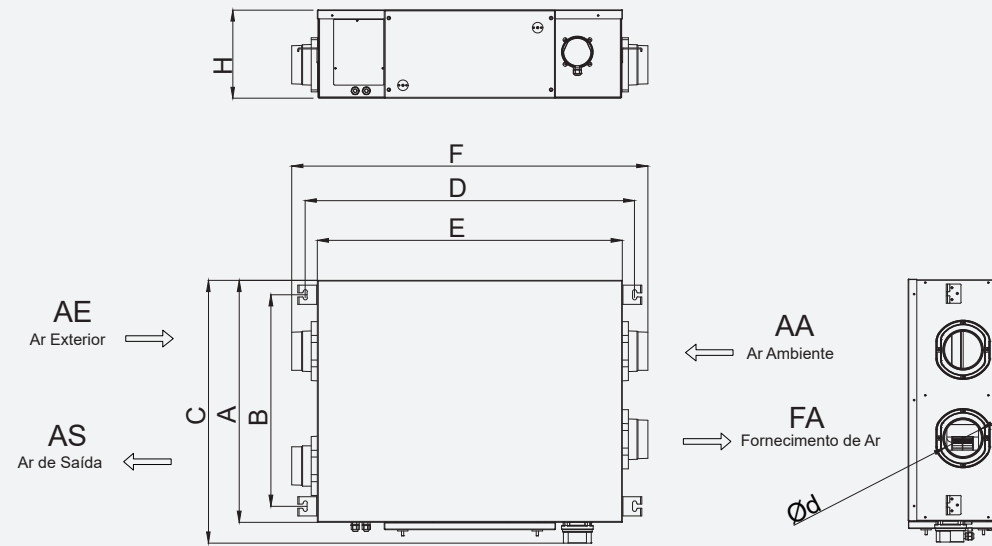
Model	A	B	H
ERV0150ANW	530	750	240
ERV0260ANW	530	750	270
ERV0500ANW	690	1000	256
ERV0800ANW	920	1200	324
ERV1000ANW	915	1250	350



# Dimensions

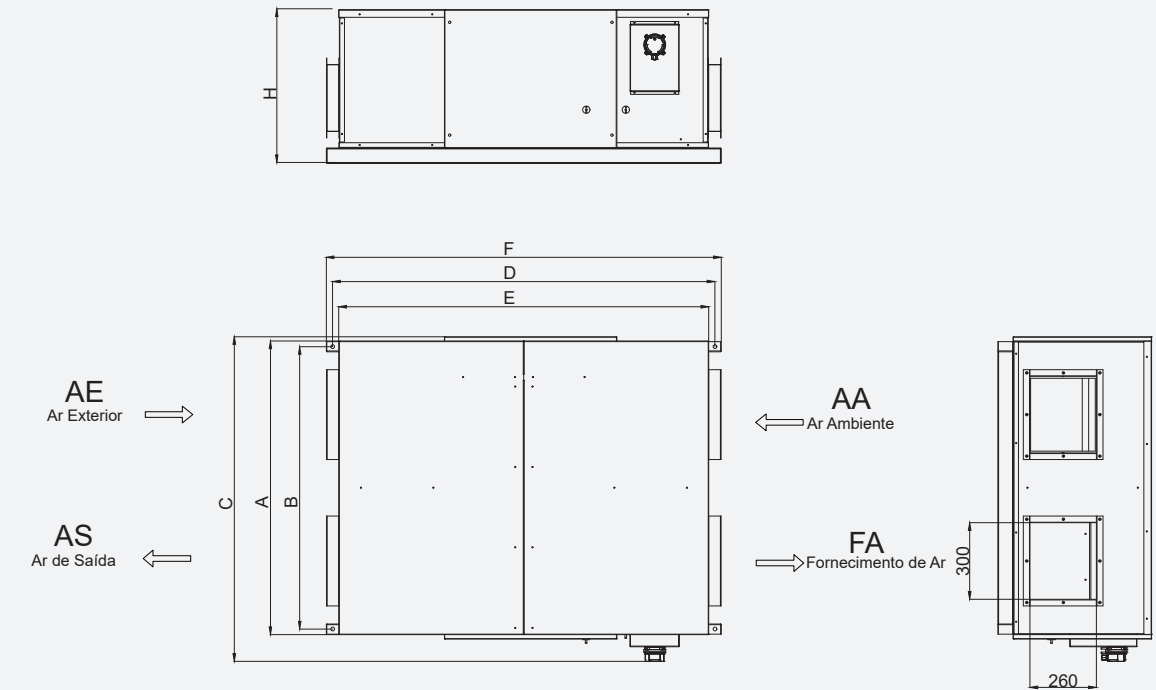
## HRV

ERV0150BNN



## HRV

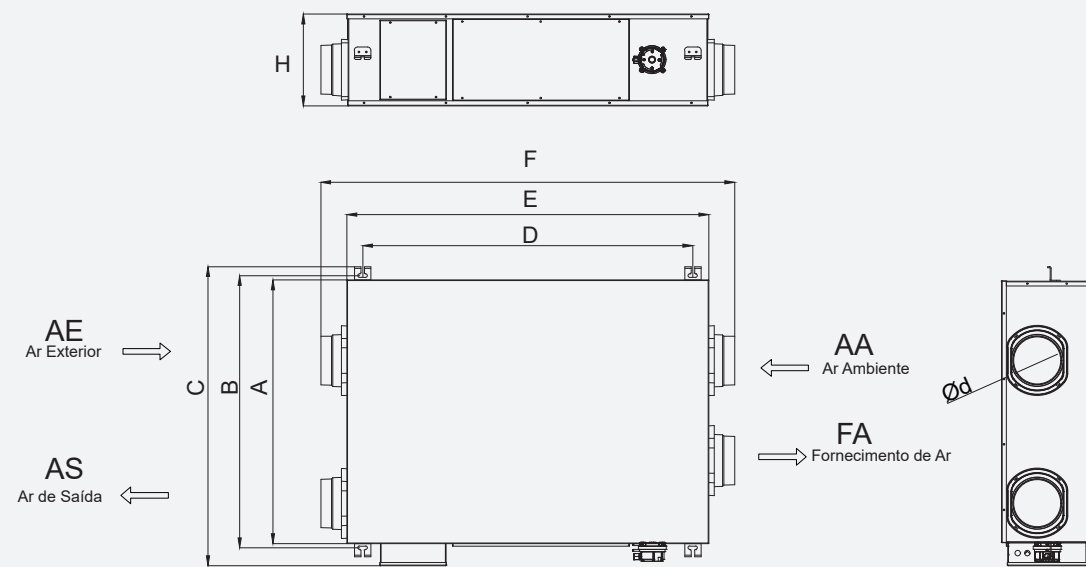
ERV2000BNN



Modelo	A	B	C	D	E	F	H	d
ERV0150BNN	650	571	710	890	820	962	235	$\Phi 110$
ERV0250BNN	750	790	848	792	835	1038	235	$\Phi 150$
ERV0350BNN	750	790	848	792	876	1038	235	$\Phi 150$
ERV0500BNN	800	831	913	1008	1100	1264	280	$\Phi 150$
ERV0800BNN	1000	1066	1158	1071	1138	1375	385	$\Phi 200$
ERV1000BNN	1295	1351	1449	1071	1150	1375	385	$\Phi 200$
ERV2000BNN	1150	1106	1272	1497	1450	1547	600	260x300

## HRV

ERV0250BNN - ERV1000BNN





# CONTROL SYSTEM

- 337** Individual Controller
- 339** Centralized Controller
- 343** BMS Solution
- 349** Multi Tenant Solution
- 350** 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

- 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-cleaning function
- Backlight
- Convenient to operate most functions through one button



#### 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-cleaning function
- Timer
- Health function
- Backlight



### Individual Controller

#### HW-SA201ABK

- Individual & group control(Max. 16 indoor units)
- On/Off, mode, fan speed, temperature, swing
- °C/°F, Temp. adjustment sensitivity  $\pm 0.5^{\circ}\text{C}(\pm 1^{\circ}\text{F})$
- Timer
- Backlight off
- Built-in infrared signal receiver for duct units
- Individual louver control for round-way cassette
- R32 refrigerant leakage alarm
- Self-cleaning function



#### 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



#### HW-PA201ABK

- Colorful screen
- Individual & group control(Max. 16 indoor units)
- Basic function : On/Off, mode, fan speed, temperature, swing
- °C/°F, Temp. adjustment sensitivity  $\pm 0.5^{\circ}\text{C}(\pm 1^{\circ}\text{F})$
- Weekly timer
- Electric heater
- Individual louver control for round-way cassette
- R32 refrigerant leakage alarm
- Multi-language



#### HA-SB101DB

- 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

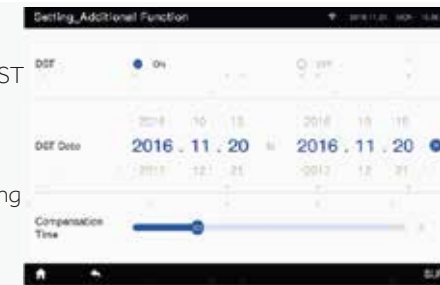
Monitoring up to 64 indoor unit could control HRV and monitoring the state of all IDU display fault IDU number



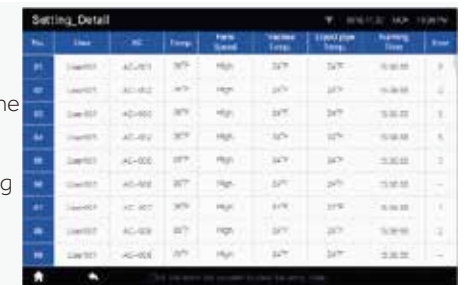
Set schedule for unit, group, all time control could be add, change, delete, unit control, group control, all On/Off



Turn ON/OFF the DST DST schedule time setting DST compensation setting



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



Interface display mode choice: list or icon all On, all Off, control all, control select



Setting password according to user demand



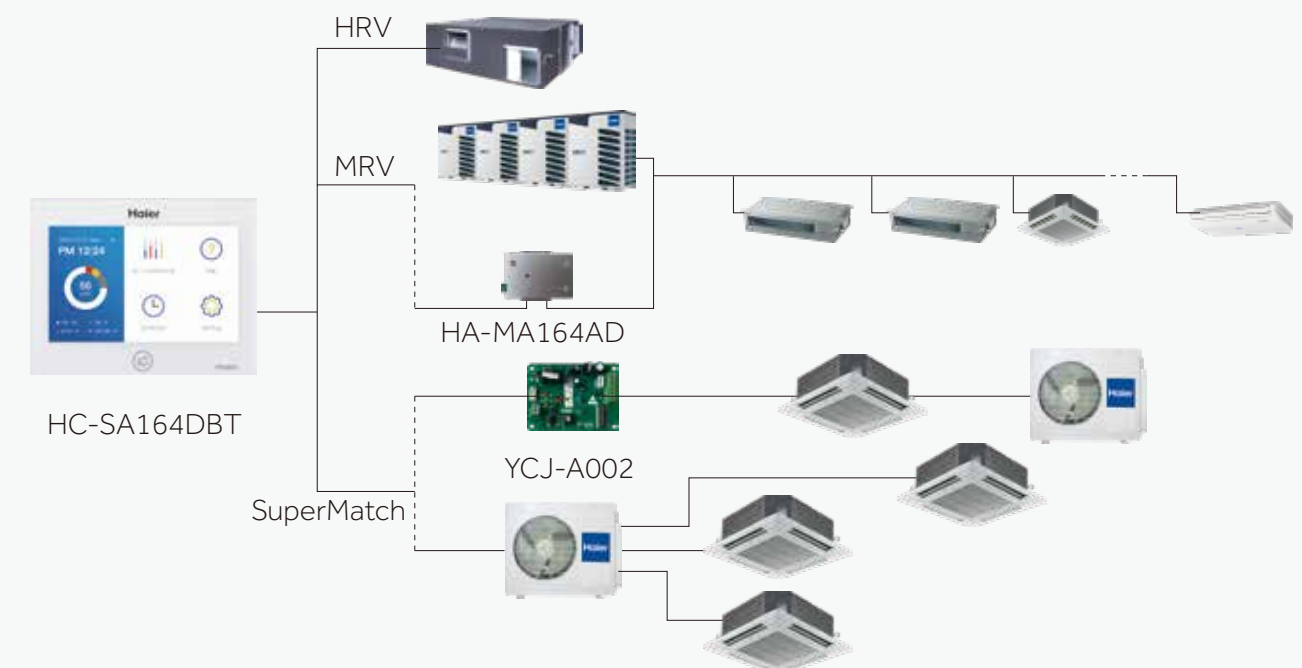
## Centralized Controller

### 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



## HC-SA164DBT system





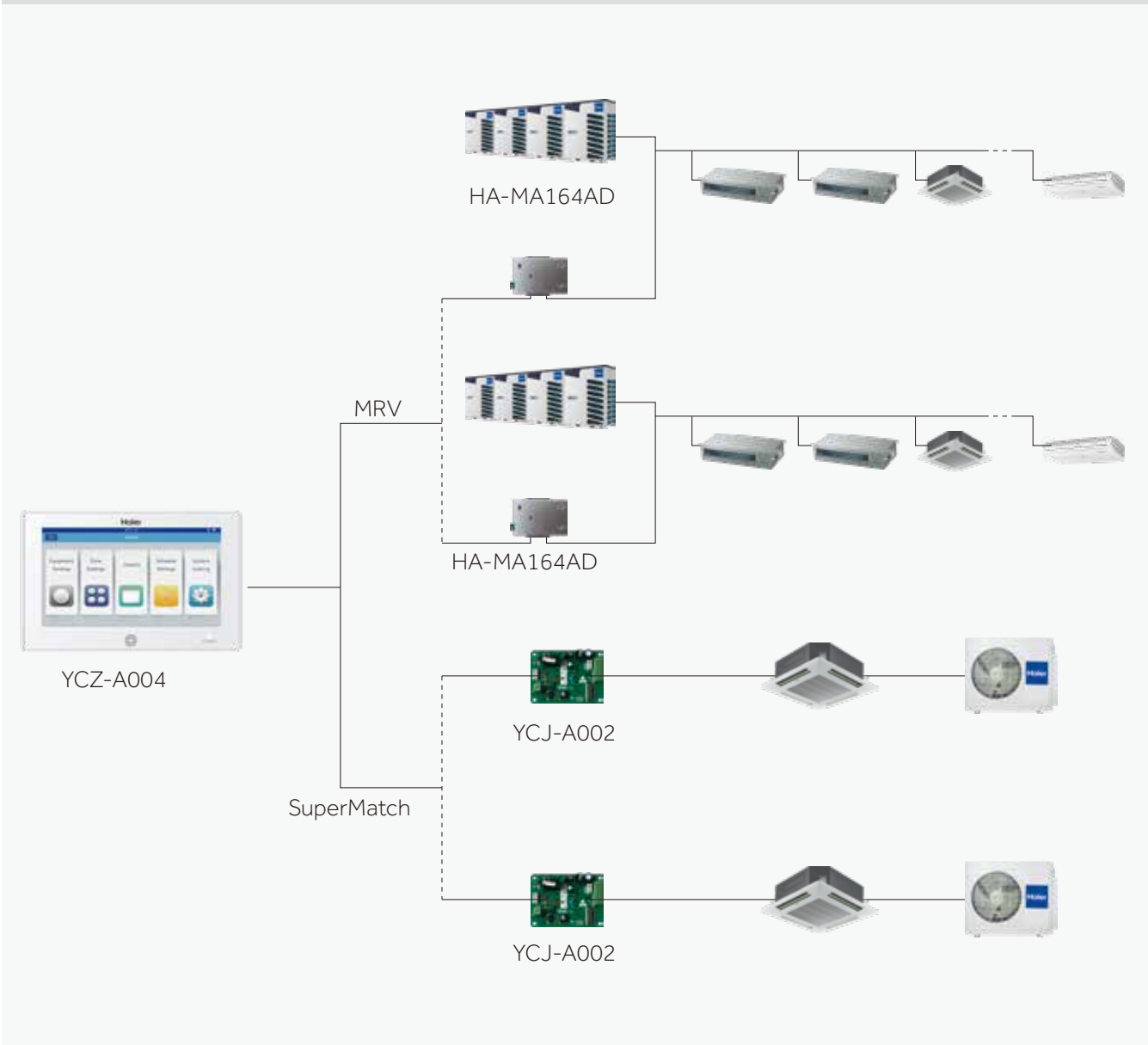
## Centralized Controller

### 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



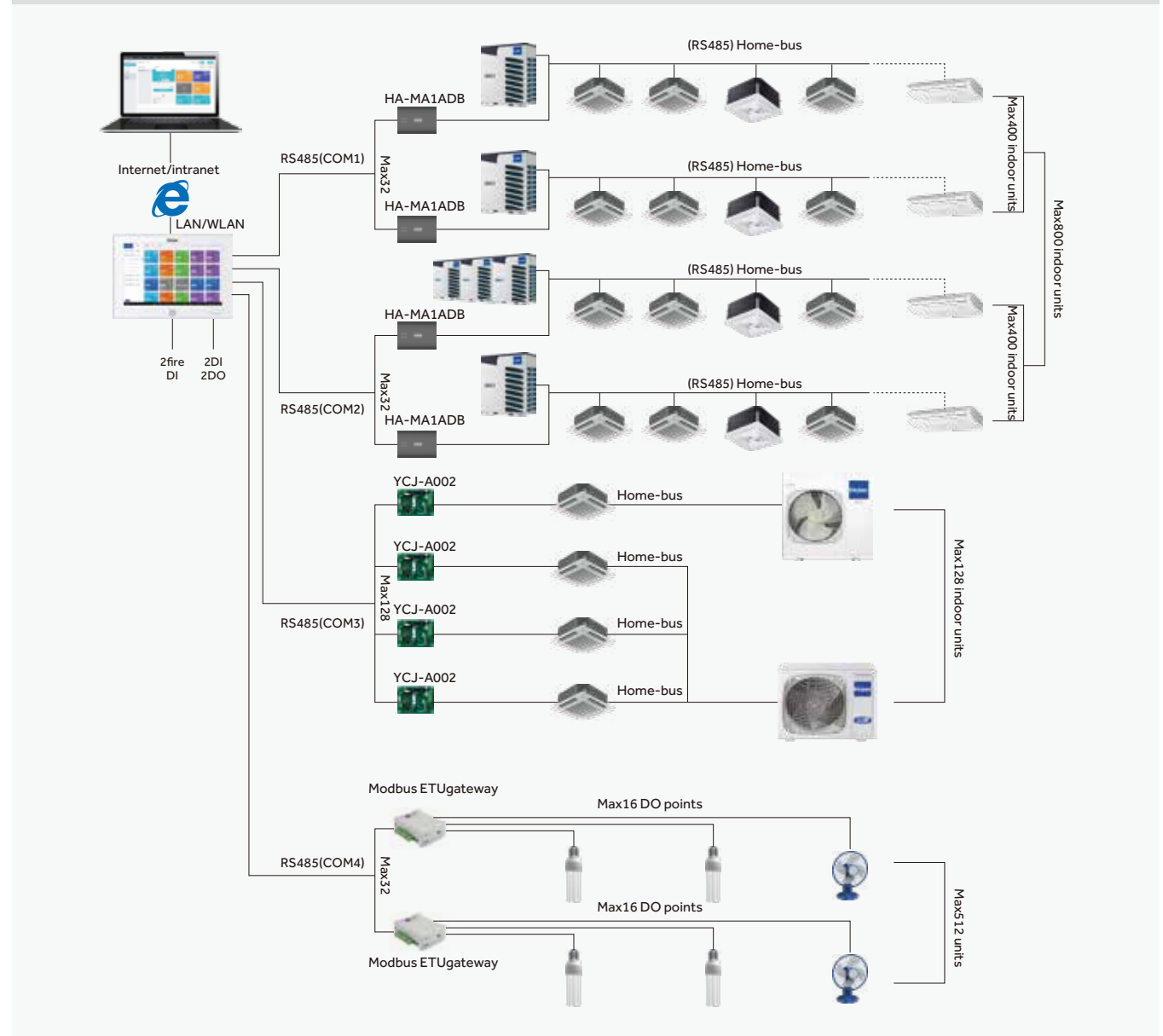
## Centralized Controller

### HC-LA1CDBT

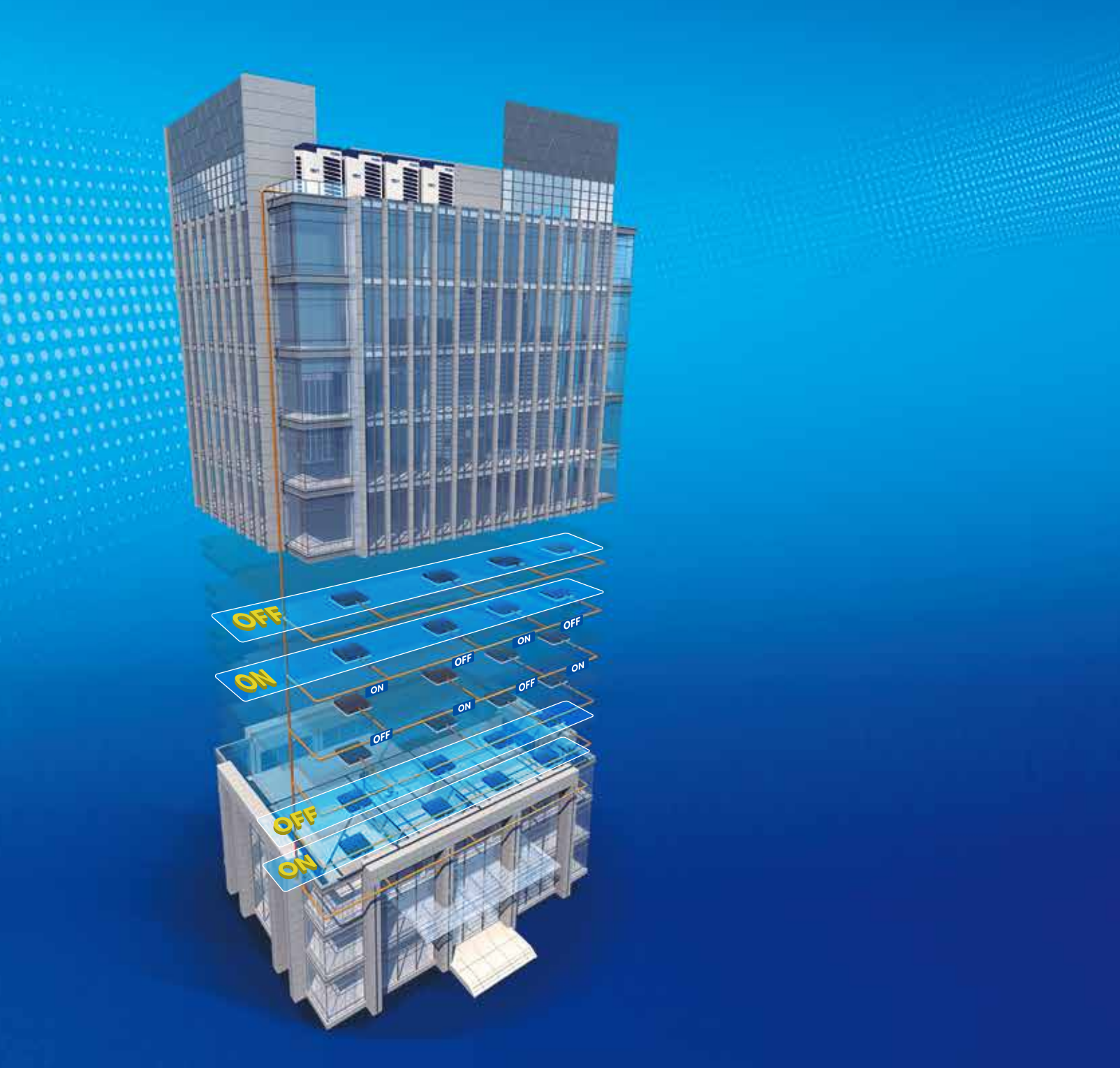
- 12.5-inch TFT LCD touch screen
- Max. 800 MRV indoor units and Max. 128 LCAC IDUs connectable for one controller totally 928 IDUS connectable
- Floor plan layout view
- Web access and email alarm
- Weekly schedule and special day setting
- Integrate 3rd party devices like fire alarm, lighting with Haier 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



### 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.

Haier 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.

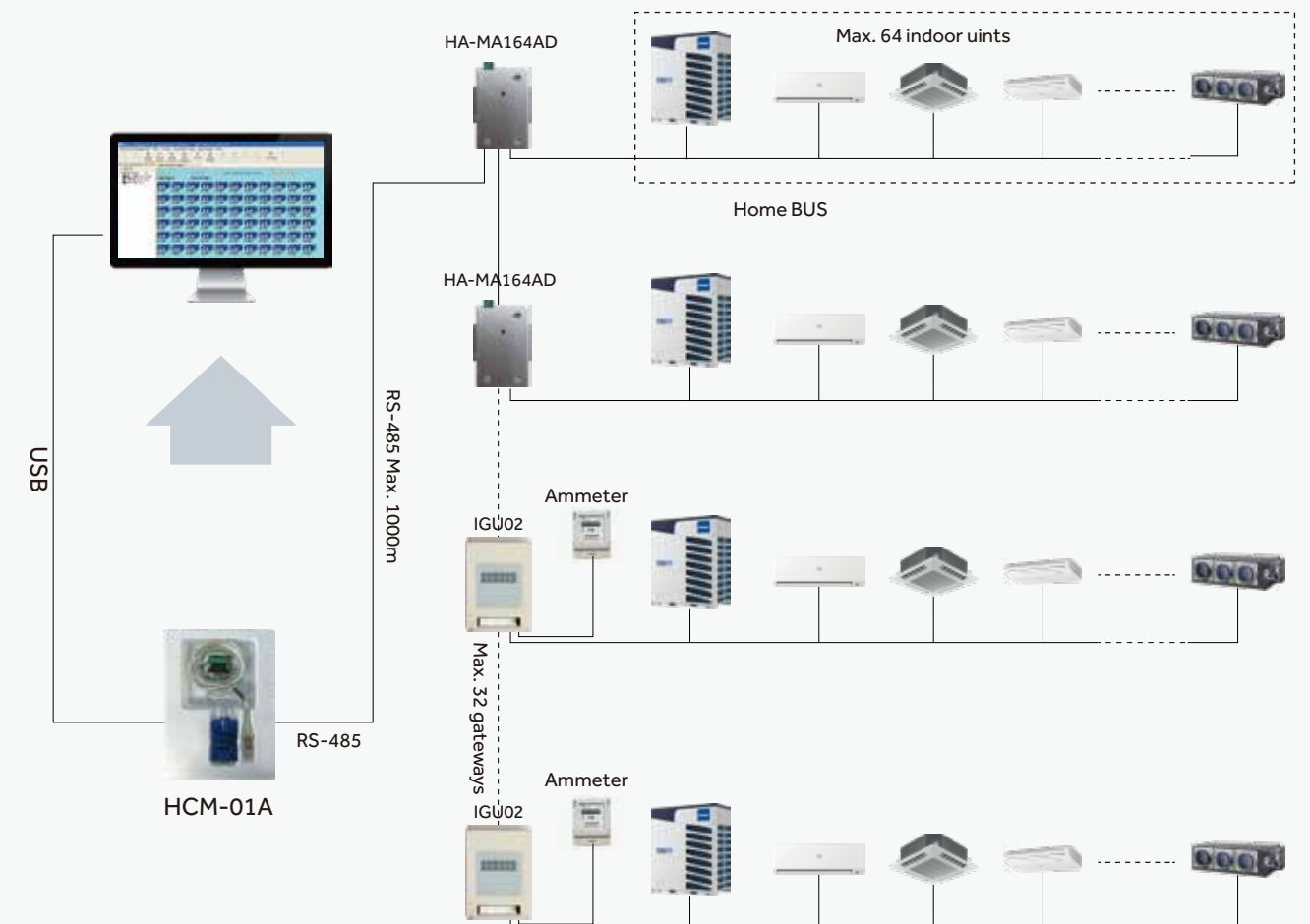
## BMS Monitor

### 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 5 system 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.



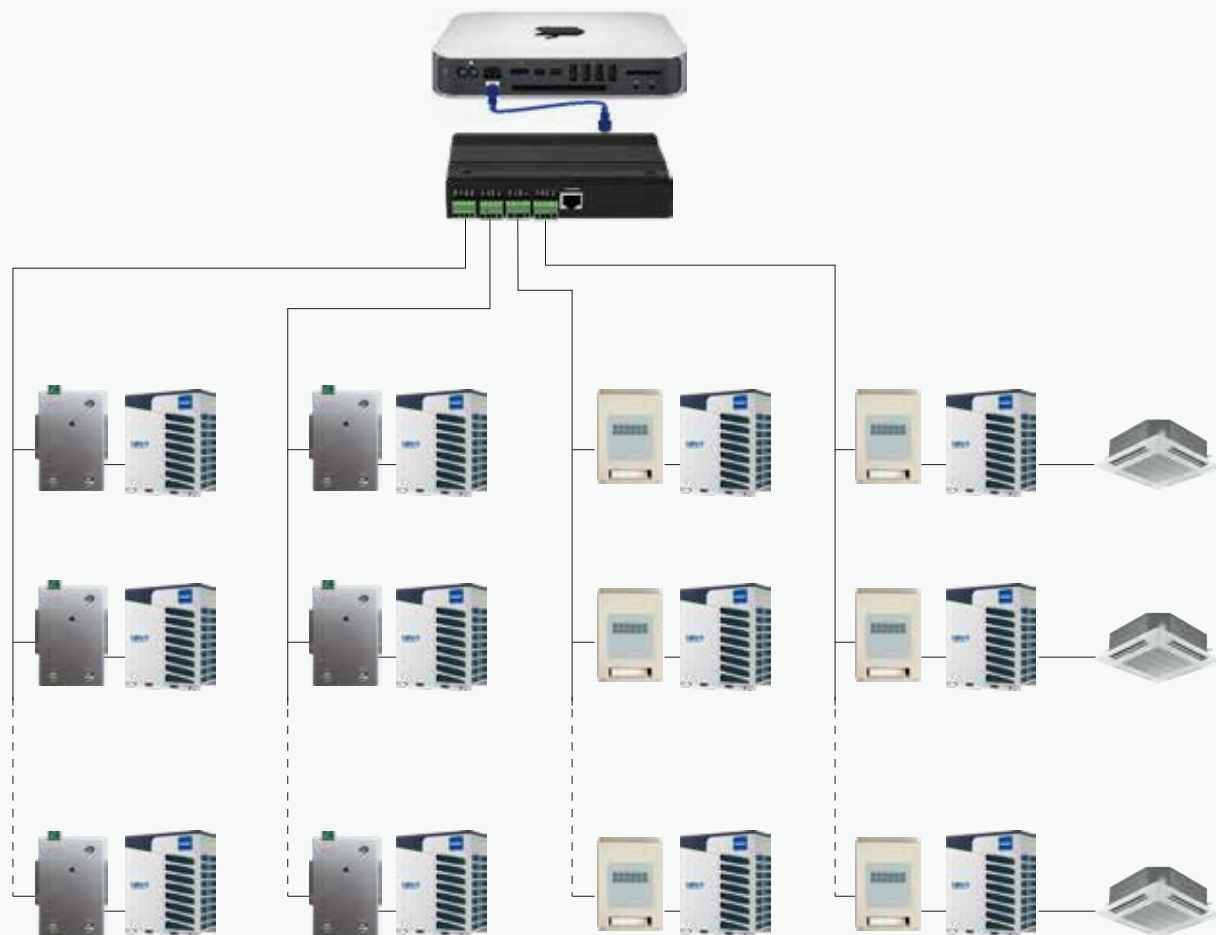
# BMS BMS Monitor

## 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
- 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)
- MRV 5 system and upgraded MRV SII(8/10/12HP) outdoor units can directly connect with HCM-03A



## HCM-03A system



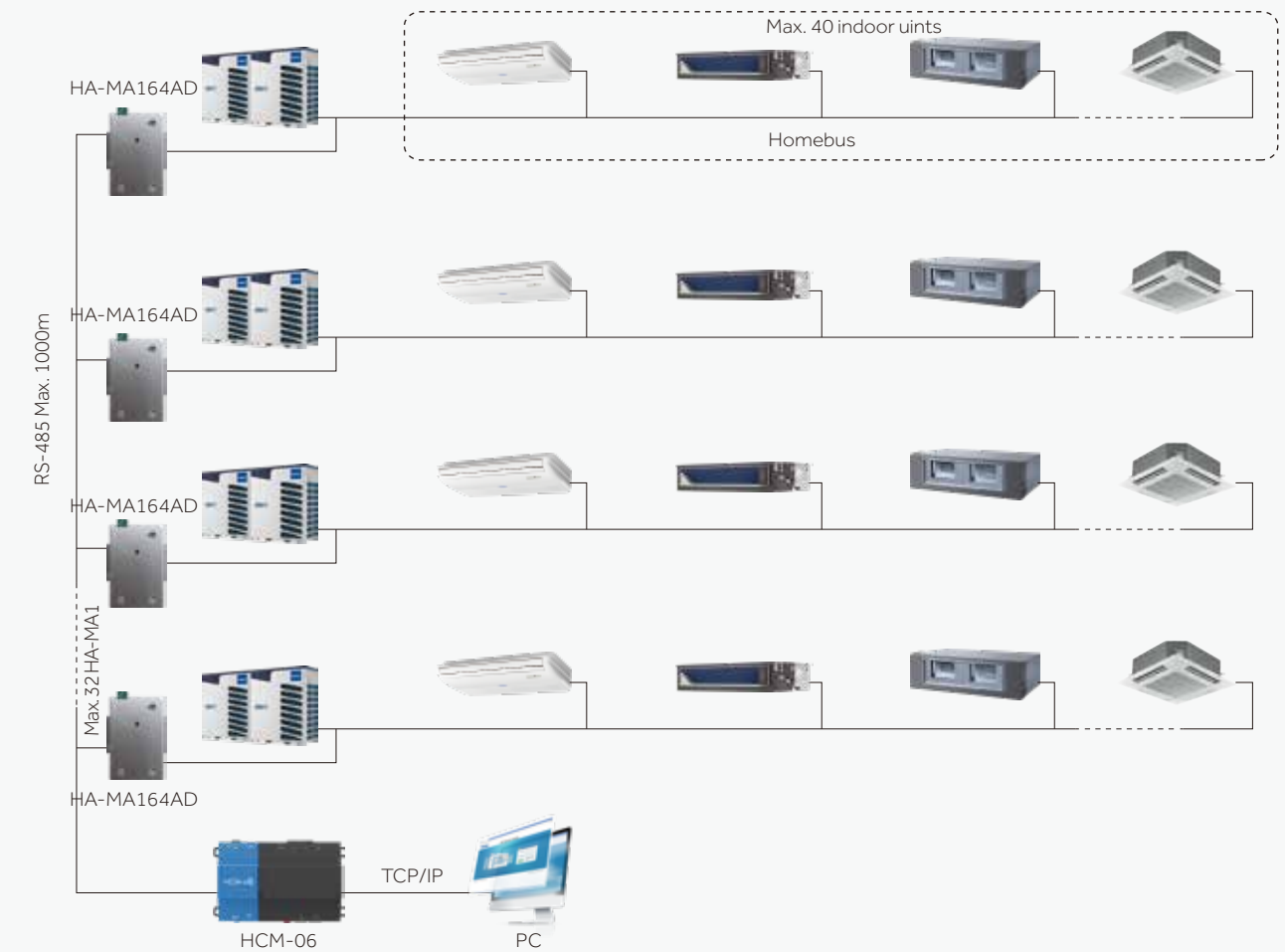
# BMS BMS Monitor

## HCM-06

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

Haier 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

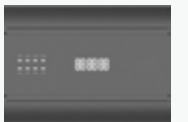
### HA-MA164AD

- Protocol adapter, convert homebus to modbus
- Gateway: modbus rtu
- Max. 64 indoor units can be connected with one HA-MA164AD
- MRV 5 system and upgraded MRV SII (8/10/12HP) 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,05,05A), each system requires one IGU02
- Max.40 indoor units can be connected with one IGU02

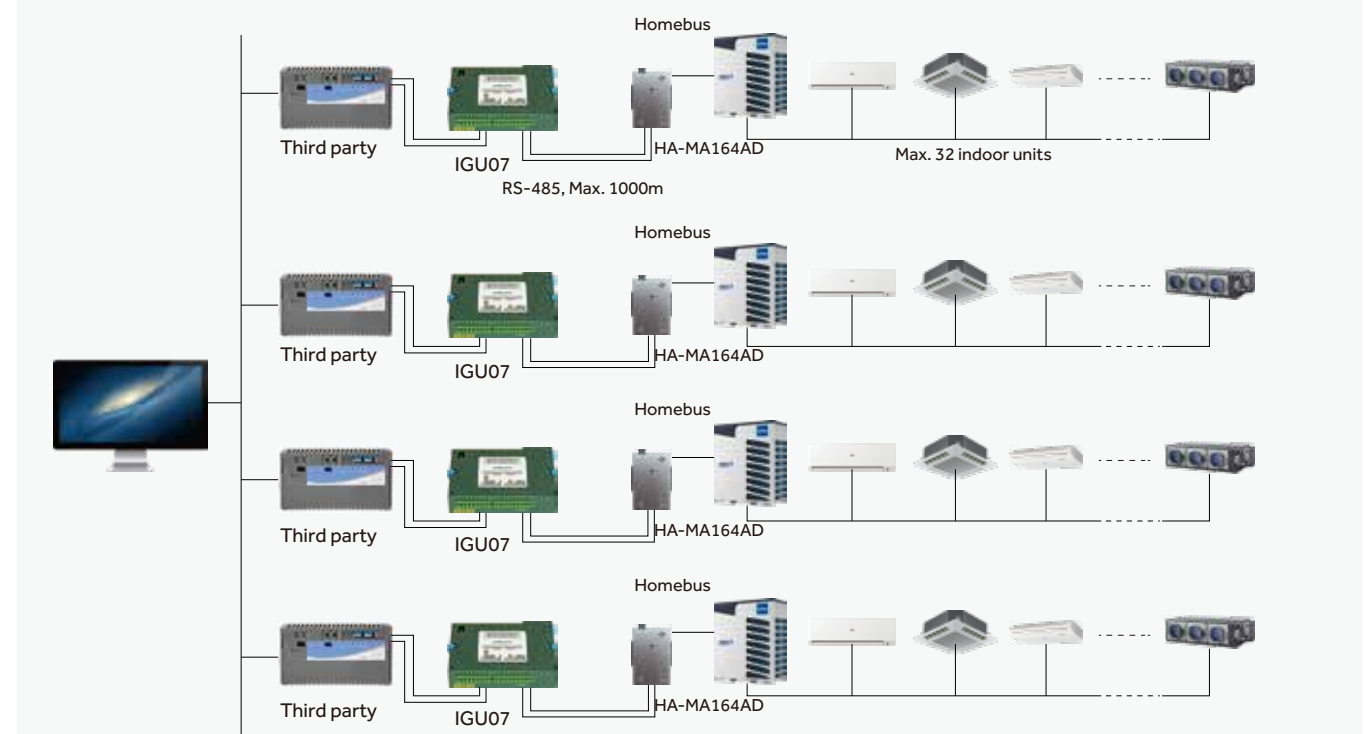


### IGU07

- 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 IGU02 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 manufacture Intesis directly

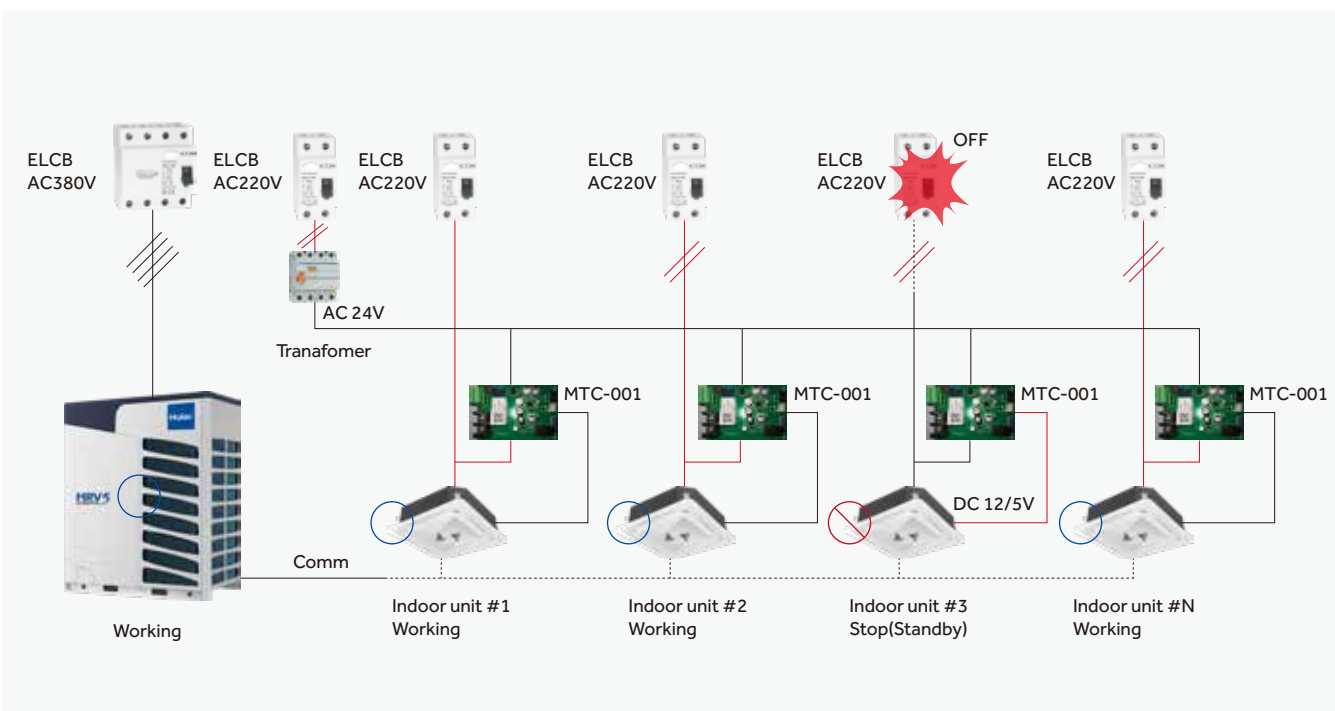


## Multi Tenant Solution

### MTC-001

Application Scenario:

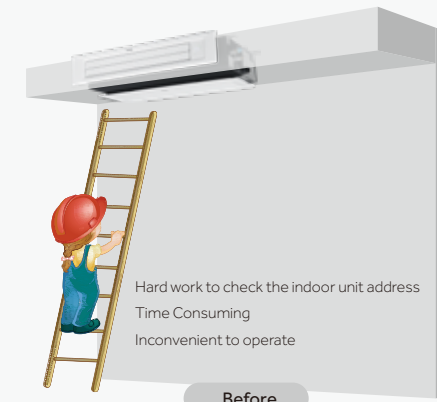
- a. The multi tenant site using separate circuit breaker for each indoor unit
- b. The hotel room using key-tag system which cuts off the power of indoor unit directly
- When it is detected that any connected indoor unit is forcibly cut off, the MTC-001 provides DC power to the indoor PCB to ensure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



## Service Tool

### Address setting and checking tool YR-NS

- On/Off, mode, fan speed, temperature setting, swing
- IDU address checking
- IDU address setting



Before



Now

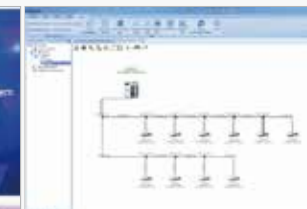
### Haier HACS Selection Software -easy to Design and Customization

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

With the Haier 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 jpg drawings. The selection software guides you within design rules and offers a comprehensive system design report under pdf, word or excel format.



Launch Page



System Layout Page



System Configuration Page



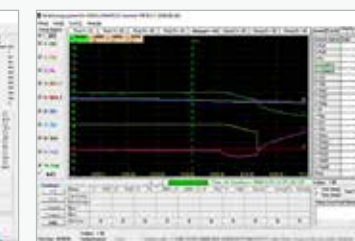
Synchronous Information on PC & APP

### 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.



TD-03




























# 🔗 Controllers Match Table For MRV Indoor Units

Outlook	Series	Model						
			YR-HRS01	YR-HQS01	HW-BA116ABK	HW-BA101ABT	HW-SA201ABK	HW-PA201ABK
	1-way Cassette	AB**2MAERA	•	•	•	•	•	•
	2-way Cassette	AB**2MBERA	•	•	•	•	•	•
	Compact Cassette	AB**2MCERA(M)	•	•			•	•
	Round Way Cassette	AB**2MRERA	•	•			•	•
	4-way Cassette	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**2MJERAB AD**2MJERAC	•	•	•	•	•	•
	High ESP Duct (20/200Pa)	AD**2MJERAD	•		•	•	•	•
	High ESP Duct (100-250Pa)	AD**2MGERA						•
	High ESP Duct (0-300Pa)	AD**2MTERAD		•			•	
	High Wall (N platform)	AS**2MFERA(B) AS**2MVERAC	•	•	•	•	•	•
	High Wall (N platform)	AS**2MFERA AS**2MFERAC	•	•	•	•	•	•
	Console	AF**2MBERA	•	•			•	•
	Built-in Floor Standing	AE**2MLERA	•	•	•	•	•	•
	Fresh Air Duct	AD482MJERF 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 III, MRV III-PLUS	2 outdoor units
Gather pipe		HZG-30A	Refrigerant gathering for MRV III, MRV III-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-B335A	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(heat recovery)
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: **Albania**  
Project Name: **Studioluçe, Tirana**  
Equipment Installed: **MRV5**



Country: **Albania**  
Project Name: **Hilal Palace (Bar and Restaurant), Golem**  
Equipment Installed: **MRV5**



Country: **Albania**  
Project Name: **EU4 Schools, Sukth**  
Equipment Installed: **MRV5**



Country: **Albania**  
Project Name: **Urban Fit, Tirana**  
Equipment Installed: **MRV5**





# Reference Projects

Country: **Australia**  
Project Name: **Queensland Toondah**  
Equipment Installed: **MRV S + Hydro Box**



Country: **Czech Republic**  
Project Name: **Prague Main Railway Station**  
Equipment Installed: **MRV 5**



Country: **Australia**  
Project Name: **Hilton Hotel in New Caledonia**  
Equipment Installed: **MRV5**



Country: **Czech Republic**  
Project Name: **Mountfiled Shop**  
Equipment Installed: **MRV 5+MRV S**





# Reference Projects

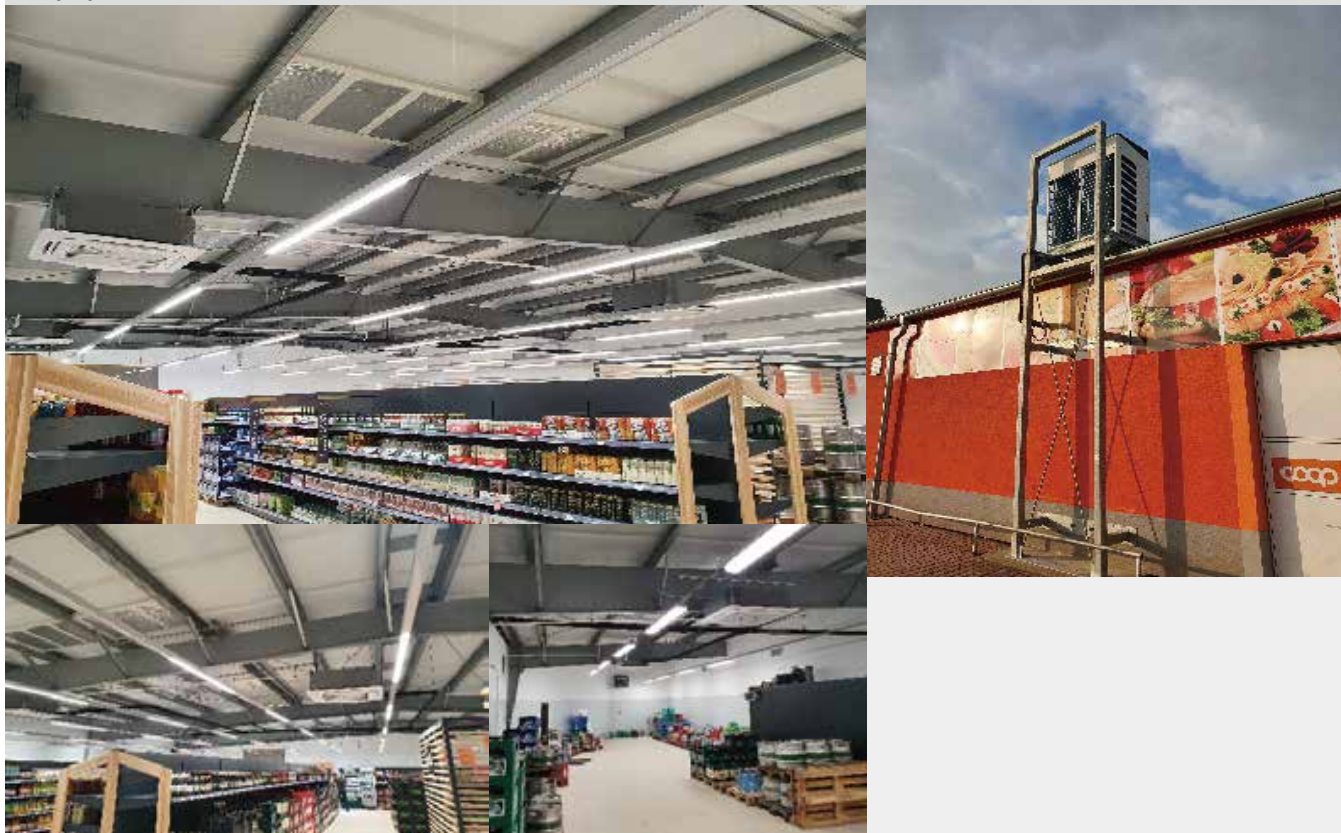
Country: **Czech Republic**  
Project Name: **Outlet Arena Moravia**  
Equipment Installed: **MRV-S + MRV5**



Country: **Czech Republic**  
Project Name: **Pragolaktos**  
Equipment Installed: **MRV-S + MRV5**



Country: **Czech Republic**  
Project Name: **Renta Tábor**  
Equipment Installed: **MRV 5**



Country: **Czech Republic**  
Project Name: **DEK Stavebniny**  
Equipment Installed: **MRV-S**





# Reference Projects

Country: **Italy**  
 Project Name: **Shoes Manufacturing Industry in Fossò (Venice)**  
 Equipment Installed: **MRV 5**



Country: **Italy**  
 Project Name: **Ca 'Foscari University**  
 Equipment Installed: **MRV 5**



Country: **Italy**  
 Project Name: **Audi Shop**  
 Equipment Installed: **MRV 5+MRV S**



Country: **India**  
 Project Name: **Enrise Sayaji Hotels**  
 Equipment Installed: **MRV 5+ Light Commercial**





# Reference Projects

Country: **India**  
Project Name: **Saveetha Engg. College**  
Equipment Installed: **MRV 5**



Country: **Israel**  
Project Name: **Acro Real Estate High-end Residential Project**  
Equipment Installed: **MRV SII**



Country: **India**  
Project Name: **Sky Mansion (Sample)**  
Equipment Installed: **MRV 5**



Country: **Malta**  
Project Name: **St. Vincent de Paul Residence**  
Equipment Installed: **MRV IV+MRV S**





# Reference Projects

Country: **Pakistan**  
Project Name: **Meezan Bank Head Office**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Chase Value Centre**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Interloop HD-2**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Ramada Hotel**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **Pakistan**  
Project Name: **Integrated Medical Care (IMC) Hospital**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Nagina Head Office's HVAC Project**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Dr. Ziauddin Hospital**  
Equipment Installed: **MRV 5**



Country: **Pakistan**  
Project Name: **Cybernet Pakistan**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **Slovenia**  
Project Name: **Residential Building**  
Equipment Installed: **MRV 5**



Country: **Switzerland**  
Project Name: **McDonald's restaurant**  
Equipment Installed: **MRV 5-H**



Country: **Slovenia**  
Project Name: **Business Zone**  
Equipment Installed: **MRV5-H**



Country: **Spain**  
Project Name: **Sports Hall in Bollullos de la Mitación(club)**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **Spain**  
Project Name: **Guardería Hospital Niño Jesús**  
Equipment Installed: **MRV-S**



Country: **Spain**  
Project Name: **Facultad de Turismo de Murcia**  
Equipment Installed: **MRV 5**



Country: **Spain**  
Project Name: **B&B Hotel**  
Equipment Installed: **MRV 5+MRV S**



Country: **Spain**  
Project Name: **Kiwoko**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **Spain**  
Project Name: **Faculty of Statistical Sciences**  
Equipment Installed: **MRV S**



Country: **Thailand**  
Project Name: **Siamgrand Hotel**  
Equipment Installed: **MRV 5**



Country: **Thailand**  
Project Name: **Histar Technology ( Thailand ) Renovation Project**  
Equipment Installed: **MRV 5**



Country: **Thailand**  
Project Name: **Paolo Hospital**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **Turkey**  
Project Name: **Caspian Shopping Center**  
Equipment Installed: **MRV 5**



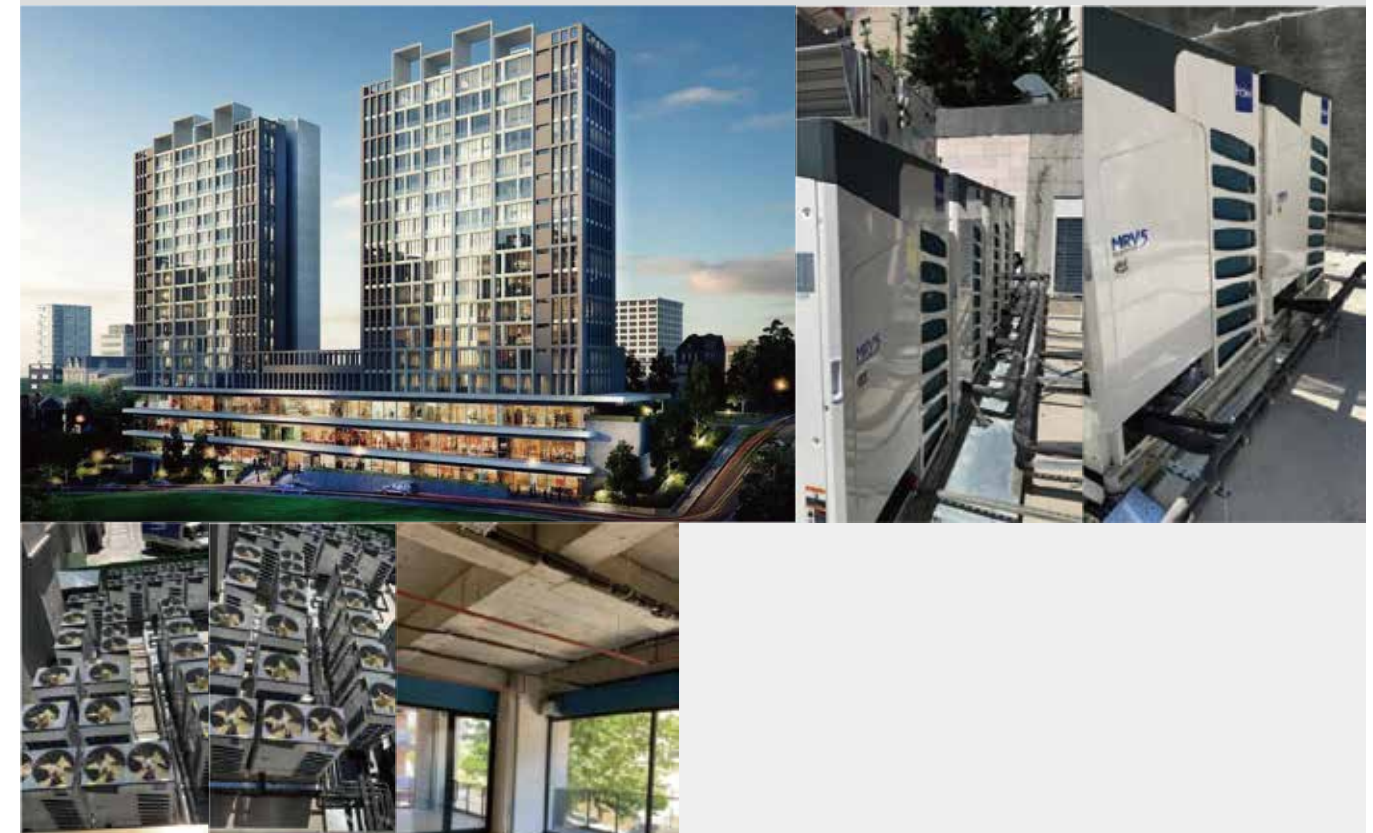
Country: **Thailand**  
Project Name: **Mukdaharn Hospital**  
Equipment Installed: **MRV5**



Country: **Thailand**  
Project Name: **Sukhumvit Hotel**  
Equipment Installed: **MRV 5, MRV S**



Country: **Turkey**  
Project Name: **Caspian Shopping Center**  
Equipment Installed: **MRV 5**





# Reference Projects

Country: **United States (Austin)**  
Project Name: **Fairfield Inn Hotel**  
Equipment Installed: **MRV 5**



Country: **United States (Austin)**  
Project Name: **Office Building**  
Equipment Installed: **MRV 5**



Country: **United States (Austin)**  
Project Name: **Elementary School**  
Equipment Installed: **MRV 5**



Country: **Ukraine**  
Project Name: **IT-Center**  
Equipment Installed: **MRV 5**





Date     /     /

