

Haier

MRV

Australia & New Zealand



Haier Intelligent Buildings

Haier Brand Story

Established in 1984, Haier Group is a world-leading provider of solutions to better life. In the process of sustainable innovation and entrepreneurship, Haier always upholds the principle of "prioritizing people's value". Mr. Zhang Ruimin, Chairman of the Board and CEO of Haier Group, first proposed the Rendanheyi Model in September 2005. After 15 years of development and innovation, Rendanheyi has achieved trans-culture, trans-industry and trans-field fusion and replication with its contemporary features, universality characteristics.

Focusing on user experience, Haier has grown from the once collectively owned small factory on the verge of bankruptcy into an ecosystem that leads the IoT era. As the world's first and only IoT ecosystem brand, Haier has been included on the list of BrandZ™ Top 100 Most Valuable Global Brands for two consecutive years. Haier has topped Global Major Appliances Brand Rankings by Euromonitor International for 11 consecutive years. Its subsidiary Haier Smart Home is among the list of Global 500 of Fortune.

To date, Haier Group owns four listed companies, has six platforms including Haier Smart Home, COSMOPlat, Ririshun, Yingkang Life, Haier Biomedical, Haina Cloud and HCH, and has seven global brands such as Haier, Casarte, Leader, GE Appliances, Fisher & Paykel, AQUA and Candy. It has successfully incubated 5 unicorn companies and 23 gazelle companies. Moreover, Haier has established 10+N open innovation systems, 25 industrial parks, 124 manufacturing centers, 108 marketing centers and more than 140,000 sales networks around the globe, it has gone deep into 160 countries and regions globally, serving more than 1 billion users' families.

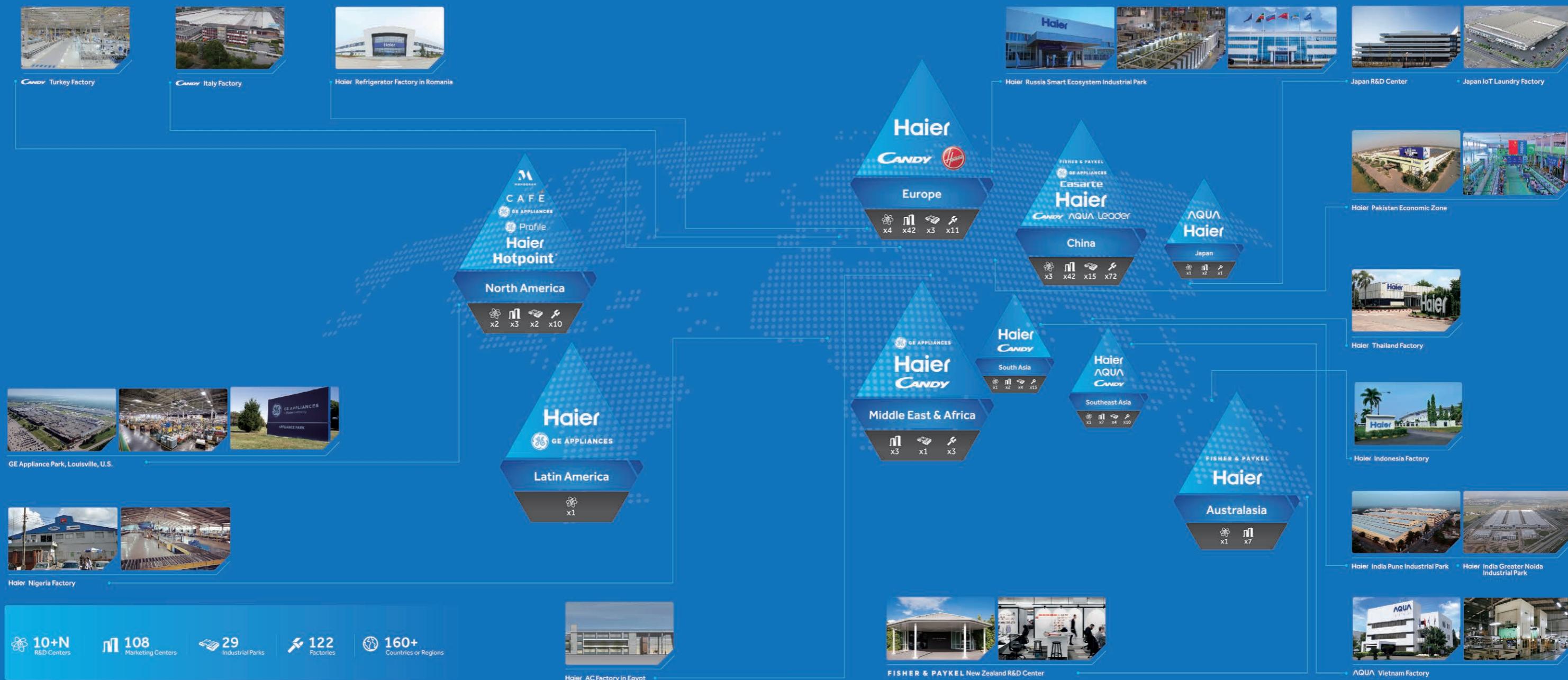
Upholding the vision of "creating new engines to growth in the era of IoT with Rendanheyi Model", Haier Group is committed to working with its world-class ecosystem partners to continuously build premium brand, scenario brand and ecosystem brand, and to set up IoT ecosystems in clothing, food, accommodation, travel, health, elderly care, biomedicine and education, and to tailor personalized smart life for users around the globe.



Haier Global Network

Haier has owned 10+N R&D centers, 29 industrial park, 122 factories, 108 marketing centers across the world, and the sales network over 160 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.



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 Enterprises 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



Simulated
Rainfall Test



Enthalpy-difference
Test



Safe Test



Acoustic Labs



Centralized Control



Simulated
Snow Test



Simulated
Sunshine Test



Limiting Condition
Test



Humidity
Condition Handling



Double 85 Test



Drop Test

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.

1996	Home VRF (Home MRV) First unit in China Haier first home inverter multi	2005	Modular combination MRV II First pure DC inverter in China Technology from Toshiba	2012	MRV S Full DC inverter Side discharge outdoor Largest capacity of side discharge	2014	MRV IV Full DC inverter, Large single module	2016	MRVIII PLUS Full DC inverter MRV SII New platform, new outlook	2018	MRV 5-RC Launching MRV 5-RC heat recovery range	2020	MRV 5-H Launched MRV 5-H	2021	MRV 5-C launched Cooling only series
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1993
Haier Enter into China commercial AC field

1999
Commercial VRF (C-MRV) First Modular VRF unit in China

2008
MRV III DC Inverter
23 Olympic reference projects in Beijing

2013
MRV III-RC Heat recovery (3 pipe system)
MRV W Water-cooled / MRV

2015
MRV IV (T3) Full DC inverter

2017
MRV SII Launched Globally Including the firstever Haier MRV product for the north american market

2019
US MRV 5 launched US MRV 5 HP & HR AHRI certification High efficiency and low operating temperature

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PRODUCT LINE-UP

Outdoor Units

Series	HP	8	10	12	14	16	18	20	22	24	26	28	30	32	34	36	38	40	42	44	46	48	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80	82	84	86	88	90	92	94	96	98	100	102	104
MRV 5-RC	3/380~415/50 3/380~415/60																																																	

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																				
	3/380~415/50 3/380~415/60																				

EASY MRV			
Model	MS1-036A	MS1-060A	MS3-036A
Match with indoor	1 by 1	1 by 1	1 by 3
EASY MRV Connection Kit			
Capacity(Btu/h)	≤36K	36K<X≤60K	Every indoor capacity ≤36K
MRV series	MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)		

DX AHU ² Connection kit				
Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B
Capacity	3.5≤x≤7kW	7<x≤14kW	14<x≤28kW	28<x≤56kW
New				
MRV series	MRV 5, MRV SII (4/5/6/8/10/12HP Double fan)			

PRODUCT LINE-UP

Indoor Units

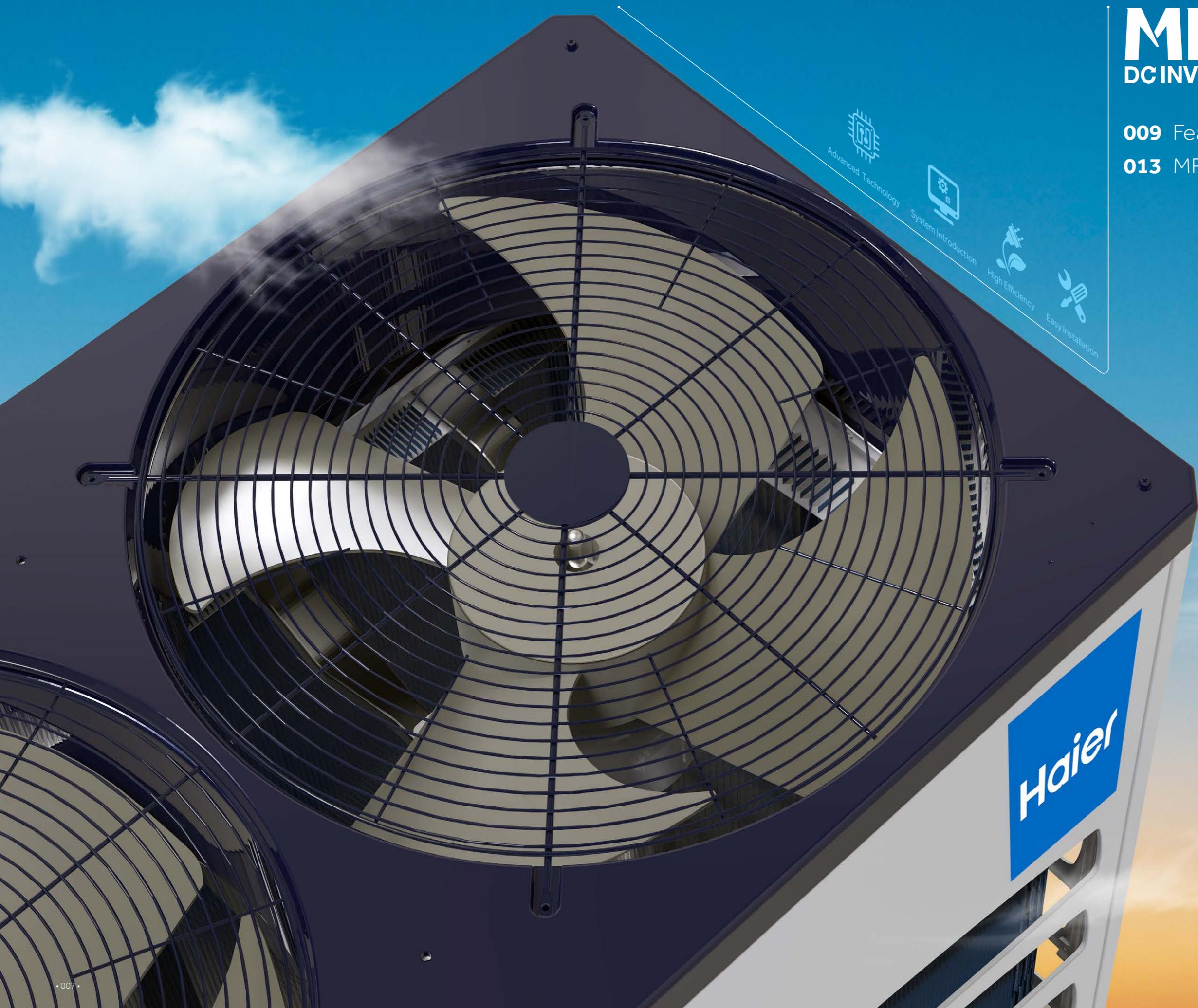
Series	KBTU/h kW		5	7	9	12	16	18	24	28	30	38	42	48	54	72	96
			1.5	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2	12.5	14.0	16.0	22.6	28.0
1-Way Cassette		AB**2MAERA	■	■	■	■											
Compact Cassette		AB**2MCERA(M)	■	■	■	■	■	■									
Round Way Cassette		AB**2MRERA		■	■	■	■	■	■	■	■	■	■	■	■	■	■
Slim Duct (0/15/30Pa)		AD**2MSERA(D) AD**2MSERA	■	■	■	■	■	■	■								
High ESP Duct(20/200Pa)		AD**2MJERAD	■	■	■	■	■	■	■	■	■	■	■	■	■	■	
High ESP Duct (100-250Pa)		AD**2MGERA														■	■
High Wall		AS**2MNERAB AS**2MNERA	■	■	■	■	■	■	■	■	■						
Fresh Air Duct (Comming soon)		AD**2MJERF AD**2MTERF											■		■	■	■

MRV5-RC

DC INVERTER

009 Features & Benefits

013 MRV 5-RC Outdoor

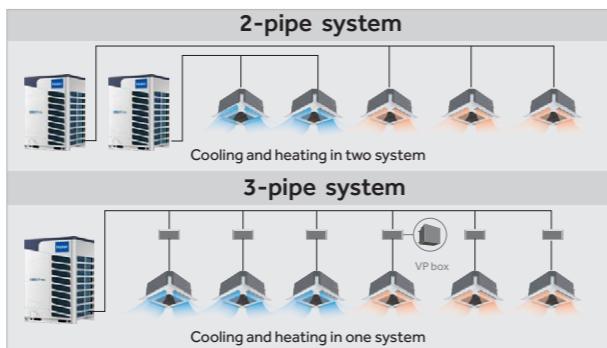




SYSTEM INTRODUCTION

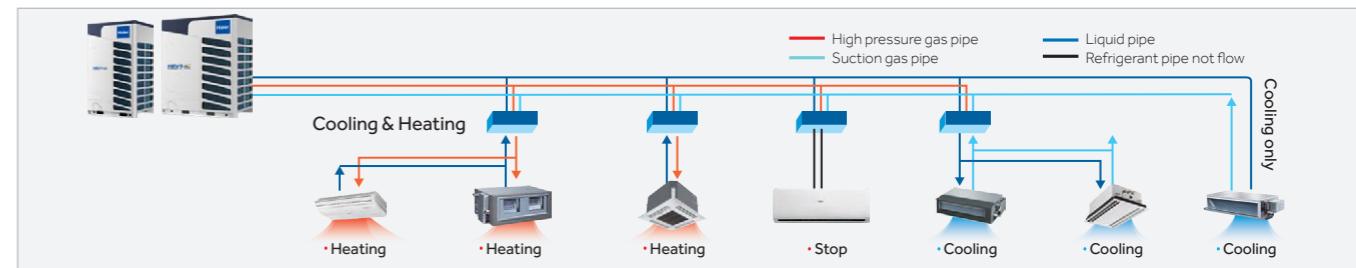
What is heat recovery VRF unit?

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 provided to meet various project demands.



SYSTEM INTRODUCTION

Variable operation mode in one system



ADVANCED TECHNOLOGY

What is heat recover VRF unit?

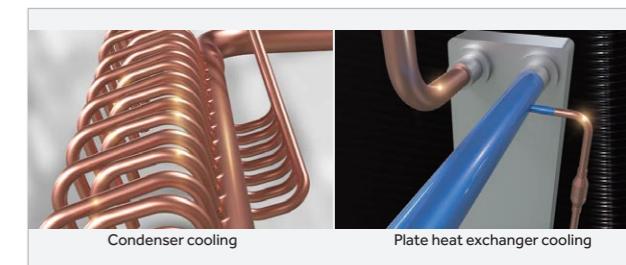
With large capacity full DC inverter compressor, MRV 5-RC can reach single module 22HP, maximum combination 88HP.



HIGH EFFICIENCY

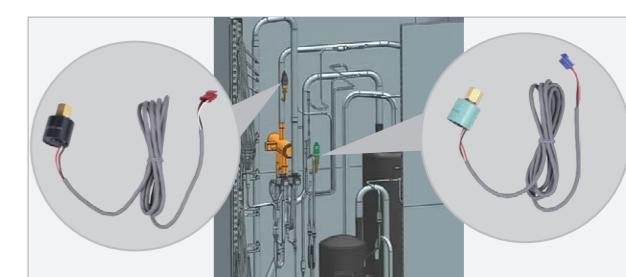
Two stage cooling technology

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.



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.



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

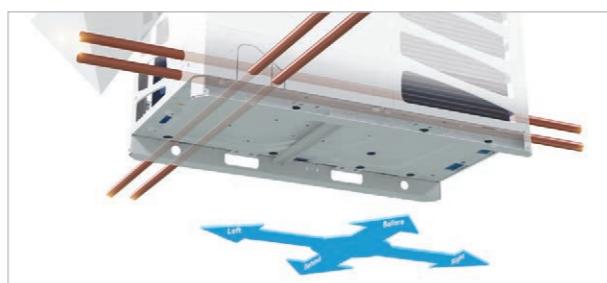
- Specially designed for MRV 5-RC, volume is small to 0.02m³ (for VP1 box), 0.05m³ (for VP4 box). Greatly reduced the installation space.
- Individual Valve and Pipe Box for Heat Recovery.
- The valve box can be connected in series, reduce the use of diverging pipes and reduce the installation cost.

Model name	Max.capacity of indoor(kw)	Power Supply	Max. indoor units	Dimension
VP1-112C	x≤11.2	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<x≤28	1/220~240/50/60	8	388×200×277
VP4-450C	≤45	1/220~240/50/60	20	388×200×277



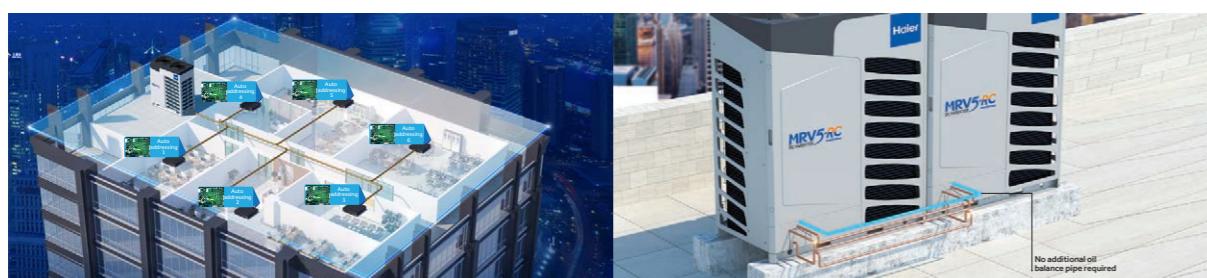
Door-type electric control box

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



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.



3/380~415/50/60

Model	Combination model		AV08IMAURA	AV10IMAURA	AV12IMAURA
Capacity	Capacity range	HP	8	10	12
	Cooling	kW	22.4	28	33.5
	Heating	kW	25	31.5	35
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	kW	5.66	7.46	9.19
	Max power input	kW	9.60	12.20	14.72
	Rated current	A	13.80	16.22	16.88
	Max current	A	23.80	27.00	26.20
	Heating	Rated power input	5.77	7.96	9.25
		Max power input	9.80	12.90	14.70
		Rated current	9.93	12.96	12.80
		Max current	17.20	20.30	20.08
	EER		3.96	3.75	3.65
	AEER		3.47	3.19	3.10
	COP	%	4.33	3.96	3.78
	ACOP	%	3.89	3.50	3.39
Performance	Air flow (H)	m ³ /h	13500	13500	13500
	Sound pressure level (H)	dB(A)	61	61	61
Installation	External dimensions(W/D/H)	mm	980/750/1690		
	Shipping dimensions(W/D/H)	mm	1070/850/1838		
	Net/Shipping weight	kg	267/292		
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
	Compressor quantity		1INV	1INV	1INV
	Refrigerant type		R410A	R410A	R410A
	Refrigerant charge	kg	11.5	12.5	14
	Refrigerant liquid pipe	mm	9.52	9.52	12.7
	Refrigerant gas pipe	mm	19.05	22.22	25.4
	Refrigerant high gas pipe	mm	19.05	19.05	22.22
	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		15	17	20
Working temp.	Cooling	°C	-5~48		
	Heating	°C	-15~21		

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
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. 35°C DB/24WB; in heating, indoor temp. is 20°C DB/6°CWB, outdoor temp. is 7°C DB/6°CWB.

MRV5-RC

DC INVERTER

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	AV14IMAURA	AV16IMAURA	AV18IMAURA	AV20IMAURA	AV22IMAURA	AV24IMAURA	AV26IMAURA			
Combination model	/	/	/	/	AV10IMAURA	AV12IMAURA	AV14IMAURA			
	/	/	/	/	AV12IMAURA	AV12IMAURA	AV14IMAURA			
	/	/	/	/	/	/	/			
	/	/	/	/	/	/	/			
Capacity	Capacity range	HP	14	16	18	20	22	24	26	
	Cooling	kW	40	45	50	56	61.5	67	73.5	
	Heating	kW	45	50	56.5	58	66.5	70	80	
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	11.22	12.75	14.06	16.73	16.65	18.38	20.41
		Max power input	kW	20.16	22.66	24.70	28.50	27.80	30.69	34.08
	Heating	Rated current	A	24.78	25.42	30.32	35.14	33.10	33.76	41.66
		Max current	A	43.25	41.73	47.94	55.09	55.27	56.37	69.56
	Heating	Rated power input	kW	11.76	13.27	15.93	15.08	17.21	18.5	21.01
		Max power input	kW	21.01	23.43	27.30	26.10	28.73	30.89	35.08
	Performance	Rated current	A	20.07	21.73	23.93	26.13	25.76	25.6	32.87
		Max current	A	33.23	35.54	38.65	41.87	43.01	42.74	54.88
	EER		3.57	3.53	3.56	3.35	3.69	3.65	3.60	
	AEER		3.28	3.21	3.20	2.90	3.14	3.10	3.20	
	COP	%	3.83	3.77	3.55	3.85	3.86	3.78	3.81	
	ACOP	%	3.55	3.50	3.27	3.39	3.44	3.39	3.48	
Performance	Air flow (H)	m³/h	19000	19000	19000	19000	27000.00	27000	32500	
	Sound pressure level (L)	dB(A)	64	64	64	64	64	64	66	
Installation	External dimensions(W/D/H)	mm	1410/750/1690		1410/750/1690		980/750/1690*2	980/750/1690*2	980/750/1690+1410/750/1690	
	Shipping dimensions(W/D/H)	mm	1515/850/1838		1515/850/1838		1070/850/1838*2	1070/850/1838*2	1070/850/1838+1515/850/1838	
	Net/Shipping weight	kg	385/414		385/414		267/292*2	267/292*2	267/292+385/414	
	Compressor type		DC INV. SCROLL							
	Compressor brand		MITSUBISHI ELECTRIC							
	Compressor quantity		2INV	2INV	2INV	2INV	1INV+1INV	1INV+1INV	1INV+2INV	
	Refrigerant type		R410A							
	Refrigerant charge	kg	17.5	17.5	17.5	18.5	12.5+14	14+14	14+17.5	
	Refrigerant liquid pipe	mm	12.7	12.7	15.88	15.88	15.88	15.88	15.88	
	Refrigerant gas pipe	mm	25.4	28.58	28.58	28.58	28.58	28.58	28.58	
Connection ratio	Refrigerant high gas pipe	mm	22.22	25.4	25.4	25.4	25.4	25.4	25.4	
	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	
	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130	50~130	50~130	50~130	
	Maximum number of indoor units		24	27	30	33	36	40	43	
Working temp.	Cooling	°C	-5~48			-5~48				
	Heating	°C	-15~21			-15~21				

Max drop between I.U.&O.U. *1
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MRV5-RC

DC INVERTER

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		AV28IMAURA	AV30IMAURA	AV32IMAURA	AV34IMAURA	AV36IMAURA	AV38IMAURA	AV40IMAURA	
Capacity	Combination model	AV14IMAURA	AV14IMAURA	AV16IMAURA	AV16IMAURA	AV18IMAURA	AV18IMAURA	AV20IMAURA	
		AV14IMAURA	AV16IMAURA	AV16IMAURA	AV18IMAURA	AV18IMAURA	AV20IMAURA	AV20IMAURA	
		/	/	/	/	/	/	/	
		/	/	/	/	/	/	/	
Capacity	Capacity range	HP	28	30	32	34	36	38	
	Cooling	kW	80	85	90	95	100	106	
	Heating	kW	90	95	100	106.5	113	114.5	
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	22.44	23.97	25.5	26.81	28.12	30.79
		Max power input	kW	37.47	40.02	42.58	44.76	46.95	51.41
		Rated current	A	49.56	50.2	50.84	55.74	60.64	65.46
		Max current	A	82.75	83.82	84.89	93.07	101.25	109.30
	Heating	Rated power input	kW	23.52	25.03	26.54	29.2	31.86	31.01
		Max power input	kW	39.27	41.79	44.31	48.75	53.20	51.78
		Rated current	A	40.14	41.8	43.46	45.66	47.86	50.06
		Max current	A	67.02	69.79	72.56	76.24	79.91	83.58
Performance	EER		3.57	3.55	3.53	3.54	3.56	3.44	
	AEER		3.28	3.24	3.21	3.20	3.20	3.03	
	COP	%	3.83	3.80	3.77	3.65	3.55	3.70	
	ACOP	%	3.55	3.52	3.50	3.37	3.27	3.33	
	Air flow (H)	m³/h	38000	38000	38000	38000	38000	38000	
	Sound pressure level (L)	dB(A)	67	67	67	67	67	67	
	External dimensions(W/D/H)	mm	1410/750/1690*2	1410/750/1690*2	1410/750/1690*2	1410/750/1690*2	1410/750/1690*2	1410/750/1690*2	
Installation	Shipping dimensions(W/D/H)	mm	1515/850/1838*2	1515/850/1838*2	1515/850/1838*2	1515/850/1838*2	1515/850/1838*2	1515/850/1838*2	
	Net/Shipping weight	kg	385/414*2	385/414*2	385/414*2	385/414*2	385/414*2	385/414*2	
	Compressor type		DC INV. SCROLL						
	Compressor brand		MITSUBISHI ELECTRIC						
	Compressor quantity		2INV*2	2INV*2	2INV*2	2INV*2	2INV*2	2INV*2	
	Refrigerant type		R410A	R410A	R410A	R410A	R410A	R410A	
	Refrigerant charge	kg	17.5+17.5	17.5+17.5	17.5+17.5	17.5+17.5	17.5+18.5	18.5+18.5	
	Refrigerant liquid pipe	mm	15.88	19.05	19.05	19.05	19.05	19.05	
	Refrigerant gas pipe	mm	28.58	31.8	31.8	31.8	38.1	38.1	
	Refrigerant high gas pipe	mm	25.4	28.58	28.58	28.58	34.9	34.9	
Connection ratio	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	
	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130	50~130	50~130	
	Maximum number of indoor units		46	50	53	57	60	64	
	Working temp.		Cooling	-5~48		-5~48			
			Heating	-15~21		-15~21			

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/24°C WB; in heating, indoor temp. is 20°C DB, in heating, outdoor temp. is 7°C DB/6°C WB

MRV5-RC

DC INVERTER

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	AV42IMAURA	AV44IMAURA	AV46IMAURA	AV48IMAURA	AV50IMAURA	AV52IMAURA
Combination model	AV14IMAURA	AV14IMAURA	AV14IMAURA	AV16IMAURA	AV16IMAURA	AV16IMAURA
	AV14IMAURA	AV14IMAURA	AV16IMAURA	AV16IMAURA	AV16IMAURA	AV18IMAURA
	AV14IMAURA	AV16IMAURA	AV16IMAURA	AV16IMAURA	AV18IMAURA	AV18IMAURA
	/	/	/	/	/	/
Capacity	Capacity range	HP	42	44	46	48
	Cooling	kW	120	125	130	135
	Heating	kW	135	140	145	150
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	33.66	35.19	36.72
		Max power input	kW	56.20	58.76	61.31
	Heating	Rated current	A	74.34	74.98	75.62
		Max current	A	124.12	125.19	126.26
	Cooling	Rated power input	kW	35.28	36.79	38.3
		Max power input	kW	58.91	61.43	63.95
	Heating	Rated current	A	60.21	61.87	63.53
		Max current	A	100.53	103.30	106.07
	EER		3.57	3.55	3.54	3.53
Performance	AEER		3.28	3.25	3.23	3.21
	COP	%	3.83	3.81	3.79	3.77
	ACOP	%	3.55	3.53	3.52	3.50
	Air flow (H)	m³/h	57000	57000	57000	57000
	Sound pressure level (H)	dB(A)	69	69	69	69
	External dimensions(W/D/H)	mm	1410/750/1690*3	1410/750/1690*3	1410/750/1690*3	1410/750/1690*3
	Shipping dimensions(W/D/H)	mm	1515/850/1838*3	1515/850/1838*3	1515/850/1838*3	1515/850/1838*3
	Net/Shipping weight	kg	385/414*3	385/414*3	385/414*3	385/414*3
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
Installation	Compressor quantity		2INV*3	2INV*3	2INV*3	2INV*3
	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	17.5+17.5+17.5	17.5+17.5+17.5	17.5+17.5+17.5	17.5+17.5+17.5
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	38.1	38.1	38.1	38.1
	Refrigerant high gas pipe	mm	34.9	34.9	34.9	34.9
	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
Connection ratio	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
	Connectable indoor unit ratio	%	50~130	50~130	50~130	50~130
Working temp.	Maximum number of indoor units		64	64	64	64
	Cooling	°C	-5~48	-5~48	-5~48	-5~48
	Heating	°C	-15~21	-15~21	-15~21	-15~21

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.
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/24°C WB; in heating, indoor temp. is 20°C DB/6°C WB; outdoor temp. is 7°C DB/6°C WB.

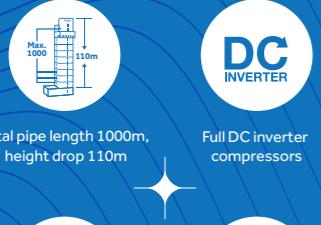
MRV5-RC

DC INVERTER

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	AV54IMAURA	AV56IMAURA	AV58IMAURA	AV60IMAURA	AV62IMAURA	AV64IMAURA
Combination model	AV18IMAURA	AV18IMAURA	AV18IMAURA	AV20IMAURA	AV14IMAURA	AV16IMAURA
	AV18IMAURA	AV18IMAURA	AV20IMAURA	AV20IMAURA	AV16IMAURA	AV16IMAURA
	AV18IMAURA	AV20IMAURA	AV20IMAURA	AV20IMAURA	AV16IMAURA	AV16IMAURA
	/	/	/	/	AV16IMAURA	AV16IMAURA
Capacity	54	56	58	60	62	64
Cooling	kW	150	156	162	168	175
Heating	kW	169.5	171	172.5	174	195
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
	Rated power input	kW	42.18	44.85	47.52	50.19
	Max power input	kW	70.43	74.88	79.34	83.80
	Rated current	A	90.96	95.78	100.6	105.42
	Max current	A	151.87	159.92	167.97	176.02
	Rated power input	kW	47.79	46.94	46.09	45.24
	Max power input	kW	79.79	78.37	76.95	75.54
	Rated current	A	71.79	73.99	76.19	78.39
	Max current	A	119.86	123.54	127.21	130.88
	EER		3.56	3.48	3.41	3.35
Performance	AEER		3.20	3.09	2.99	2.90
	COP	%	3.55	3.64	3.74	3.85
	ACOP	%	3.27	3.31	3.35	3.39
	Air flow (H)	m³/h	57000	57000	57000	57000
	Sound pressure level (H)	dB(A)	69	69	69	70
	External dimensions(W/D/H)	mm	1410/750/1690*3	1410/750/1690*3	1410/750/1690*3	1410/750/1690*4
Installation	Shipping dimensions(W/D/H)	mm	1515/850/1838*3	1515/850/1838*3	1515/850/1838*3	1515/850/1838*4
	Net/Shipping weight	kg	385/414*3	385/414*3	385/414*3	385/414*4
	Compressor type		DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand		MITSUBISHI	MITSUBISHI	MITSUBISHI	MITSUBISHI
	ELECTRIC		ELECTRIC	ELECTRIC	ELECTRIC	ELECTRIC
	Compressor quantity		2INV*3	2INV*3	2INV*3	2INV*4
	Refrigerant type		R410A	R410A	R410A	R410A
	Refrigerant charge	kg	17.5+17.5+17.5	17.5+17.5+18.5	17.5+18.5+18.5	18.5+18.5+18.5
	Refrigerant liquid pipe	mm	19.05	19.05	19.05	19.05
	Refrigerant gas pipe	mm	38.1	38.1	41.3	41.3
Connection ratio	Refrigerant high gas pipe	mm	34.9	34.9	34.9	34.9
	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
	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	-5~48		-5~48	
	Heating	°C	-15~21		-15~21	

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.
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.
* 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

MRV5-RC

DC INVERTER

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	AV66IMAURA		AV68IMAURA		AV70IMAURA		AV72IMAURA	
	Combination model		AV16IMAURA	AV16IMAURA	AV16IMAURA	AV16IMAURA	AV18IMAURA	AV18IMAURA
Capacity	Capacity range	HP	66		68		70	
	Cooling	kW	185		190		195	
	Heating	kW	206.5		213		219.5	
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	52.31	53.62	54.93	56.24	
		Max power input	kW	87.34	89.53	91.71	93.90	
		Rated current	A	106.58	111.48	116.38	121.28	
		Max current	A	177.95	186.13	194.31	202.50	
	Heating	Rated power input	kW	55.74	58.4	61.06	63.72	
		Max power input	kW	93.07	97.51	101.95	106.39	
		Rated current	A	89.12	91.32	93.52	95.72	
		Max current	A	148.80	152.47	156.15	159.82	
Performance	EER		3.54		3.54	3.55	3.56	
	AEER		3.21		3.20	3.20	3.20	
	COP	%	3.70		3.65	3.59	3.55	
	ACOP	%	3.43		3.37	3.32	3.27	
	Air flow (H)	m³/h	76000		76000	76000	76000	
	Sound pressure level (L)	dB(A)	70		70	70	70	
Installation	External dimensions(W/D/H)	mm	1410/750/1690*4		1410/750/1690*4		1410/750/1690*4	
	Shipping dimensions(W/D/H)	mm	1515/850/1838*4		1515/850/1838*4		1515/850/1838*4	
	Net/Shipping weight	kg	385/414*4		385/414*4		385/414*4	
	Compressor type		DC INV. SCROLL		DC INV. SCROLL		DC INV. SCROLL	
	Compressor brand		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC		MITSUBISHI ELECTRIC	
	Compressor quantity		2INV*4		2INV*4		2INV*4	
	Refrigerant type		R410A		R410A		R410A	
	Refrigerant charge	kg	17.5+17.5+17.5+17.5		17.5+17.5+17.5+17.5		17.5+17.5+17.5+17.5	
	Refrigerant liquid pipe	mm	19.05		22.22		22.22	
	Refrigerant gas pipe	mm	41.3		44.5		44.5	
	Refrigerant high gas pipe	mm	34.9		34.9		34.9	
	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		64		64		64	
Working temp.	Cooling	°C	-5~48		-5~48		-5~48	
	Heating	°C	-15~21		-15~21		-15~21	

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/24°C WB; in heating, indoor temp. is 20°C DB, in heating, outdoor temp. is 7°C DB/6°C WB



MRV5-RC

DC INVERTER

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	AV74IMAURA	AV76IMAURA	AV78IMAURA	AV80IMAURA	
Combination model	AV18IMAURA	AV18IMAURA	AV18IMAURA	AV20IMAURA	
	AV18IMAURA	AV18IMAURA	AV20IMAURA	AV20IMAURA	
	AV18IMAURA	AV20IMAURA	AV20IMAURA	AV20IMAURA	
	AV20IMAURA	AV20IMAURA	AV20IMAURA	AV20IMAURA	
Capacity	74	76	78	80	
	206	212	218	224	
	227.5	229	230.5	232	
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
	Rated power input kW	58.91	61.58	64.25	66.92
	Max power input kW	98.36	102.82	107.28	111.73
	Rated current A	126.1	130.92	135.74	140.56
	Max current A	210.54	218.59	226.64	234.69
	Rated power input kW	62.87	62.02	61.17	60.32
	Max power input kW	104.97	103.55	102.13	100.71
	Rated current A	97.92	100.12	102.32	104.52
	Max current A	163.49	167.17	170.84	174.51
	EER	3.50	3.44	3.39	3.35
Performance	AEER	3.11	3.03	2.96	2.90
	COP %	3.62	3.69	3.77	3.85
	ACOP %	3.30	3.33	3.36	3.39
	Air flow (H) m³/h	76000	76000	76000	76000
	Sound pressure level (H) dB(A)	70	70	70	70
	External dimensions(W/D/H) mm	1410/750/1690*4	1410/750/1690*4	1410/750/1690*4	1410/750/1690*4
	Shipping dimensions(W/D/H) mm	1515/850/1838*4	1515/850/1838*4	1515/850/1838*4	1515/850/1838*4
	Net/Shipping weight kg	385/414*4	385/414*4	385/414*4	385/414*4
	Compressor type	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL	DC INV. SCROLL
	Compressor brand	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC	MITSUBISHI ELECTRIC
Installation	Compressor quantity	2INV*4	2INV*4	2INV*4	2INV*4
	Refrigerant type	R410A	R410A	R410A	R410A
	Refrigerant charge kg	17.5+17.5+17.5+18.5	17.5+17.5+18.5+18.5	17.5+18.5+18.5+18.5	18.5+18.5+18.5+18.5
	Refrigerant liquid pipe mm	22.22	22.22	22.22	22.22
	Refrigerant gas pipe mm	44.5	44.5	44.5	44.5
	Refrigerant high gas pipe mm	34.9	34.9	38.1	38.1
	Max. total pipe length m	1000	1000	1000	1000
	Max. pipe length (Equivalent/Actual) m	260/220	260/220	260/220	260/220
	Max. drop between 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
Connection ratio	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
	Connectable indoor unit ratio %	50~130	50~130	50~130	50~130
Working temp.	Maximum number of indoor units	64	64	64	64
	Cooling °C	-5~48	-5~48	-5~48	-5~48
	Heating °C	-15~21	-15~21	-15~21	-15~21

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.
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/24°C WB; in heating, indoor temp. is 20°C DB, in heating, outdoor temp. is 7°C DB/6°C WB

MRVS^{II}

- 027 Features & Benefits
- 032 MRV S^{II} Outdoor
- 034 Dimensions



MRVS^{II}

- 027 Features & Benefits
- 032 MRV S^{II} Outdoor
- 034 Dimensions



Haier





ADVANCED TECHNOLOGY

Leadership in technology(4-6HP)

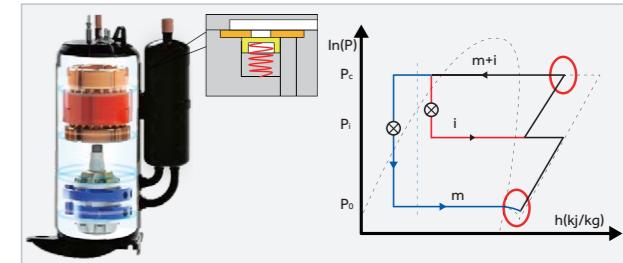
- Two-stage supercooling cycle technology, increased unit efficiency by 9%. (Double fan)
- Maximizing 30°C undercooling, increase unit refrigerating capacity by 46%.



ADVANCED TECHNOLOGY

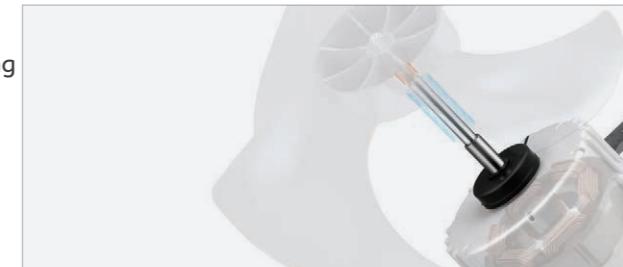
Increasing enthalpy by replenish gas, realize the unit powerful heating capacity

Taking the heating cycle as an example, when environment temperature is low, heat exchanged capability of outdoor unit is depressed. The amount of gas 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.



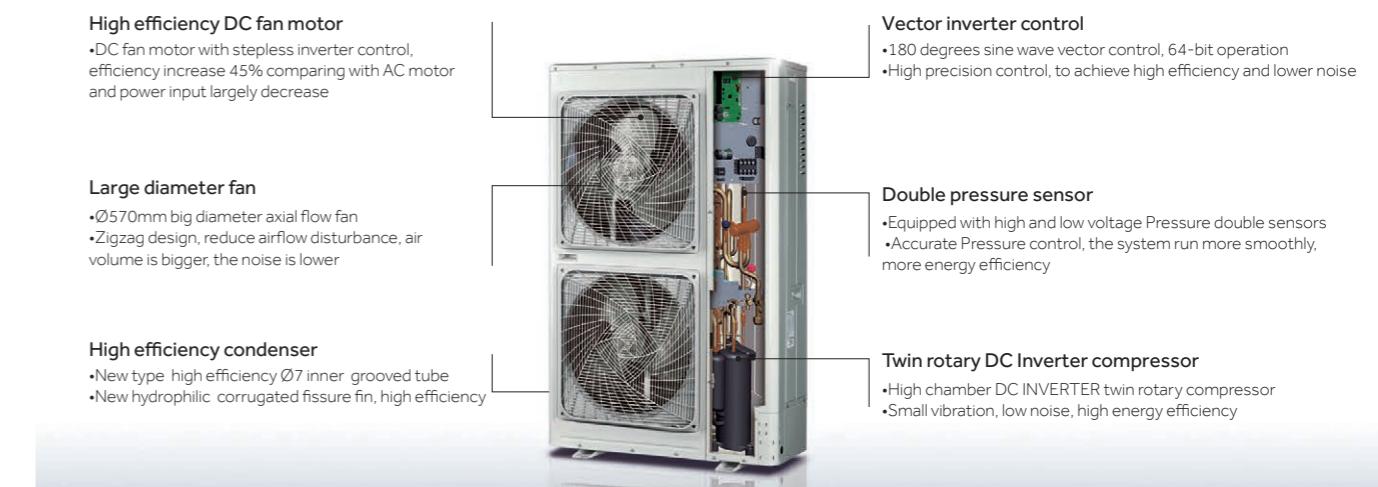
DC fan and fan motor

- 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)



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

Bigger outdoor capacity, more flexible application



Indoor units and outdoor units self-cleaning

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



HIGH EFFICIENCY

High energy efficiency

DC inverter compressor

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%

Low noise level

Night Quiet Operation Function

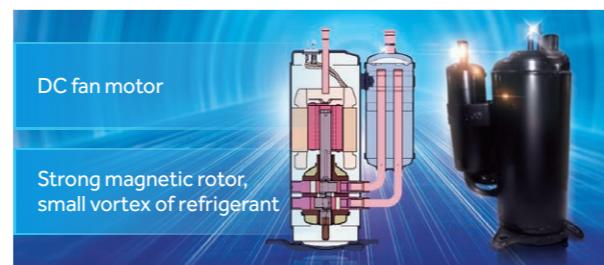
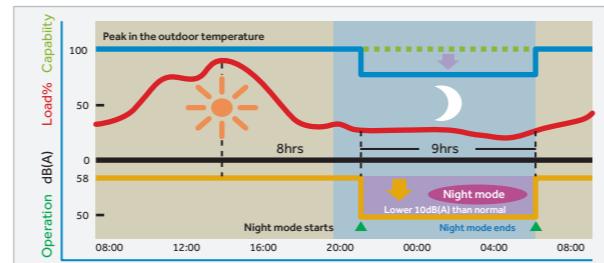
Noise can be reduced to 45dB(A).

Charge Valve

Built-in charge valve enables safer and easier maintenance

Low standby power

New PCB programme, reduce 20% standby power consumption



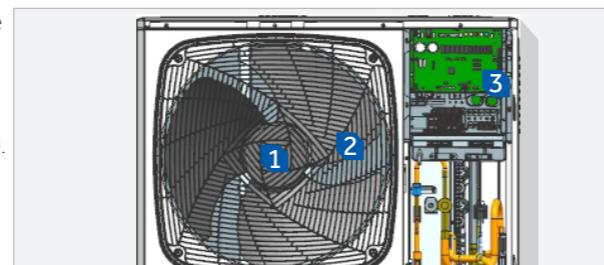
New DC inverter twin rotary compressor

- Small torque change, good dynamic balance, the system runs stably, little vibration, low noise, high efficiency.

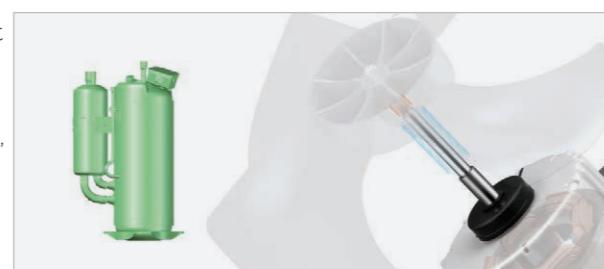
- More higher efficiency in part load running.

SUPER COMFORT

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



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



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

Low noise operation

- DC INVERTER compressor, smooth operation, no need frequent start the compressor, effectively reduce the noise outdoor.

- Vector inverter control, more precise control.

- DC fan motor, motor bracket used the non-resonance structure, ensure smooth running of the motor, reduce operating noise.

- Big diameter fan, design according to aviation quieter principle.

Easy installation

Compact Side Discharge Design, Big Capacity, Small Footprint / Small footprint, only 0.42m², 43% floor area can be reduced.



EASY INSTALLATION

1 Double side "4" handles
Easy to carry

2 "888" test panel
All running data & error code can be checked from "888" screen, which is easy for installers

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



Compact side discharge design

No need additional ventilation hood comparing with top discharge unit.



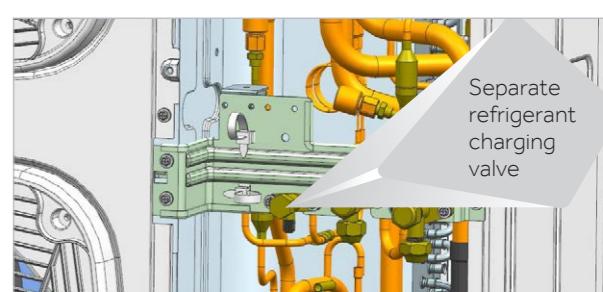
Long pipe length, high height drop

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



Separate refrigerant charging valve

Easy for refrigerant charging.



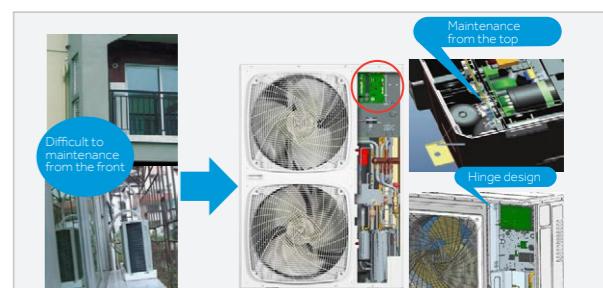
Parameter display panel

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



Easy maintenance for control

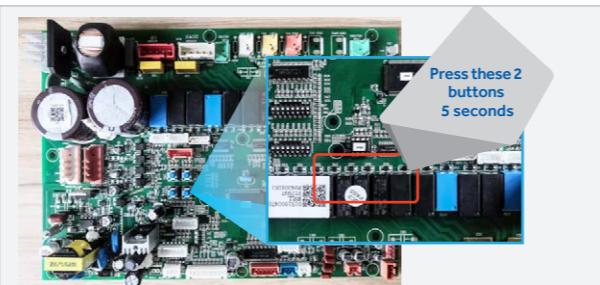
The control box is in front, reserving space 108mm between control box and top panel, easy maintenance from the top. Control box is with hinge design, easy to open for maintenance(8/10/12HP).



HIGH RELIABILITY

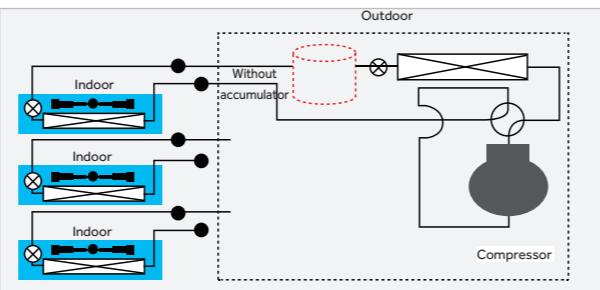
Refrigerant automatically reclaim Technology

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



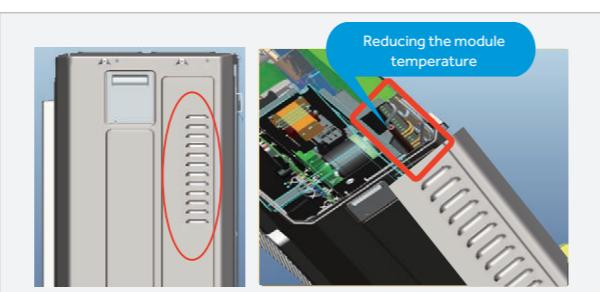
Refrigerant control technology

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



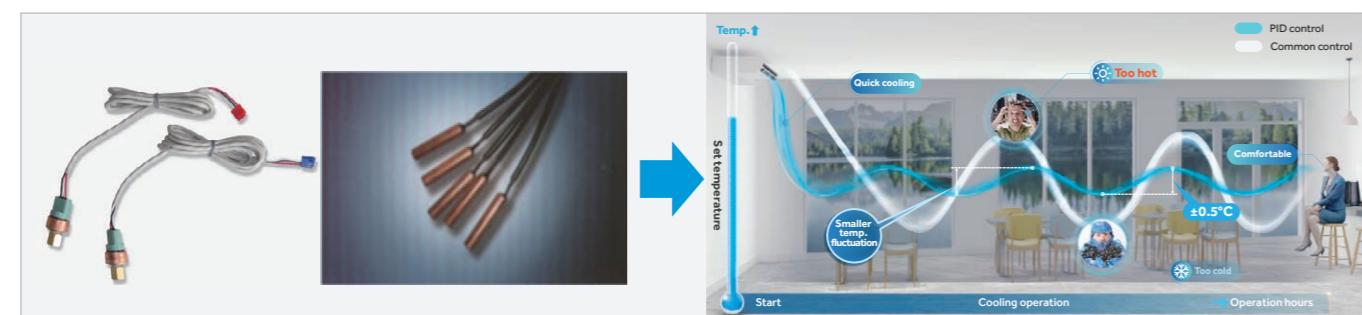
Air inlet grill design on right side panel

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



High and low double pressure sensor

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



MRVS^{II}



- AU042FPERA
- AU052FPERA
- AU062FPERA

Model		AU042FPERA	AU052FPERA	AU062FPERA
Capacity ⁽¹⁾	Capacity range	HP	4	5
	Cooling	kW	12.6	14
	Heating	kW	14.2	16
	SEER(T1)	/	6.82	6.65
	η s.c	%	270	263
	SCOP(T1)	/	4.05	4.11
	η s.h	%	159	161
Electrical parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Rated power input (Cooling)	kW	3.61	3.66
	Rated power input (Heating)	kW	3.14	3.70
Dimensions	External(W/D/H)	mm	950/370/1350	950/370/1350
	Shipping (W/D/H)	mm	1023/483/1492	1023/483/1492
Weight	Net/Shipping	kg	108/123	108/123
Compressor	Compressor type	/	Rotary	Rotary
	Motor power	W	4130	4130
	Compressor quantity	/	1	1
Fan	Air flow (H)	m ³ /h	7200	7200
Pressure sound level	Cooling	dB(A)	57	58
	Heating	dB(A)	57	58
Refrigerant	Type	/	R410A	R410A
	Charge	kg	4	4
Piping	Refrigerant liquid pipe	mm	9.52	9.52
	Refrigerant gas pipe	mm	15.88	15.88
	Total pipe length	m	300	300
	Max. pipe length (Equivalent/Actual)	m	175/150	175/150
	Max drop between IDU&ODU (ODU above/below)	m	50/40	50/40
	Max drop between IDU & IDU	m	15	15
Connection ratio	Connectable indoor unit ratio	%	50-130	50-130
	Maximum number of indoor units	/	8	10
Working temp.	Cooling	°C	-5~50	-5~50
	Heating	°C	-20~27	-20~27

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

MRVS^{II}



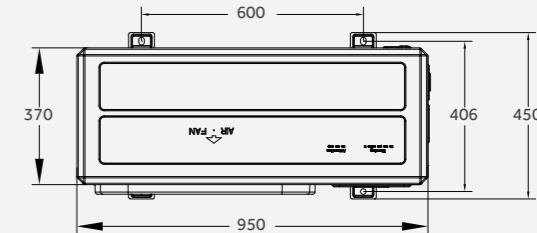
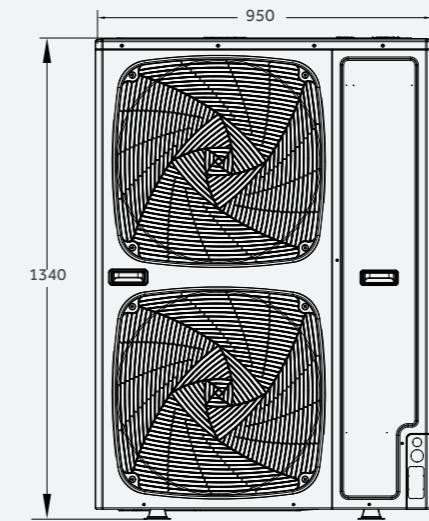
- AU08NFKERA
- AU10NFKERA
- AU12NFKERA

Model	AU08NFKERA	AU10NFKERA	AU12NFKERA
Capacity ⁽¹⁾	Capacity range	HP	8HP
	Cooling	kW	22.6
	Heating	kW	22.6
	Heating(Max)	kW	25
	SEER	/	7.67
	η s.c	%	304
	SCOP	/	4.05
	η s.h	%	159
Electrical parameters	Power supply	Ph/V/Hz	3/380~415/50/60
	Rated Power input (Cooling)	kW	5.35
	Rated Power input (Heating)	kW	5.3
Dimensions	External (W/D/H)	mm	1050/400/1636
	Shipping (W/D/H)	mm	1150/510/1790
Weight	Net/Shipping weight	kg	149/168
Compressor	Compressor type	/	Inverter Twin Rotary
	Motor Power	W	6270
	Compressor quantity	/	1
Fan	Air flow (H)	m ³ /h	10000
Pressure sound level	Cooling	dB(A)	63
	Heating	dB(A)	65
Refrigerant	Type	/	R410A
	Charge	kg	5.1
Piping	Refrigerant liquid pipe	mm	9.52
	Refrigerant gas pipe	mm	19.05
	Total pipe length	m	300
	Max. pipe length(Equivalent/Actual)	m	175/150
	Max drop between I.U.&O.U.(ODU above / below)	m	50
	Max drop between I.U.&I.U.	m	15
	Connectable indoor unit ratio	%	50~130
Connection ratio	Maximum number of indoor units	/	13
	Cooling	°C	-5~48
Working temp.	Heating	°C	-20~27
			-20~27

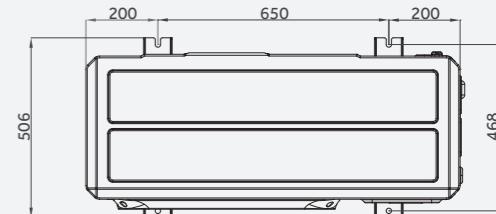
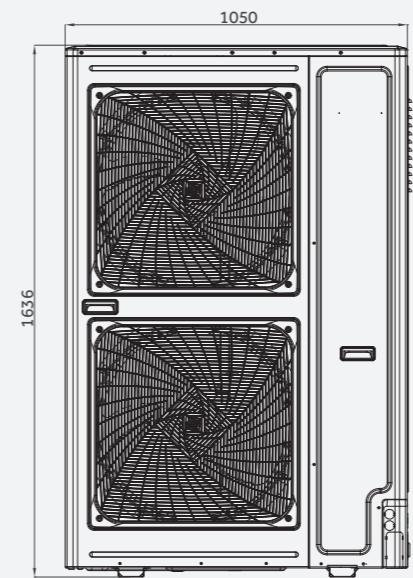
(1) All the specifications are tested under nominal condition as per Eurovent conditions (In cooling, Indoor temp is 27°C DB/19°C WB; Outdoor temp 35°C DB/24°C WB; In heating, Indoor temp is 20°C DB, Outdoor temp is 7°C DB/6°C WB)

Dimensions

AU04FPERA AU05FPERA AU06FPERA AU04IFPERA AU05IFPERA AU06IFPERA



AU08NFKERA AU10NFKERA AU12NFKERA



MRVS II

MRV AHU Connection Kit

037 The 2nd Generation AHU Kit

040 Specification

040 Dimensions



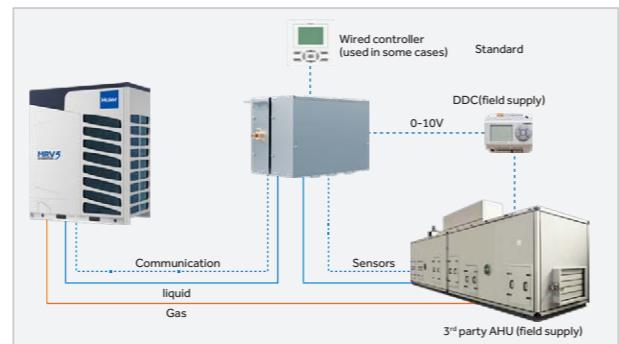


MRV AHU The 2nd Generation AHU Kit

SYSTEM INTRODUCTION

System introduction

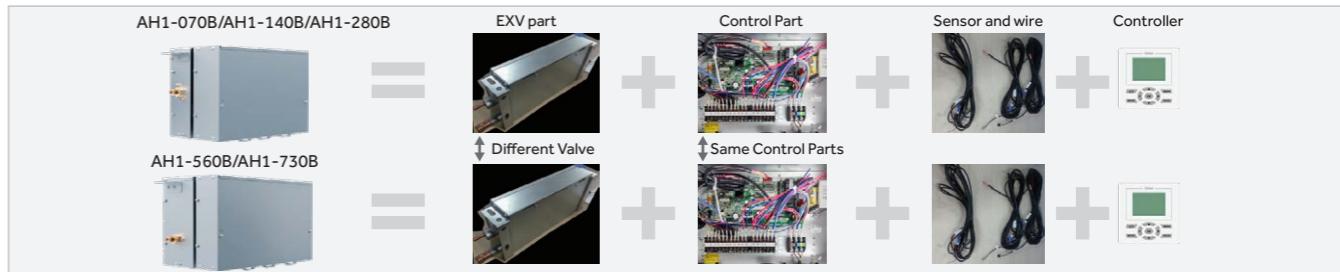
Haier offers a range of connection kit to connect MRV outdoor units to third party DX air handling units.



SYSTEM INTRODUCTION

Ahu kit configuration

Haier 2nd generation AHU kit also contains the following 4 parts: The Controller model is HW-AA 101DBK, special for Haier 2nd 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 3rd party AHU.

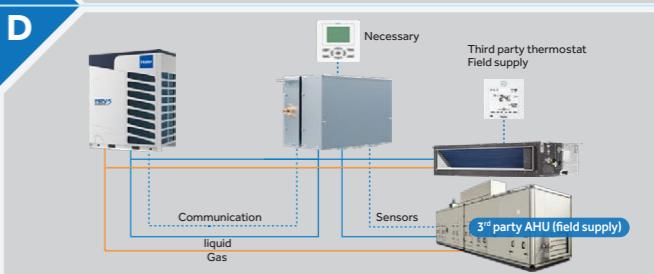
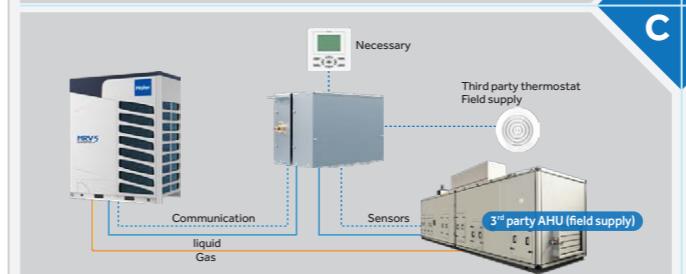
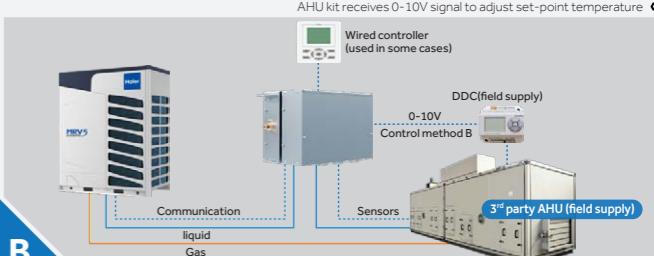
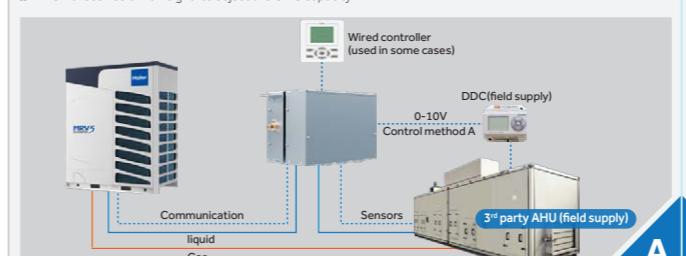
DX AHU ² Connection kit						Special design for MRV 5 , MRV SII
Model Capacity	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B	
Compatibility						
Outdoor	MRV5-RC				MRV S [®]	
HP	Only suitable for heat pump HP→8-20					
Power supply	8-26 3Ph/380-415V/50/60Hz				4 5 6 8 10 12 1Ph/220-230V/50/60Hz 3Ph/380-400V/50/60Hz 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 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

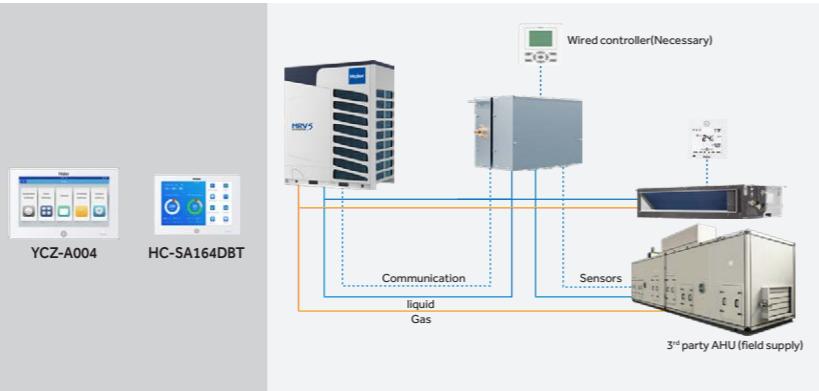
Control method for combination VRF indoor units and 3rd party AHU system

SYSTEM INTRODUCTION

Central control

Note:

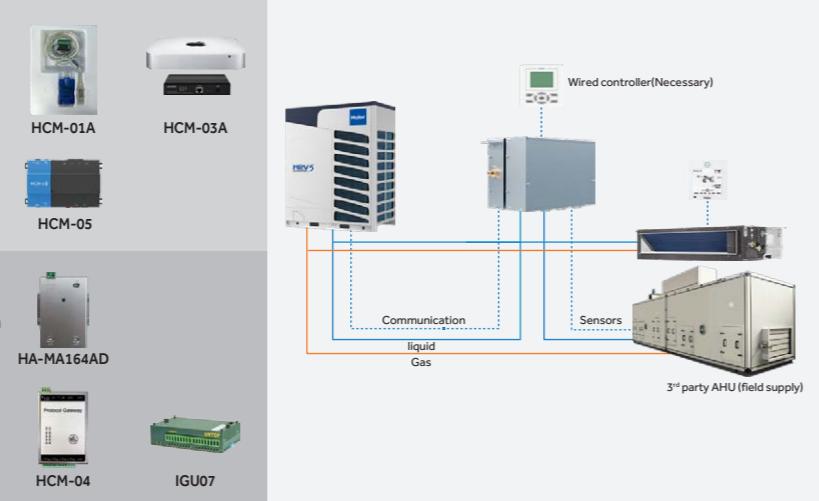
- MRV 5 and upgraded MRV SII(8/10/12HP can directly connect with central controller HC-SA164DBT and YCZ-A004.
- Other MRV systems need the HA-MA164AD gateway.
- For new webserver controller, the new gateway HA-MA1ADB.
- For control method A,B,C of AHU kit, only monitoring the AHU is available and unable 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

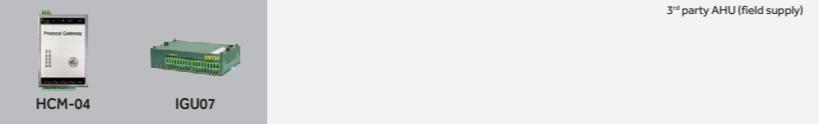
Note:

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

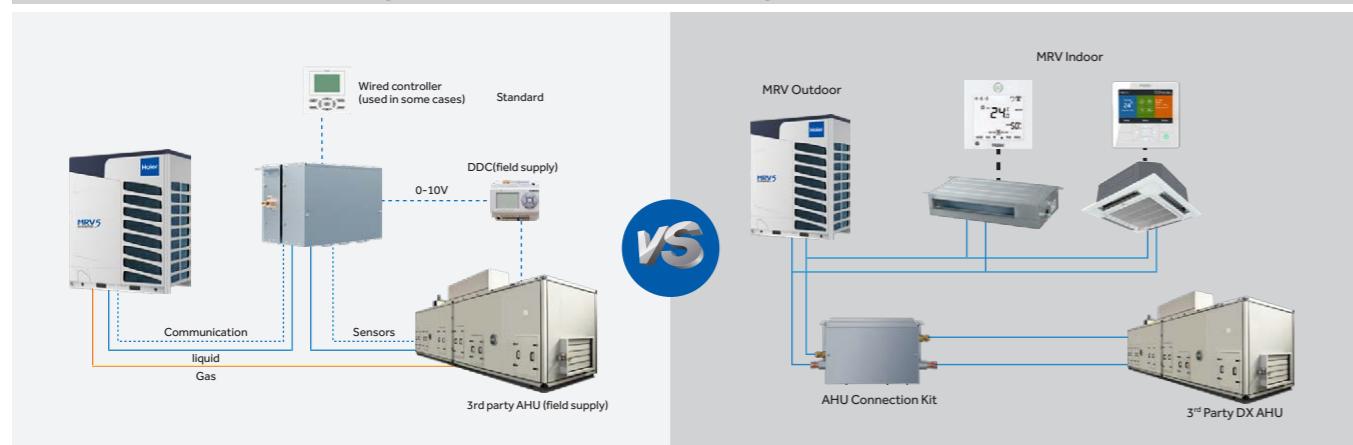


UNIT STRUCTURE

Features

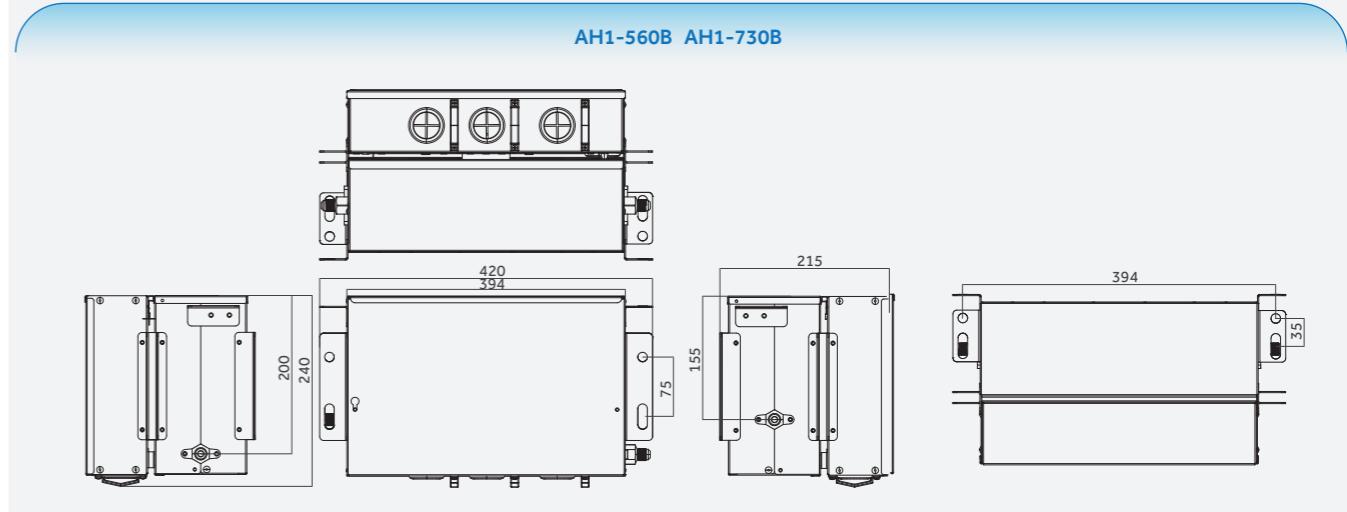
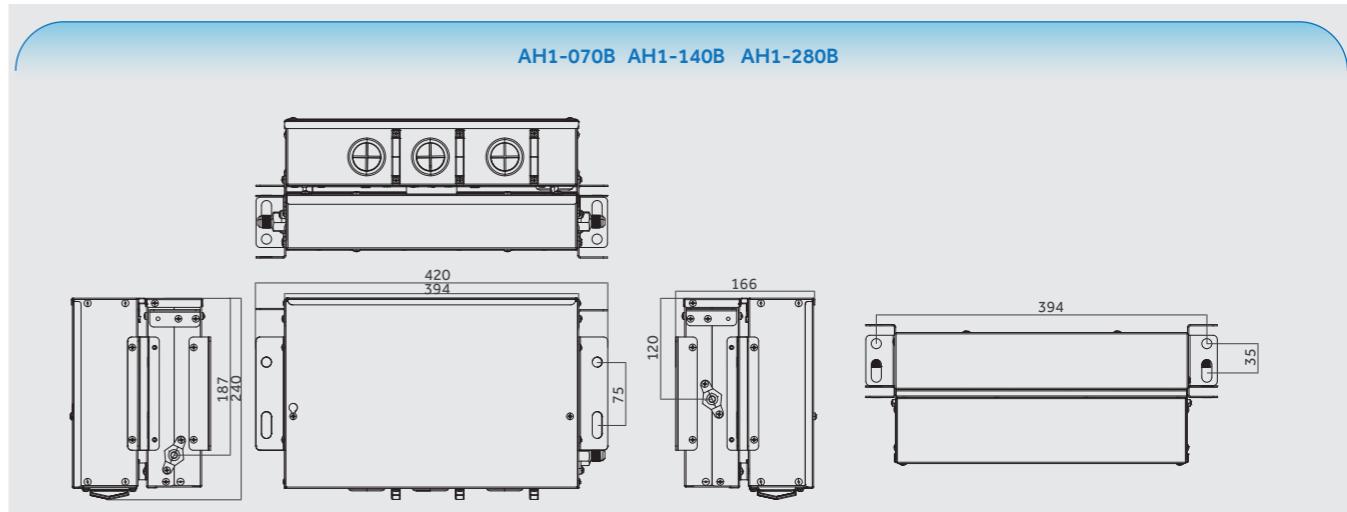
- Extend the AHU connected capacity of per kit ranging from 3.5 kW to 73kW, which can meet the small, medium and large buildings demands.
- Add the 0-10V signal control.
- Supply air temperature (from DDC) or return air temperature controllable.
- Remove the gas pipe, more convenient for installation.

The 2nd generation AHU kit VS The 1st 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





MRV INDOOR



Cassette



Duct



High Wall

043 Features

051 1-Way Cassette

053 Compact Cassette

055 Round Way Cassette

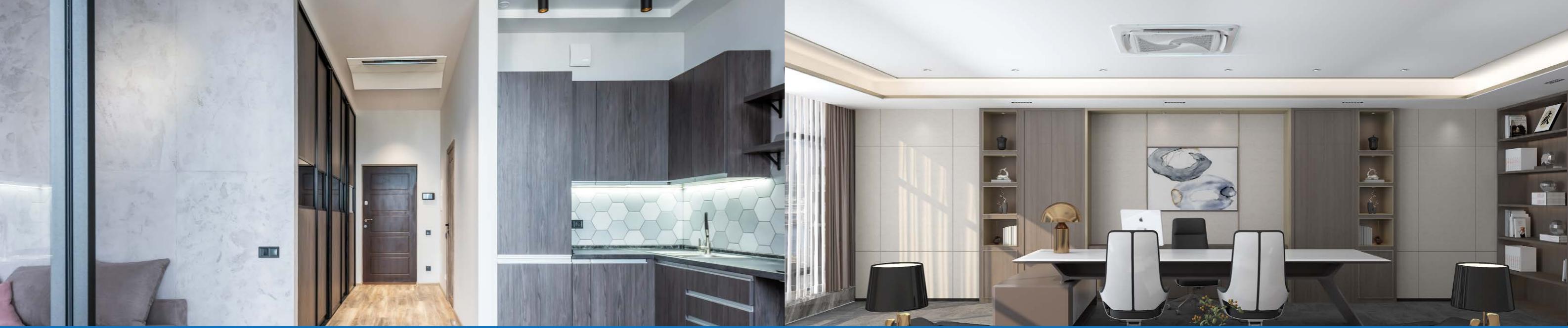
057 Slim Duct

059 High ESP Duct (20/200Pa)

061 High ESP Duct (100/250Pa)

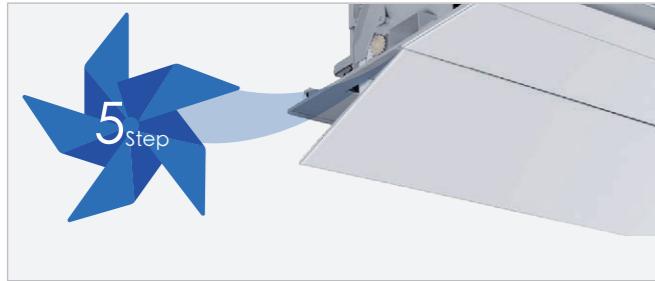
063 High Wall

071 Dimensions



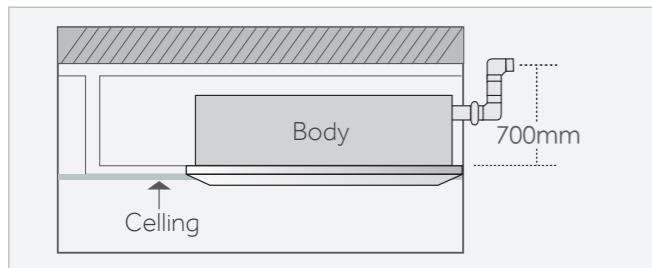
1-Way Cassette

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



Standard condensate water lifting pump

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

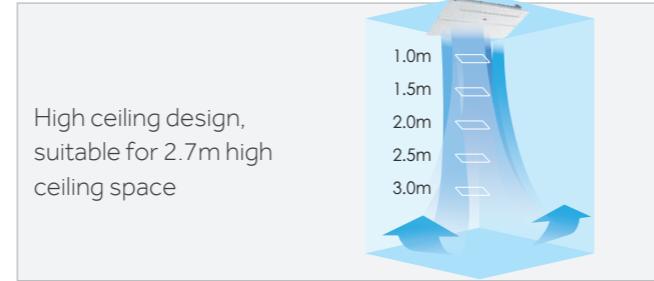


Suitable for corner installation for comfortable and uniform air supply

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

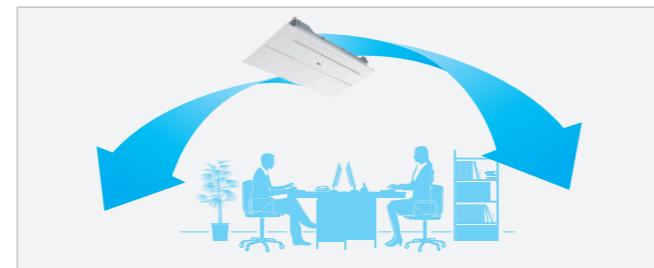


High ceiling design the air reaches the ground



Super wide angle air supply comfortable enjoy

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



Free air supply and flexible control to enjoy a comfortable environment

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



Quiet operation, create a peaceful space

- High efficiency brushless DC fan motor, achieve step-less adjustment for speed, greatly reduce the noise of operation.
- Optimize the traditional air duct design, adopt sound insulation wall technology, effectively reduce the eddy current range, block the transmission path of noise, effectively reduce the noise about 3dB(A).
- Fan optimization design, using the principle of fluid mechanics, referring to the design of aviation structure, so that the airflow speed distribution is uniform, reduce the airflow resistance, so as to reduce noise, to achieve quiet operation. Note: * Other ac motor standards are optional.



Standard drain pump

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

Antibacterial Filter



Round Way Cassette

Streamlined outlook design

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



Energy saving control

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

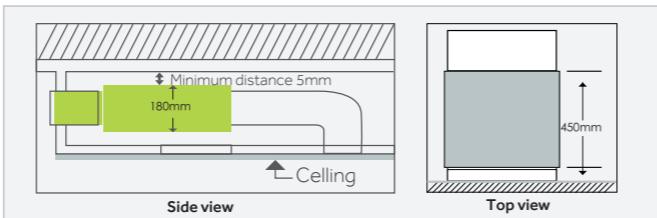




Slim Duct

Adjusted ESP super slim save installation space agile and convenient

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



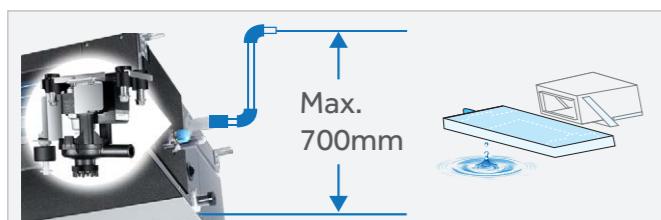
Quiet operation

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

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

High lift-up drain pump

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



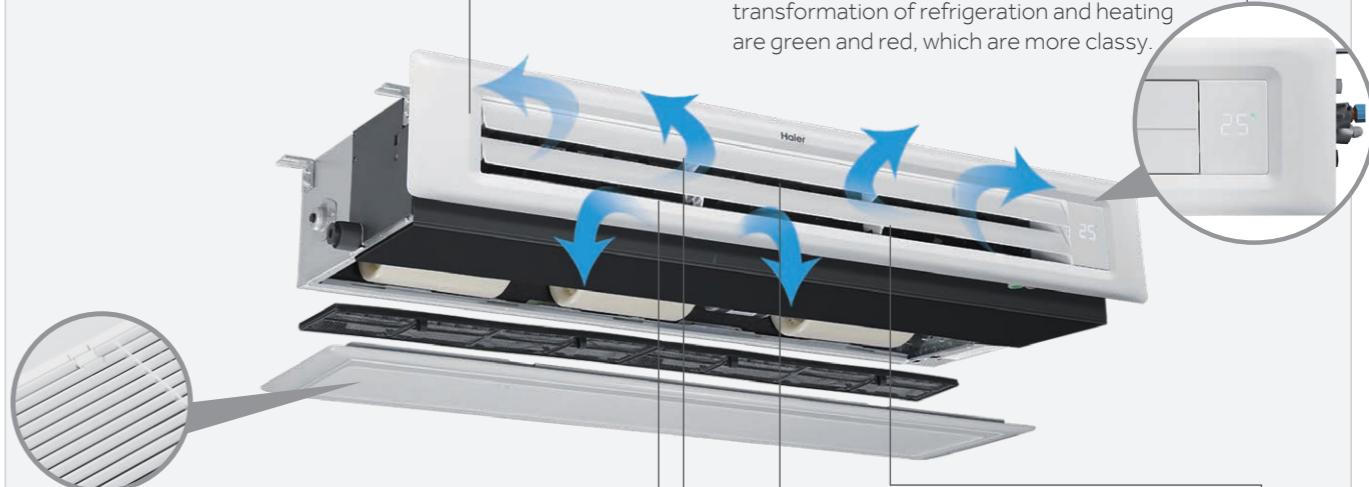
Antibacterial Filter



3D Three-dimensional Air Supply

With makings fastidious

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



Details of the outstanding using at ease

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

Fashionable and beautiful

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

Sympathetic function

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

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.

3D three-dimensional air supply

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

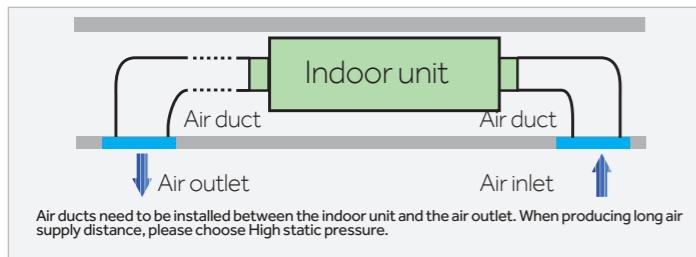


Medium and High ESP DUCT

High ESP Duct

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.



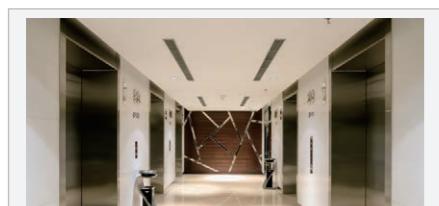
Air duct connection more room to share

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.



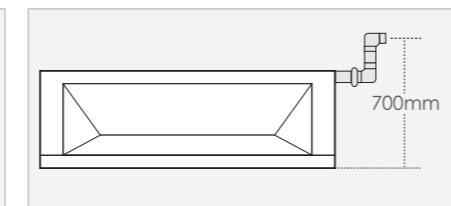
Free setting air outlet humanization setting

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.



Antibacterial Filter

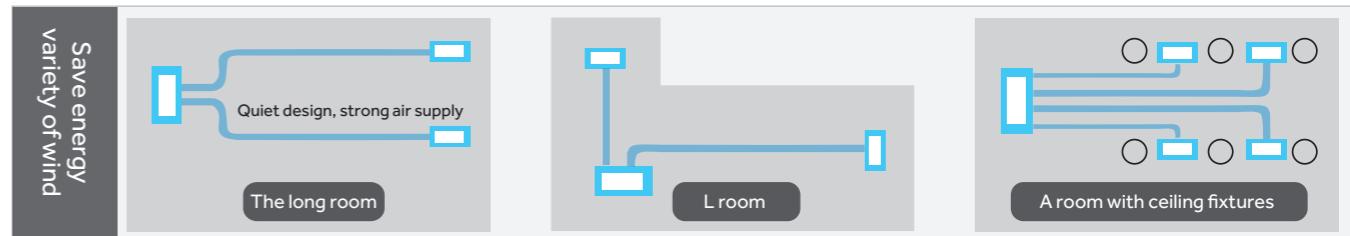
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

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



High static pressure design, more room to share

The external static pressure can achieve 200Pa, and the air duct can be freely selected. Do an air conditioning, multi-room sharing.



Antibacterial Filter

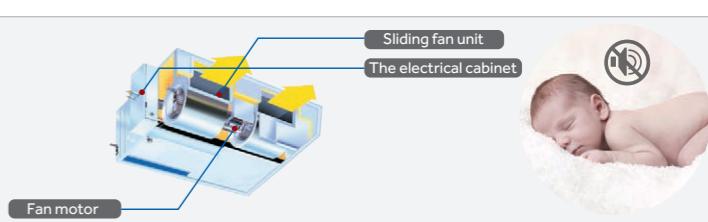
Silver (Ag) is a natural antibacterial material, which has good broad-spectrum antibacterial properties and could motivate bacterial extinction.

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



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 fan speed to meet different needs.



Multiple installation way, flexible optional

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

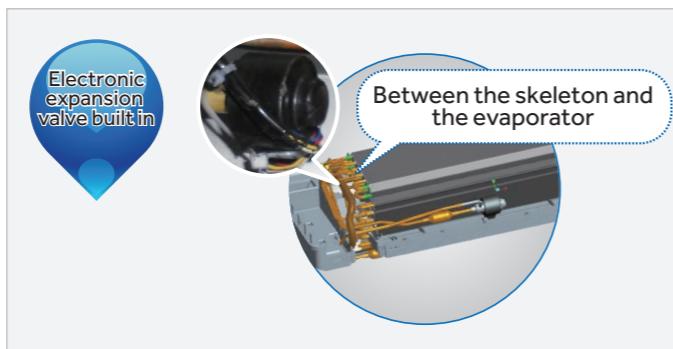




High Wall

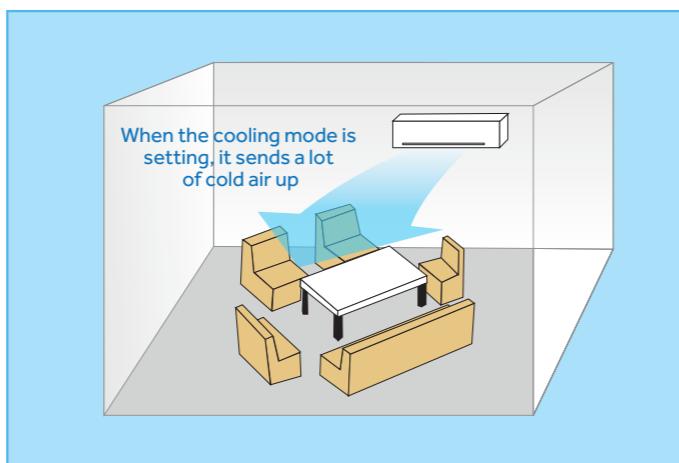
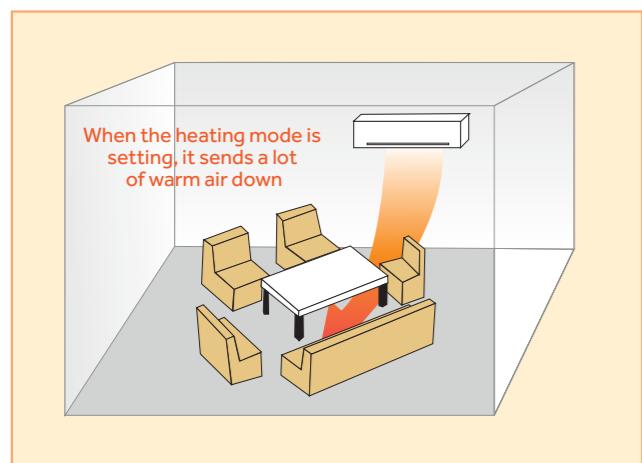
Built-in electronic expansion valve for easy installation

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

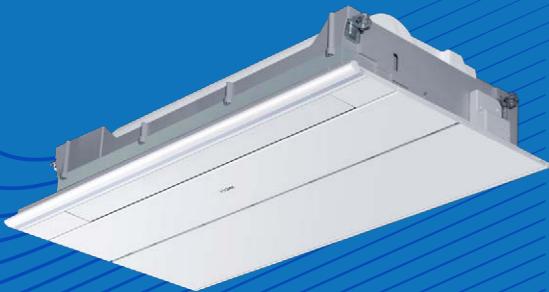


Flexible wind control, quick cooling and heating

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



1-Way CASSETTE



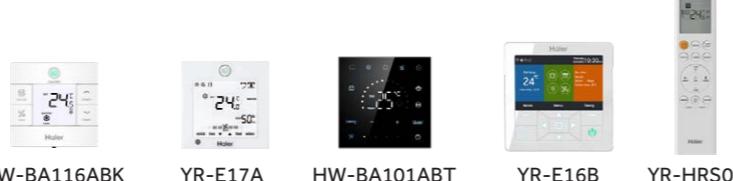
DC fan motor



Ultra thin design 185mm



Butterfly wings airflow

Built-in high head
drain pump maxi. 1000mm

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

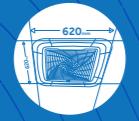
1-Way  CASSETTE

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
	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
	Sound pressure level(H/M/L)	dB(A)	32/29/24	32/29/24	32/29/24	34/30/25
Performance	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
	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
Installation	Refrigerant gas pipe	mm	9.52	9.52	9.52	12.7
	Model Name		P1B-1050IB	P1B-1050IB	P1B-1050IB	P1B-1050IB
	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
Panel	/	HW-BA101ABT		HW-BA101ABT	HW-BA101ABT	HW-BA101ABT
	/	YR-E16B		YR-E16B	YR-E16B	YR-E16B
	/	HW-BA116ABK		HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
	/	YR-E17A		YR-E17A	YR-E17A	YR-E17A
	Infrared (Optional)	/	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

Compact CASSETTE



DC fan motor



New panel design
620*620mm



Fresh air outlet



Low sound level



YR-E17A YR-E16B YR-HRS01 YR-HQS01

Compact
CASSETTE

Model/Indoor unit			AB052MCERA(M)	AB072MCERA(M)	AB092MCERA(M)	AB122MCERA(M)	AB162MCERA(M)	AB182MCERA(M)
Capacity	Cooling	kBtu/h	5.1		7.5	9.5	12.3	15.3
		kW	1.5		2.2	2.8	3.6	4.5
	Heating	kBtu/h	5.8		8.5	10.9	13.6	17.1
		kW	1.7		2.5	3.2	4	5
Electrical Parameters	Power supply	Ph/V/Hz	1/220-240/50/60		1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60
	Air flow(H/M/L)	m³/h	520/450/400		520/450/400	520/450/400	520/450/400	650/520/450
	Sound pressure level(H/M/L)	dB(A)	32/30/29		32/30/29	32/30/29	33/30/29	33/30/29
	Sound power level(H/M/L)	dB(A)	46/44/43		46/44/43	46/44/43	47/44/43	47/44/43
Installation	External dimensions(W/D/H)	mm	570/570/260		570/570/260	570/570/260	570/570/260	570/570/260
	Shipping dimensions(W/D/H)	mm	718/680/380		718/680/380	718/680/380	718/680/380	718/680/380
	Net/Shipping weight	kg	16/19		16/19	16/19	19/22	19/22
	Refrigerant liquid pipe	mm	6.35		6.35	6.35	6.35	6.35
	Refrigerant gas pipe	mm	9.52		9.52	9.52	12.7	12.7
Panel	Model Name		PB-620KB		PB-620KB	PB-620KB	PB-620KB	PB-620KB
	External dimensions(W/D/H)	mm	620/620/60		620/620/60	620/620/60	620/620/60	620/620/60
	Shipping dimensions(W/D/H)	mm	660/660/115		660/660/115	660/660/115	660/660/115	660/660/115
Controller	Wired(Optional)	/	YR-E16B		YR-E16B	YR-E16B	YR-E16B	YR-E16B
		/	YR-E17A		YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared (Optional)	/	YR-HQS01		YR-HQS01	YR-HQS01	YR-HQS01	YR-HQS01
		/	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

Round Way CASSETTE



Round Way  CASSETTE



DC fan motor



Unique round-way air outlet, no blind spot



Innovative 4 independent air flow control 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	44/40/36	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		PB-950KB								
	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)	/	YR-E17A	YR-E17A		YR-E17A								
		/	YR-E16B	YR-E16B		YR-E16B								
	Infrared(Optional)	/	YR-HQS01	YR-HQS01		YR-HQS01								
		/	YR-HRS01	YR-HRS01		YR-HRS01								

**Slim
DUCT[®] (0/15/30Pa)**



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

**Slim
DUCT[®] (0/15/30Pa)**



DC fan motor



Super slim design,
only 185mm



Friendly design of rear or
bottom air return



Built-in high head drain pump

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	9.6	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	13.7	17	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)	m³/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)		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
Drain pump	Net/Shipping weight	Kg	4/5		4/5	4/5	4/5	4/5	5/6	5/6
	O-optimal,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
	Wired(Optional)	/	YR-E16B		YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
	/		YR-E17A		YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared (Optional)	/	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01

High ESP
DUCT
(20/200Pa)



DC fan motor



Only 248mm thick



Built-in drain pump



50/60Hz

All module can realize
50/60Hz



DUCT
(20/200Pa)
High ESP
DUCT
(20/200Pa)



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

Model/Indoor unit			AD052MGERAD	AD072MGERAD	AD092MGERAD		AD122MGERAD	AD162MGERAD	AD182MGERAD	AD242MGERAD	AD282MGERAD	AD302MGERAD	AD382MGERAD	AD482MGERAD	AD542MGERAD
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	kW	1.5	2.2	2.8		3.6	4.5	5.6	7.1	8	9	11.2	14	16
		kBtu/h	5.8	8.5	10.9		13.7	17	21.5	27.3	30.7	34.1	44.3	55.6	60
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	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
	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,N-not	/	S	S	S		S	S	S	S	S	S	S	S	S
Controller	Wired(Optional)	/	YR-E17A	YR-E17A	YR-E17A		YR-E17A								
		/	YR-E16B	YR-E16B	YR-E16B		YR-E16B								
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK		HW-BA116ABK								
	Infrared(Optional)	/	HW-BA101ABT	HW-BA101ABT	HW-BA101ABT		HW-BA101ABT								
			YR-HRS01	YR-HRS01	YR-HRS01		YR-HRS01								

High ESP
DUCT
(100/250Pa)



DC fan motor



250
Pa

Max. ESP 250Pa



28
kW



50/60
Hz

Max. capacity 28kw

All module can realize
50/60Hz



DUCT
(20/200Pa)



YR-E16B

High ESP
DUCT
(100/250Pa)

Model/Indoor unit		AD722MTERAD			AD962MTERAD	
Capacity	Model capacity	HP			8	10
	Cooling	kBtu/h			77.1	95.6
		kW			22.6	28
	Heating	kBtu/h			85.3	105.8
		kW			25.2	31.5
Electrical Parameters	Power supply	Ph/V/Hz			1/220-240/50/60	1/220-240/50/60
Dimensions (W/D/H)	Net Product	mm			1330/895/500	1330/895/500
	Shipping Product	mm			1590/1087/690	1590/1087/690
Weight	Product Net/Shipping	kg			103/146	103/146
Fan	Static Pressure(Standard/Max)	Pa			100/250	100/250
	Air flow (H/M/L)	m³/h			4200/3900/2500	5200/4390/3500
Sound level	Sound pressure level(H/M/L)	dB(A)			55/51/47	62/58/54
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	/			N	N
Controller	Wired(Optional)	/			YR-E16B	YR-E16B

N High WALL



N High WALL

Model/Indoor unit			AS052MNERAB AS052MNERAC	AS072MNERAB AS072MNERAC		AS092MNERAB AS092MNERAC	AS122MNERAB AS122MNERAC	AS162MNERA AS162MNERAC	AS182MNERA AS182MNERAC	AS242MNERA AS242MNERAC	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
Performance	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
	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
Installation	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
	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-BA101ABT
		/	YR-E16B	YR-E16B		YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B	YR-E16B
		/	HW-BA116ABK	HW-BA116ABK		HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	YR-E17A	YR-E17A		YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A	YR-E17A
	Infrared(Optional)	/	YR-HRS01	YR-HRS01		YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	YR-HRS01	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



DC fan motor



Stylish design & LED display



Built in EEV, easy to installation



Comfortable Sleep



MRVINDOOR

Ventilation



Fresh Air Duct



HRV

067 VENTILATION

Fresh Air Duct

HRV

Fresh Air DUCT



100~
250Pa

Variable static pressure
100~250Pa setting



Install with other indoor
units together, and
introduce the outdoor
fresh air into indoor



DC fan motor



All module can realize
50/60Hz



HW-BA116ABK



YR-E17A



HW-BA101ABT



YR-E16B

Fresh Air DUCT

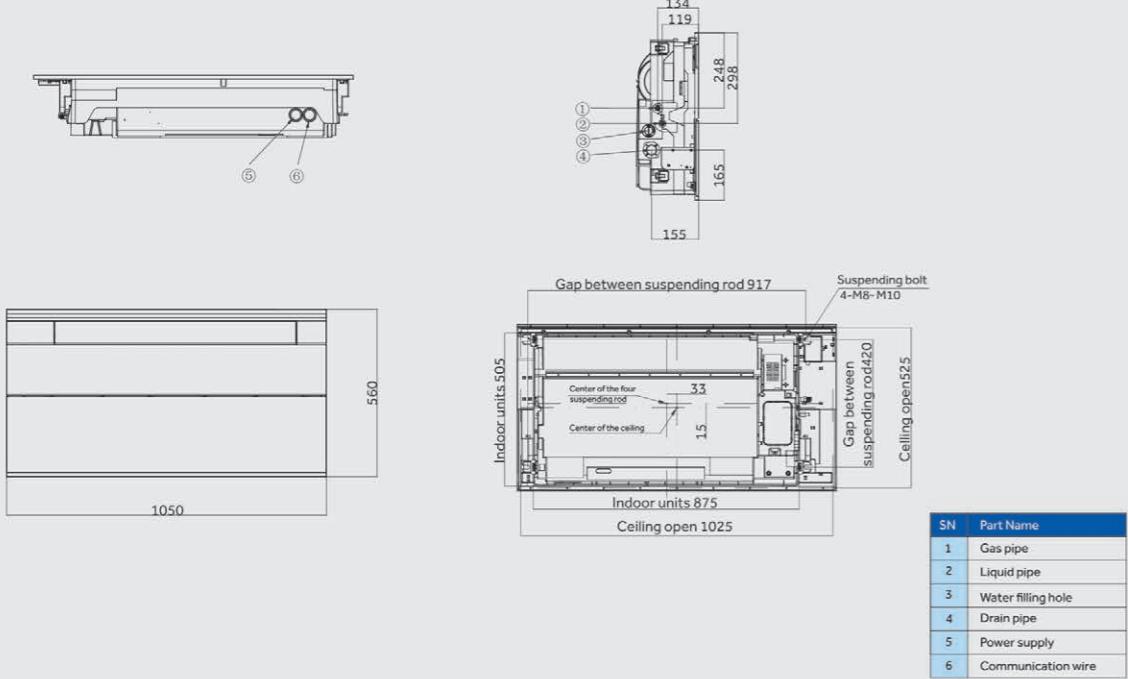
MRV INDOOR

Model/Indoor unit			AD482MJERF	AD722MTERAF	AD962MTERAF
Capacity	Cooling	kBtu/h	47.7	77.1	95.5
		kW	14	22.6	28
	Heating	Btu/h	30.4	51.8	60.8
		kW	8.9	15.2	17.8
Electrical Parameters	Power supply	Ph/V/Hz	1/220~230/50/60	1/220~230/50/60	1/220~230/50/60
Performance	Air flow (H)	m³/h	1600/1460/1070	4000/3500/3000	4500/4000/3600
	Sound pressure level(H/M/L)	dB(A)	48/47/42	50/47/44	51/48/45
	Sound power level(H/M/L)	dB(A)	61/60/56	68/65/60	68/66/62
Installation	External dimensions(W/D/H)	mm	1500/700/248	1512/856/502	1512/856/502
	Shipping dimensions(W/D/H)	mm	1718/848/345	1558/896/612	1558/896/612
	Net/Shipping weight	kg	43.6/50.4	102/116	102/116
	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	100/250	100/250
Controller	Wired (Optional)	/	YR-E16A	YR-E16A	YR-E16A
		/	YR-E16B	YR-E16B	YR-E16B
		/	HW-BA116ABK	HW-BA116ABK	HW-BA116ABK
		/	YR-E17A	YR-E17A	YR-E17A

Dimensions

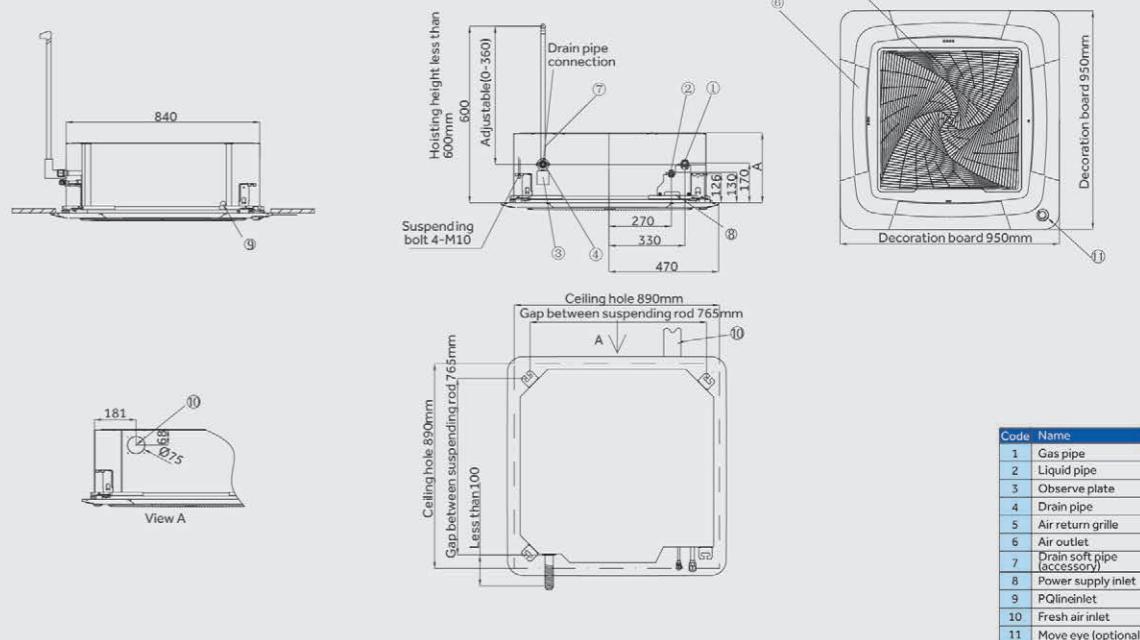
1-Way Cassette

AB052MAERA AB072MAERA AB092MAERA AB122MAERA



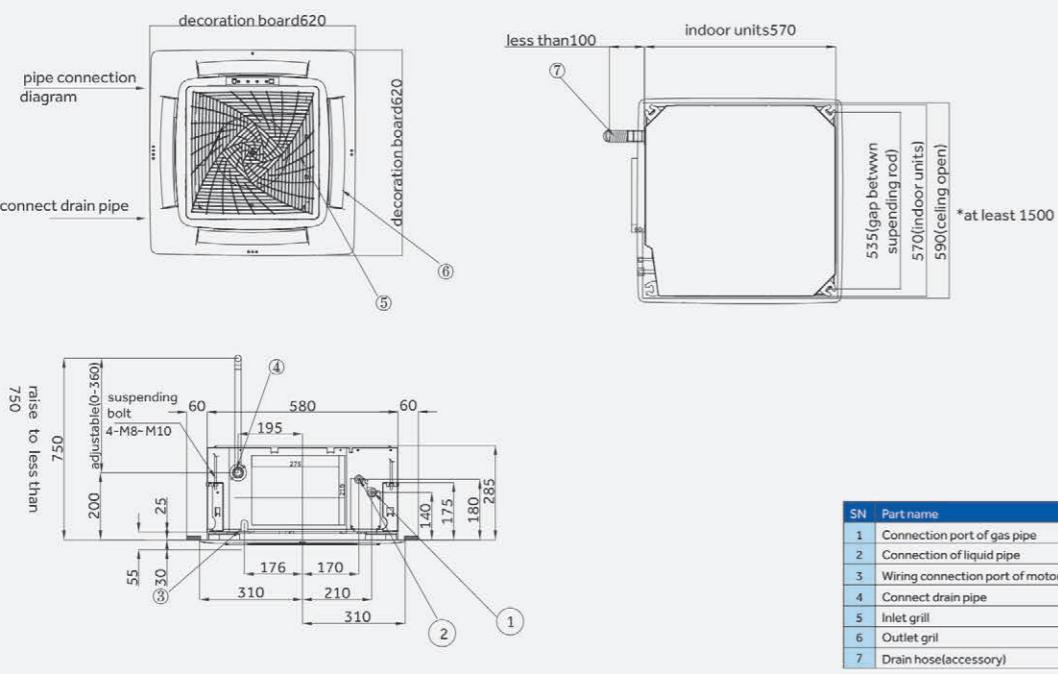
Round Way Cassette

AB072MRERA AB092MRERA AB122MRERA AB162MRERA AB162MRERA AB242MRERA
AB282MRERA AB302MRERA AB302MRERA AB482MRERA AB602MRERA



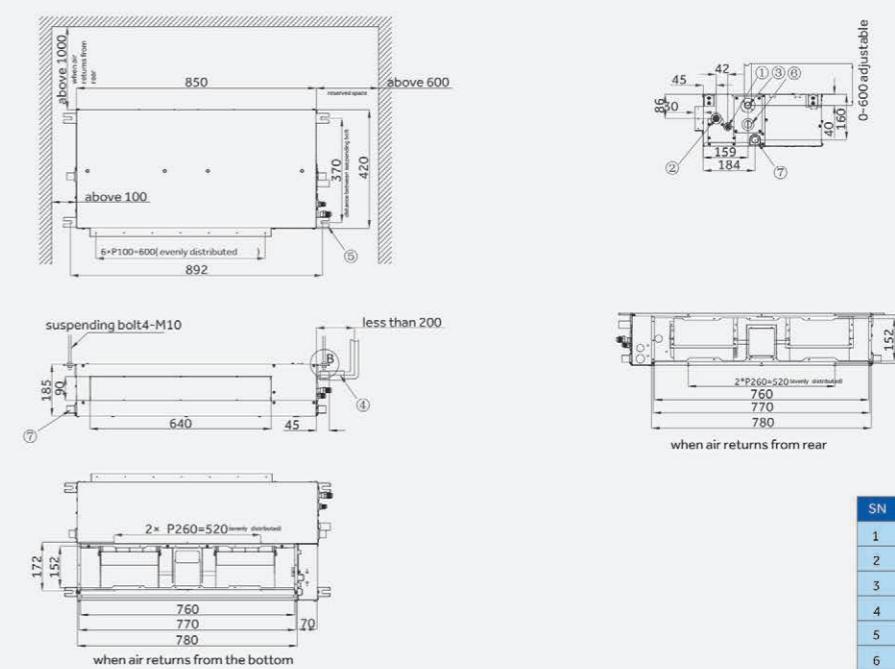
Compact Cassette

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



Slim Duct_(0/15/30Pa)
Slim Duct_(0/15/30Pa)
Slim Duct_(0/30Pa)

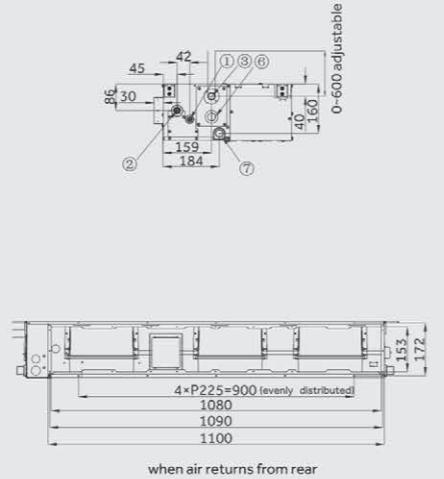
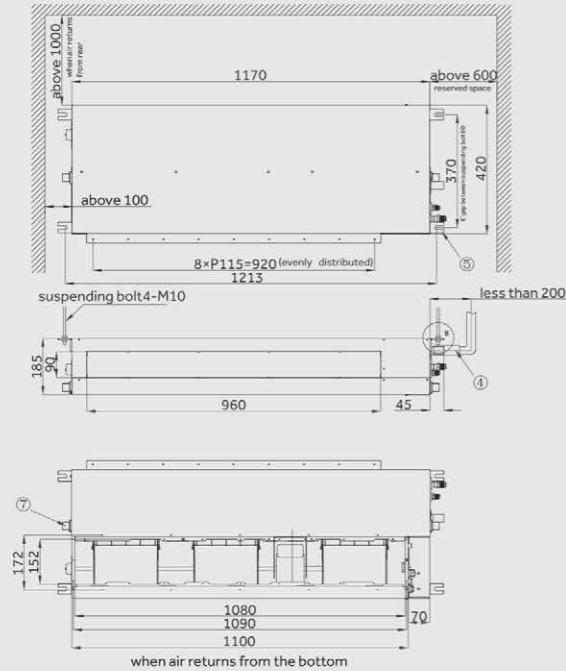
AD052MSERA(H) AD072MSERA(H) AD092MSERA(H) AD122MSERA(H) AD162MSERA(H)
AD052MSERA(D) AD072MSERA(D) AD092MSERA(D) AD122MSERA(D) AD162MSERA(D)
AD052MSERA AD072MSERA AD092MSERA AD122MSERA AD162MSERA



Dimensions

Slim Duct_(0/15/30Pa)
Slim Duct_(0/15/30Pa)
Slim Duct_(0/30Pa)

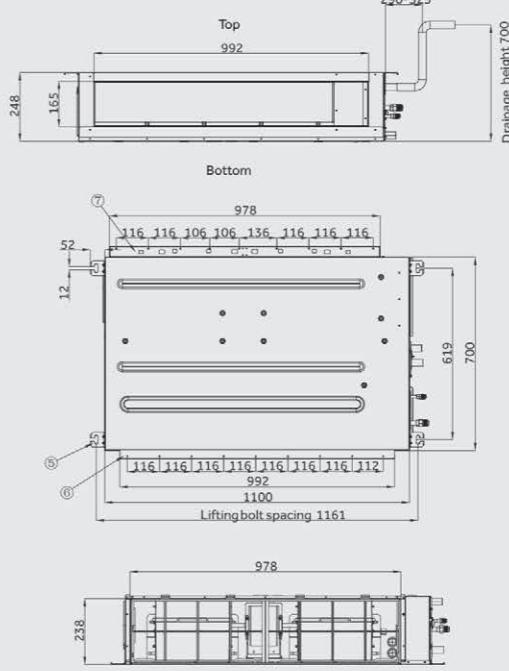
AD182MSERA(H) AD242MSERA(H)
AD182MSERA(D) AD242MSERA(D)
AD182MSERA AD242MSERA



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

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

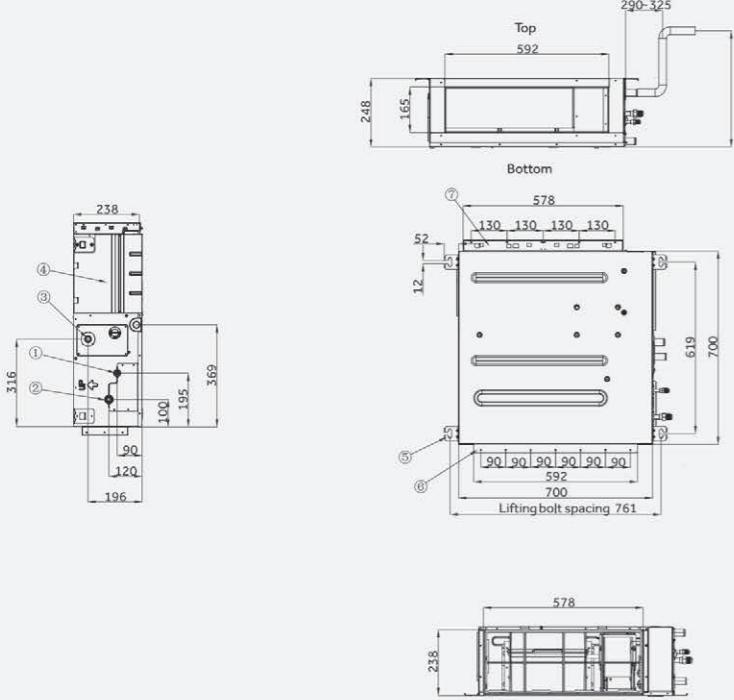
AD182MJERA(H) AD242MJERA(H) AD282MJERA(H) AD302MJERA(H)
AD182MJERAB AD242MJERAB AD282MJERAB AD302MJERA
AD182MJERAD AD242MJERAD AD282MJERAD AD302MJERAD



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

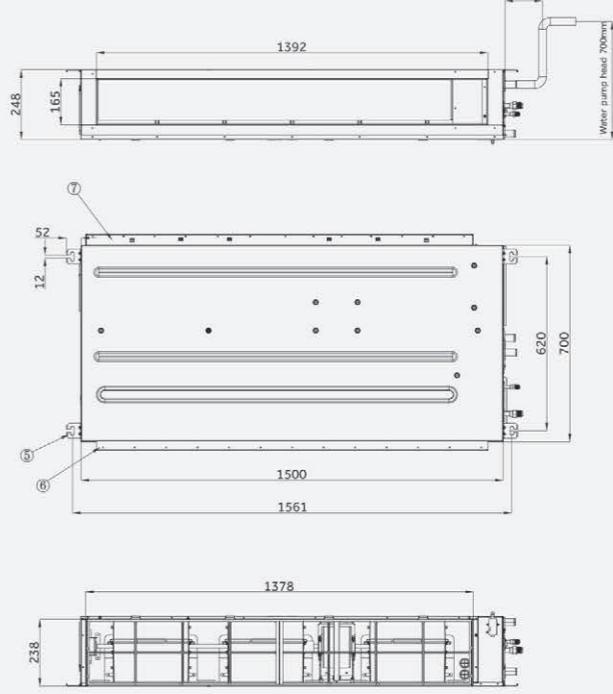
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AD052MJERAB AD072MJERAB AD092MJERAB AD122MJERAB AD162MJERAB
AD052MJERAD AD072MJERAD AD092MJERAD AD122MJERAD AD162MJERAD



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

AD382MJERA(H) AD482MJERA(H) AD542MJERA(H)
AD382MJERA AD482MJERA AD542MJERA
AD382MJERAD AD482MJERAD AD542MJERAD

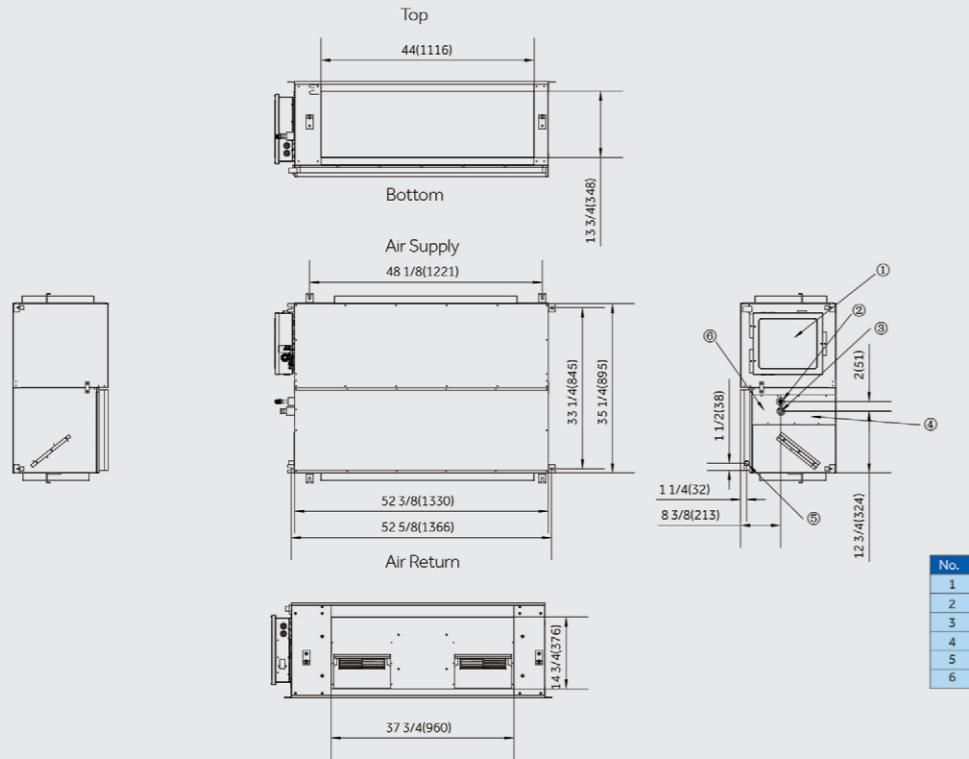


No.	Name
1	Liquid pipe
2	Gas pipe
3	Drain pipe
4	Electrical box
5	Hanging foot
6	Air outlet
7	Air return
8	Fresh air

Dimensions

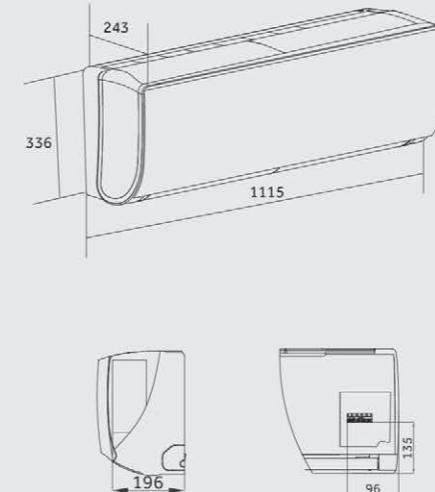
High ESP Duct
(100/250Pa)

AD722MGERA AD962MGERA



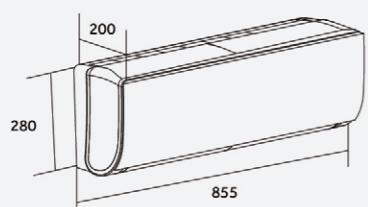
N High Wall

AS162MNERA AS182MNERA AS242MNERA
AS162MFERA AS182MFERA AS242MFERA



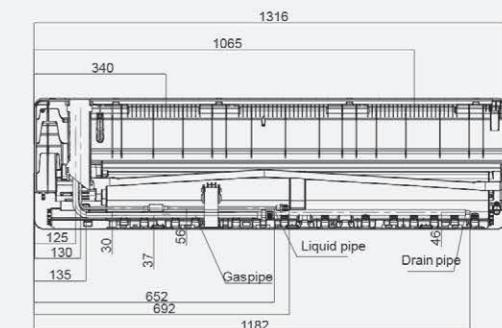
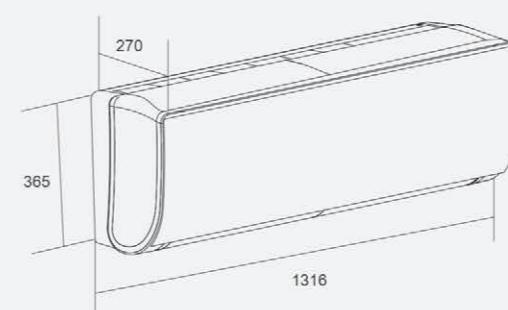
N High Wall

AS052MNERAB AS072MNERAB AS092MNERAB AS122MNERAB
AS052MFERAB AS072MFERAB AS092MFERAB AS122MFERAB



N High Wall

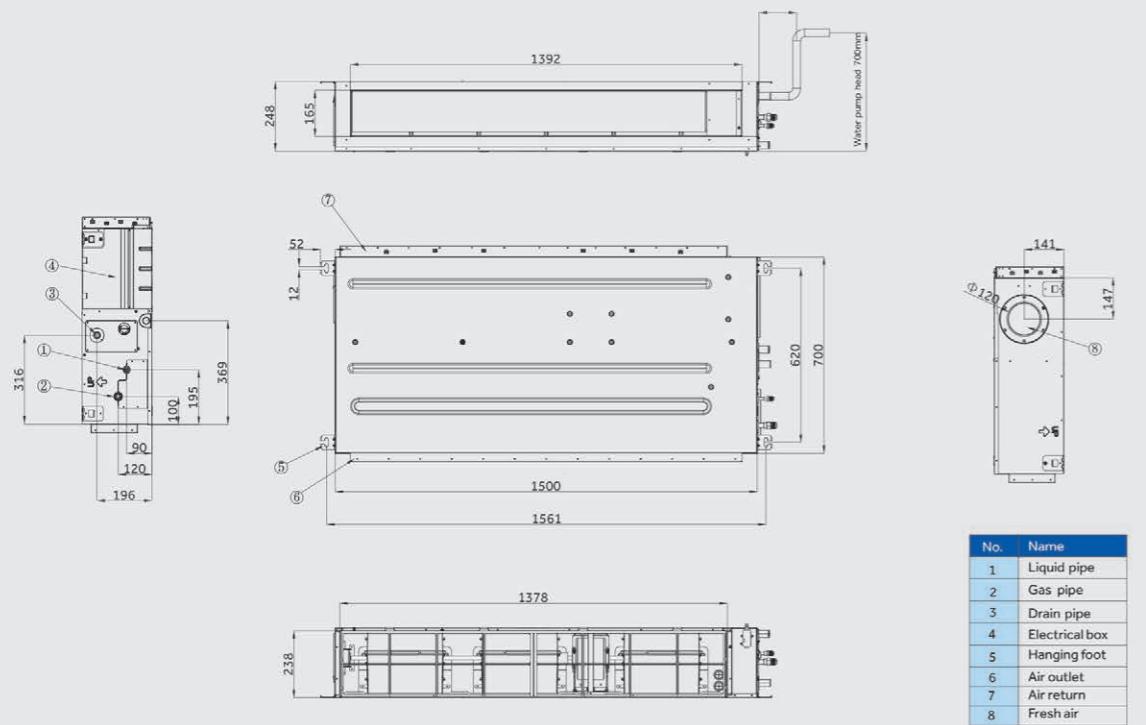
AS282MNERA AS302MNERA



Dimensions

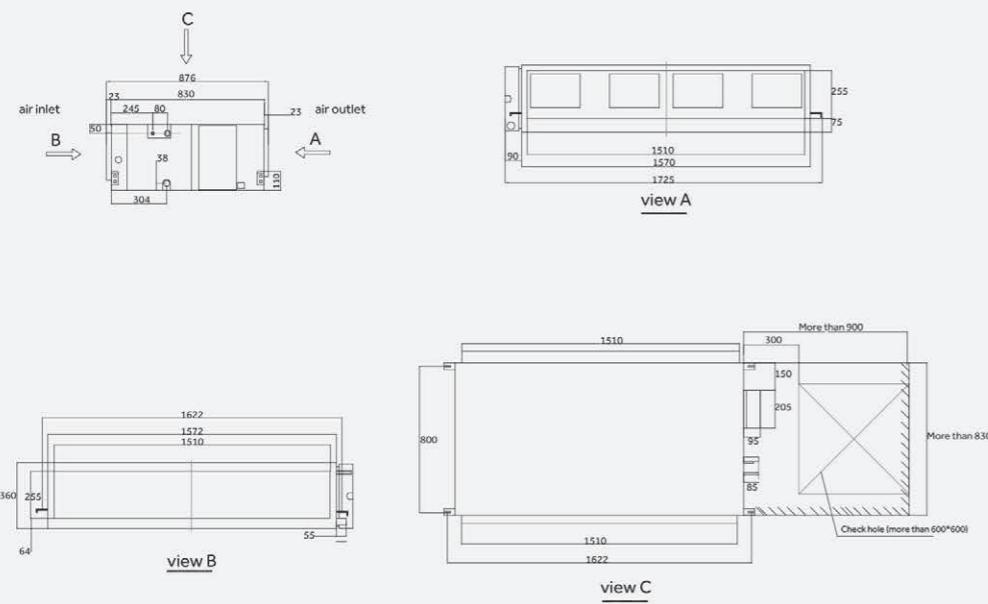
Fresh Air Duct

AD482MJERF



Fresh Air Duct

AD722MTERF AD962MTERF





CONTROL SYSTEM



Individual Controller



Centralized Controller

BMS



Multi Tenant Solution



Service Tool



Controllers Match Table
for MRV Indoor Units



Accessories

081 Individual Controller

093 Multi Tenant Solution

083 Centralized Controller

094 Service Tool

087 BMS Solution



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-Clean
- 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-Clean
- Timer
- Health function
- Backlight



INDIVIDUAL CONTROLLER

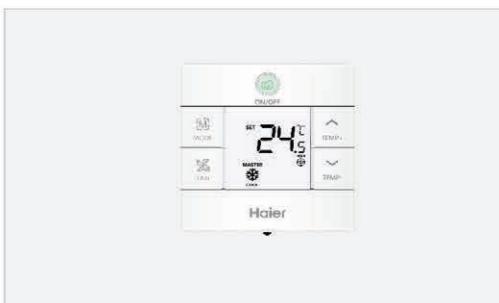
YR-E17A

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



HW-BA116ABK

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



HW-BA101ABT

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



YR-E16B

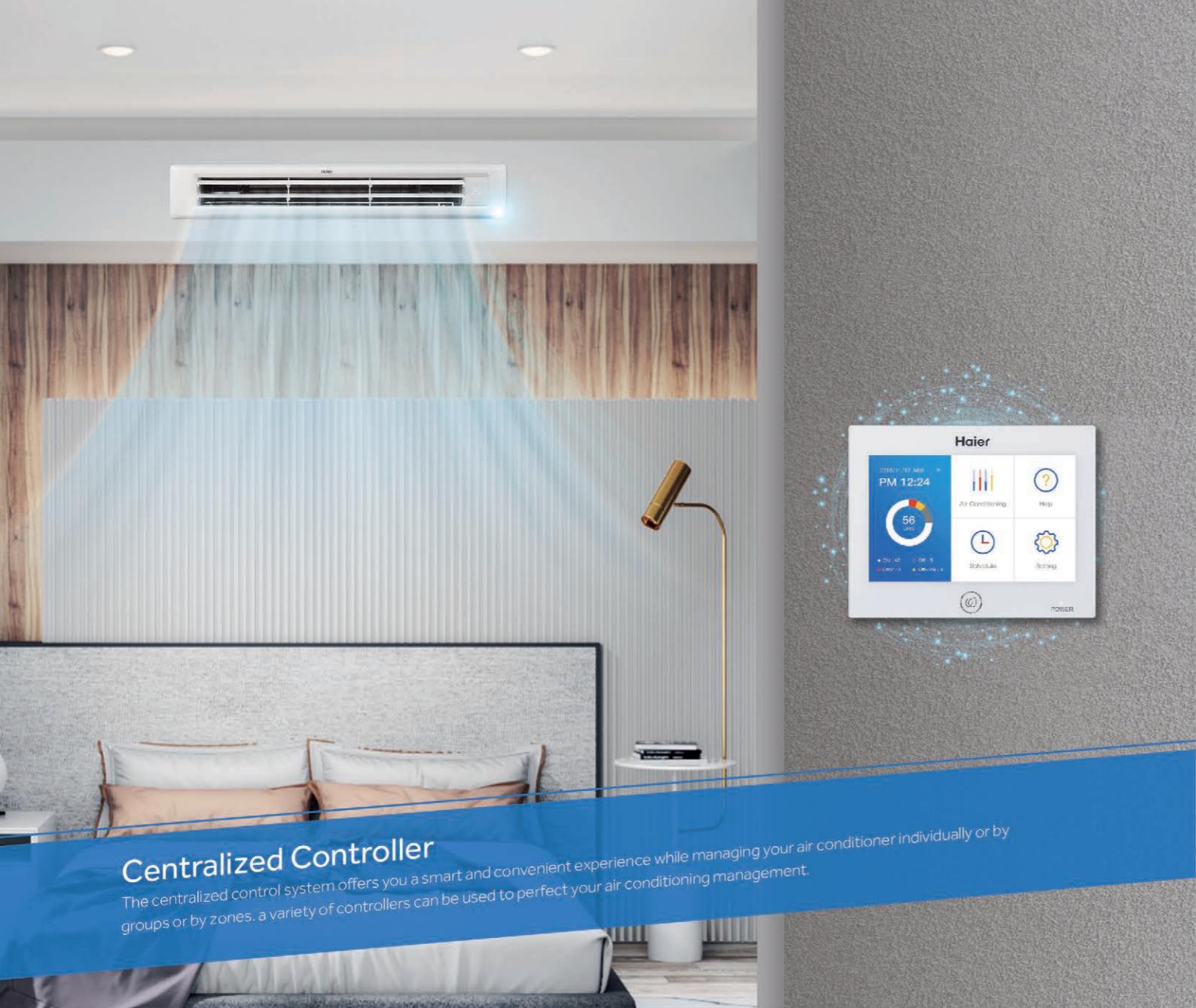
- Colorful screen
- On/off, mode, fan speed, temperature setting, swing
- Individual & group control (max 16 indoor units)
- Fahrenheit/ celsius selectable; sensitivity $\pm 0.5^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$)
- Weekly timer
- Individual louver control for MINI 4-way cassette and Round Flow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



RE-02

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





CENTRALIZED CONTROLLER

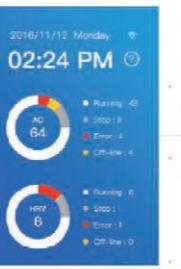
HC-SA164DBT

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



CENTRALIZED CONTROLLER

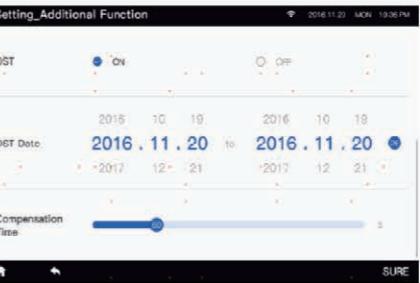
Monitoring up to 64 indoor unit could control HRV and monitoring the state of all IDU display Fault IDU number



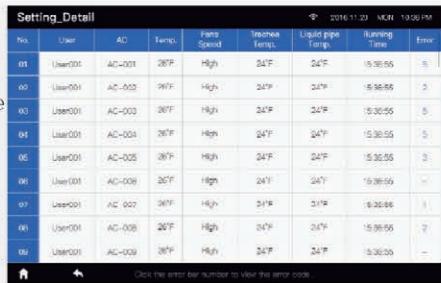
Set schedule for unit, group, all time control could be add, change, delete, unit control, group control, all ON/OFF



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



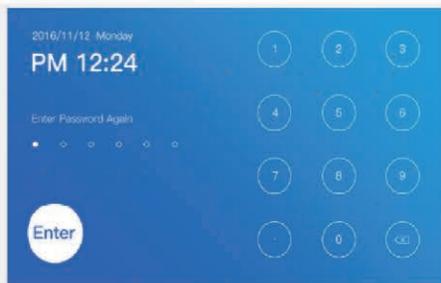
Display the detailed information check the name, number, temperature, running time and fault code



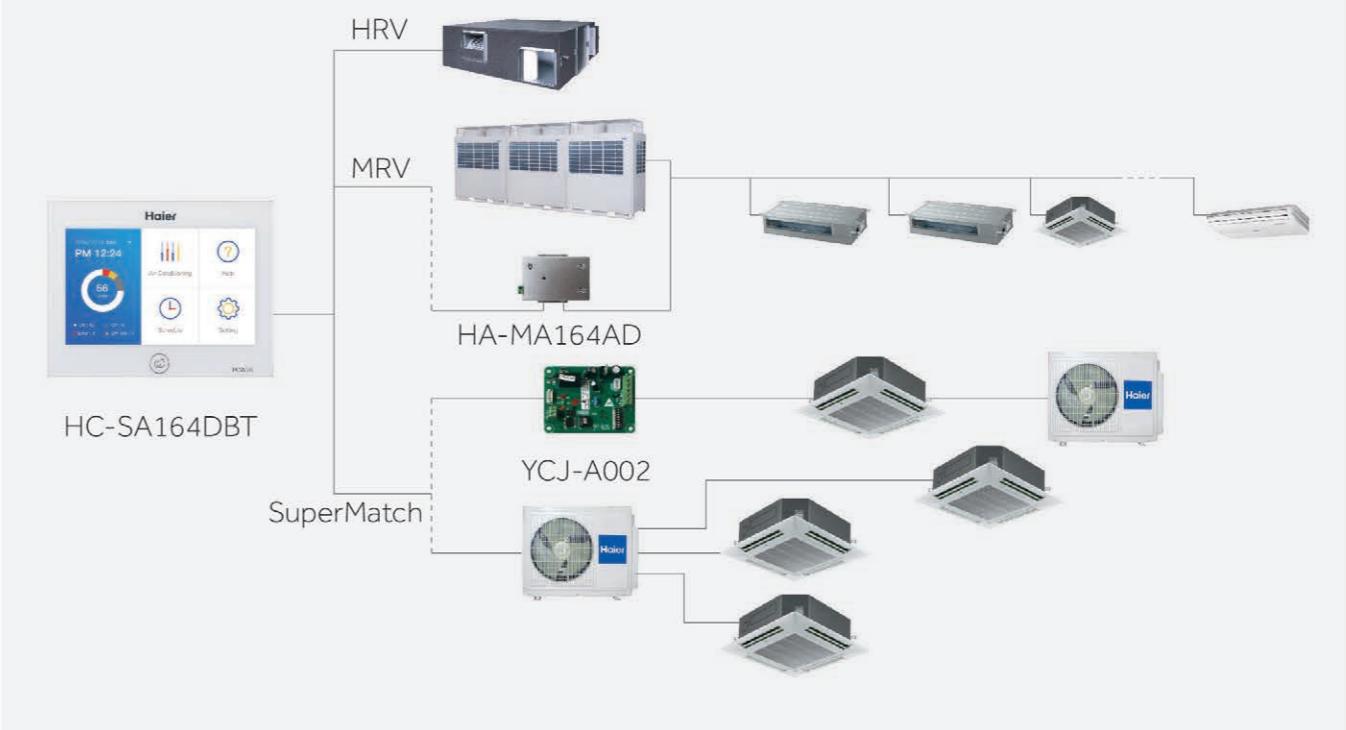
Interface display mode choice: list or icon All on, all off, control all, control select



Setting password according to user demand



HC-SA164DBT System



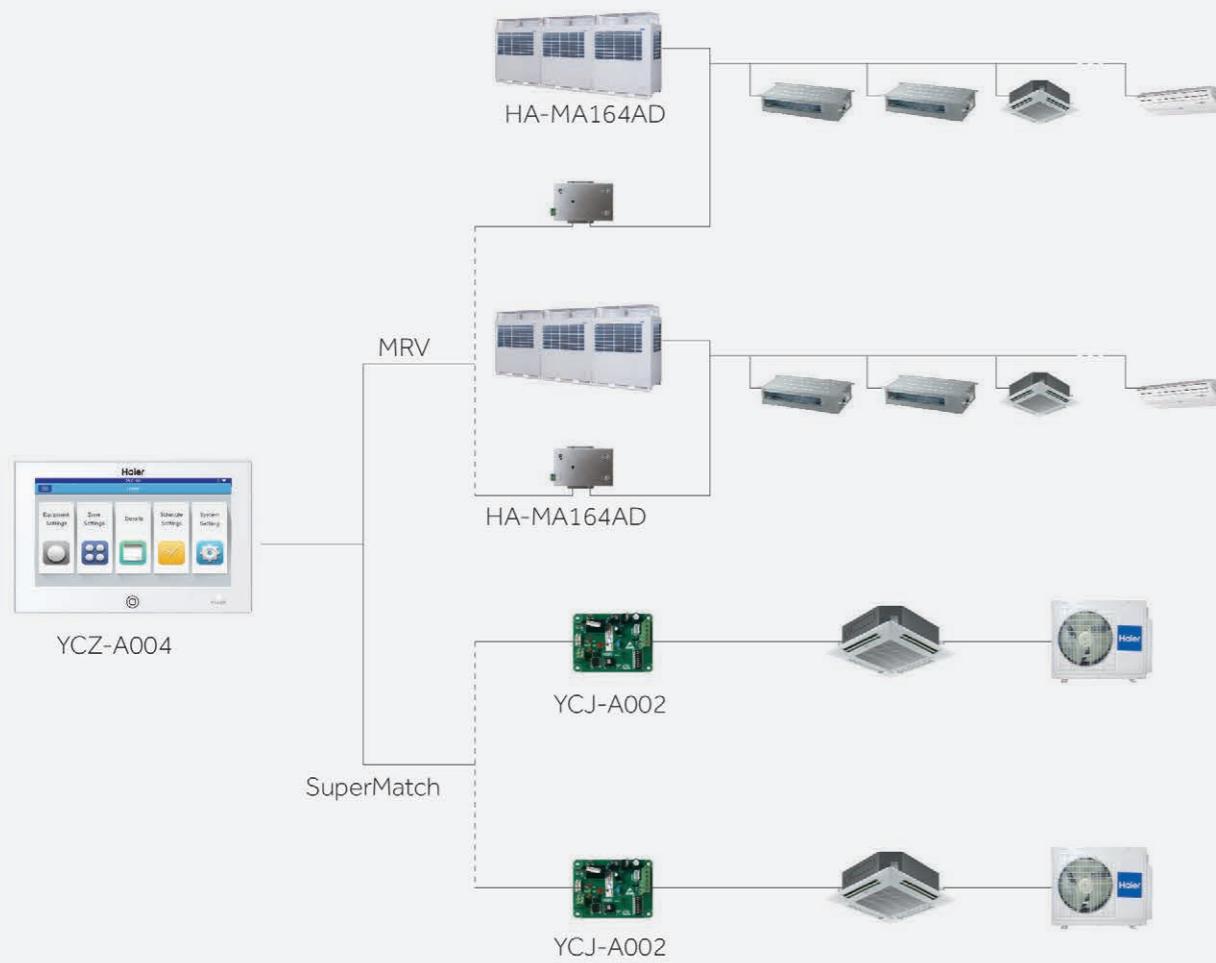
CENTRALIZED CONTROLLER

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

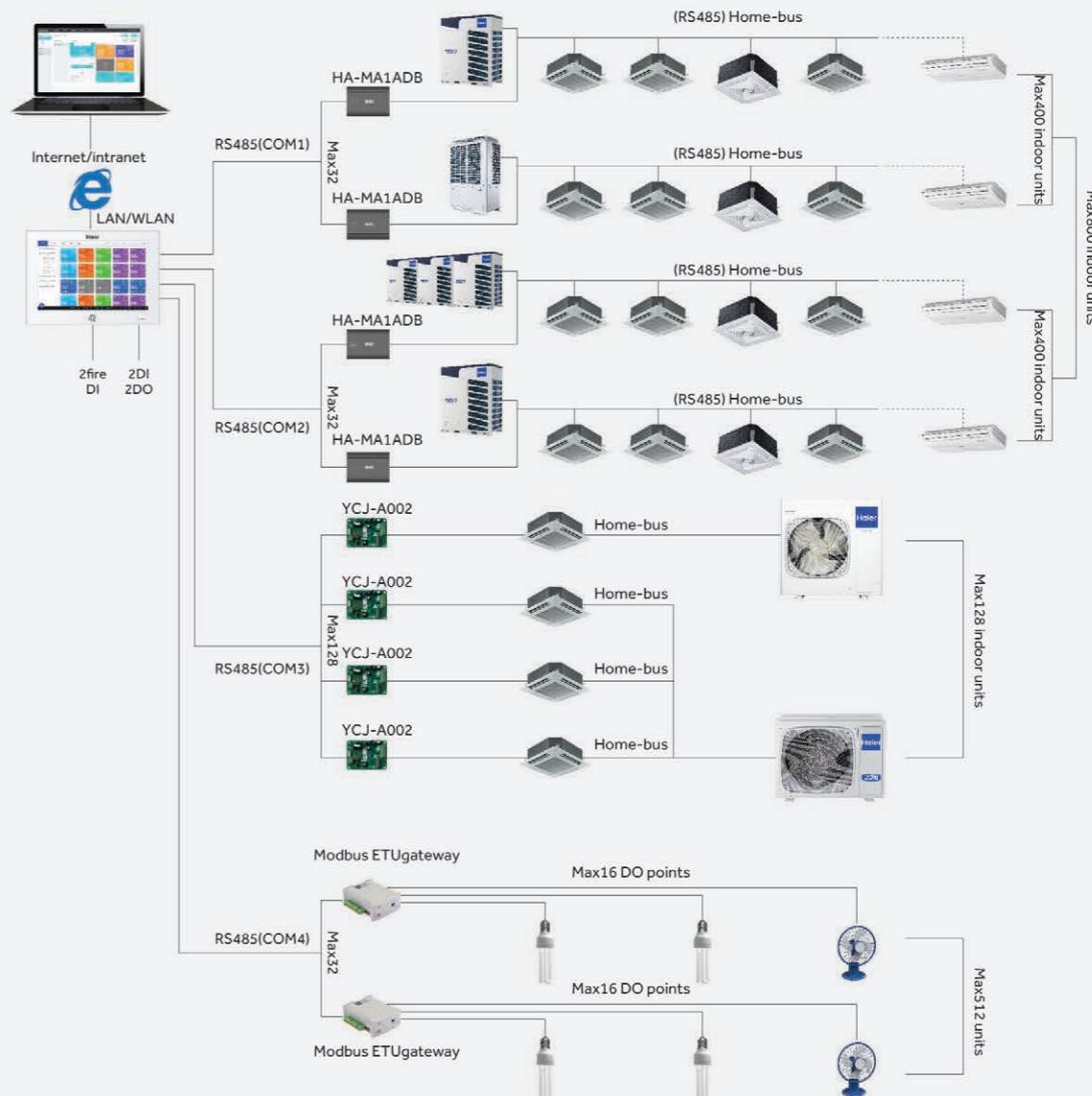
HC-LA1CDBT

- 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



NEW

HC-LA1CDBT System



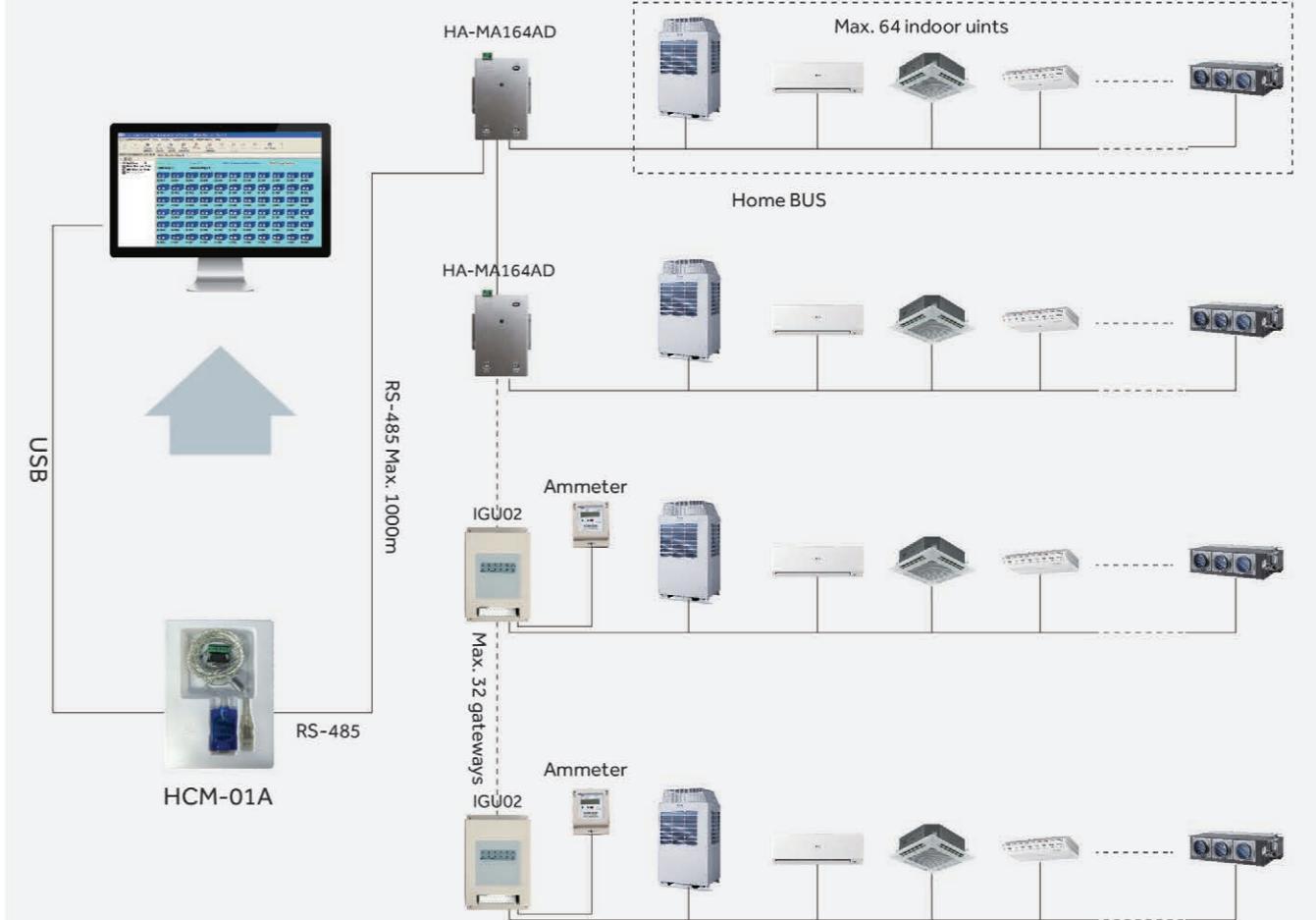
BMS BMS MONITOR

HCM-01A

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



HCM-01A System



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



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.

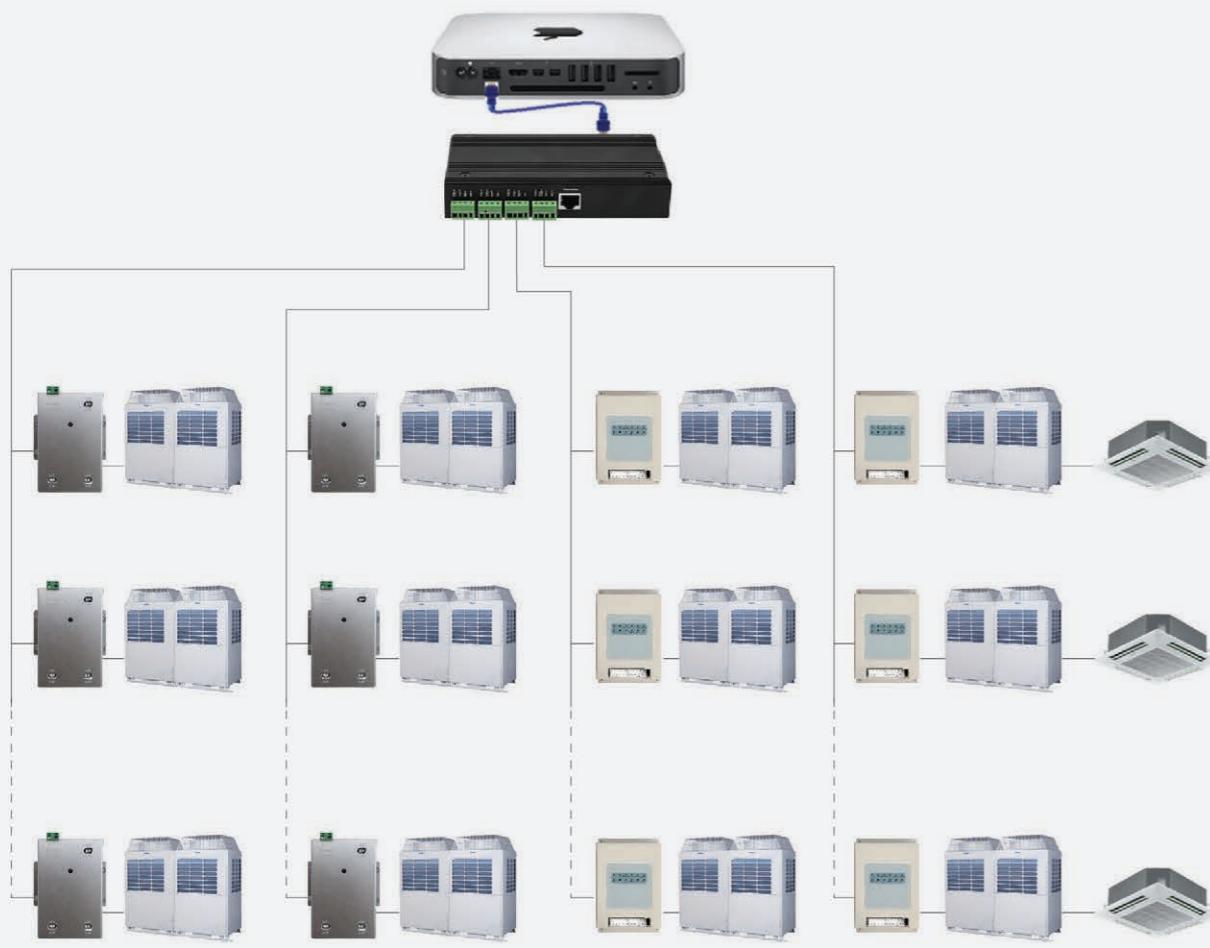
BMS BMS MONITOR

HCM-03A

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



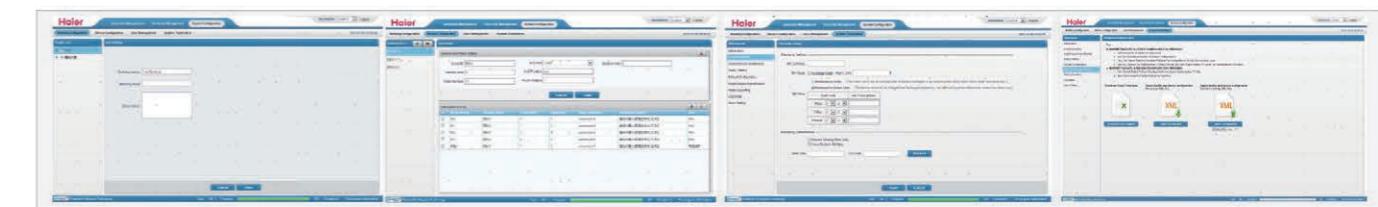
HCM-03A System



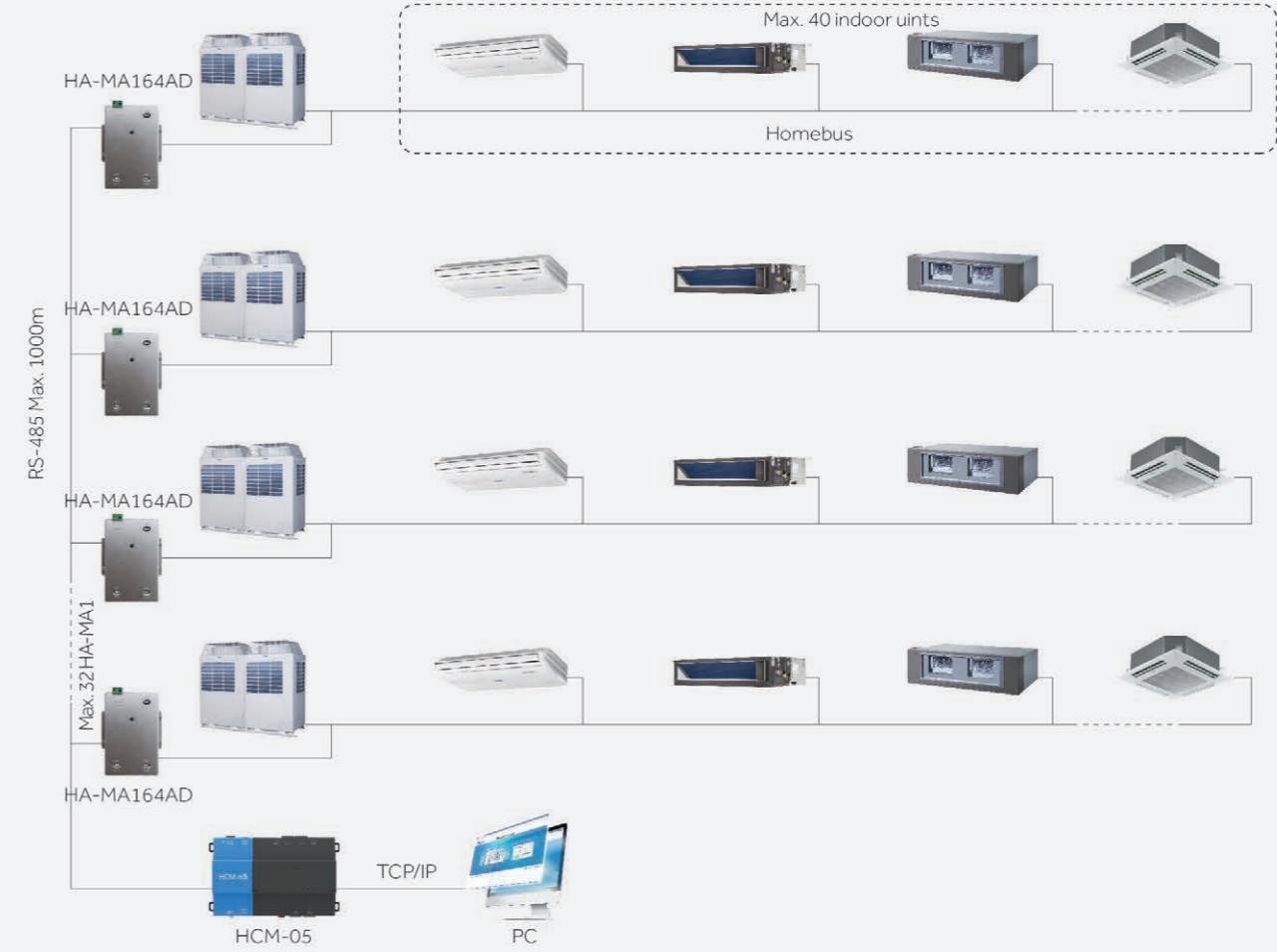
BMS BMS MONITOR

HCM-05

- Remote monitoring version
- Third party interface: BACnet ip
- Max. 250 indoor units can be controlled for HCM-05; and 500 indoor units for HCM-05A
- Max. 32 systems for HCM-05. Each system requires one IGU02/HA-MA164AD
- Max. 64 systems for HCM-05A. 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





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 RS-485
- Gateway modbus rtu
- Max. 64 indoor units can be connected with one HA-MA164AD
- MRV 5system 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

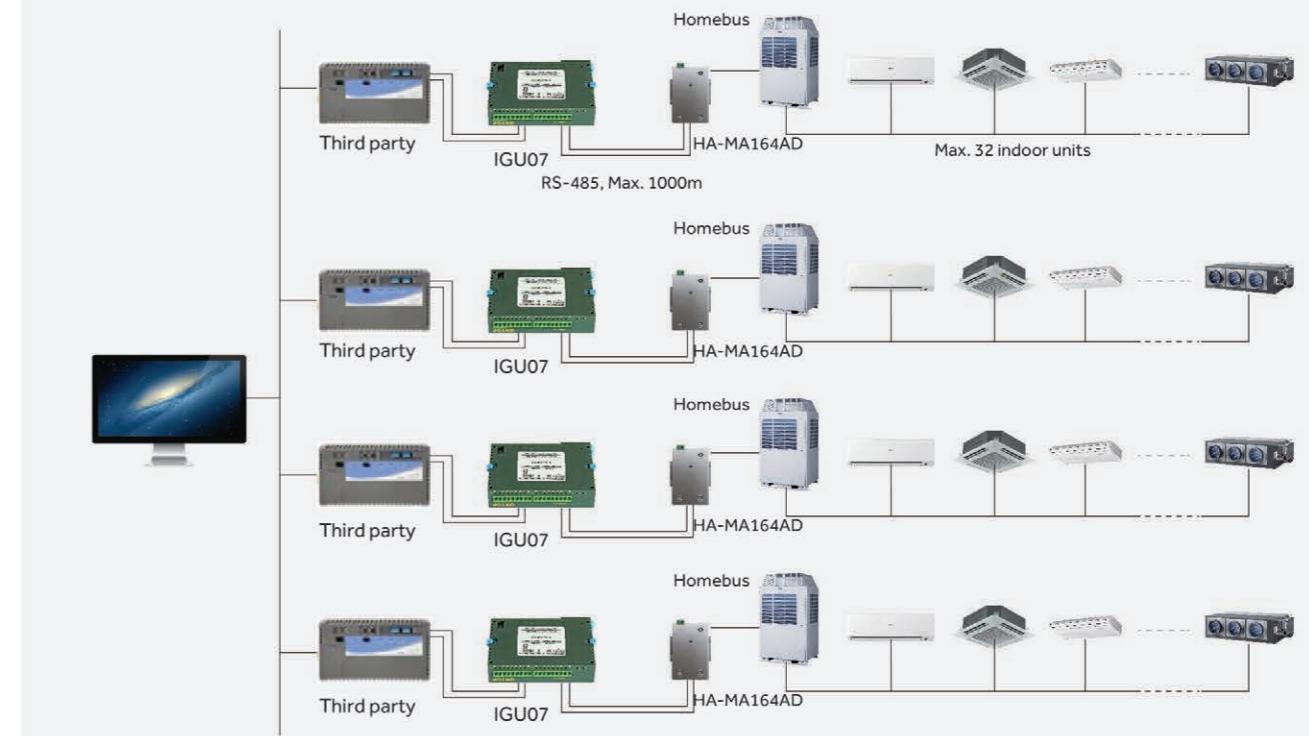


IGU07

- Protocol adapter, convert modbus rtu to ionworks
- 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



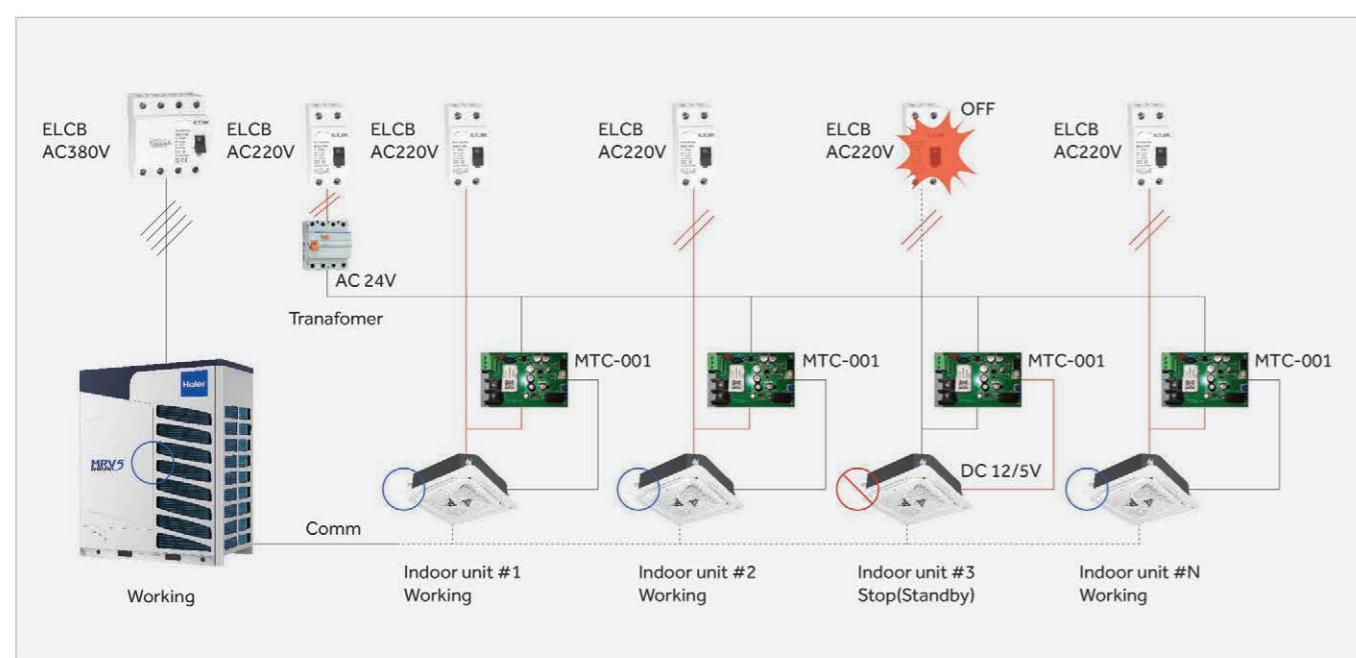
*For the KNX gateway purchase, please contact the KNX manufacture Intesis directly

MULTI TENANT SOLUTION

MTC-001

Application Scenario:

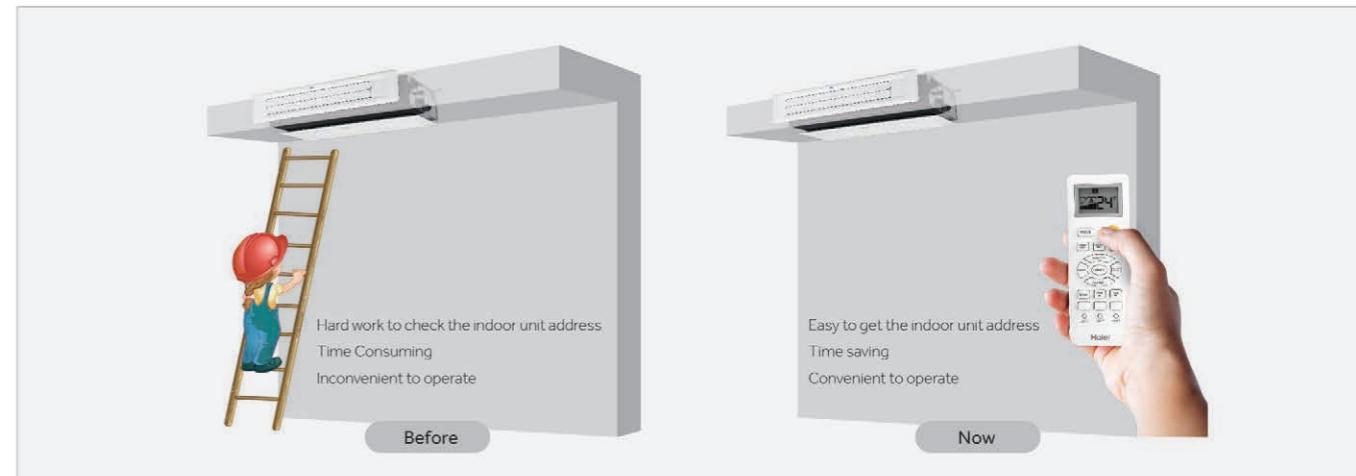
- a. The multi tenant site using separate circuit breaker for each indoor unit
- b. The hotel room using key-tag system which cuts off the power of indoor unit directly
- When it is detected that any connected indoor unit is forcibly cut off, the MTC-001 provides DC power to the indoor PCB to ensure 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

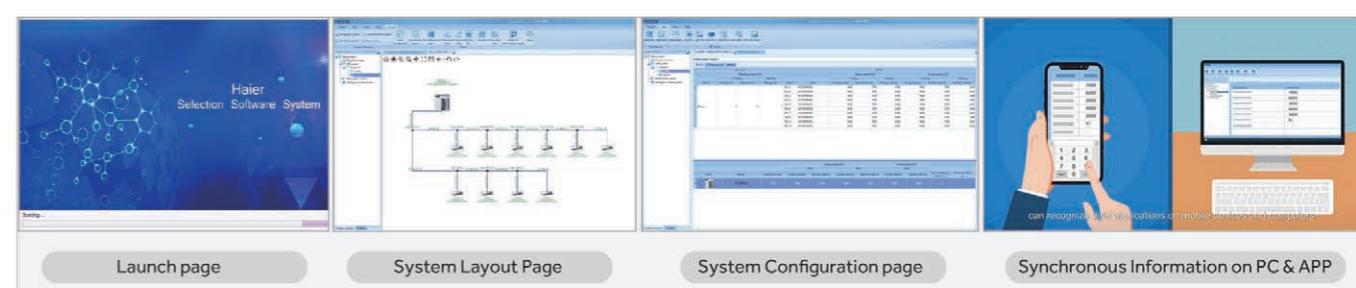
- On/Off, Mode, Fan speed, Temperature setting, Swing
- IDU address checking
- IDU address setting



Haier HACS Selection Software -easy to Design and Customization

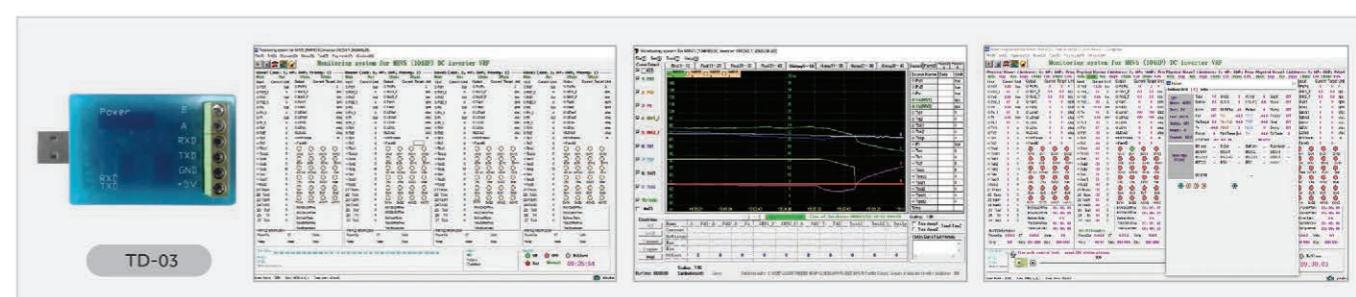
Haier HACS Selection Software supports PC & App, which means the reports and information on the phone and computer are synchronous.

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.



Service tool TD-03 with monitoring software

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



CONTROLLERS MATCH TABLE FOR MRV INDOOR UNITS

Outlook	Series	Model						
			YR-HRS01	YR-HQS01	HW-BA116ABK	HW-BA101ABT	YR-E17A	YR-E16B
	1-Way Cassette	AB**2MAERA	•	•	•	•	•	•
	Compact Cassette	AB**2MCERA(M)	•	•			•	•
	Round Way Cassette	AB**2MRERA	•	•			•	•
	Slim Duct (0/15/30Pa)	AD**2MSERA(D)	•		•	•	•	•
	High ESP Duct (20/200Pa)	AD**2MJERAD	•		•	•	•	•
	High ESP Duct (100-250Pa)	AD**2MGERA						•
	High Wall (N platform)	AS**2MNERA(B) AS**2MVERAC	•	•	•	•	•	•
	Fresh Air Duct	AD482MJERF AD722MTERF AD962MTERF			•	•	•	•

• Controllers can match with the indoor unit

ACCESSORIES

Name	Design	Model	Functions	For what 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-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		VP1-112B, VP1-180B VP1-280B	Vavle pipe box	MRV 5-RC(heat recovery)
VP box		VP4-450B	Vavle pipe box	MRV 5-RC(heat recovery)

REFERENCE PROJECTS



Reference Projects

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



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



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



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



Reference Projects

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



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



Country: Algeria
Project Name: Tapis office and showroom
Installation Series: MRVII-C



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



Reference Projects

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



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



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



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



Reference Projects

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



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



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



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



Reference Projects

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



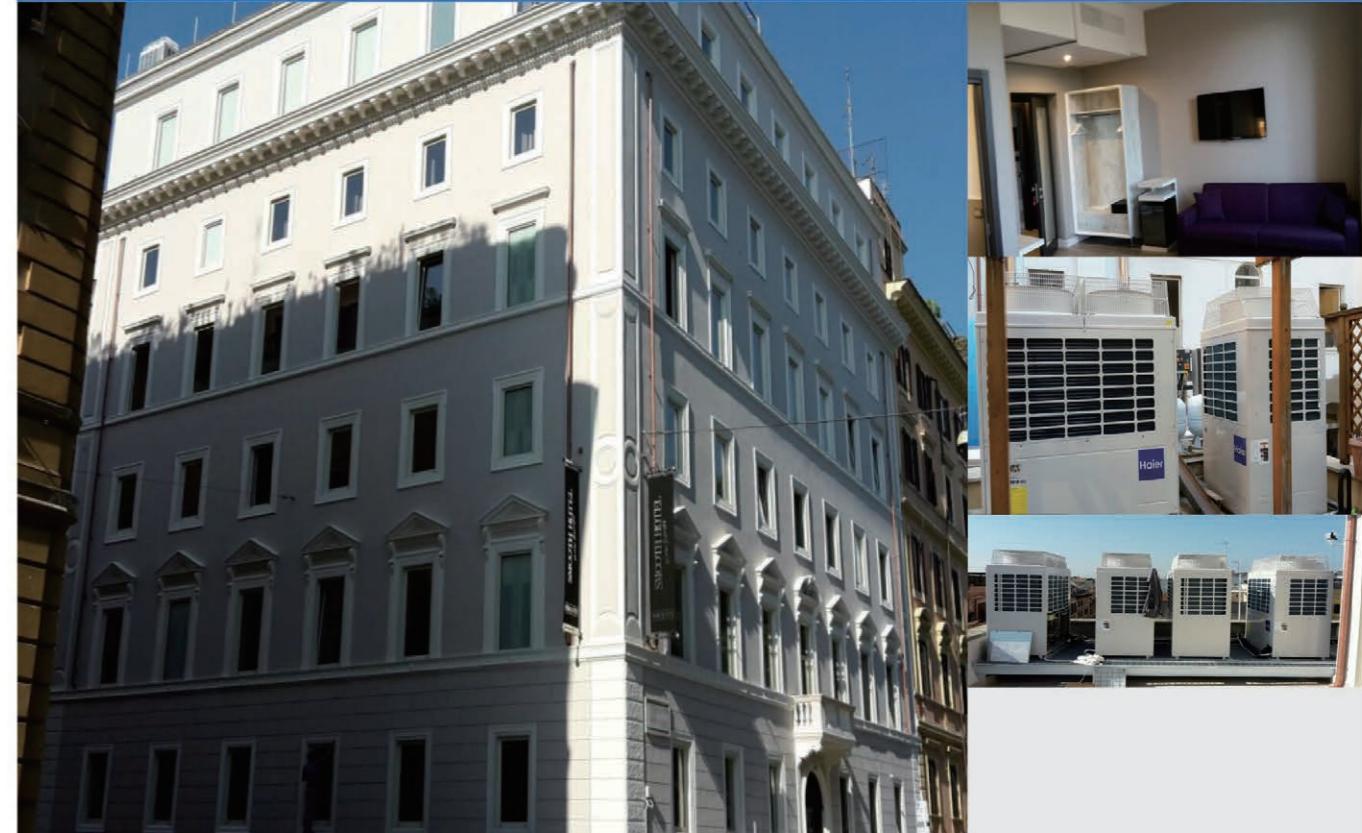
Country: Italy
Project Name: Audi Shop
Installation Series: MRV 5+MRV S



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



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



Reference Projects

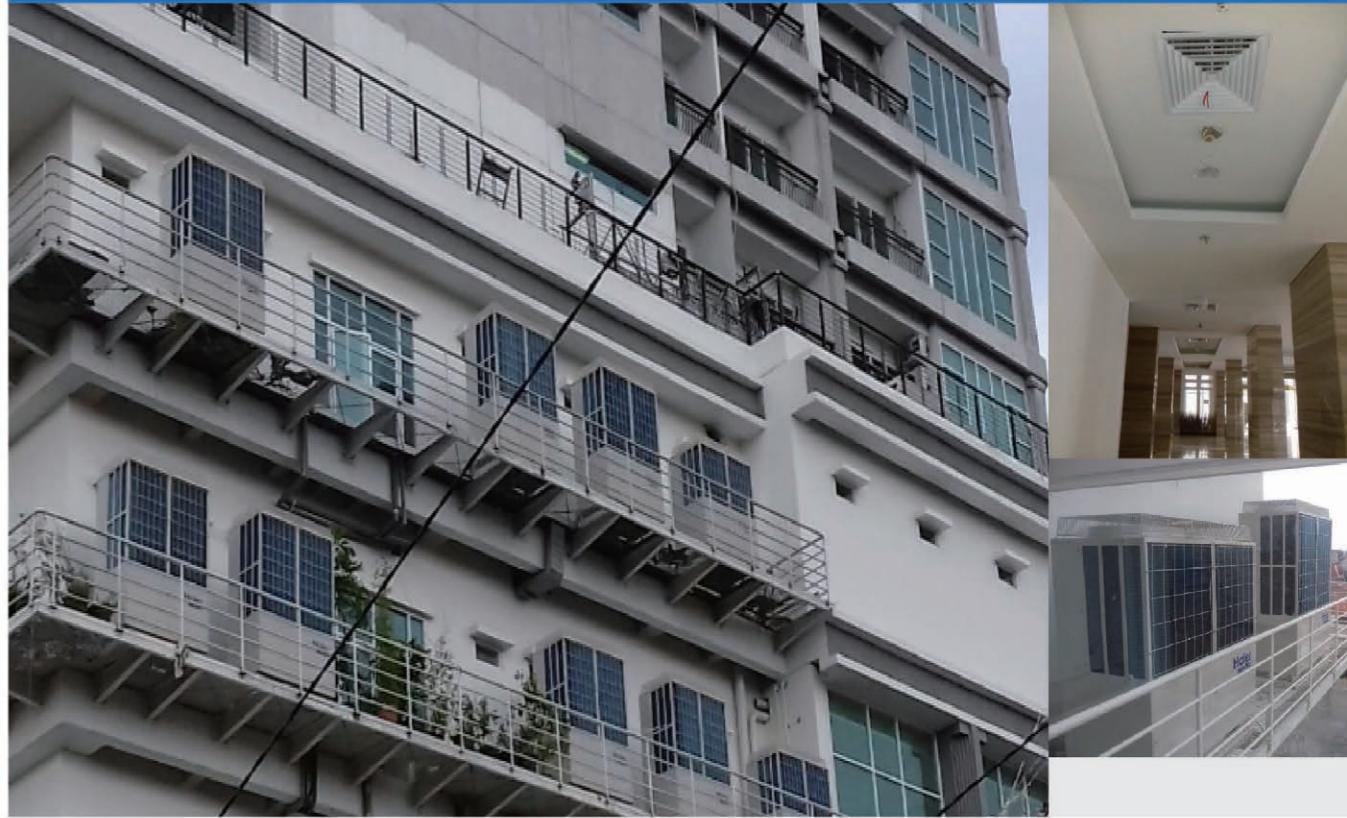
Country: Italy
Project Name: Meininger Hotel
Installation Series: MRV III C Plus +MRV III -RC



Country: Indonesia
Project Name: St. Borromeus Hospital
Installation Series: MRVIII-C



Country: Indonesia
Project Name: Kosambi Apartement
Installation Series: MRV IV-C & SINGLE



Country: Israel
Project Name: Acro Real Estate High-end Residential Project
Installation Series: MRV SII



Reference Projects

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



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



Country: Pakistan
Project Name: L'ecole School
Installation Series: MRV IV



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



Reference Projects

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



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



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



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



Reference Projects

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



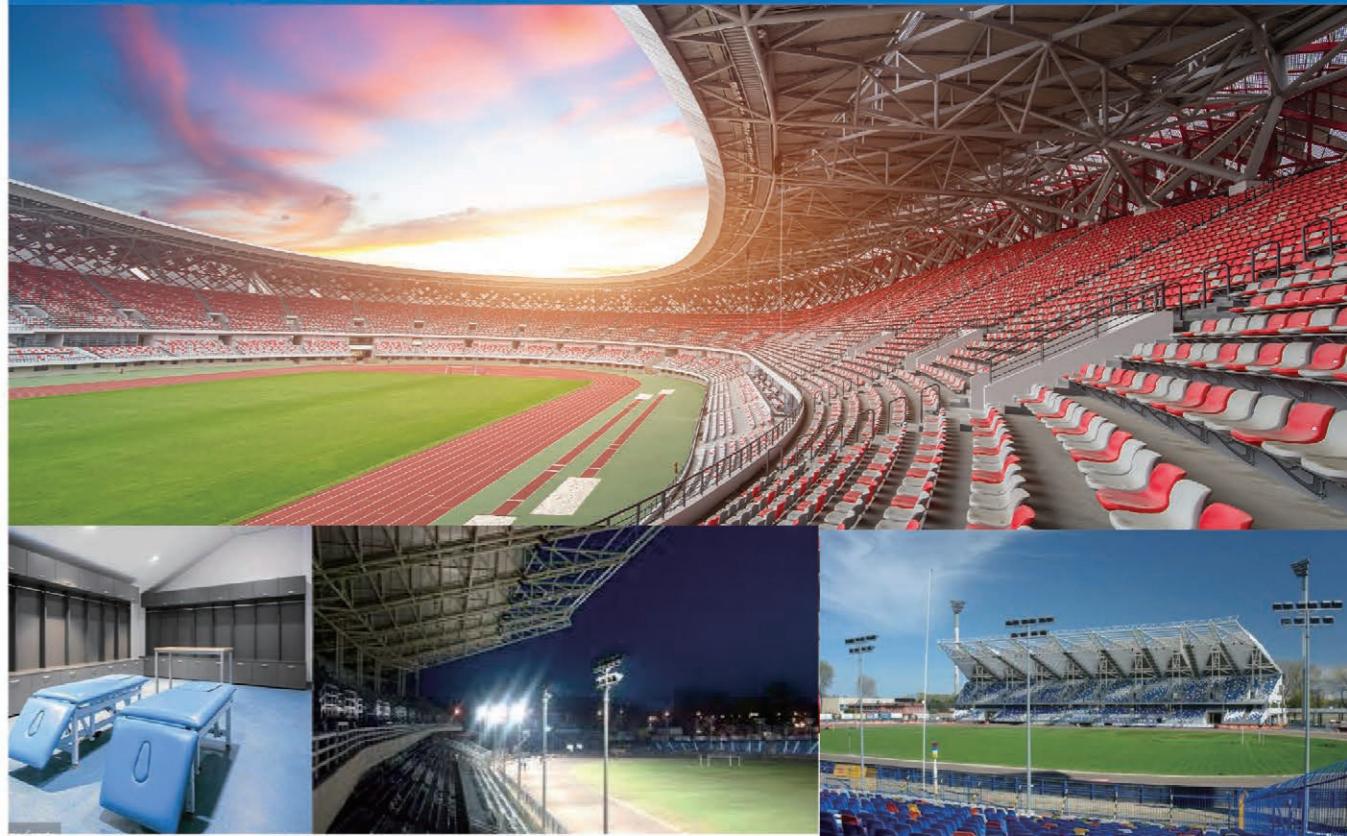
Country: Poland
Project Name: Hotel & conference center
Installation Series: MRV III-C



Country: Poland
Project Name: 4 separate building designated for business, retail and entertainment purposes
Installation Series: MRV III-C



Country: Poland
Project Name: Stadium
Installation Series: 5 MRV III-S systems



Reference Projects

Country: Poland
Project Name: 2000sq m, 3 story building
Installation Series: MRV III-C



Country: Republic of Malta
Project Name: Water front
Installation Series: MRV-IV



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



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

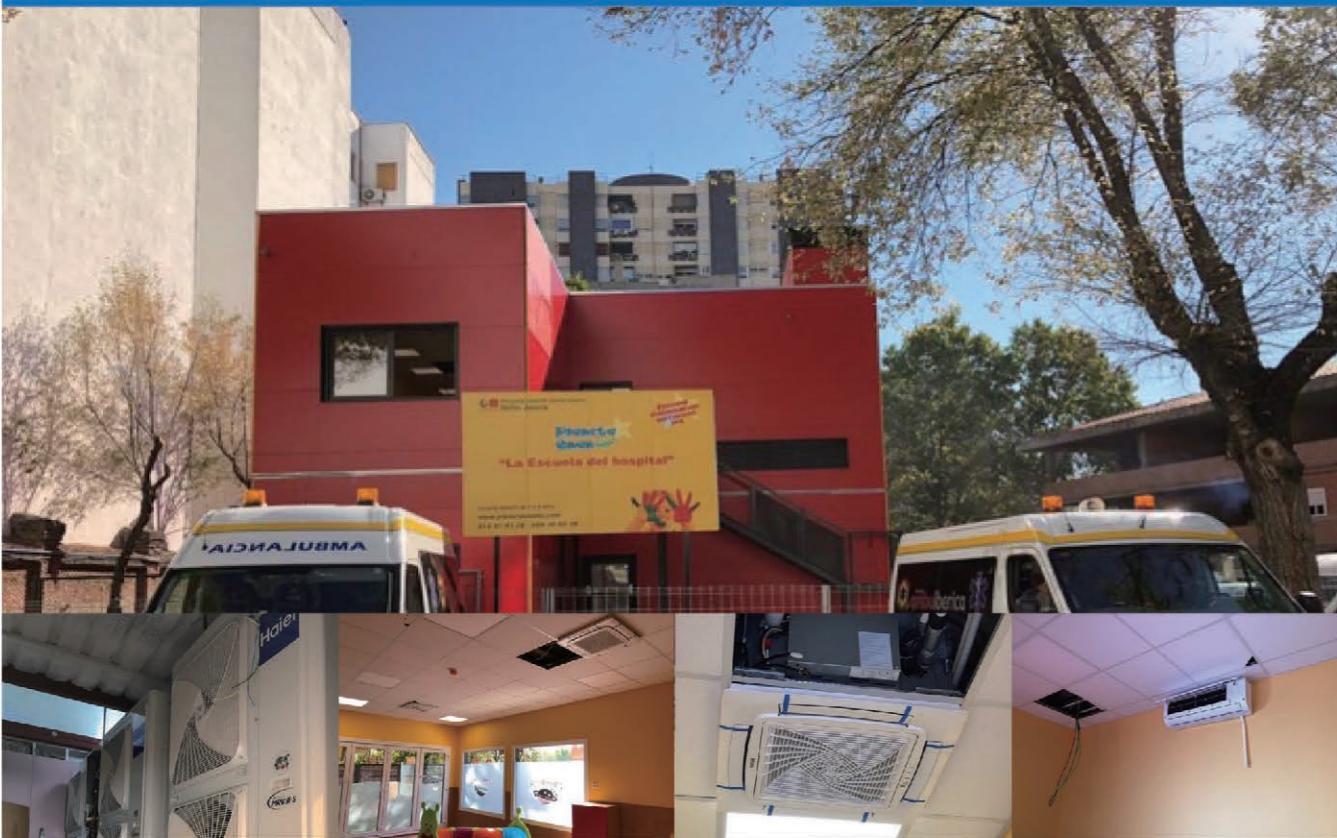


Reference Projects

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



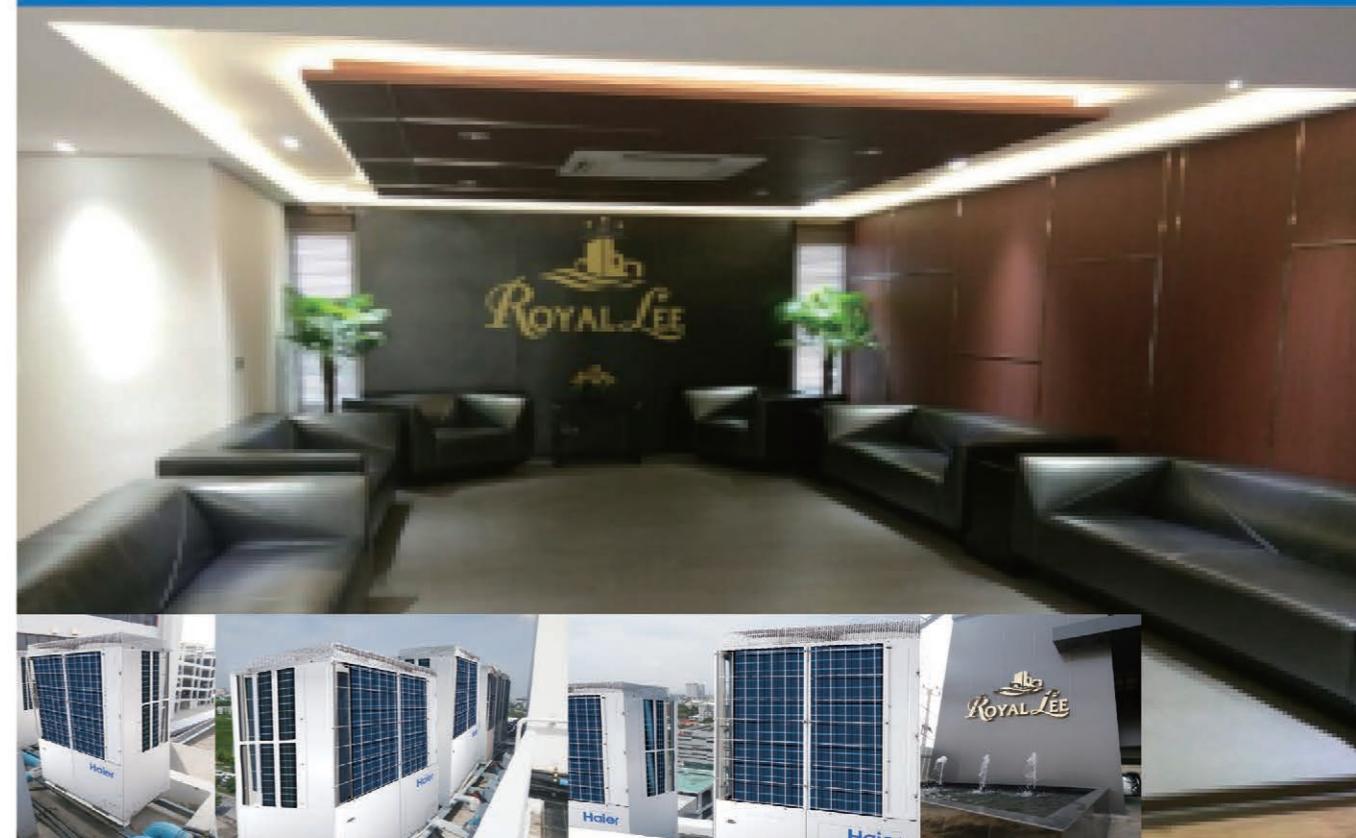
Country: Spain
Project Name: Guardería Hospital Niño Jesús
Installation Series: MRV-S



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



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



Reference Projects

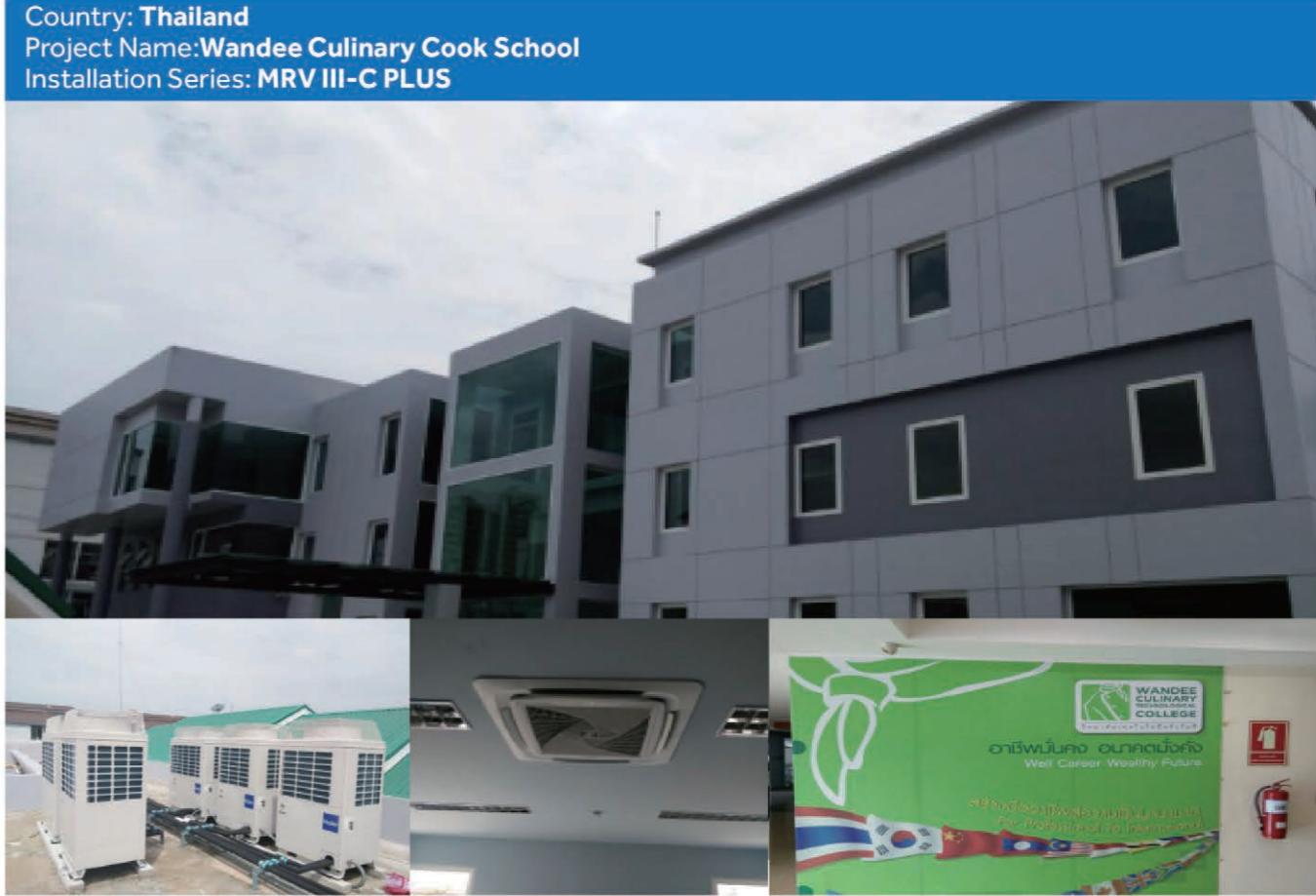
Country: Turkey
Project Name: Caspian Shopping Center
Installation Series: MRV 5



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



Country: Thailand
Project Name: Wandee Culinary Cook School
Installation Series: MRV III-C PLUS



Country: Ukraine
Project Name: IT-Center
Installation Series: MRV 5



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