



Haier
HVAC Solutions

Professional, Smart &
Healthy Air Solutions

Commercial & Applied HVAC Solutions

Catalogue 2022/23



The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

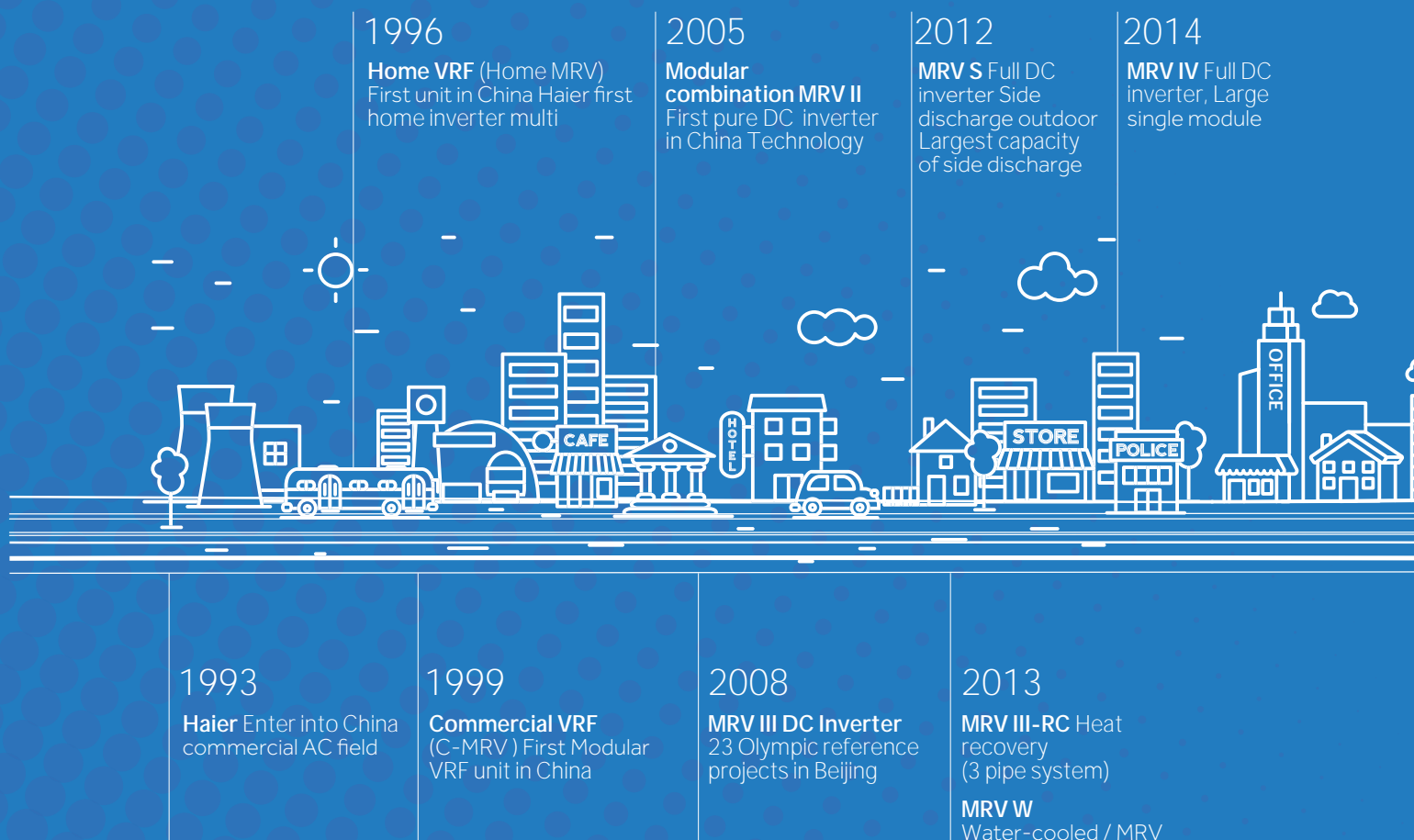
CONTENTS

01	RANGE	16
02	MRV S II Outdoor Units - Front Air Discharge	21
03	MRV 5 Full DC Inverter Outdoor Units	30
04	MRV 5-H Full DC Inverter Outdoor Units	48
05	MRV 5-RC 3-Pipe Heat Recovery Outdoor Units	64
06	MRV 5-W Water Cooled Heat Pump Outdoor units	80
07	MRV INDOOR UNITS	92
	Smart Flow All-Way Cassette	94
	4-Way Standard Cassette compact	96
	4-Way Standard Cassette	98
	Wall Mounted Units	99
	1-Way Cassette	102
	2-Way Cassette	103
	Ceiling / Floor Convertible	104
	Slim Duct - Low Pressure	105
	Ducted - Medium Pressure	106
	Ducted - High Pressure	107
	Ducted - Fixed flow	108
	Floor Console - Built-in	110
	Floor Console, Exposed type, Double Flow	111
	Fresh Air Duct	112
	Cross-Flow Heat Recovery Units	113
	Hydrobox	114
	Unit Dimensions	115
08	EASY MRV Supermatch Indoor Unit	127
09	MRV AHU Application	138
10	Control, Management systems & Accessories	145

Haier Brand Story

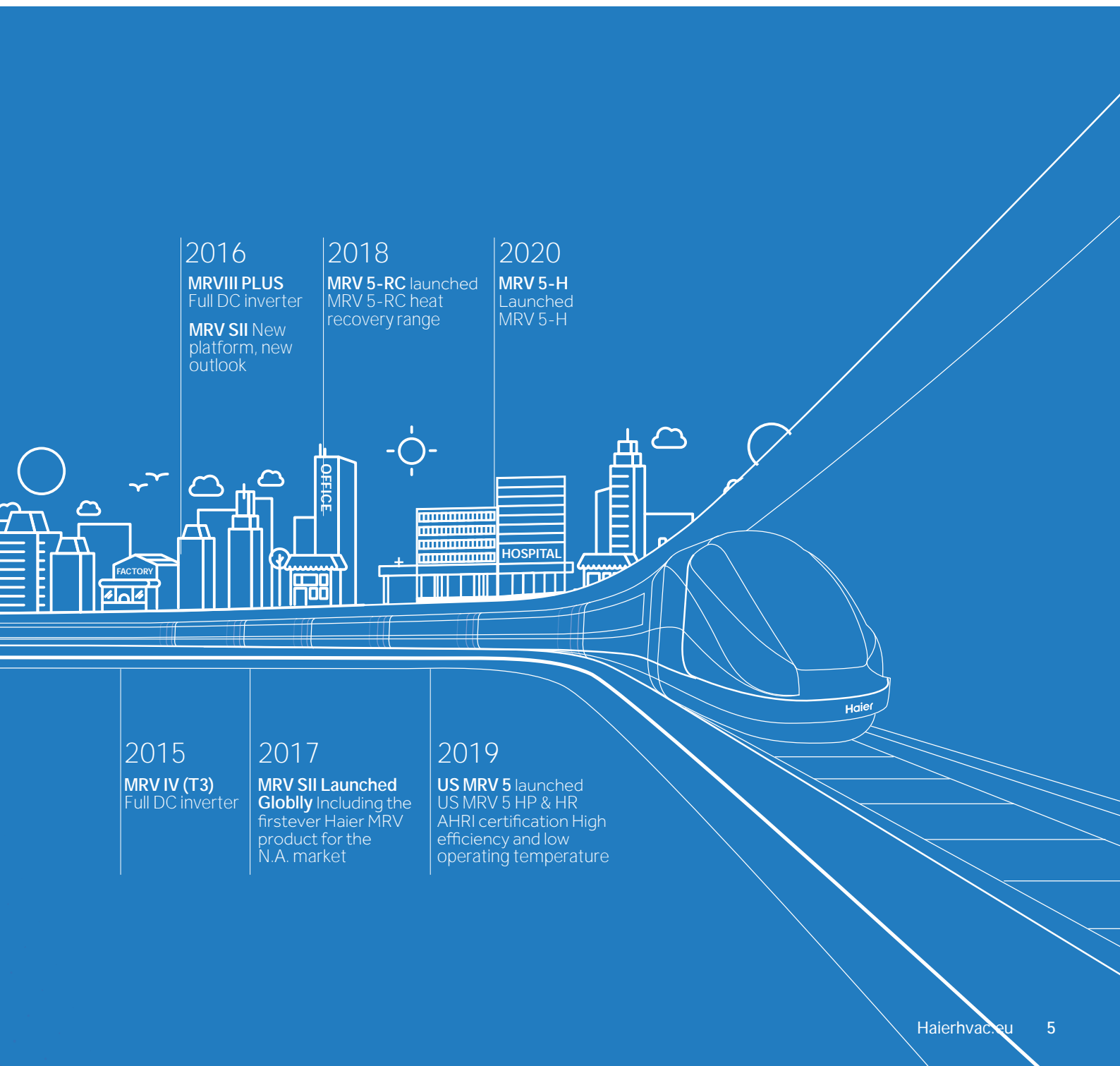
Established in 1984, Haier Group is a world-leading provider of solutions to better life. In the process of sustainable innovation and entrepreneurship, Haier always upholds the principle of "prioritising people's value". Mr. Zhang Ruimin, Ex-Chairman of the Board and CEO of Haier Group, first proposed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

Focusing on user experience, Haier has grown from the once collectively owned small factory 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 12 consecutive years. It's subsidiary Haier Smart Home is among the list of Global Fortune 500.



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, Candy and Hoover. 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 user families.

Upholding the vision of “creating new engines to growth in the era of IoT with the Rendanheyi Model”, Haier Group is committed to working with its world-class ecosystem partners to continuously build premium brands and to set up IoT ecosystems in all industries including Health, Retail, Leisure, Travel and Education and to tailor personalized smart life for users around the globe.



2016

MRVIII PLUS
Full DC inverter
MRV SII New platform, new outlook

2018

MRV 5-RC launched
MRV 5-RC heat recovery range

2020

MRV 5-H
Launched
MRV 5-H

2015

MRV IV (T3)
Full DC inverter

2017

MRV SII Launched Globly Including the firstever Haier MRV product for the N.A. market

2019

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

Haier Global Network

Haier has built its infrastructure in various parts of the world to quickly meet the demands of its customers including R&D centres, production facilities, commercial companies and sales points.

Through the five R&D centres around the world, Haier has forged strategic alliances with first-class providers, research institutes and prestigious universities to create an innovative ecosystem of scholars and engineers connected by a single virtual and physical network.



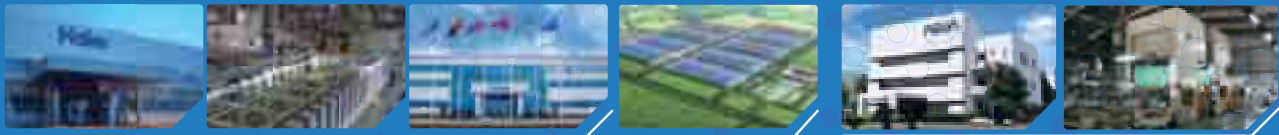


The world's only ecosystem brand for three consecutive years.

Haier has ranked No.1 Global Major Appliance Brand for 12 consecutive years. Source from Euromonitor 2020.

Haier Smart Home was named one of Fortune's most admired companies in the world.

In 2020, Haier Smart Home was once again listed on the Fortune Global 500, ranking 13 up from last year.



Haier Russia Smart Ecosystem Industrial Park

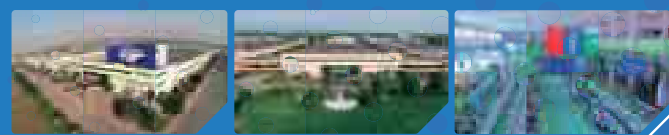
Haier Phase II of Smart Ecosystem Industrial Park in Russia

AQUA Vietnam Factory



AQUA Japan R&D Center

AQUA Japan IoT Laundry Factory



Haier Pakistan Economic Zone



Haier Thailand Factory

Haier Indonesia Factory

Haier Global Manufacturing Capacity

Haier AC has 8 production facilities in China, another 8 located between South Asia and North Africa. These factories have a total production capacity of over 27.2 million units per year.



Eurovent

Haier has been awarded the prestigious Eurovent certification for its MRV outdoor units, and the entire production facility. This recognition further underlines Haier's desire to create high-quality, high-performance and environmentally friendly products and services.



CERTIFICATE
N° 19.11.008



Eurovent Heat Pumps / Pompes à chaleur Eurovent

Range Name / Nom de Gamme :
MRV 5

Granted on November 6, 2019 - *Date 1ère admission 6 novembre 2019*

This document is valid at the date of issue - Check the current validity on:
Document valable à la date d'émission - Vérifier la validité en cours sur :
www.eurovent-certification.com

Participant/Titulaire

Haier Overseas Electric Appliances Corp. Ltd
South room #401, Brand Center Building - Haier High- Tech Industrial Park, Lao Shan District,
266101 Qingdao (Shandong Province), China

This product performance certificate is issued by Eurovent Certita Certification according to the certification rules:

ECP Eurovent-HP - « Eurovent Heat Pumps » in force at established date.

Pursuant to the decision notified by Eurovent Certita Certification, the right to use the mark ECP shall be granted to the beneficiary company for the above Range in the conditions defined by the certification program mentioned.

Unless withdrawn or suspended, this certificate remains valid as long as the requirements for the certification program framework are met. The validity of the certificate is to be verified on www.eurovent-certification.com

THIS CERTIFICATE HAS BEEN ISSUED ON 23/03/2022
THIS CERTIFICATE IS VALID UNTIL 31/12/2022

Ce certificat de performance produit est délivré par Eurovent Certita Certification dans les conditions fixées par le référentiel :

ECP Eurovent-HP - « Pompes à chaleur Eurovent » en vigueur à date d'édition.

En vertu de la décision notifiée par Eurovent Certita Certification, le droit d'usage de la marque ECP, est accordé à la société qui en est bénéficiaire pour la gamme visée ci-dessus, dans les conditions définies par le programme de certification mentionné.

Sauf retrait ou suspension, ce certificat demeure valide tant que les conditions du référentiel du programme de certification sont respectées. La validité du certificat est à vérifier sur le site Internet www.eurovent-certification.com

*CE CERTIFICAT A ÉTÉ EMIS LE 23/03/2022
CE CERTIFICAT EST VALIDE JUSQU'AU 31/12/2022*

Paris, 23 mars 2022



Organisme accrédité n° 5-05 17
Certification Produits et Services selon la norme NF EN ISO/CEI 17065:2012
Portée disponible sur www.cofrac.fr

Accreditation #5- 0517 Products and Services Certification according to NF EN ISO/CEI 17065:2012 -
Scope available on www.cofrac.fr

COFRAC est signataire des accords MLA d'EA et MLA d'IAF,
COFRAC is signatory of EA MLA and IAF MLA,

List of EA members is available on www.european-accreditation.org/ea-members
list of IAF members is available on www.iaf.nu/articles/IAF_MEMBERS_SIGNATORIES/4

MANAGING BOARD MEMBER / MEMBRE DIRECTOIRE

EUROVENT CERTITA CERTIFICATION SAS au capital de 100 000 € - 48- 50 rue de la Victoire 75009 Paris - FRANCE
Tel. : 33 (0)1 75 44 71 71 - 513 133 637 RCS Paris - SIRET 513 133 637 000 35 - TVA FR 59513133637

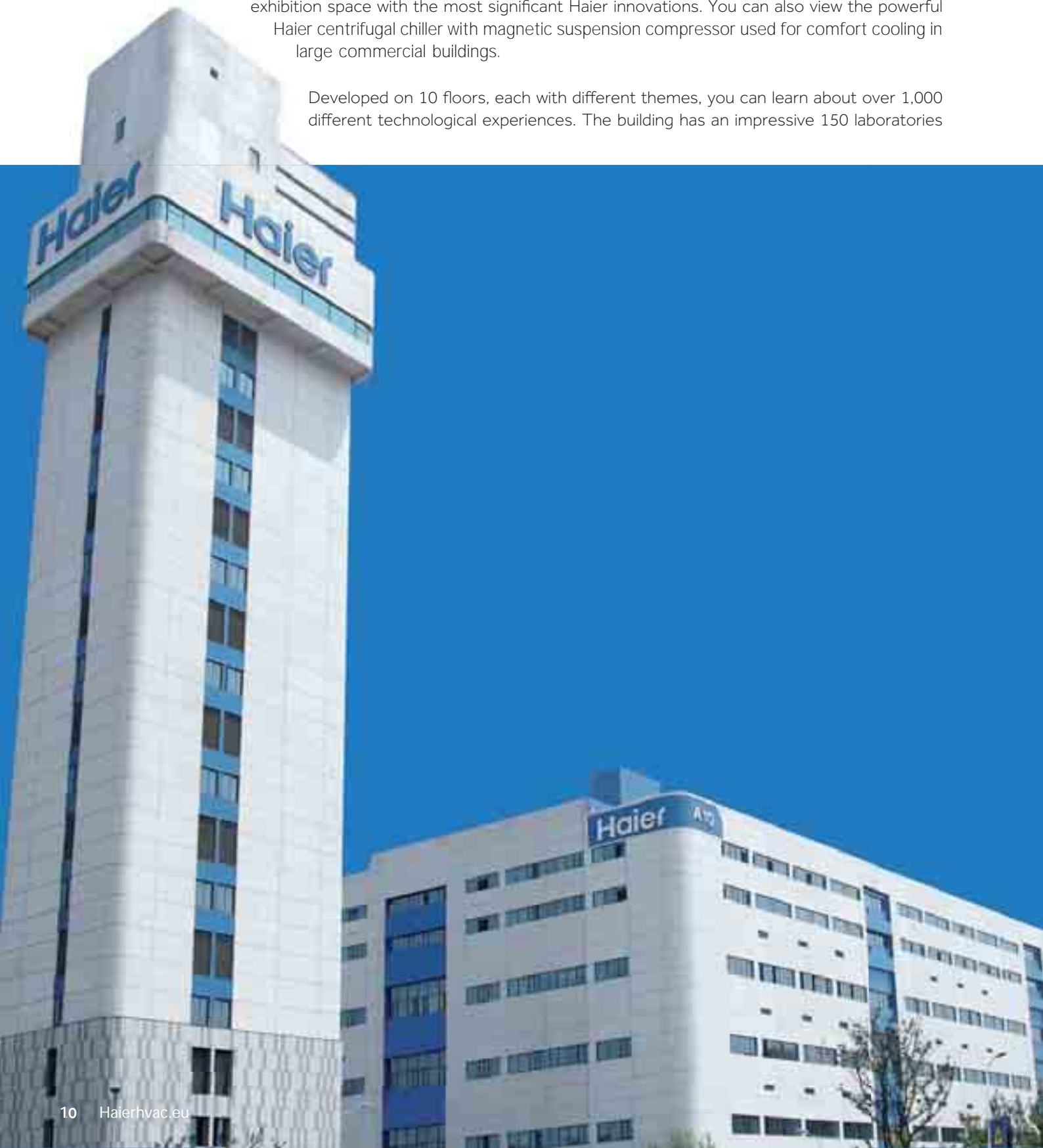
S06D06 TEMPLATE_ECP_RANGE_REV1.1

Haier R&D Center

Haier has set a new standard for HVAC laboratories, giving life to what today represents 'The state of the art' and one of its kind. Operating since March 2014, it is now the world's reference point.

Inside the "Haier Park" industrial complex in Qingdao China, there is the world's most advanced laboratory for testing, research and development of products for the HVAC (heating, ventilation, cooling) sector. The 'Haier Park' has a large exhibition space with the most significant Haier innovations. You can also view the powerful Haier centrifugal chiller with magnetic suspension compressor used for comfort cooling in large commercial buildings.

Developed on 10 floors, each with different themes, you can learn about over 1,000 different technological experiences. The building has an impressive 150 laboratories



where it is possible to test all products according to all national and international regulations specific to the HVAC sector. From calorimeters, to anechoic halls, to atmospheric simulators, electromagnetic tests and more.

Haier employs specialised engineers from all over the world and initiate several collaborations with many renowned manufacturers worldwide. The 'Haier Tower' is a proud landmark for Haier. It is located next to the main set of laboratories at the 'Haier Park'. With a height of 106 m, the highest in the world, the 'Haier Tower' encompasses 5 laboratories where our MRV systems and beyond are tested, predicting and controlling all the variables that can occur in the phases of installation and real operation. With the creation of this futuristic laboratory, Haier wanted to reaffirm its intention to becoming a world-leading manufacturer in the HVAC sector.

R&D Labs



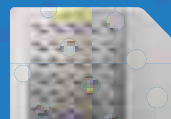
EMC test



Simulated Rainfall Test



Enthalpy-difference test



Safe Test



Acoustic Labs



Centralized control



Simulated Snow Test



Simulated Sunshine Test



Limiting condition test



Humidity Condition Handling

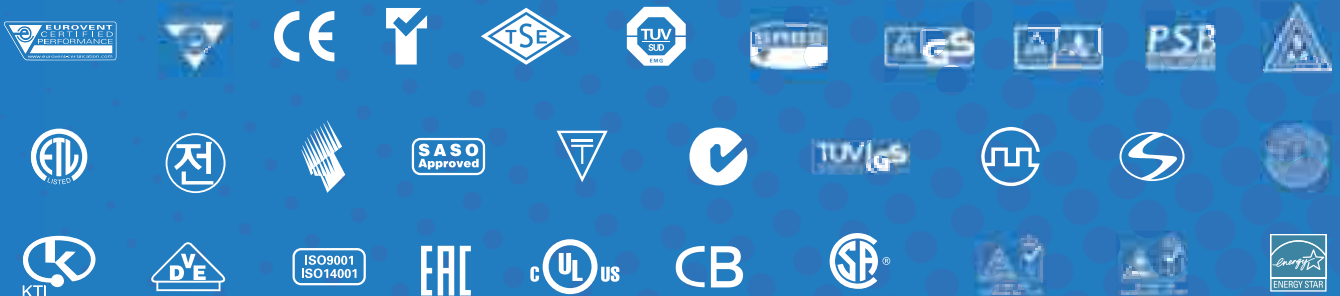


Double 85 Test



Drop Test

Global Certification



Haier AC In Europe

Haier is a global leading provider of comfort solutions with an ambition to continuously deliver unique and advance technologies, superior design and tailor-made experiences when it comes to the air you breath.

Haier Group was established in 1984 in Qingdao by Zhang Ruimin who has centred the business around the RenDanHeYi philosophy. The well-respected model, developed and implemented by Mr. Ruimin, is revolutionary. No other company operates in this way. RenDanHeYi puts the needs of the user first. One of the core components of the model is "zero distance" to our customers. Each and every employee is empowered to provide outstanding commitment and value to our partners and end customers, keeping them at the forefront at all times.

We have since gone from strength to strength, by continuously striving for the best in class, and working towards developing premium products for Global markets with IoT at the forefront of all R&D and product development. We have been on the list of BrandZ Top 100 Most Valuable Global Brands for two consecutive years as the world's first and only IoT ecosystem brand. Haier has also topped Global Major Appliances Brand Rankings by Euromonitor International for 13 consecutive years.

Our European HVAC operations has been active for over 30 years. We are now fully supported by some of the most talented and dedicated sale, marketing and technical teams spread across Italy, Spain, Portugal, UK, France, Central Europe and Germany. Our partners and distributors are equally spread across key markets in Europe, making us a truly Pan European dedicated HVAC organisation.

The commitment of Haier will be strengthened further in 2022 when we prepare to launch our new European HVAC training centre in Barcelona, where we look forward to welcoming our Distributors, Installers and Designers to come and experience Haier's HVAC Solutions first-hand.

Our portfolio includes Residential and Commercial HVAC solutions as well as Hot Water Solutions, giving us a truly diverse offering to suit various applications from small residential through to big commercial solutions for Hotels and Retail applications.

At Haier HVAC Solutions we have a total production capacity of around 27 million sets per year. This is supported by 16 Air Conditioning factories with 8 of them being in overseas markets. This outstanding capacity enables us to continually strive to lead the market in delivering Smart and Healthy solutions across Europe. Some of the most successful result of this has been the New UVC module which has been independently tested and proven to be effective in, inhibiting the Covid-19 virus with a 99.998% efficiency. Another such accomplishment has been the launch of 'hOn' Wi-Fi, the latest in technology to be introduced across products in the Haier portfolio, from white goods through to Air Conditioning.

With the support of our Partners and the team at Haier we have truly increased our presence in Europe as a trustworthy brand with a premium product offering, a growing network of distributors, post-sale service and 6-year warranty.







MRV





Meet the range



RANGE

MRV S II Outdoor Units

SERIES	4-5 HP	4 HP	5 HP	6 HP	8 HP	10 HP	12 HP
MRV S II							
Model	AU042FNERA AU052FNERA	AU042FPERA AU041FPERA	AU052FPERA AU051FPERA	AU062FPERA AU061FPERA	AU08NFKERA	AU10NFKERA	AU12NFKERA

MRV 5 & MRV 5 - H Full DC Inverter 2-pipe Heat Pump

SERIES	8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24 HP	26 HP	28 HP	30 HP	32 HP	34 HP
														
MRV 5 Model	AV08	AV10	AV12	AV14	AV16	AV18	AV20	AV22	AV24	AV26	AV28	AV30	AV32	AV34IMVEVA
	IMVEVA					IMVEVA					IMVEVA			
MRV 5 - H Model	AV08	AV10	AV12	AV14	AV16	AV18	AV20	AV22	AV24	AV26	AV28	AV30	AV32	AV34NMVETA
	NMVETA					NMVETA					NMVETA			

SERIES	36 HP	38 HP	40 HP	42 HP	44 HP	46 HP	48 HP	50 HP	52 HP	54 HP	56 HP	58 HP	60 HP	62 HP	64 HP	66 HP	68 HP	70 HP	72 HP	74 HP	76 HP	78 HP
																						
MRV 5 Model	AV36	AV38	AV40	AV42	AV44	AV46	AV48	AV50	AV52	AV54	AV56	AV58	AV60	AV62	AV64	AV66	AV68	AV70	AV72	AV74	AV76	AV78
	IMVEVA										IMVEVA											
MRV 5 - H Model	AV36	AV38	AV40	AV42	AV44	AV46	AV48	AV50	AV52	AV54	AV56	AV58	AV60	AV62	AV64	AV66	AV68	AV70	AV72	AV74	AV76	AV78
	NMVETA										NMVETA											

SERIES	80 HP	82 HP	84 HP	86 HP	88 HP	90 HP	92 HP	94 HP	96 HP	98 HP	100 HP	102 HP	104 HP
													
MRV 5 Model	AV80	AV82	AV84	AV86	AV88	AV90	AV92	AV94	AV96	AV98	AV100	AV102	AV104
	IMVEVA												
MRV 5 - H Model	AV80	AV82	AV84	AV86	AV88	AV90	AV92	AV94	AV96	AV98	AV100	AV102	AV104
	NMVETA												

RANGE

MRV 5 - RC Full DC Inverter 3-pipe Heat Pump

SERIES	8 HP	10 HP	12 HP	14 HP	16 HP	18 HP	20 HP	22 HP	24 HP	26 HP	28 HP	30 HP
MRV 5-RC												
Model	AV08	AV10	AV12	AV14	AV16	AV18	AV20	AV22	AV24	AV26	AV28	AV30IMVURA
	IMVURA				IMVURA				IMVURA			

SERIES	32 HP	34 HP	36 HP	38 HP	40 HP	42 HP	44 HP	46 HP	48 HP	50 HP	52 HP	54 HP	56 HP	58 HP	60 HP	62 HP	64 HP	66 HP
MRV 5-RC																		
Model	AV32	AV34	AV36	AV38	AV40	AV42	AV44	AV46IMVURA	AV48	AV50	AV52	AV54	AV56	AV58	AV60	AV62	AV64	AV66
	IMVURA								IMVURA									

SERIES	68 HP	70 HP	72 HP	74 HP	76 HP	78 HP	80 HP	82 HP	84 HP	86 HP	88 HP
MRV 5-RC											
Model	AV68	AV70	AV72	AV74	AV76	AV78	AV80	AV82	AV84	AV86	AV88
	IMVURA										

MRV 5 - RC 3-pipe connection kit

SERIES	$X \leq 11,2KW$	$11,2 < X \leq 18KW$	$18 < X \leq 28KW$	4 ways - max 11,2kW for single output.
VP - Boxes				
Model	VP1-112C	VP1-180C	VP1-280C	VP4-450C

MRV W Water Cooled Heat Pump Outdoor Units

SERIES	8 HP	10 HP	12 HP	16 HP	18 HP	20 HP	22 HP	24 HP	28 HP	30 HP	32 HP	34 HP	36 HP
MRV-W													
Model	AV08	AV10	AV12	AV16	AV18	AV20	AV22	AV24	AV28	AV30	AV32	AV34	AV36
	IMWEWA			IMWEWA				IMWEWA					

AHU Kit to create direct-expansion air treatment units


SERIES	$3,5 \leq X \leq 7KW$	$7 \leq X \leq 14KW$	$14 \leq X \leq 28KW$	$28 \leq X \leq 56KW$	$56 \leq X \leq 73KW$
AHU KIT					
Model	AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B
MRV Compatibility	"S" series with front air discharge and "5" series				

RANGE

EASY MRV Residential and Commercial Supermatch Indoor Units - Connectable to MRV Systems with MS Valves










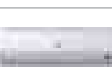





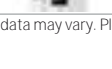
SERIES	Kbtu/h	7	9	12	15	18	24	28	30	38	48	60
	kW	2,0	2,5	3,5	4,2	5,0	7,1	8,0	9,0	11,2	14,0	16,0
FLEXIS PLUS		•	•	•	•	•	•					
FLEXIS PLUS		•	•	•	•	•	•					
PEARL		•	•	•		•	•					
Console			•	•	•							
CASSETTE			•	•		•	•	•				
CEILING/FLOOR CONVERTIBLE				•		•	•	•				
SLIM DUCT LOW PRESSURE DC			•	•		•	•					
DUCTED MEDIUM PRESSURE				•		•	•	•				
TOWER											•	•

EASY MRV MS Valves for Residential and Commercial Units

SERIES	11,2 kW	11,2 to 18,0 kW	Max 33,6 kW (max 11,2 kW per single output)
EASY MRV			
Model	MS1-036A	MS1-060A	MS3-036A
Combination with Number of IU	1:1	1:1	1:3
MRV Compatibility	"S" series with front air discharge and "5" series		

RANGE

MRV Indoor Units

SERIES	Kbtu/h	5	7	9	12	16	18	24	28	30	38	48	60	72	96
	kW	1,5	2,2	2,8	3,6	4,5	5,6	7,1	8,0	9,0	11,2	14,0	16,0	22,6	28,0
CASSETTE SMART FLOW 4 WAY DC			•	•	•	•	•	•	•	•	•	•	•		
CASSETTE 4 WAY 60x60 DC		•	•	•	•	•	•								
CASSETTE 4 WAY 60x60 AC		•	•	•	•	•	•								
CASSETTE 4 WAY 90x90 AC							•	•	•	•	•	•			
FLOOR CONSOLE, BUILT-IN			•	•	•	•	•	•							
WALL (INTERNAL/EXTERNAL EEV)		•	•	•	•	•	•	•	•	•					
CASSETTE 1 WAY		•	•	•	•										
CASSETTE 2 WAY			•	•	•	•	•								
CEILING / FLOOR CONVERTIBLE NEW				•	•	•	•	•	•	•	•	•			
SLIM DUCT LOW PRESSURE DC NEW		•	•	•	•	•	•	•							
DUCTED MEDIUM PRESSURE NEW		•	•	•	•	•	•	•	•	•	•	•			
DUCTED HIGH PRESSURE							•	•	•	•	•	•		•	•
DUCTED - CONSTANT AIR FLOW			•	•	•	•	•	•	•	•	•	•	•		
WALL (INTERNAL/EXTERNAL EEV)		•	•	•	•	•	•	•	•	•					
FLOOR CONSOLE, BUILT-IN			•	•	•	•	•	•							
CONSOLE		•	•	•	•	•	•								
DUCTED FRESH AIR ALL OUTDOOR AIR NEW												•		•	•
ERV NEW															
HYDROBOX NEW										•			•		

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

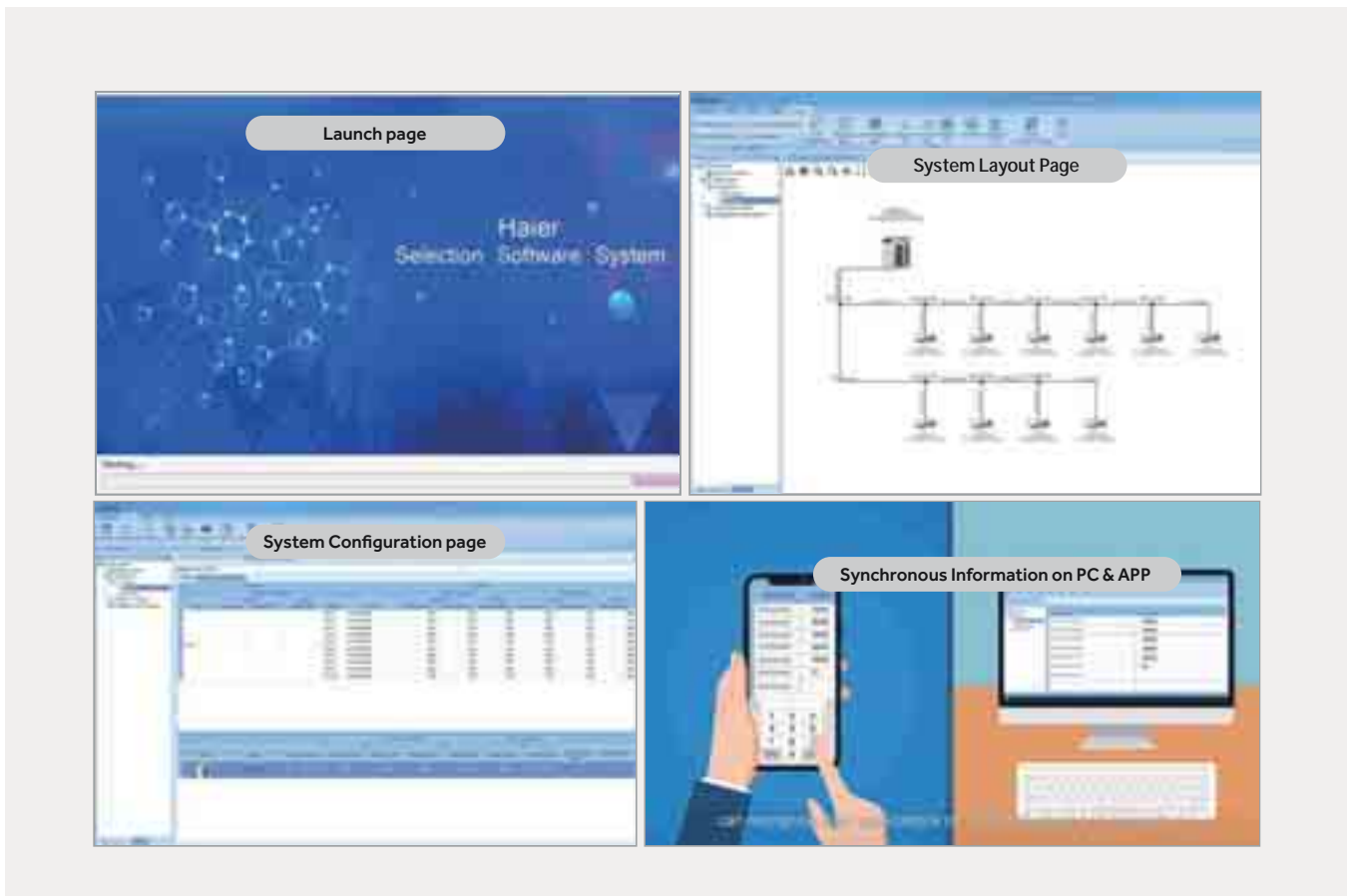
SELECTION SOFTWARE

HAIER SELECTION SOFTWARE

EASY DESIGN AND CUSTOMISATION

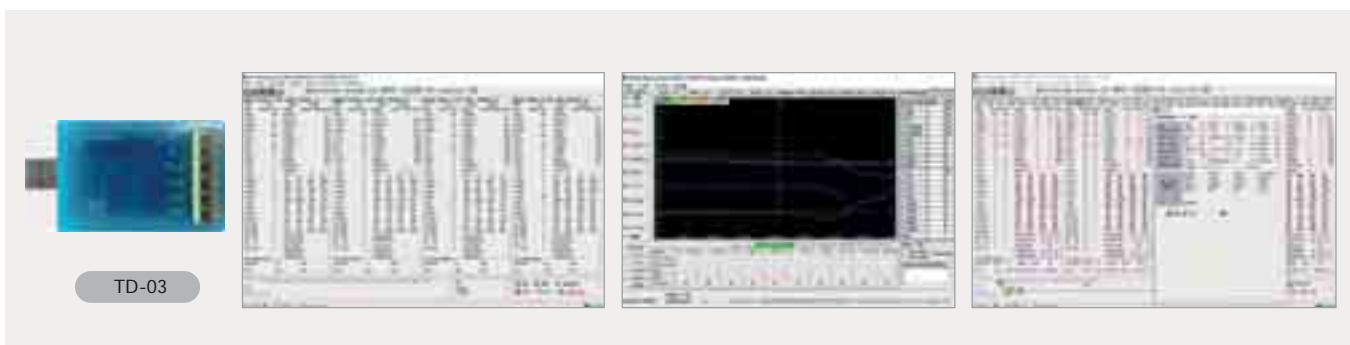
The Haier Selection Software supports PC & Apps, which means the reports and information on all devices and phones are synchronised.

With the Haier MRV Selection software, engineers and consultants can easily design layouts and prepare a full MRV system 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 and JPG drawings. The selection software guides you within design rules and offers a comprehensive system design report in PDF, Word or Excel format.



SERVICE TOOL TD-03 WITH MONITORING SOFTWARE

Installers can use TD-03 service tool together with monitoring software for real-time monitoring of the system as well as access to operating data of VRF system through the PC. The running data and parameters can be used to analyse error's for fast troubleshooting. You can save the data for further analysis.





MRVS^{II}

DC Inverter Unit with Front Discharge

MRV S II - FEATURES

IMPROVED CONFIGURATION AND PERFORMANCE (8/10/12HP SIDE DISCHARGE)

Flexible applications with bigger outdoor capacity options.

High efficiency DC fan motor

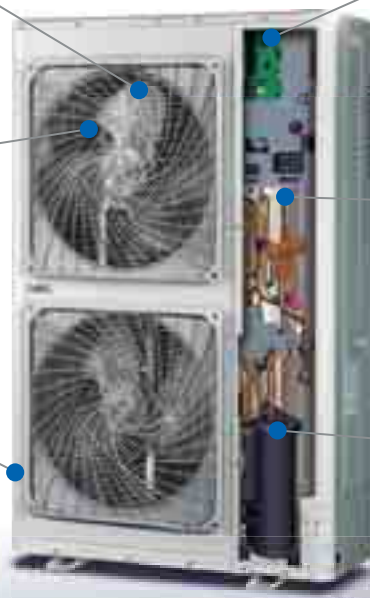
- DC fan motor with stepless inverter control, increases efficiency by 45% comparing with AC motor.

Larger fan diameter

- Ø570mm larger axial flow fan
- Zigzag design, reduces disturbance in airflow as well as increasing air volume and reducing noise level.

High efficiency condenser

- Newly designed high efficiency inner grooved tube.
- New hydrophilic corrugated fissurefin increases efficiency.



Vector inverter control

- 180 degrees sine wave vector control, 64-bit operation
- Precision control achieves high efficiency and lower noise levels

Double pressure sensor

- Equipped with high and low voltage pressure sensors
- Accurate pressure control ensures the system runs smoothly, increasing energy efficiency.

Twin rotary DC Inverter compressor

- High chamber DC inverter twin rotary compressor
- Increased energy efficiency by achieving smaller vibrations and benefiting from lower sound levels.

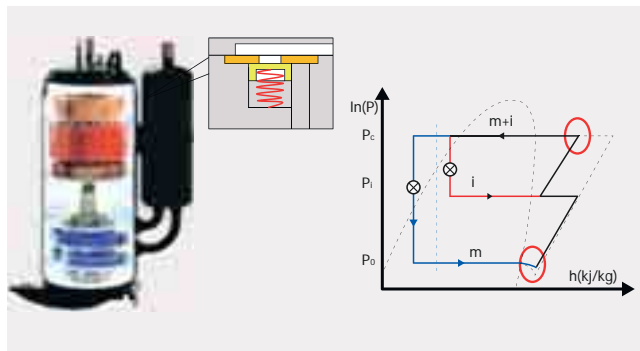
LEADING TECHNOLOGY (4-6HP)

Two-stage super cooling cycle technology, increases efficiency by 9%. (Double fan) 30°C maximum temperature in cooling increases unit refrigerating capacity by 46%



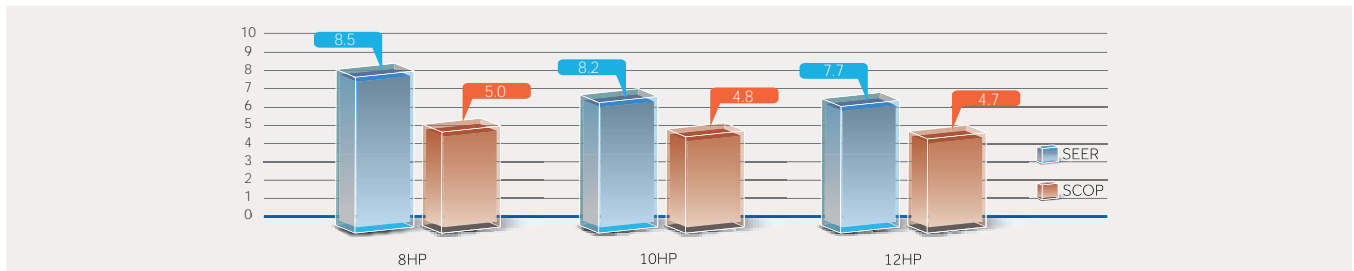
INCREASING POWERFUL HEATING CAPACITY

When the ambient temperature is low, the heat exchange capability of the outdoor unit is decreased and the amount of air returned by the compressor is reduced. By increasing the refrigerant flow during the heating cycle of the indoor unit heat exchanger, we improve the heating capacity.



MRV S II - FEATURES

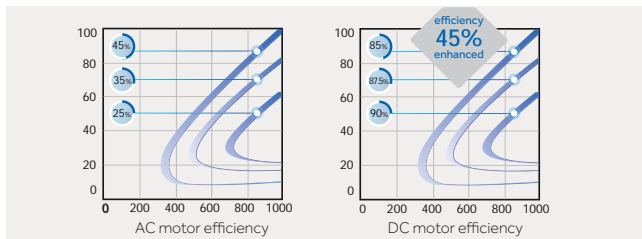
HIGH EER AND COP(8/10/12HP)



DC FAN AND FAN MOTOR

- DC inverter fan motor is highly efficient during part load operation
- 16-stage speed control; high efficiency operation especially in low speed

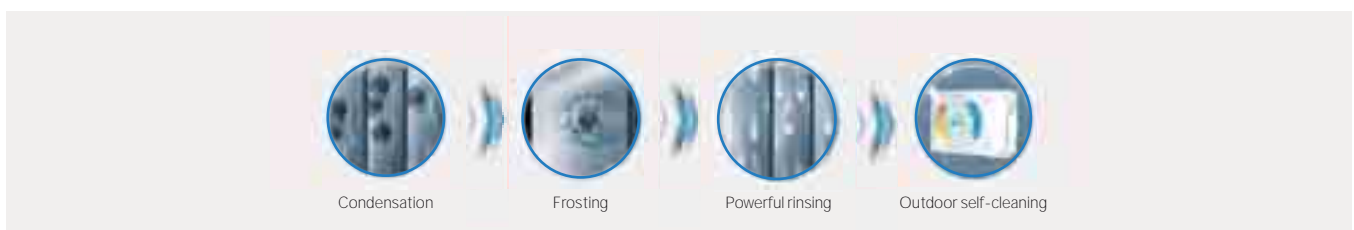
- 45% increase in efficiency compared with AC motor due to reduced input power
- 570mm diameter fan, increases air flow and achieves higher efficiency(8/10/12HP)



SELF-CLEANING FUNCTION ON INDOOR AND OUTDOOR UNITS

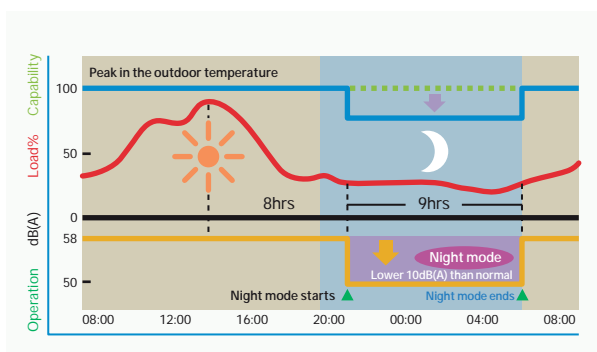
During operation, dirt accumulates on the evaporator. If the evaporator is not cleaned regularly, accumulated dirt reduces the thermal exchange by 15-30% and also promotes the proliferation of bacteria and mould.

The new Self Clean technology is the first of its kind to integrate the self-cleaning function of both the evaporator and the condenser. It starts with cleaning the evaporator, then switches to cleaning the condenser without stopping the compressor.



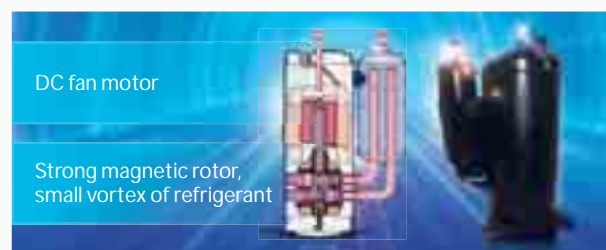
LOW NOISE LEVEL

- Night quiet operation function
- Noise levels can be reduced down to 45dB(A)



NEW DC INVERTER TWIN ROTARY COMPRESSOR

- A small torque change and a good dynamic balance of the system allows the unit to run smoothly with little vibration, low noise levels and increased efficiency
- Increased efficiency during part load operation



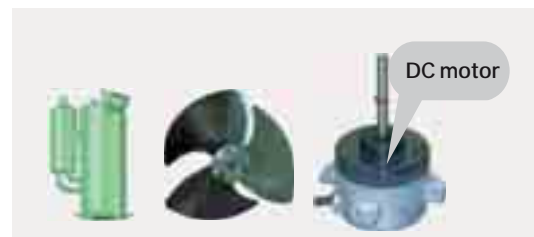
MRV S II - FEATURES

- 1** New aerodynamic fan
550mm super big diameter aerospace helix fan. lowering sound level by 3dB(A)
- 2** Enlarged air inlet path and spiral air outlet path.
Air flow direction follows the grill direction which reduces sound levels by 2-4 dB(A)
- 3** Automatic sound reduction capability. Night mode set by the PCB is 8dB(A) lower



LOW SOUND OPERATION

- DC inverter compressor achieves a smoother operation and effectively reduces sound levels by eliminating the frequent start up of the compressor.
- Precision control achieved by vector inverter control
- Non-resonance motor brackets are used on the DC fan motor which ensures a smoother operation of the motor and reduces operating sound levels
- Larger fan diameter inspired by aviation design principles for quieter operation



COMPACT SIDE DISCHARGE DESIGN

Side discharge design eliminates the need for additional ventilation hood compared with a top discharge unit, ideal for narrow spaces.



MRV S II - FEATURES

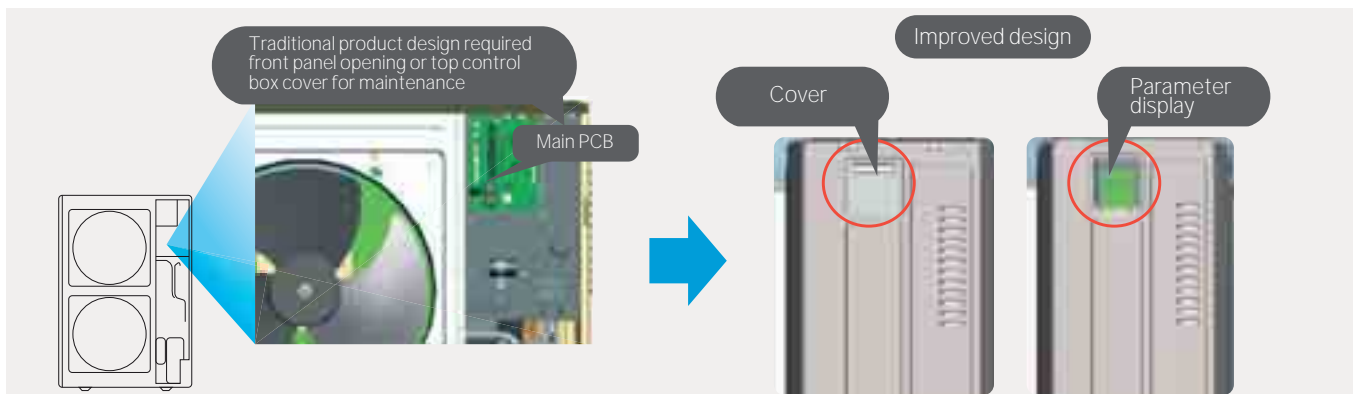
LONG PIPE LENGTH, INCREASED HEIGHT DROP

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



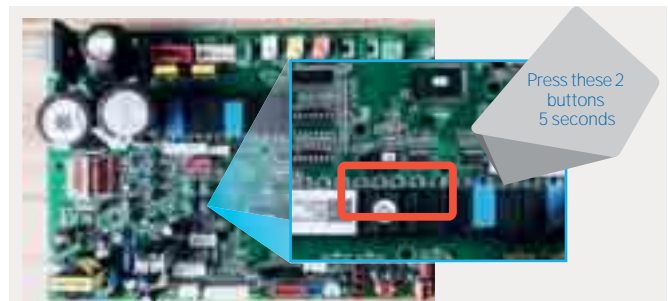
PARAMETER DISPLAY PANEL

The parameter display panel has been improved by moving it to the side of the unit. The parameter can be easily accessed by directly opening the protective cover for maintenance.



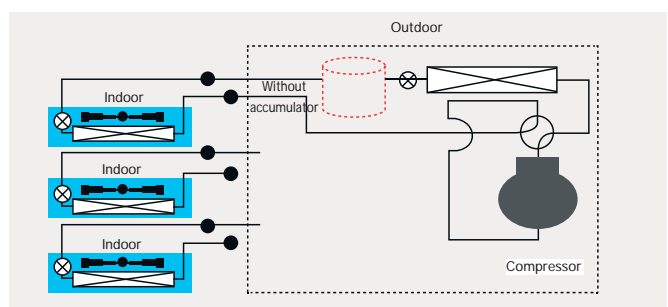
AUTOMATIC REFRIGERANT RECLAIM TECHNOLOGY

Set automatic refrigerant reclaim through the dip switch. The refrigerant in the indoor unit can be automatically returned to the outdoor unit. This is convenient during maintenance, reducing refrigerant waste, maintenance cost and time.



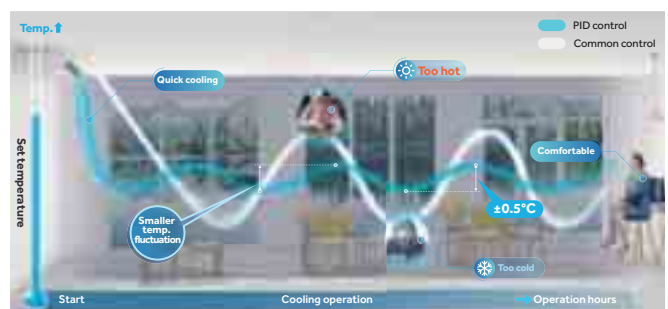
REFRIGERANT CONTROL TECHNOLOGY

Refrigerant control technology without high pressure accumulator, reduces the refrigerant volume and enhances operating efficiency.



HIGH AND LOW DOUBLE PRESSURE SENSOR

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



Outdoor Units with Frontal Discharge MRV S II



4-5HP
AU042FNERA
AU052FNERA

Model			AU042FNERA	AU052FNERA
Capacity ^[1]	Power Class	HP	4	5
	Cooling	kW	12,10	14,00
	Heating	kW	12,10	14,00
Electrical parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60
	Absorbed power - Cooling	kW	4,25	5,00
	Max absorbed current - Cooling	kW	28,30	29,30
	Absorbed power - Heating	A	4,10	4,83
	Max absorbed current - Heating	A	27,90	29,30
	EER energy class	/	2,85	2,80
	COP energy class	/	2,95	2,90
	SEER energy class (T1)	/	4,90	4,85
	SCOP energy class (T1)	/	3,50	3,55
	η _{s,hs,c} %	%	193	191
η _{s,hs,h} %	%	137	139	
Fan	Air flow (High)	m ³ /h	5400	5400
Pressure sound level	Sound pressure level (Cooling)	dB(A)	58	60
	Sound pressure level (Heating)	dB(A)	60	62
Dimensions	Unit Dimensions WxDxH	mm	950x370x965	950x370x965
	Packaged unit dimensions WxDxH	mm	1010x458x990	1010x458x990
Weight	Net/Shipping weight	kg	90/102	90/102
Compressor	Compressor type	/	Rotary Inverter	Rotary Inverter
	Motor Power	W	4130	4130
	Compressor quantity	/	1	1
Refrigerant	Refrigerant type	/	R410A	R410A
	Pre-charged refrigerant qty.	kg	3,30	3,30
Piping	Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)
	Ø Gas side refrigerant pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)
	Maximum piping length	m	120	120
	Max linear piping length (Equivalent/Real)	m	70/60	70/60
	Std. drop between IU and OU	m	30/20	30/20
	Max. drop between IU *3	m	10	10
Connection ratio	Indoor / Outdoor Capacity Ratio	%	50-130	50-130
	Maximum number of connectable IUs	/	7	8
Working temp.	Cooling	°C	-5-50	-5-50
	Heating	°C	-15-21	-15-21

(*) The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units with Frontal Discharge

MRV S II



4-6HP

AU042FPERA
AU052FPERA
AU062FPERA
AU041FPERA
AU051FPERA
AU061FPERA

Model			AU042FPERA	AU052FPERA	AU062FPERA	AU041FPERA	AU051FPERA	AU061FPERA
Capacity ^[1]	Power Class	HP	4	5	6	4	5	6
	Cooling	kW	12,10	14,00	15,50	12,10	14,00	15,50
	Heating	kW	12,10	14,00	15,50	12,10	14,00	15,50
Electrical parameters	Power supply	Ph/V/Hz	1/220-240/50/60	1/220-240/50/60	1/220-240/50/60	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Absorbed power - Cooling	kW	3,61	4,33	5,17	3,61	4,33	5,17
	Max absorbed current - Cooling	A	34,10	35,50	36,90	11,40	11,90	12,90
	Absorbed power - Heating	kW	3,23	3,76	5,00	3,23	3,76	5,00
	Max absorbed current - Heating	A	32,70	34,10	35,50	10,90	11,40	11,90
	EER energy class	/	3,35	3,23	3,00	3,35	3,23	3,00
	COP energy class	/	3,75	3,72	3,10	3,75	3,72	3,10
	SEER energy class (T1)	/	6,82	6,65	6,80	6,82	6,65	6,80
	SCOP energy class (T1)	/	4,05	4,11	4,05	4,05	4,11	4,05
	η _{s,h} %	%	270	263	269	270	263	269
η _{s,h} %	%	159	161	159	159	161	159	
Fan	Air flow (High)	m ³ /h	7200	7200	7200	7200	7200	7200
Pressure sound level	Sound pressure level (Cooling)	dB(A)	57	58	59	57	58	59
	Sound pressure level (Heating)	dB(A)	57	58	59	57	58	59
Dimensions	Unit Dimensions WxDxH	mm	950x370x1350	950x370x1350	950x370x1350	950x370x1350	950x370x1350	950x370x1350
	Packaged unit dimensions WxDxH	mm	1023x471x1420	1023x471x1420	1023x471x1420	1023x471x1420	1023x471x1420	1023x471x1420
Weight	Net/Shipping weight	kg	108/123	108/123	108/123	108/123	108/123	108/123
	Compressor type	/	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter	Rotary Inverter
Compressor	Motor Power	W	4130	4130	4130	4060	4060	4060
	Compressor quantity	/	1	1	1	1	1	1
Refrigerant	Refrigerant type	/	R410A	R410A	R410A	R410A	R410A	R410A
	Pre-charged refrigerant qty.	kg	4,00	4,00	4,00	4,00	4,00	4,00
Piping	Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
	Ø Gas side refrigerant pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
	Maximum piping length	m	300	300	300	300	300	300
	Max linear piping length (Equivalent/Real)	m	175/150	175/150	175/150	175/150	175/150	175/150
	Std. drop between IU and OU	m	50	50	50	50	50	50
	Max. drop between IU *3	m	15	15	15	15	15	15
Connection ratio	Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130	50-130
	Maximum number of connectable IUs	/	8	10	13	8	10	13
Working temp.	Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50	-5-50
	Heating	°C	-20-27	-20-27	-20-27	-20-27	-20-27	-20-27

(*) The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

(a) With solder reduced from 22,22 to 19,05 for connecting the pipe to the unit valve accessory accompanying the product.

(b) The unit also works regularly with 9,52 diameter pipe. Requires 9,52>12,7 adapter to connect to the machine (not provided by Haier).

Outdoor Units with Frontal Discharge MRV S II



8-12HP

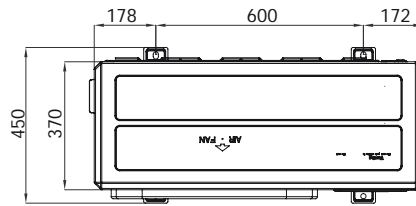
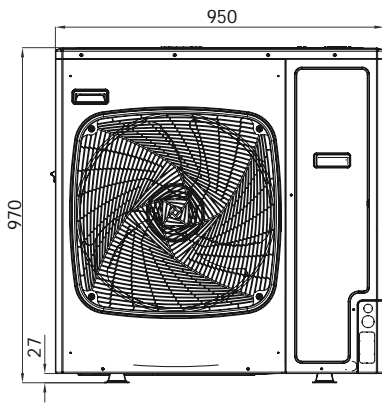
AU08NFKERA
AU10NFKERA
AU12NFKERA

Model			AU08NFKERA	AU10NFKERA	AU12NFKERA
Capacity ⁽¹⁾	Power Class	HP	8	10	12
	Cooling	kW	22,60	28,00	31,50
	Heating	kW	22,60	30,50	31,50
Electrical parameters	Power supply	Ph/V/Hz	3/380-415/50/60	3/380-415/50/60	3/380-415/50/60
	Absorbed power - Cooling	kW	6,95	8,67	11,52
	Max absorbed current - Cooling	A	19,00	23,80	25,40
	Absorbed power - Heating	kW	5,79	8,03	8,49
	Max absorbed current - Heating	A	18,00	22,60	24,20
	EER energy class	/	3,25	3,23	2,73
	COP energy class	/	3,90	3,80	3,71
	SEER energy class (T1)	/	7,67	7,65	7,47
	SCOP energy class (T1)	/	4,05	4,16	4,21
	η _{s,h} %	%	304	303	296
	η _{s,h} %	%	159	163	165
Fan	Air flow (High)	m ³ /h	10000	10000	10000
Pressure sound level	Sound pressure level (Cooling)	dB(A)	63	64	65
	Sound pressure level (Heating)	dB(A)	65	66	67
Dimensions	Unit Dimensions WxDxH	mm	1050x400x1636	1050x400x1636	1050x400x1636
	Packaged unit dimensions WxDxH	mm	1150x510x1790	1150x510x1790	1150x510x1790
Weight	Net/Shipping weight	kg	149/168	149/168	149/168
Compressor	Compressor type	/	Twin Rotary Inverter	Twin Rotary Inverter	Twin Rotary Inverter
	Motor Power	W	6270	6270	6270
	Compressor quantity	/	1	1	1
Refrigerant	Refrigerant type	/	R410A	R410A	R410A
	Pre-charged refrigerant qty.	kg	5,10	5,10	5,10
Piping	Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
	Ø Gas side refrigerant pipe	mm (inch)	19,05 (3/4)	22,22 (7/8)	25,40 (1)
	MaMaximum piping length	m	300	300	300
	Max linear piping length (Equivalent/Real)	m	175/150	175/150	175/150
	Std. drop between IU and OU	m	50	50	50
	StMax. drop between IU *3	m	15	15	15
Connection ratio	Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
	Maximum number of connectable IUs	/	13	16	19
Working temp.	Cooling	°C	-5-48	-5-48	-5-48
	Heating	°C	-20-27	-20-27	-20-27

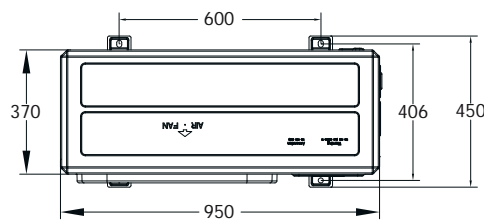
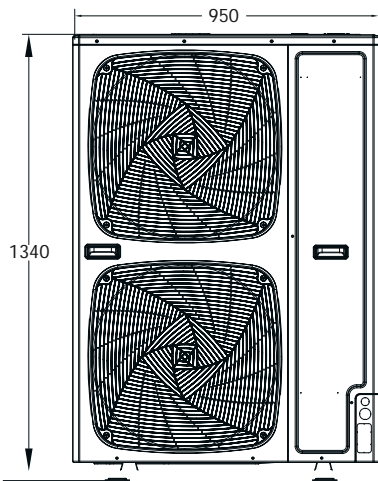
(*) The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units with Frontal Discharge MRV S II

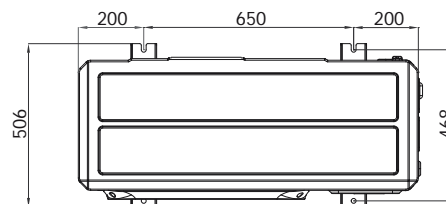
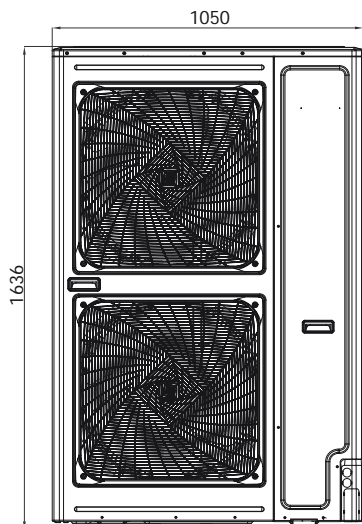
AU042FNERA AU052FNERA



AU042FPERA AU052FPERA AU062FPERA AU04IFPERA AU05IFPERA AU06IFPERA



AU08NFKERA AU10NFKERA AU12NFKERA







MRV5

Full DC inverter heat
pump VRF system

MRV 5 - FEATURES

WIDE RANGE OF POWER

Up to 26 HP with single module and up to 104 HP by combining up to 4 modules. Modules 8 to 16 HP are equipped with single fan, for maximum installation flexibility and a small footprint on the surface.



SMART LINK

Wireless connection and communication between indoor units.

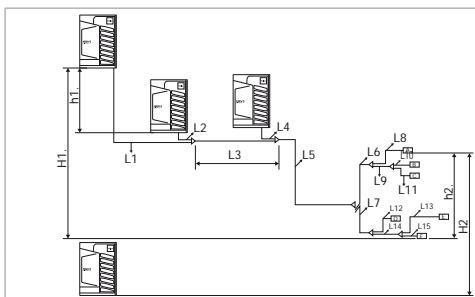
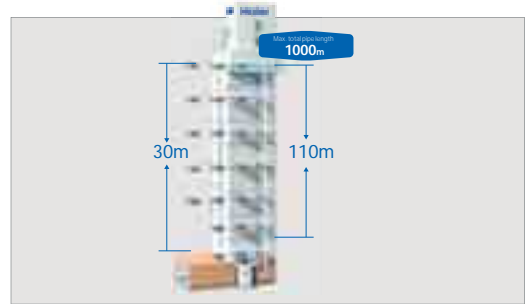
- Labour saving
- Automatic network connection
- Convenient maintenance
- Stable performance
- Total Cost saving is estimated about 30%



TOTAL PIPE LENGTH 1000M, HEIGHT DROP 110M

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

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

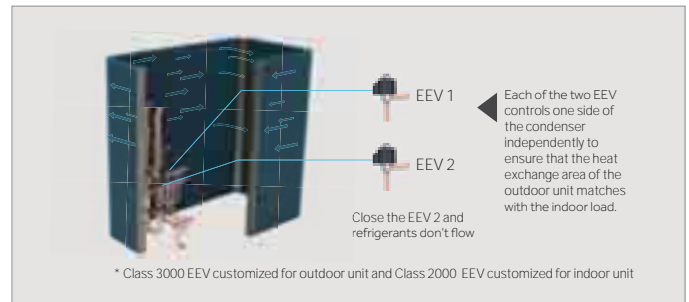


	Max. Length	Pipe in left figure	
Single way total pipe length (=total liquid pipe length)	1000m	L1+L2+L3+L4+L5+L6+L7+L8+L9+L10+L11+L12+L13+L14+L15	
Single way max. pipe length (max. length between outdoor & indoor) actual length	220m	L1 + L3 + L5 + L7 + L14 + L13	
Main pipe actual length (length between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

MRV 5 - FEATURES

DESIGN OF CONTROL CONDENSER WITH ELECTRONIC EXPANSION VALVE

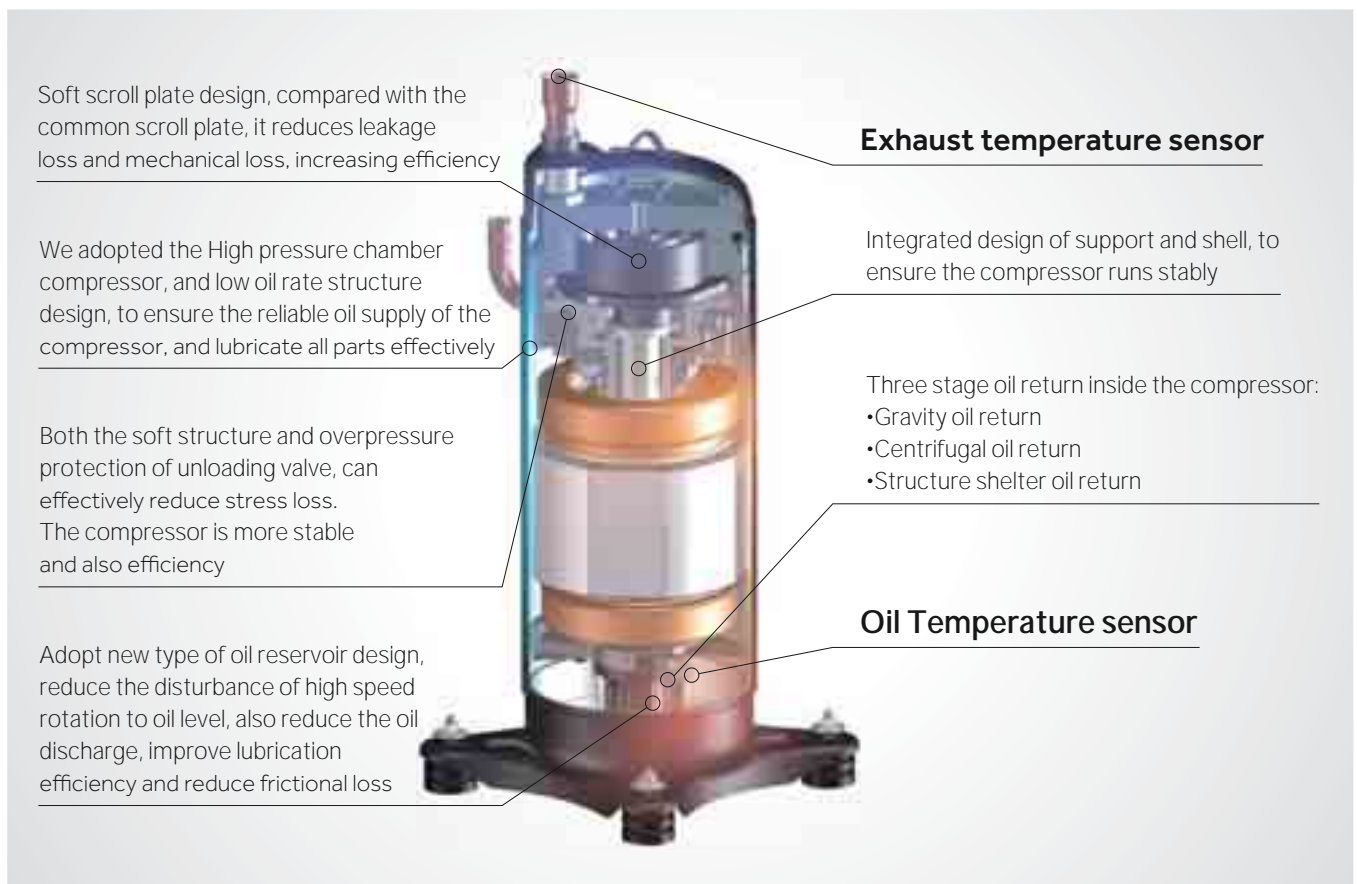
The condenser is controlled by two electronic expansion valves, which can reasonably use the heat exchanger area according to the demand of IDU heat exchange temperature and distribute the refrigerant flow according to the load demand, to ensure high-performance heat exchange efficiency.



SUPER EFFICIENCY WITH FULL DC INVERTER COMPRESSOR

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

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



MRV 5 - FEATURES

AUTOMATIC OIL BALANCING

When pairing multiple modules with each other, it is not necessary to provide the oil equalisation pipe, as the lubrication system inside each module is self-controlled.



NEW 4-SIDED CONTINUOUS HEAT EXCHANGER COIL

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



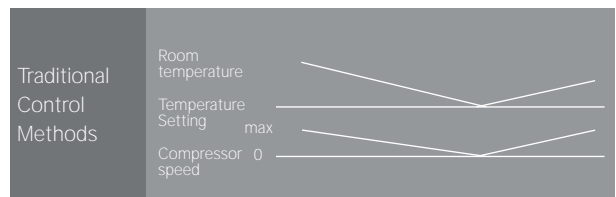
NEW CERTIFIED AND REGISTERED DESIGN

The unit is equipped with a hinged technical door that allows access to the electronic parts in a simple and secure way. The electronic part in turn is mounted on a mobile base that can also be opened for access to the refrigeration part of the unit. This line of products includes new and generous fans with an aerodynamic profile tested in the wind tunnel, with a diameter of 700 mm to move large air flows in maximum tranquillity and quietness.

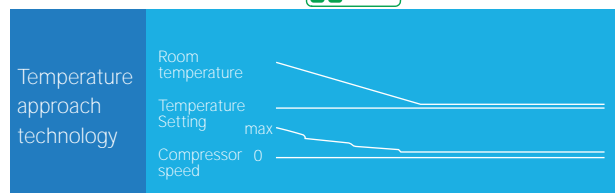


TEMPERATURE APPROACHING TECHNOLOGY

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



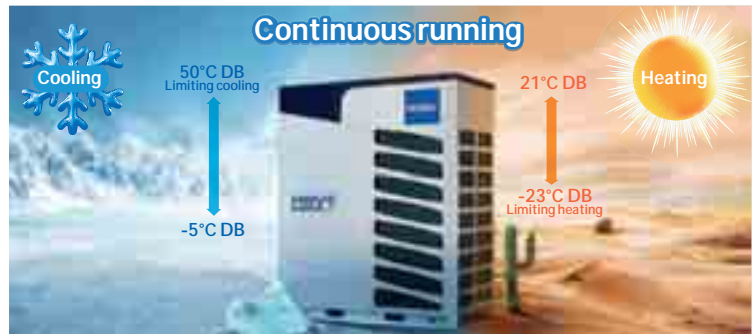
38% Power Consumption Reduced



MRV 5 - FEATURES

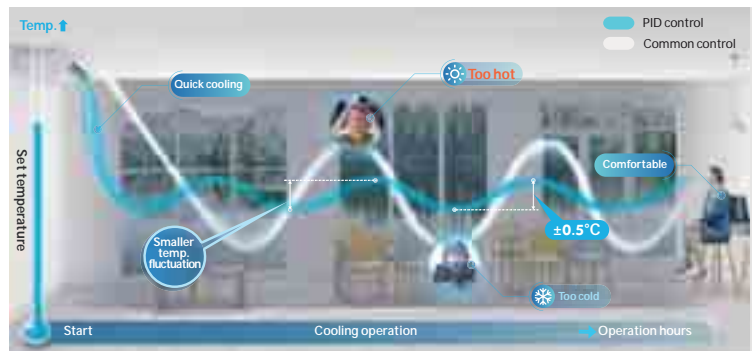
WIDE OPERATION TEMPERATURE

The heating operation temperature can be as low as -23°C outdoor ambient temperature. The cooling operation temperature can reach 50°C outdoor temperature, allowing it to operate in extreme temperatures.



PRECISE TEMPERATURE CONTROL AT $\pm 0.5^{\circ}\text{C}$

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



INTELLIGENT TRIPLE BACKUP OPERATION TECHNOLOGY

•For the double-compressor system, if one compressor is in breakdown, the other compressor can be put into backup operation immediately to ensure the user needs.

•For the multi-module combination, in case of breakdown of one outdoor unit, this unit can be interrupted from the system so that the other modules can continue to operate.
•Super-long backup operation time, which can reach up to 8 hours.



MULTIPLE MODES AVAILABLE TO MEET THE NEEDS OF DIFFERENT USERS



Operation mode:

Cooling priority, heating priority, cooling only, heating only, and VIP priority



Silent mode:

Seven-position silent mode available (night time silent mode and six-position silent mode)



Static pressure mode:

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

MRV 5 - FEATURES

ROTARY ELECTRIC CONTROL BOX DESIGN

Rotary electric control box design gives access to the inside of the machine without having to dismantle the whole casing, for faster and more convenient maintenance.



4-WAY PIPE CONNECTION

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



AUTOMATIC SNOW CLEARING AND DUST REMOVAL FUNCTION

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



PIPING REFRIGERANT STORAGE TECHNOLOGY

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



AUTO ADDRESSING INDOOR UNITS

The ODU can automatically address the indoor units through the module on PCB, and the controller can search and set the address of the indoor unit, making the setup and maintenance of the system quick and easy.



110PA EXTERNAL STATIC PRESSURE DESIGN

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



Installation of duct



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

MRV 5 - FEATURES

SMARTLINK - WIRELESS WI-FI COMMUNICATION

Wi-Fi "Smartlink", the new and exclusive wireless communication system between outdoor and indoor units (optional)



"SMARTLINK" WI-FI FEATURES

- As an alternative to the classic digital communication cable, which is required to make all indoor units talk to their outdoor units, you can install these wireless radio accessories with ZigBee technology on each indoor and outdoor unit.
- At the time of activation, the indoor units begin to dialog with each other creating a stable network of coded signals that bounce between the various internal units until they reach the outdoor unit and vice versa. Each indoor unit works as a signal repeater. With this system, communication is guaranteed even to the most distant indoor unit, and in the presence of walls or other obstacles.
- When an indoor unit is in maintenance, the signal of the unit is lost, this does not affect the normal functioning of the other units.
- The system is set up by the Haier service centres in the start-up phase through a special application (APP) that can be installed on smartphones or tablets (it does not require access to the Internet, as it works on a local WIFI network)



Radio adapter for the indoor unit to be connected to the respective electronic board.

The use of the 'Smartlink' system is useful where it is impossible to reach all the units with a cable. It can be expensive in economic terms and takes time to roll out a cable, intervening on an existing redevelopment plant where the existing layout of the wired communication is not known and where there was a problem on the existing cable (damage etc.) and it is not possible to detect the problem.



8-16HP

AV08IMVEVA
AV10IMVEVA
AV12IMVEVA
AV14IMVEVA
AV16IMVEVA

Model		AV08IMVEVA	AV10IMVEVA	AV12IMVEVA	AV14IMVEVA	AV16IMVEVA
Capacity						
Power Class	HP	8	10	12	14	16
Cooling	kW	25,20	28,00	33,50	40,00	45,00
Heating	kW	25,20	28,00	33,50	40,00	45,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	6,24	7,37	10,15	11,94	13,24
Max absorbed power - Cooling	kW	10,08	11,56	13,80	16,40	19,20
Absorbed current in cooling	A	10,53	12,44	17,14	20,16	22,34
Max absorbed current - Cooling	A	17,02	19,52	23,30	27,69	32,41
Absorbed power - Heating	kW	5,73	6,51	8,59	10,00	11,25
Max absorbed power - Heating	kW	9,90	11,25	12,50	15,10	18,40
Absorbed current in heating	A	9,67	10,99	14,52	16,88	18,99
Max absorbed current - Heating	A	16,70	18,99	21,10	25,49	31,06
EER energy class	W/W	4,04	3,80	3,30	3,35	3,40
COP energy class	W/W	4,40	4,30	3,90	4,00	4,00
SEER energy class	W/W	7,25	7,09	6,69	6,60	6,36
SCOP energy class	W/W	4,41	4,31	4,31	4,12	4,05
$\eta_{s,c}$ %		287	281	265	261	251
$\eta_{s,h}$ %		173	169	169	162	159
Ventilation						
Air flow (High)	m ³ /h	11000	11000	12000	13500	13500
Sound pressure level (High)	dB(A)	56	56	59	59	60
Sound power level (High)	dB(A)	81	82	88	88	88
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	980x750x1690				
Packaged unit dimensions WxDxH	mm	1070x850x1858				
Net weight / Gross weight	Kg	224/250			244/270	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	1INV	1INV	1INV	1INV	1INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	8,50	8,50	8,50	10,00	10,00
Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)
Ø Gas side refrigerant pipe	mm (inch)	19,05 (3/4)	22,22 (7/8)	25,40 (1)	25,40 (1)	28,58 (1-1/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	13	16	20	24	27
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

Outdoor Units

MRV 5



18-26HP

AV18IMVEVA
AV20IMVEVA
AV22IMVEVA
AV24IMVEVA
AV26IMVEVA

		AV18IMVEVA	AV20IMVEVA	AV22IMVEVA	AV24IMVEVA	AV26IMVEVA
Capacity						
Power Class	HP	18	20	22	24	26
Cooling	kW	50,40	56,00	61,50	68,00	73,50
Heating	kW	50,40	56,00	61,50	68,00	73,50
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	15,60	16,62	20,16	22,67	36,75
Max absorbed power - Cooling	kW	21,40	25,10	28,50	29,10	37,80
Absorbed current in cooling	A	26,34	28,05	34,06	38,28	59,24
Max absorbed current - Cooling	A	36,13	42,37	48,11	49,13	61,91
Absorbed power - Heating	kW	13,19	14,66	18,64	19,43	26,25
Max absorbed power - Heating	kW	17,70	22,70	25,50	26,50	30,40
Absorbed current in heating	A	22,27	24,75	31,49	32,80	45,68
Max absorbed current - Heating	A	29,88	38,32	43,05	44,74	51,32
EER energy class	W/W	3,23	3,37	3,05	3,00	2,00
COP energy class	W/W	3,82	3,82	3,30	3,50	2,80
SEER energy class	W/W	6,78	6,75	6,54	5,83	4,90
SCOP energy class	W/W	4,15	4,20	4,21	4,17	3,48
$\eta_{s,c}$ %		268	267	259	230	193
$\eta_{s,h}$ %		163	165	165	164	136
Ventilation						
Air flow (High)	m ³ /h	17000	17000	18000	18000	19000
Sound pressure level (High)	dB(A)	61	61	61	62	62
Sound power level (High)	dB(A)	88	88	90	90	90
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858				
Net weight / Gross weight	Kg	287/317	370/400			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	1INV	2INV	2INV	2INV	2INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	10,00	10,00	10,00	10,00	10,00
Ø Liquid side refrigerant pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Ø Gas side refrigerant pipe	mm (inch)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	30	33	36	40	43
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB. The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



18-34HP

AV14IMVEVA

AV16IMVEVA

AV18IMVEVA

Model		AV28IMVEVA AV14IMVEVA AV14IMVEVA	AV30IMVEVA AV14IMVEVA AV16IMVEVA	AV32IMVEVA AV16IMVEVA AV16IMVEVA	AV34IMVEVA AV16IMVEVA AV18IMVEVA
Capacity					
Power Class	HP	28	30	32	34
Cooling	kW	80,00	85,00	90,00	95,40
Heating	kW	80,00	85,00	90,00	95,40
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	23,88	25,18	26,47	28,94
Max absorbed power - Cooling	kW	32,80	35,60	38,40	40,60
Absorbed current in cooling	A	40,32	42,50	44,69	48,69
Max absorbed current - Cooling	A	55,37	60,10	64,83	68,54
Absorbed power - Heating	kW	20,00	21,25	22,50	24,44
Max absorbed power - Heating	kW	30,20	33,50	36,80	36,10
Absorbed current in heating	A	33,76	35,87	37,98	41,27
Max absorbed current - Heating	A	50,98	56,55	62,13	60,94
EER energy class	W/W	3,35	3,38	3,40	3,31
COP energy class	W/W	4,00	4,00	4,00	3,90
SEER energy class	W/W	6,60	6,36	6,36	6,36
SCOP energy class	W/W	4,12	4,05	4,05	4,05
$\eta_{s,c}$ %		261	251	251	251
$\eta_{s,h}$ %		162	159	159	159
Ventilation					
Air flow (High)	m ³ /h	27000	27000	27000	30500
Sound pressure level (High)	dB(A)	62	63	63	64
Sound power level (High)	dB(A)	91	91	91	91
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	980x750x1690+980x750x1690			980x750x1690+1410x750x1690
Packaged unit dimensions WxDxH	mm	11070x850x1858+1070x850x1858			1070x850x1858+1515x850x1858
Net weight / Gross weight	Kg	244/270+ 244/270	244/270+244/270		244/270+ 287/317
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2INV	2INV	2INV	2INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20,00	20,00	20,00	20,00
Ø Liquid side refrigerant pipe	mm (inch)	15,88 (5/8)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	28,58 (1-1/8)	31,80 (1-1/4)	31,80 (1-1/4)	31,80 (1-1/4)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	47	50	53	56
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5

Haier

MRV5



36-44HP

AV18IMVEVA

AV20IMVEVA

AV22IMVEVA

Model		AV36IMVEVA AV18IMVEVA AV18IMVEVA	AV38IMVEVA AV18IMVEVA AV20IMVEVA	AV40IMVEVA AV20IMVEVA AV20IMVEVA	AV42IMVEVA AV20IMVEVA AV22IMVEVA	AV44IMVEVA AV22IMVEVA AV22IMVEVA
Capacity						
Power Class	HP	36	38	40	42	44
Cooling	kW	100,80	106,40	112,00	117,50	123,00
Heating	kW	100,80	106,40	112,00	117,50	123,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	31,21	32,22	33,23	36,78	40,21
Max absorbed power - Cooling	kW	42,80	46,50	50,20	53,60	57,00
Absorbed current in cooling	A	52,68	54,40	56,11	62,11	68,12
Max absorbed current - Cooling	A	72,26	78,50	84,75	90,49	96,23
Absorbed power - Heating	kW	26,39	27,85	29,32	33,30	37,28
Max absorbed power - Heating	kW	35,40	40,40	45,40	48,20	51,00
Absorbed current in heating	A	44,55	47,02	49,50	56,24	62,98
Max absorbed current - Heating	A	59,76	68,20	76,64	81,37	86,10
EER energy class	W/W	3,23	3,30	3,37	3,19	3,05
COP energy class	W/W	3,82	3,82	3,82	3,53	3,30
SEER energy class	W/W	6,78	6,75	6,75	6,54	6,54
SCOP energy class	W/W	4,15	4,15	4,20	4,20	4,21
$\eta_{s,c}$ %		268	267	267	259	259
$\eta_{s,h}$ %		163	163	165	165	165
Ventilation						
Air flow (High)	m ³ /h	34000	34000	34000	35000	36000
Sound pressure level (High)	dB(A)	64	64	64	64	64
Sound power level (High)	dB(A)	91	91	91	92	93
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	287/317+287/317			370/400+370/400	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2INV	3INV	4INV	4INV	4INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20,00	20,00	20,00	20,00	20,00
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	59	63	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



46-54HP

AV18IMVEVA

AV22IMVEVA

AV24IMVEVA

AV26IMVEVA

Model		AV46IMVEVA AV22IMVEVA AV24IMVEVA	AV48IMVEVA AV24IMVEVA AV24IMVEVA	AV50IMVEVA AV24IMVEVA AV26IMVEVA	AV52IMVEVA AV26IMVEVA AV26IMVEVA	AV54IMVEVA AV18IMVEVA AV18IMVEVA AV18IMVEVA
Capacity						
Power Class	HP	46	48	50	52	54
Cooling	kW	129,50	136,00	141,50	147,00	151,20
Heating	kW	129,50	136,00	141,50	147,00	151,20
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)		3/380-400/50/60 (5 wires L1+L2+L3+N+T)		3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	42,83	45,34	59,42	73,50	46,81
Max absorbed power - Cooling	kW	57,60	58,20	66,90	75,60	64,20
Absorbed current in cooling	A	72,34	76,56	97,52	118,48	79,03
Max absorbed current - Cooling	A	97,24	98,25	111,04	123,82	108,38
Absorbed power - Heating	kW	38,07	38,86	45,68	52,50	39,58
Max absorbed power - Heating	kW	52,00	53,00	56,90	60,80	53,10
Absorbed current in heating	A	64,29	65,60	78,48	91,36	66,82
Max absorbed current - Heating	A	87,79	89,48	96,06	102,64	89,64
EER energy class	W/W	3,02	3,00	2,38	2,00	3,23
COP energy class	W/W	3,40	3,50	3,10	2,80	3,82
SEER energy class	W/W	5,83	5,83	4,90	4,90	6,78
SCOP energy class	W/W	4,17	4,17	3,48	3,48	4,15
$\eta_{s,c}$ %		230	230	193	193	268
$\eta_{s,h}$ %		164	164	136	136	163
Ventilation						
Air flow (High)	m ³ /h	36000	36000	37000	38000	51000
Sound pressure level (High)	dB(A)	65	65	65	65	66
Sound power level (High)	dB(A)	93	93	93	93	93
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690				1410x750x1690+1410x750x1690+1410x750x1690
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858				1515x850x1858+1515x850x1858+1515x850x1858
Net weight / Gross weight	Kg	370/400+370/400				287/317+287/317+287/317
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4INV	4INV	4INV	4INV	3INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20,00	20,00	20,00	20,00	30,00
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

Outdoor Units

MRV 5



56-64HP

AV18IMVEVA

AV20IMVEVA

AV22IMVEVA

Model		AV56IMVEVA AV18IMVEVA AV18IMVEVA AV20IMVEVA	AV58IMVEVA AV18IMVEVA AV20IMVEVA AV20IMVEVA	AV60IMVEVA AV20IMVEVA AV20IMVEVA AV20IMVEVA	AV62IMVEVA AV20IMVEVA AV20IMVEVA AV22IMVEVA	AV64IMVEVA AV20IMVEVA AV22IMVEVA AV22IMVEVA
Capacity						
Power Class	HP	56	58	60	62	64
Cooling	kW	156,80	162,40	168,00	173,50	179,00
Heating	kW	156,80	162,40	168,00	173,50	179,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	47,82	48,84	49,85	53,39	56,94
Max absorbed power - Cooling	kW	67,90	71,60	75,30	78,70	82,10
Absorbed current in cooling	A	80,74	82,45	84,16	90,17	96,17
Max absorbed current - Cooling	A	114,63	120,88	127,12	132,86	138,60
Absorbed power - Heating	kW	41,05	42,51	43,98	47,96	51,94
Max absorbed power - Heating	kW	58,10	63,10	68,10	70,90	73,70
Absorbed current in heating	A	69,30	71,77	74,25	80,99	87,73
Max absorbed current - Heating	A	98,08	106,53	114,97	119,69	124,42
EER energy class	W/W	3,28	3,33	3,37	3,25	3,14
COP energy class	W/W	3,82	3,82	3,82	3,62	3,45
SEER energy class	W/W	6,75	6,75	6,75	6,54	6,54
SCOP energy class	W/W	4,15	4,15	4,20	4,20	4,20
$\eta_{s,c}$ %		267	267	267	259	259
$\eta_{s,h}$ %		163	163	165	165	165
Ventilation						
Air flow (High)	m ³ /h	51000	51000	51000	52000	53000
Sound pressure level (High)	dB(A)	66	66	66	66	66
Sound power level (High)	dB(A)	93	93	93	94	94
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	287/317+287/317+370/400	287/317+370/400+370/400	370/400+370/400+370/400		
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4INV	5INV	6INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30,00	30,00	30,00	30,00	30,00
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	38,10 (1-1/2)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



66-74HP

AV22IMVEVA

AV24IMVEVA

AV26IMVEVA

Model		AV66IMVEVA AV22IMVEVA AV22IMVEVA AV22IMVEVA	AV68IMVEVA AV22IMVEVA AV22IMVEVA AV24IMVEVA	AV70IMVEVA AV22IMVEVA AV24IMVEVA AV24IMVEVA	AV72IMVEVA AV24IMVEVA AV24IMVEVA AV24IMVEVA	AV74IMVEVA AV24IMVEVA AV24IMVEVA AV26IMVEVA
Capacity						
Power Class	HP	66	68	70	72	74
Cooling	kW	184,50	191,00	197,50	204,00	209,50
Heating	kW	184,50	191,00	197,50	20,00	209,50
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	60,48	62,99	65,50	68,01	82,09
Max absorbed power - Cooling	kW	85,50	86,10	86,70	87,30	96,00
Absorbed current in cooling	A	102,18	106,40	110,62	114,84	135,80
Max absorbed current - Cooling	A	144,34	145,35	146,37	147,38	160,16
Absorbed power - Heating	kW	55,92	56,71	57,50	58,29	65,11
Max absorbed power - Heating	kW	76,50	77,50	78,50	79,50	83,40
Absorbed current in heating	A	94,47	95,78	97,09	98,40	111,28
Max absorbed current - Heating	A	129,15	130,84	132,52	134,21	140,80
EER energy class	W/W	3,05	3,03	3,02	3,00	2,55
COP energy class	W/W	3,30	3,37	3,43	3,50	3,22
SEER energy class	W/W	6,54	5,83	5,83	5,83	4,90
SCOP energy class	W/W	4,21	4,17	4,17	4,17	3,48
$\eta_{s,c}$ %		259	230	230	230	193
$\eta_{s,h}$ %		165	164	164	164	136
Ventilation						
Air flow (High)	m ³ /h	54000	54000	54000	54000	55000
Sound pressure level (High)	dB(A)	66	66	67	67	67
Sound power level (High)	dB(A)	95	95	95	95	95
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	370/400+370/400+370/400				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6INV	6INV	6INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30,00	30,00	30,00	30,00	30,00
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas side refrigerant pipe	mm (inch)	41,30 (1-5/8)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

Outdoor Units MRV 5

76-84HP

AV20IMVEVA
AV22IMVEVA
AV24IMVEVA
AV26IMVEVA



Model		AV76IMVEVA AV24IMVEVA AV26IMVEVA AV26IMVEVA	AV78IMVEVA AV26IMVEVA AV26IMVEVA AV26IMVEVA	AV80IMVEVA AV20IMVEVA AV20IMVEVA AV20IMVEVA AV20IMVEVA	AV82IMVEVA AV20IMVEVA AV20IMVEVA AV20IMVEVA AV22IMVEVA	AV84IMVEVA AV20IMVEVA AV20IMVEVA AV22IMVEVA AV22IMVEVA
Capacity						
Power Class	HP	76	78	80	82	84
Cooling	kW	215,00	220,50	224,00	229,50	235,00
Heating	kW	215,00	220,50	224,00	229,50	235,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	96,17	110,25	66,47	70,01	73,55
Max absorbed power - Cooling	kW	104,70	113,40	100,40	103,80	107,20
Absorbed current in cooling	A	156,76	177,72	112,21	118,22	124,23
Max absorbed current - Cooling	A	172,95	185,73	169,50	175,24	189,98
Absorbed power - Heating	kW	71,93	78,75	58,64	62,62	66,60
Max absorbed power - Heating	kW	87,30	91,20	90,80	93,60	96,40
Absorbed current in heating	A	124,16	137,04	98,99	105,74	112,48
Max absorbed current - Heating	A	147,38	153,96	153,29	158,02	162,74
EER energy class	W/W	2,24	2,00	3,37	3,28	3,19
COP energy class	W/W	2,99	2,80	3,82	3,67	3,53
SEER energy class	W/W	4,90	4,90	6,75	6,54	6,54
SCOP energy class	W/W	3,48	3,48	4,20	4,20	4,20
$\eta_{s,c}$ %		193	193	267	259	259
$\eta_{s,h}$ %		136	136	165	165	165
Ventilation						
Air flow (High)	m ³ /h	56000	57000	68000	69000	70000
Sound pressure level (High)	dB(A)	67	67	67	67	67
Sound power level (High)	dB(A)	95	95	94	95	95
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690	1410x750x1690+1410x750x1690+1410x750x1690	1410x750x1690+1410x750x1690+1410x750x1690	1410x750x1690+1410x750x1690+1410x750x1690	1410x750x1690+1410x750x1690+1410x750x1690
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858	1515x850x1858+1515x850x1858+1515x850x1858	1515x850x1858+1515x850x1858+1515x850x1858	1515x850x1858+1515x850x1858+1515x850x1858	1515x850x1858+1515x850x1858+1515x850x1858
Net weight / Gross weight	Kg	370/400+370/400+370/400		370/400+370/400+370/400+370/400		
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6INV	6INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30,00	30,00	40,00	40,00	40,00
Ø Liquid side refrigerant pipe	mm (inch)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas side refrigerant pipe	mm (inch)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



86-94HP

AV20IMVEVA
AV22IMVEVA
AV24IMVEVA
AV26IMVEVA

Model		AV86IMVEVA AV20IMVEVA AV22IMVEVA AV22IMVEVA AV22IMVEVA	AV88IMVEVA AV22IMVEVA AV22IMVEVA AV22IMVEVA AV22IMVEVA	AV90IMVEVA AV22IMVEVA AV22IMVEVA AV22IMVEVA AV24IMVEVA	AV92IMVEVA AV22IMVEVA AV22IMVEVA AV24IMVEVA AV24IMVEVA	AV94IMVEVA AV22IMVEVA AV24IMVEVA AV24IMVEVA AV24IMVEVA
Capacity						
Power Class	HP	86	88	90	92	94
Cooling	kW	240,50	246,00	252,50	259,00	265,50
Heating	kW	240,50	246,00	252,50	259,00	265,50
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	77,10	80,64	83,15	85,66	88,17
Max absorbed power - Cooling	kW	110,60	114,00	114,60	115,20	115,80
Absorbed current in cooling	A	130,23	136,24	140,46	144,68	148,90
Max absorbed current - Cooling	A	186,72	192,46	193,47	194,48	195,49
Absorbed power - Heating	kW	70,58	74,56	75,35	76,14	76,93
Max absorbed power - Heating	kW	99,20	10,00	103,00	104,00	105,00
Absorbed current in heating	A	119,22	125,96	127,27	128,58	129,89
Max absorbed current - Heating	A	167,47	172,20	173,89	175,57	177,26
EER energy class	W/W	3,12	3,05	3,04	3,02	3,01
COP energy class	W/W	3,41	3,30	3,35	3,40	3,45
SEER energy class	W/W	6,54	6,54	5,83	5,83	5,83
SCOP energy class	W/W	4,20	4,21	4,17	4,17	4,17
$\eta_{s,c}$ %		259	259	230	230	230
$\eta_{s,h}$ %		165	165	164	164	164
Ventilation						
Air flow (High)	m ³ /h	71000	72000	72000	72000	72000
Sound pressure level (High)	dB(A)	67	67	68	68	68
Sound power level (High)	dB(A)	96	96	96	96	96
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	370/400+370/400+370/400+370/400				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8INV	8INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40,00	40,00	40,00	40,00	40,00
Ø Liquid side refrigerant pipe	mm (inch)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Ø Gas side refrigerant pipe	mm (inch)	50,80 (2)	50,80 (2)	50,80 (2)	50,80 (2)	50,80 (2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5



96-104HP
AV24IMVEVA
AV26IMVEVA

Model		AV96IMVEVA AV24IMVEVA AV24IMVEVA AV24IMVEVA AV24IMVEVA	AV98IMVEVA AV24IMVEVA AV24IMVEVA AV24IMVEVA AV26IMVEVA	AV100IMVEVA AV24IMVEVA AV24IMVEVA AV26IMVEVA AV26IMVEVA	AV102IMVEVA AV24IMVEVA AV26IMVEVA AV26IMVEVA AV26IMVEVA	AV104IMVEVA AV26IMVEVA AV26IMVEVA AV26IMVEVA AV26IMVEVA
Capacity						
Power Class	HP	96	98	100	102	104
Cooling	kW	272,00	277,50	283,00	288,50	294,00
Heating	kW	272,00	277,50	283,00	288,50	294,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	90,68	104,76	118,84	132,92	147,00
Max absorbed power - Cooling	kW	116,40	125,10	133,80	142,50	151,20
Absorbed current in cooling	A	153,12	174,08	195,04	216,00	236,96
Max absorbed current - Cooling	A	196,51	209,29	222,07	234,86	247,64
Absorbed power - Heating	kW	77,71	84,54	91,36	98,18	105,00
Max absorbed power - Heating	kW	106,00	109,90	113,80	117,70	121,60
Absorbed current in heating	A	131,20	144,08	156,96	169,84	182,72
Max absorbed current - Heating	A	178,95	185,53	192,12	198,70	205,29
EER energy class	W/W	3,00	2,65	2,38	2,17	2,00
COP energy class	W/W	3,50	3,28	3,10	2,94	2,80
SEER energy class	W/W	5,83	4,90	4,90	4,90	4,90
SCOP energy class	W/W	4,17	3,48	3,48	3,48	3,48
$\eta_{s,c}$ %		230	193	193	193	193
$\eta_{s,h}$ %		164	136	136	136	136
Ventilation						
Air flow (High)	m ³ /h	72000	73000	74000	75000	76000
Sound pressure level (High)	dB(A)	68	68	68	68	68
Sound power level (High)	dB(A)	96	96	96	96	96
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	370/400+370/400+370/400+370/400				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8INV	8INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40,00	40,00	40,00	40,00	40,00
Ø Liquid side refrigerant pipe	mm (inch)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Ø Gas side refrigerant pipe	mm (inch)	50,80 (2)	54,10 (2-1/8)	54,10 (2-1/8)	54,10 (2-1/8)	54,10 (2-1/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



MRV5-H

DC INVERTER

Heat Pump
VRF Continuous
Heating System

MRV H - FEATURES



MRV 5-H CONTINUOUS HEATING, EVEN DURING DEFROST MODE.

MRV 5-H continuous heating VRF system by Haier adopts intelligent defrost technology according to the system pressure, coil temperature and humidity changes, coupled with the fan motor inspection technology to initiate automatic defrost mode.

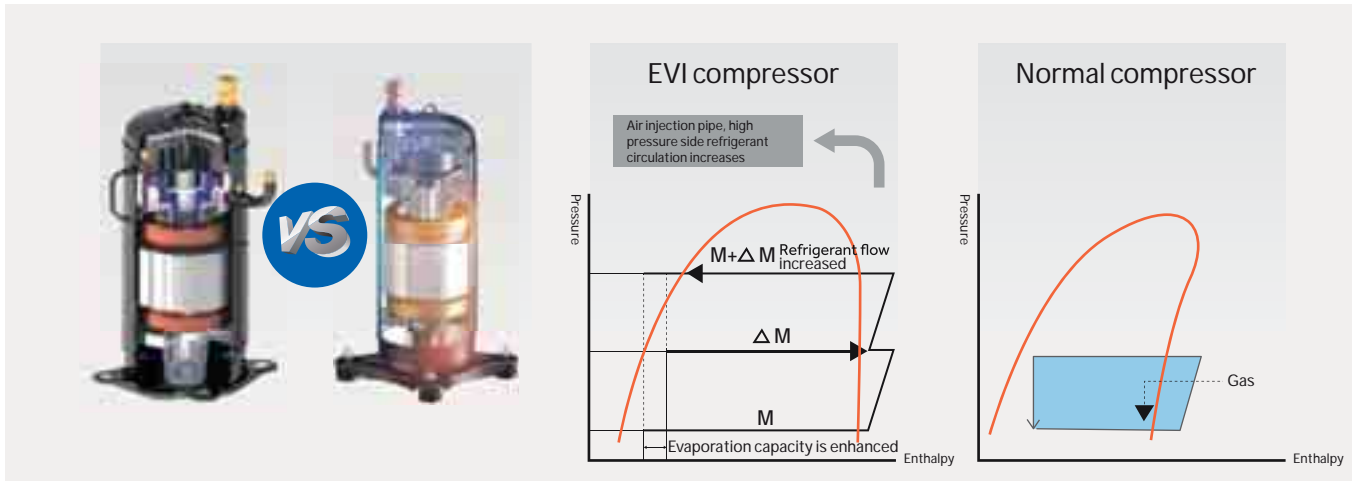
Indoor temperature fluctuations are reduced by using direct defrosting technology and ensuring that in certain defrosting modes the four-way valve does not reverse direction giving you uninterrupted heating temperatures.



MRV H - FEATURES

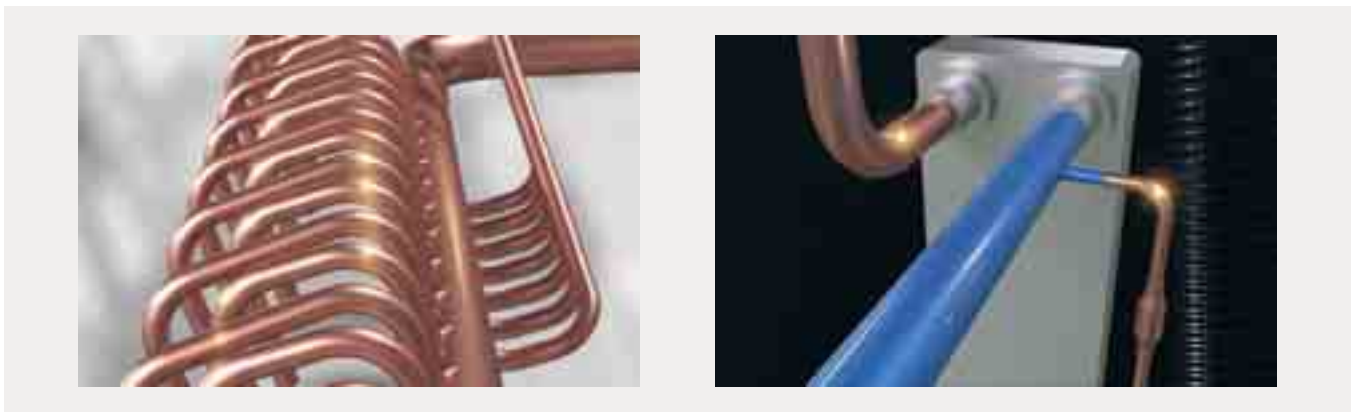
ENHANCED VAPOR INJECTION TECHNOLOGY, LOW TEMPERATURE HEATING AND HIGH TEMPERATURE COOLING

The MRV 5-H unit adopts an EVI compressor, which can increase the circulation of the refrigerant by 15%, and improve the heating effect by 30% compared with standard compressor types. The heating operating temperature in winter can be -27°C , and the cooling operating temperature in summer can be 52°C .



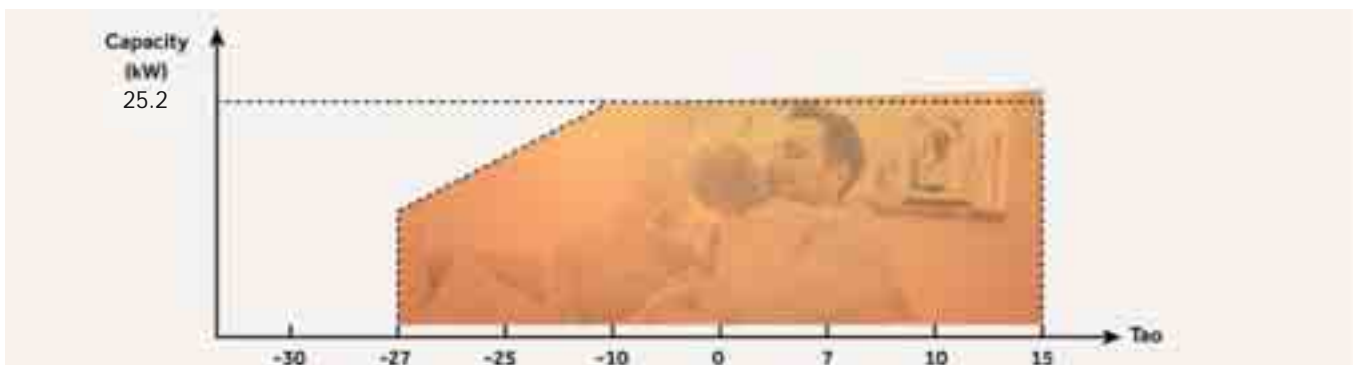
2 STAGE SUB-COOLING

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



RELIABLE PERFORMANCE IN LOW TEMPERATURES

Compared with the standard series, the heating capacity in MRV 5-H is increased by 10% in the low temperature. For example, in the 8HP unit the heating capacity is 100% under -10°C environment temperature.





8-16HP

AV08NMVETA
AV10NMVETA
AV12NMVETA
AV14NMVETA
AV16NMVETA

Model		AV08NMVETA	AV10NMVETA	AV12NMVETA	AV14NMVETA	AV16NMVETA
Capacity						
Power Class	HP	8	10	12	14	16
Cooling	kW	25,20	28,00	33,50	40,00	45,00
Heating	kW	25,20	28,00	33,50	40,00	45,00
Electrical Parameters						
Power supply	Ph-V/Hz	*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*		*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*		*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*
Absorbed power - Cooling	kW	6,24	7,37	10,15	11,94	13,24
Max absorbed power - Cooling	kW	14,30	15,10	16,32	17,58	20,69
Absorbed current in cooling	A	10,53	12,44	17,14	20,16	22,34
Max absorbed current - Cooling	A	23,81	25,14	27,17	29,27	34,50
Absorbed power - Heating	kW	5,56	6,32	8,33	9,71	10,92
Max absorbed power - Heating	kW	11,69	12,19	12,69	16,10	19,56
Absorbed current in heating	A	9,39	10,67	14,07	16,39	18,44
Max absorbed current - Heating	A	19,47	20,30	21,13	26,81	32,57
EER energy class	W/W	4,04	3,80	3,30	3,35	3,40
COP energy class	W/W	4,53	4,43	4,02	4,12	4,12
SEER energy class	W/W	7,25	7,09	6,69	6,60	6,36
SCOP energy class	W/W	4,41	4,31	4,31	4,12	4,05
η _{s,c} %		287	281	265	261	251
η _{s,h} %		173	169	169	162	159
Ventilation						
Air flow (High)	m ³ /h	11000	11000	12000	13500	13500
Sound pressure level (High)	dB(A)	56	56	59	59	60
Sound power level (High)	dB(A)	81	82	88	88	88
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	980x750x1690				
Packaged unit dimensions WxDxH	mm	1070x850x1858				
Net weight / Gross weight	Kg	255/280				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	1INV	1INV	1INV	1INV	1INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	10	10	10	10	10
Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)
Ø Gas side refrigerant pipe	mm (inch)	19,05 (3/4)	22,22 (7/8)	25,40 (1)	25,40 (1)	28,58 (1-1/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	13	16	20	24	27
External Temperature Operating Limits						
Cooling	°C	-5-52	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21	-27-21

Outdoor Units

MRV 5-H



18-26HP

AV18NMVETA
AV20NMVETA
AV22NMVETA
AV24NMVETA
AV26NMVETA

		AV18NMVETA	AV20NMVETA	AV22NMVETA	AV24NMVETA	AV26NMVETA
Capacity						
Power Class	HP	18	20	22	24	26
Cooling	kW	50,40	56,00	61,50	68,00	73,50
Heating	kW	50,40	56,00	61,50	68,00	73,50
Electrical Parameters						
Power supply	Ph-V/Hz	*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*		*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*		*3/380-400/50/60 (5 wires L1+L2+L3+N+T)*
Absorbed power - Cooling	kW	15,60	16,62	20,16	22,67	36,75
Max absorbed power - Cooling	kW	25,90	28,91	31,82	32,81	37,80
Absorbed current in cooling	A	26,34	28,05	34,03	37,65	59,24
Max absorbed current - Cooling	A	40,30	46,30	51,91	54,12	61,91
Absorbed power - Heating	kW	12,81	14,23	18,09	18,86	25,52
Max absorbed power - Heating	kW	21,93	24,70	25,69	30,40	32,45
Absorbed current in heating	A	21,62	24,03	30,54	31,84	43,08
Max absorbed current - Heating	A	36,51	41,13	42,78	50,62	54,03
EER energy class	W/W	3,23	3,37	3,05	3,00	2,00
COP energy class	W/W	3,93	3,93	3,40	3,61	2,88
SEER energy class	W/W	6,78	6,75	6,54	5,83	4,90
SCOP energy class	W/W	4,15	4,20	4,21	4,17	3,50
$\eta_{s,c}$ %		268	267	259	230	193
$\eta_{s,h}$ %		163	165	165	164	137
Ventilation						
Air flow (High)	m ³ /h	17000	17000	18000	18000	19000
Sound pressure level (High)	dB(A)	61	61	61	62	62
Sound power level (High)	dB(A)	88	88	88	90	90
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858				
Net weight / Gross weight	Kg	385/410				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2INV	2INV	2INV	2INV	2INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	10	10	10	10	10
Ø Liquid side refrigerant pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Ø Gas side refrigerant pipe	mm (inch)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	30	33	36	40	43
External Temperature Operating Limits						
Cooling	°C	-5-52	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21	-27-21

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



28-32 HP
AV14NMVETA
AV16NMVETA

Model		AV28NMVETA AV14NMVETA AV14NMVETA	AV30NMVETA AV14NMVETA AV16NMVETA	AV32NMVETA AV16NMVETA AV16NMVETA
Capacity				
Power Class	HP	28	30	32
Cooling	kW	80,00	85,00	90,00
Heating	kW	80,00	85,00	90,00
Electrical Parameters				
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	23,88	25,18	26,47
Max absorbed power - Cooling	kW	35,16	38,27	41,38
Absorbed current in cooling	A	40,32	42,50	44,69
Max absorbed current - Cooling	A	58,54	63,77	69,00
Absorbed power - Heating	kW	19,42	20,63	21,84
Max absorbed power - Heating	kW	32,20	35,66	39,12
Absorbed current in heating	A	32,78	34,83	36,88
Max absorbed current - Heating	A	53,61	59,38	65,14
EER energy class	W/W	3,35	3,38	3,40
COP energy class	W/W	4,12	4,12	4,12
SEER energy class	W/W	6,60	6,36	6,36
SCOP energy class	W/W	4,12	4,05	4,05
$\eta_{s,c}$ %		261	251	251
$\eta_{s,h}$ %		162	159	159
Ventilation				
Air flow (High)	m ³ /h	27000	27000	27000
Sound pressure level (High)	dB(A)	62	62,5	63
Sound power level (High)	dB(A)	91	91	91
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	980x750x1690+980x750x1690		
Packaged unit dimensions WxDxH	mm	1070x850x1858+1070x850x1858		
Net weight / Gross weight	Kg	255/280+255/280		
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2INV	2INV	2INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	20
Ø Liquid side refrigerant pipe	mm (inch)	15,88 (5/8)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	28,58 (1-1/8)	31,80 (1-1/4)	31,80 (1-1/4)
Maximum piping length	m	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30
Std. drop between IU *4	m	18	18	18
Static Pressure Fans	Pa	110	110	110
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	47	50	53
External Temperature Operating Limits				
Cooling	°C	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21

Outdoor Units

MRV 5-H



34-38HP

AV14NMVETA

AV18NMVETA

AV20NMVETA

Model		AV34NMVETA AV16NMVETA AV16NMVETA	AV36NMVETA AV18NMVETA AV18NMVETA	AV38NMVETA AV18NMVETA AV20NMVETA
Capacity				
Power Class	HP	34	36	38
Cooling	kW	95,40	100,80	106,40
Heating	kW	95,40	100,80	106,40
Electrical Parameters				
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	28,84	31,20	32,22
Max absorbed power - Cooling	kW	46,59	51,80	54,81
Absorbed current in cooling	A	48,68	52,67	54,39
Max absorbed current - Cooling	A	74,80	80,60	86,60
Absorbed power - Heating	kW	23,73	25,62	27,04
Max absorbed power - Heating	kW	41,49	43,86	46,63
Absorbed current in heating	A	40,06	43,25	45,65
Max absorbed current - Heating	A	69,08	73,03	77,64
EER energy class	W/W	3,31	3,23	3,30
COP energy class	W/W	4,02	3,93	3,93
SEER energy class	W/W	6,36	6,78	6,75
SCOP energy class	W/W	4,05	4,15	4,15
$\eta_{s,c}$ %		251	268	267
$\eta_{s,h}$ %		159	163	163
Ventilation				
Air flow (High)	m ³ /h	27000	34000	34000
Sound pressure level (High)	dB(A)	63,5	64	64
Sound power level (High)	dB(A)	91	91	91
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	980x750x1690+1410x750x1690	1410x750x1690+1410x750x1690	
Packaged unit dimensions WxDxH	mm	1070x850x1858+1485x850x1858	1485x850x1858+1485x850x1858	
Net weight / Gross weight	Kg	255/280+385/410	385/410+385/410	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	3INV	4INV	4INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	20
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	31,80 (1-1/4)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90
Max. drop between IU and OU (O.U. down/up)*2	m	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30
Std. drop between IU *4	m	18	18	18
Static Pressure Fans	Pa	110	110	110
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	56	59	63
External Temperature Operating Limits				
Cooling	°C	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



40-48HP

AV20NMVETA

AV22NMVETA

AV24NMVETA

Model		AV40NMVETA AV20NMVETA AV20NMVETA	AV42NMVETA AV20NMVETA AV22NMVETA	AV44NMVETA AV22NMVETA AV22NMVETA	AV46NMVETA AV22NMVETA AV24NMVETA	AV48NMVETA AV24NMVETA AV24NMVETA
Capacity						
Power Class	HP	40	42	44	46	48
Cooling	kW	112,00	117,50	123,00	129,50	136,00
Heating	kW	112,00	117,50	123,00	129,50	136,00
Electrical Parameters						
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	33,23	36,78	40,32	42,83	45,34
Max absorbed power - Cooling	kW	57,82	60,73	63,64	64,63	65,62
Absorbed current in cooling	A	56,11	62,09	68,07	71,68	75,30
Max absorbed current - Cooling	A	92,60	98,21	103,82	106,03	108,24
Absorbed power - Heating	kW	28,47	32,32	36,18	36,95	37,73
Max absorbed power - Heating	kW	49,40	50,39	51,38	56,09	60,80
Absorbed current in heating	A	48,06	54,56	61,07	62,38	63,69
Max absorbed current - Heating	A	82,25	83,90	85,55	93,39	101,23
EER energy class	W/W	3,37	3,19	3,05	3,02	3,00
COP energy class	W/W	3,93	3,64	3,40	3,50	3,61
SEER energy class	W/W	6,75	6,54	6,54	5,83	5,83
SCOP energy class	W/W	4,20	4,20	4,21	4,17	4,17
$\eta_{s,c}$ %		267	259	259	230	230
$\eta_{s,h}$ %		165	165	165	164	164
Ventilation						
Air flow (High)	m ³ /h	34000	35000	36000	36000	36000
Sound pressure level (High)	dB(A)	64	64	64	64,5	65
Sound power level (High)	dB(A)	91	92	93	93	93
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858				
Net weight / Gross weight	Kg	385/410+385/410				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4INV	4INV	4INV	4INV	4INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	20	20	20
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Standard height difference between IU and OU	m	110/90	110/90	110/90	110/90	110/90
Standard height difference between IU and IU	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-52	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21	-27-21

Outdoor Units

MRV 5-H



50-56HP

AV18NMVETA
AV20NMVETA
AV24NMVETA
AV26NMVETA

Model		AV50NMVETA AV24NMVETA AV26NMVETA	AV52NMVETA AV26NMVETA AV26NMVETA	AV54NMVETA AV18NMVETA AV18NMVETA AV18NMVETA	AV56NMVETA AV18NMVETA AV18NMVETA AV20NMVETA
Capacity					
Power Class	HP	50	52	54	56
Cooling	kW	141,50	147,00	151,20	156,80
Heating	kW	141,50	147,00	151,20	156,80
Electrical Parameters					
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	59,42	73,50	46,80	47,82
Max absorbed power - Cooling	kW	70,61	75,60	77,70	80,71
Absorbed current in cooling.	A	96,89	118,48	79,01	80,73
Max absorbed current - Cooling	A	116,03	123,82	120,90	126,90
Absorbed power - Heating	kW	44,38	51,04	38,43	39,85
Max absorbed power - Heating	kW	62,85	64,90	65,79	68,56
Absorbed current in heating	A	74,93	86,17	64,87	67,28
Max absorbed current - Heating	A	104,65	108,06	109,54	114,15
EER energy class	W/W	2,38	2,00	3,23	3,28
COP energy class	W/W	3,19	2,88	3,93	3,93
SEER energy class	W/W	4,90	4,90	6,78	6,75
SCOP energy class	W/W	3,50	3,50	4,15	4,15
$\eta_{s,c}$ %		193	193	268	267
$\eta_{s,h}$ %		137	137	163	163
Ventilation					
Air flow (High)	m ³ /h	37000	38000	51000	51000
Sound pressure level (High)	dB(A)	65	65	65,8	65,8
Sound power level (High)	dB(A)	93	93	93	93
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690		1410x750x1690+1410x750x1690+1410x750x1690	
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858		1485x850x1858+1485x850x1858+1485x850x1858	
Net weight / Gross weight	Kg	385/410+385/410		385/410+385/410+385/410	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4INV	4INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	30	30
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Standard height difference between IU and OU	m	110/90	110/90	110/90	110/90
Standard height difference between IU and IU	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21



58-64HP

AV18NMVETA

AV20NMVETA

AV22NMVETA

Model		AV58NMVETA AV18NMVETA AV20NMVETA AV20NMVETA	AV60NMVETA AV20NMVETA AV20NMVETA AV20NMVETA	AV62NMVETA AV20NMVETA AV20NMVETA AV22NMVETA	AV64NMVETA AV20NMVETA AV22NMVETA AV22NMVETA
Capacity					
Power Class	HP	58	60	62	64
Cooling	kW	162,40	168,00	173,50	179,00
Heating	kW	162,40	168,00	173,50	179,00
Electrical Parameters					
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	48,83	49,85	53,39	56,94
Max absorbed power - Cooling	kW	83,72	86,73	89,64	92,55
Absorbed current in cooling.	A	82,44	84,16	90,14	96,12
Max absorbed current - Cooling	A	132,90	138,90	144,51	150,12
Absorbed power - Heating	kW	41,27	42,70	46,55	50,41
Max absorbed power - Heating	kW	71,33	74,10	75,09	76,08
Absorbed current in heating	A	69,68	72,08	78,59	85,10
Max absorbed current - Heating	A	118,76	123,38	125,03	126,68
EER energy class	W/W	3,33	3,37	3,25	3,14
COP energy class	W/W	3,93	3,93	3,73	3,55
SEER energy class	W/W	6,75	6,75	6,54	6,54
SCOP energy class	W/W	4,15	4,20	4,20	4,20
ηs,c %		267	267	259	259
ηs,h %		163	165	165	165
Ventilation					
Air flow (High)	m³/h	51000	51000	52000	53000
Sound pressure level (High)	dB(A)	65,8	65,8	65,8	65,8
Sound power level (High)	dB(A)	93	93	93,5	94
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858			
Net weight / Gross weight	Kg	385/410+385/410+385/410			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6INV	6INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30	30	30	30
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21

Outdoor Units

MRV 5-H



66-72HP

AV22NMVETA

AV24NMVETA

Model		AV66NMVETA AV22NMVETA AV22NMVETA AV22NMVETA	AV68NMVETA AV22NMVETA AV22NMVETA AV24NMVETA	AV70NMVETA AV22NMVETA AV24NMVETA AV24NMVETA	AV72NMVETA AV24NMVETA AV24NMVETA AV24NMVETA
Capacity					
Power Class	HP	66	68	70	72
Cooling	kW	184,50	191,00	197,50	204,00
Heating	kW	184,50	191,00	197,50	204,00
Electrical Parameters					
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"		"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	
Absorbed power - Cooling	kW	60,48	62,99	65,50	68,01
Max absorbed power - Cooling	kW	95,46	96,45	97,44	98,43
Absorbed current in cooling	A	102,10	105,72	109,33	112,95
Max absorbed current - Cooling	A	155,73	157,94	160,15	162,36
Absorbed power - Heating	kW	54,26	55,04	55,81	56,59
Max absorbed power - Heating	kW	77,08	81,78	86,49	91,20
Absorbed current in heating	A	91,61	92,92	94,23	95,53
Max absorbed current - Heating	A	128,33	136,17	144,01	151,85
EER energy class	W/W	3,05	3,03	3,02	3,00
COP energy class	W/W	3,40	3,47	3,54	3,61
SEER energy class	W/W	6,54	5,83	5,83	5,83
SCOP energy class	W/W	4,21	4,17	4,17	4,17
$\eta_{s,c}$ %		259	230	230	230
$\eta_{s,h}$ %		165	164	164	164
Ventilation					
Air flow (High)	m ³ /h	54000	54000	54000	54000
Sound pressure level (High)	dB(A)	65,8	66	66,5	66,8
Sound power level (High)	dB(A)	95	95	95	95
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858			
Net weight / Gross weight	Kg	385/410+385/410+385/410			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6INV	6INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30	30	30	30
Ø Liquid side refrigerant pipe	mm	19,05 (3/4)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas side refrigerant pipe	mm	41,30 (1-5/8)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4		18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21



74-78HP
AV24NMVETA
AV26NMVETA

Model		AV74NMVETA AV24NMVETA AV24NMVETA AV26NMVETA	AV76NMVETA AV24NMVETA AV26NMVETA AV26NMVETA	AV78NMVETA AV26NMVETA AV26NMVETA AV26NMVETA
Capacity				
Power Class	HP	74	76	78
Cooling	kW	209,50	215,00	220,50
Heating	kW	209,50	215,00	220,50
Electrical Parameters				
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	82,09	96,17	110,25
Max absorbed power - Cooling	kW	103,42	108,41	113,40
Absorbed current in cooling	A	134,54	156,13	177,72
Max absorbed current - Cooling	A	170,15	177,94	185,73
Absorbed power - Heating	kW	63,25	69,90	76,56
Max absorbed power - Heating	kW	93,25	95,30	97,35
Absorbed current in heating	A	106,77	118,01	129,25
Max absorbed current - Heating	A	155,26	158,67	162,09
EER energy class	W/W	2,55	2,24	2,00
COP energy class	W/W	3,31	3,08	2,88
SEER energy class	W/W	4,90	4,90	4,90
SCOP energy class	W/W	3,50	3,50	3,50
η _{s,c} %		193	193	193
η _{s,h} %		137	137	137
Ventilation				
Air flow (High)	m ³ /h	55000	56000	57000
Sound pressure level (High)	dB(A)	66,8	66,8	66,8
Sound power level (High)	dB(A)	95	95	95
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690		
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858		
Net weight / Gross weight	Kg	385/410+385/410+385/410		
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6INV	6INV	6INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30	30	30
Ø Liquid side refrigerant pipe	mm	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas side refrigerant pipe	mm	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Maximum piping length	m	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30
Std. drop between IU *4		18	18	18
Static Pressure Fans	Pa	110	110	110
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64
External Temperature Operating Limits				
Cooling	°C	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21

Outdoor Units MRV 5-H

Haier

MRV 5 H



80-86HP

AV20NMVETA

AV22NMVETA

Model		AV80NMVETA AV20NMVETA AV20NMVETA AV20NMVETA AV20NMVETA	AV82NMVETA AV20NMVETA AV20NMVETA AV20NMVETA AV22NMVETA	AV84NMVETA AV20NMVETA AV20NMVETA AV22NMVETA AV22NMVETA	AV86NMVETA AV20NMVETA AV22NMVETA AV22NMVETA AV22NMVETA
Capacity					
Power Class	HP	80	82	84	86
Cooling	kW	224,00	229,50	235,00	240,50
Heating	kW	224,00	229,50	235,00	240,50
Electrical Parameters					
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	66,47	70,01	73,55	77,10
Max absorbed power - Cooling	kW	115,64	118,55	121,46	124,37
Absorbed current in cooling	A	112,21	118,19	124,18	130,16
Max absorbed current - Cooling	A	185,20	190,81	196,42	202,03
Absorbed power - Heating	kW	56,93	60,79	64,64	68,50
Max absorbed power - Heating	kW	98,80	99,79	100,78	101,78
Absorbed current in heating	A	96,11	102,62	109,13	115,64
Max absorbed current - Heating	A	164,50	166,15	167,81	169,46
EER energy class	W/W	3,37	3,28	3,19	3,12
COP energy class	W/W	3,93	3,78	3,64	3,51
SEER energy class	W/W	6,75	6,54	6,54	6,54
SCOP energy class	W/W	4,20	4,20	4,20	4,20
$\eta_{s,c}$ %		267	259	259	259
$\eta_{s,h}$ %		165	165	165	165
Ventilation					
Air flow (High)	m ³ /h	68000	69000	70000	71000
Sound pressure level (High)	dB(A)	67	67	67	67
Sound power level (High)	dB(A)	94	95	95	96
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858+1485x850x1858			
Net weight / Gross weight	Kg	385/410+385/410+385/410+385/410			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40	40
Ø Liquid side refrigerant pipe	mm	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	25,40 (1)
Ø Gas side refrigerant pipe	mm	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	50,80 (2)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4		18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21



88-96HP
AV22NMVETA
AV24NMVETA

Model		AV88NMVETA AV22NMVETA AV22NMVETA AV22NMVETA AV22NMVETA	AV90NMVETA AV22NMVETA AV22NMVETA AV22NMVETA AV24NMVETA	AV92NMVETA AV22NMVETA AV22NMVETA AV24NMVETA AV24NMVETA	AV94NMVETA AV22NMVETA AV24NMVETA AV24NMVETA AV24NMVETA	AV96NMVETA AV24NMVETA AV24NMVETA AV24NMVETA AV24NMVETA
Capacity						
Power Class	HP	88	90	92	94	96
Cooling	kW	246,00	252,50	259,00	265,50	272,00
Heating	kW	246,00	252,50	259,00	265,50	272,00
Electrical Parameters						
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	80,64	83,15	85,66	88,17	90,68
Max absorbed power - Cooling	kW	127,28	128,27	129,26	130,25	131,24
Absorbed current in cooling	A	136,14	139,75	143,37	146,98	150,60
Max absorbed current - Cooling	A	207,64	209,85	212,06	214,27	216,48
Absorbed power - Heating	kW	72,35	73,13	73,90	74,68	75,45
Max absorbed power - Heating	kW	102,77	107,48	112,18	116,89	121,60
Absorbed current in heating	A	122,15	123,45	124,76	126,07	127,38
Max absorbed current - Heating	A	171,11	178,95	186,79	194,63	202,46
EER energy class	W/W	3,05	3,04	3,02	3,01	3,00
COP energy class	W/W	3,40	3,45	3,50	3,56	3,61
SEER energy class	W/W	6,54	5,83	5,83	5,83	5,83
SCOP energy class	W/W	4,21	4,17	4,17	4,17	4,17
ηs,c %		259	230	230	230	230
ηs,h %		165	164	164	164	164
Ventilation						
Air flow (High)	m ³ /h	72000	72000	72000	72000	72000
Sound pressure level (High)	dB(A)	67	67,5	67,5	68	68
Sound power level (High)	dB(A)	96	96	96	96	96
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858+1485x850x1858				
Net weight / Gross weight	Kg	385/410+385/410+385/410+385/410				
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8INV	8INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40	40	40
Ø Liquid side refrigerant pipe	mm (inch)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Ø Gas side refrigerant pipe	mm (inch)	50,80 (2)	50,80 (2)	50,80 (2)	50,80 (2)	50,80 (2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4		18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-52	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21	-27-21

Outdoor Units

MRV 5-H



98-104HP

AV24NMVETA

AV26NMVETA

Model		AV98NMVETA AV24NMVETA AV24NMVETA AV24NMVETA AV26NMVETA	AV100NMVETA AV24NMVETA AV24NMVETA AV26NMVETA AV26NMVETA	AV102NMVETA AV24NMVETA AV26NMVETA AV26NMVETA AV26NMVETA	AV104NMVETA AV26NMVETA AV26NMVETA AV26NMVETA AV26NMVETA
Capacity					
Power Class	HP	98	100	102	104
Cooling	kW	277,50	283,00	288,50	294,00
Heating	kW	277,50	283,00	288,50	294,00
Electrical Parameters					
Power supply	Ph-V/Hz	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"	"3/380-400/50/60 (5 wires L1+L2+L3+N+T)"
Absorbed power - Cooling	kW	104,76	118,84	132,92	147,00
Max absorbed power - Cooling	kW	136,23	141,22	146,21	151,20
Absorbed current in cooling	A	172,19	193,78	215,37	236,96
Max absorbed current - Cooling	A	224,27	232,06	239,85	247,64
Absorbed power - Heating	kW	82,11	88,77	95,43	102,08
Max absorbed power - Heating	kW	123,65	125,70	127,75	129,80
Absorbed current in heating	A	138,62	149,86	161,10	172,34
Max absorbed current - Heating	A	205,88	209,29	212,70	216,12
EER energy class	W/W	2,65	2,38	2,17	2,00
COP energy class	W/W	3,38	3,19	3,02	2,88
SEER energy class	W/W	4,90	4,90	4,90	4,90
SCOP energy class	W/W	3,50	3,50	3,50	3,50
$\eta_{s,c}$ %		193	193	193	193
$\eta_{s,h}$ %		137	137	137	137
Ventilation					
Air flow (High)	m ³ /h	73000	74000	75000	76000
Sound pressure level (High)	dB(A)	68	68	68	68
Sound power level (High)	dB(A)	96	96	96	96
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858+1485x850x1858			
Net weight / Gross weight	Kg	385/410+385/410+385/410+385/410			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8INV	8INV	8INV	8INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40	40
Ø Liquid side refrigerant pipe	mm	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Ø Gas side refrigerant pipe	mm	54,10 (2-1/8)	54,10 (2-1/8)	54,10 (2-1/8)	54,10 (2-1/8)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4		18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-52	-5-52	-5-52	-5-52
Heating	°C	-27-21	-27-21	-27-21	-27-21



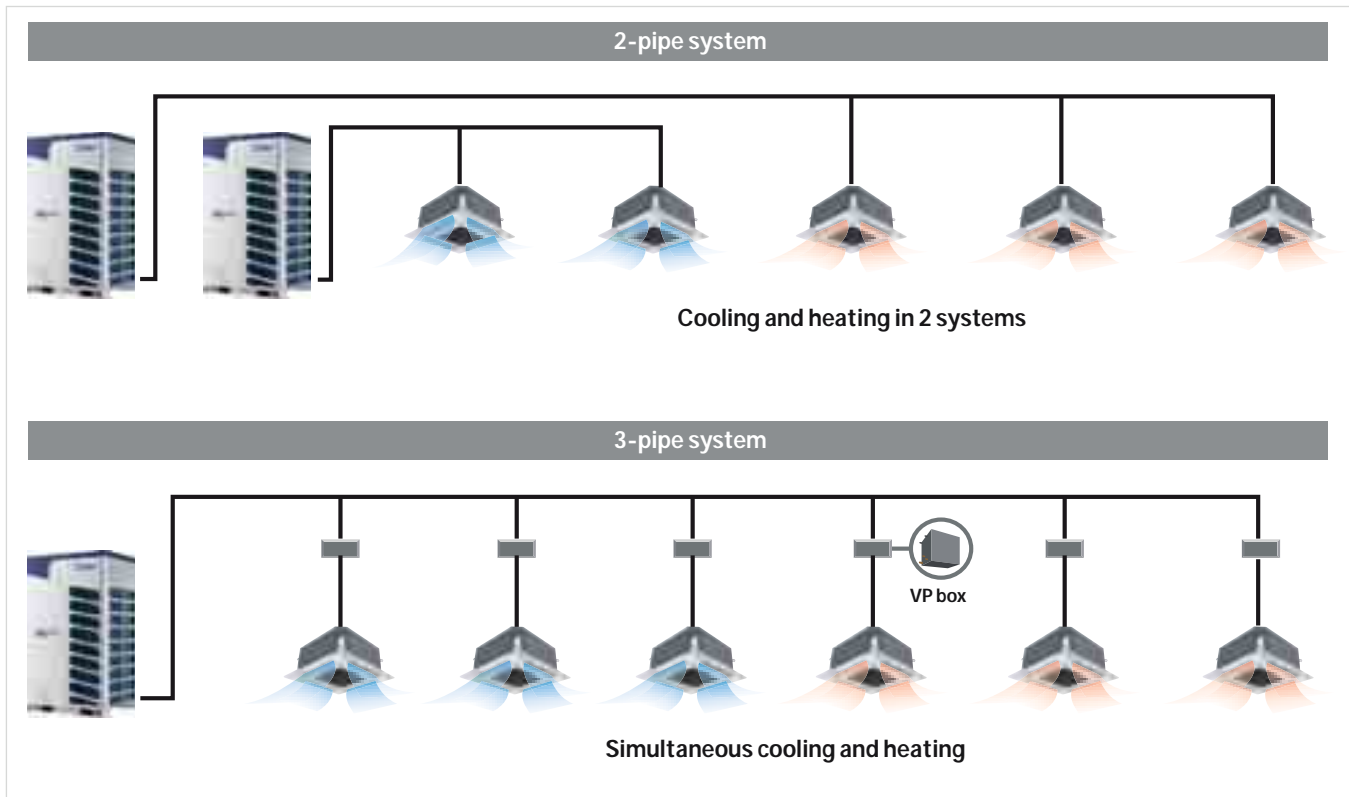
MRV5-RC

DC INVERTER

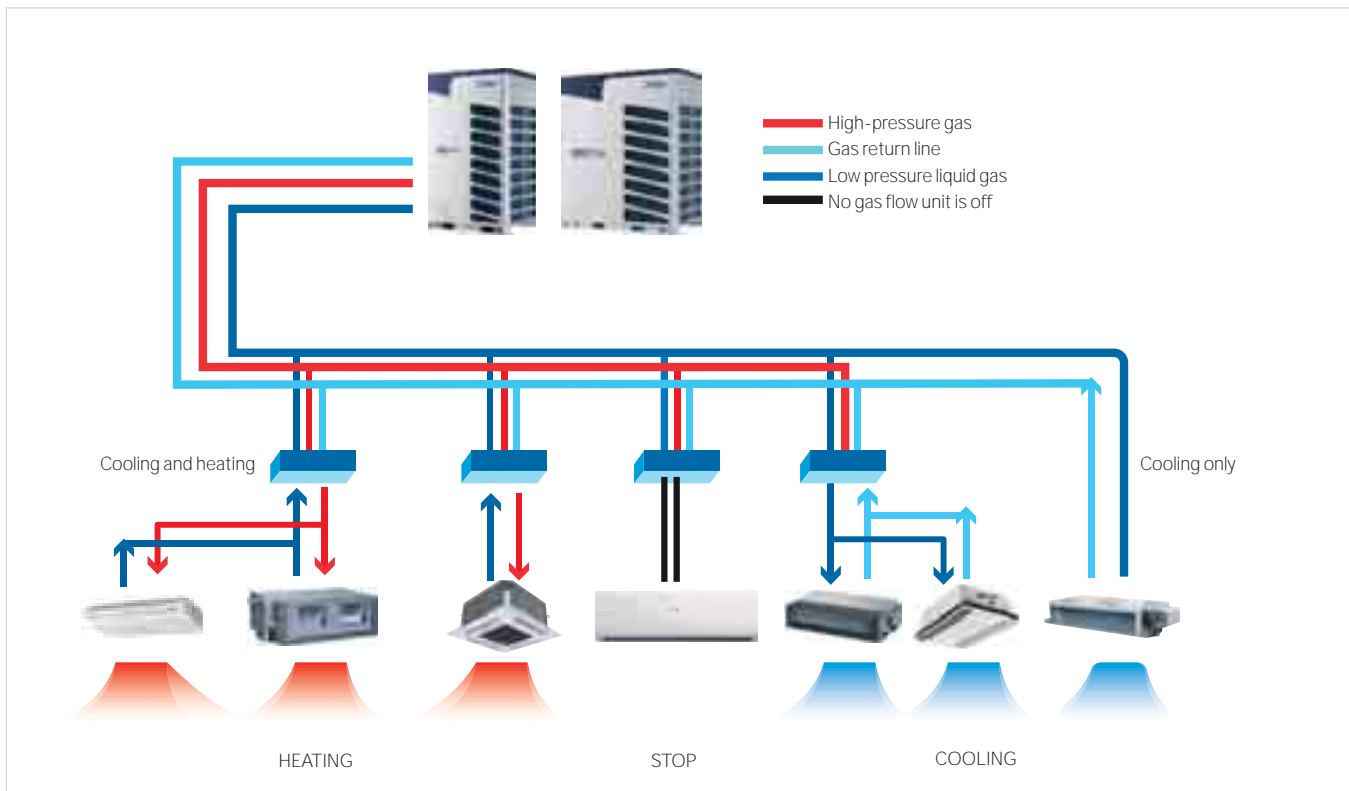
Full DC Inverter
3-Pipe Heat
Recovery Systems

MRV5 RC - FEATURES

Simultaneous heating and cooling available with a 3-pipe heat recovery outdoor unit

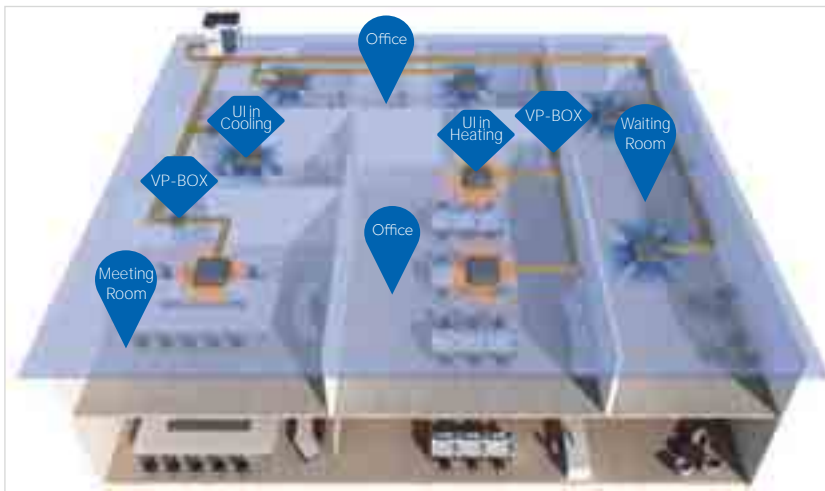


Various modes of simultaneous operation



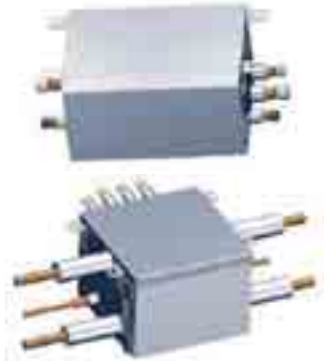
MRV5 RC - FEATURES

EXAMPLE OF A 3-PIPE MRV 5-RC SYSTEM



NEW SELECTION VALVES

- Reduced clutter
- Electronic valves for each flow line

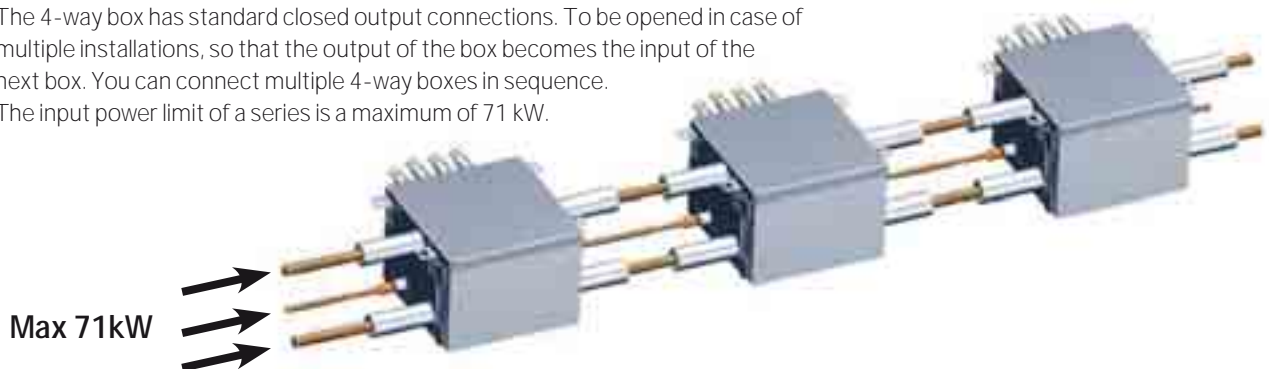


NEW SELECTION VALVES

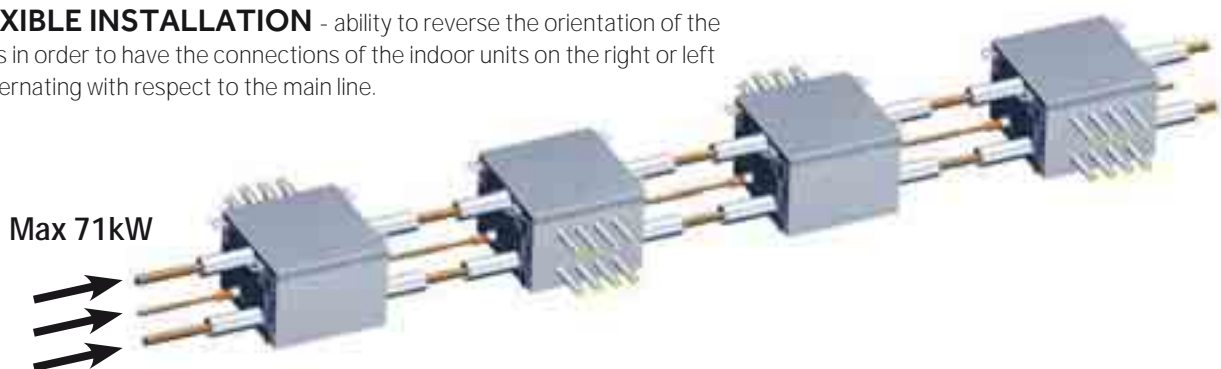
- Specially designed for MRV 5-RC, volume is small to 0,02m³ (for VP1 box), 0,05m³ (for VP4 box).
- Extensively reduces installation space.
- Individual Valve and Pipe Box for Heat Recovery.
- The valve box can be connected in a series which reduces the use of diverging pipes and reduces the installation cost.

Model*	Maximum connectable capacity (kW)	Power supply	Maximum number of connectable indoor units, same mode of operation	Dimensions (mm)
VP1-112C	$x \leq 11,2$	220-240V single-phase - 50/60Hz	5	388x200x277
VP1-180C	$11,2 < x \leq 18,0$	220-240V single-phase - 50/60Hz	8	388x200x277
VP1-280C	$18,0 < x \leq 28,0$	220-240V single-phase - 50/60Hz	8	388x200x277
VP4-450C	4 ways - max 11,2kW for single output.	220-240V single-phase - 50/60Hz	20	405x300x421

The 4-way box has standard closed output connections. To be opened in case of multiple installations, so that the output of the box becomes the input of the next box. You can connect multiple 4-way boxes in sequence. The input power limit of a series is a maximum of 71 kW.



FLEXIBLE INSTALLATION - ability to reverse the orientation of the series in order to have the connections of the indoor units on the right or left or alternating with respect to the main line.



* (limit determined by the diameters of the input pipes of the valve boxes)

Outdoor Units MRV 5-RC



8-14HP

AV08IMVURA

AV10IMVURA

AV12IMVURA

AV14IMVURA

Model		AV08IMVURA	AV10IMVURA	AV12IMVURA	AV14IMVURA
Capacity					
Power Class	HP	8	10	12	14
Cooling	kW	22,40	28,00	33,50	40,00
Heating	kW	22,40	28,00	33,50	40,00
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	5,83	7,67	9,94	12,31
Max absorbed power - Cooling	kW	12,80	13,80	18,20	19,20
Absorbed current in cooling.	A	9,63	12,67	16,43	20,33
Max absorbed current - Cooling	A	21,14	22,79	30,06	31,71
Absorbed power - Heating	kW	5,38	6,67	8,77	10,53
Max absorbed power - Heating	kW	11,50	12,50	17,40	18,40
Absorbed current in heating	A	8,88	11,01	14,48	17,38
Max absorbed current - Heating	A	18,99	20,64	28,74	30,39
EER energy class	W/W	3,84	3,65	3,37	3,25
COP energy class	W/W	4,16	4,20	3,82	3,80
SEER energy class	W/W	6,12	6,68	6,46	6,37
SCOP energy class	W/W	3,82	3,94	3,99	3,86
η _{s,c} %		242	264	255	252
η _{s,h} %		150	155	157	151
Ventilation					
Air flow (High)	m ³ /h	12000	12000	13500	13500
Sound pressure level (High)	dB(A)	57	58	60	61
Sound power level (High)	dB(A)	78	82	88	88
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	980x750x1690			
Packaged unit dimensions WxDxH	mm	1070x850x1858			
Net weight / Gross weight	Kg	246/271		257/282	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	1 INV	1 INV	1 INV	1 INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	10	10	10	10
Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)
Ø Gas recovery side refrigerant pipe	mm (inch)	19,05 (3/4)	22,22 (7/8)	25,40 (1)	25,40 (1)
Ø High-pressure refrigerant gas pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	22,22 (7/8)	22,22 (7/8)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4		18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50 – 130	50 – 130	50 – 130	50 – 130
Maximum number of connectable IUs	No.	13	16	20	24
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5-RC



16-22HP

AV16IMVURA
AV18IMVURA
AV20IMVURA
AV22IMVURA

Model		AV16IMVURA	AV18IMVURA	AV20IMVURA	AV22IMVURA
Capacity					
Power Class	HP	16	18	20	22
Cooling	kW	45,00	50,00	56,00	60,00
Heating	kW	45,00	50,00	56,00	60,00
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	13,93	16,13	17,23	20,00
Max absorbed power - Cooling	kW	25,10	28,50	32,00	33,00
Absorbed current in cooling.	A	23,01	26,64	28,46	33,03
Max absorbed current - Cooling	A	41,45	47,07	52,85	54,50
Absorbed power - Heating	kW	11,39	13,70	15,77	17,91
Max absorbed power - Heating	kW	22,70	25,50	29,40	30,40
Absorbed current in heating	A	18,81	22,62	26,05	29,58
Max absorbed current - Heating	A	37,49	42,11	48,55	50,21
EER energy class	W/W	3,23	3,10	3,25	3,00
COP energy class	W/W	3,95	3,65	3,55	3,35
SEER energy class	W/W	6,86	6,48	5,90	5,63
SCOP energy class	W/W	4,21	3,99	3,93	3,50
$\eta_{s,c}$ %		271	256	233	222
$\eta_{s,h}$ %		165	157	154	137
Ventilation					
Air flow (High)	m ³ /h	17000	17000	19000	19000
Sound pressure level (High)	dB(A)	62	63	63	64
Sound power level (High)	dB(A)	88	88	88	88
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690			
Packaged unit dimensions WxDxH	mm	1485x850x1858			
Net weight / Gross weight	Kg	366/395		375/404	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2 INV	2 INV	2 INV	2 INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	10	10	10	10
Ø Liquid side refrigerant pipe	mm (inch)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Ø Gas recovery side refrigerant pipe	mm (inch)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)
Ø High-pressure refrigerant gas pipe	mm (inch)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Standard height difference between IU and OU	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50 – 130	50 – 130	50 – 130	50 – 130
Maximum number of connectable IUs	No.	27	30	33	36
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



24-30HP

AV12IMVURA

AV14IMVURA

AV16IMVURA

Model		AV24IMVURA AV12IMVURA AV12IMVURA	AV26IMVURA AV12IMVURA AV14IMVURA	AV28IMVURA AV14IMVURA AV14IMVURA	AV30IMVURA AV14IMVURA AV16IMVURA
Capacity					
Power Class	HP	24	26	28	30
Cooling	kW	67,00	73,50	80,00	85,00
Heating	kW	67,00	73,50	80,00	85,00
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	19,88	22,25	24,62	26,24
Max absorbed power - Cooling	kW	36,40	37,40	38,40	44,30
Absorbed current in cooling.	A	32,83	36,74	40,65	43,33
Max absorbed current - Cooling	A	60,11	61,77	63,42	73,16
Absorbed power - Heating	kW	17,54	19,30	21,05	21,92
Max absorbed power - Heating	kW	34,80	35,80	36,80	41,10
Absorbed current in heating	A	28,97	31,87	34,77	36,20
Max absorbed current - Heating	A	57,47	59,12	60,78	67,88
EER energy class	W/W	3,37	3,30	3,25	3,24
COP energy class	W/W	3,82	3,81	3,80	3,88
SEER energy class	W/W	6,46	6,37	6,37	6,37
SCOP energy class	W/W	3,99	3,86	3,86	3,86
$\eta_{s,c}$ %		255	252	252	252
$\eta_{s,h}$ %		157	151	151	151
Ventilation					
Air flow (High)	m ³ /h	27000	27000	27000	30500
Sound pressure level (High)	dB(A)	63	64	64	65
Sound power level (High)	dB(A)	88	88	88	88
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	980x750x1690+980x750x1690			980x750x1690 + 1410x750x1690
Packaged unit dimensions WxDxH	mm	1070x850x1858+1070x850x1858			1070x850x1858 + 1515x850x1858
Net weight / Gross weight	Kg	246/271+246/271			246/271+366/395
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2 INV	2 INV	2 INV	3 INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	20	20
Ø Liquid side refrigerant pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	19,05 (3/4)
Ø Gas recovery side refrigerant pipe	mm (inch)	28,58 (1-1/8)	28,58 (1-1/8)	28,58 (1-1/8)	31,80 (1-1/4)
Ø High-pressure refrigerant gas pipe	mm (inch)	25,40 (1)	25,40 (1)	25,40 (1)	25,40 (1)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/ up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/ down)*2	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50 – 130	50 – 130	50 – 130	50 – 130
Maximum number of connectable IUs	No.	40	43	47	50
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5-RC



32-40HP

AV16IMVURA

AV18IMVURA

AV20IMVURA

Model		AV32IMVURA AV16IMVURA AV16IMVURA	AV34IMVURA AV16IMVURA AV18IMVURA	AV36IMVURA AV18IMVURA AV18IMVURA	AV38IMVURA AV18IMVURA AV20IMVURA	AV40IMVURA AV20IMVURA AV20IMVURA
Capacity						
Power Class	HP	32	34	36	38	40
Cooling	kW	90,00	95,00	100,00	106,00	112,00
Heating	kW	90,00	95,00	100,00	106,00	112,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	27,86	30,06	32,26	33,36	34,46
Max absorbed power - Cooling	kW	50,20	53,60	57,00	60,50	64,00
Absorbed current in cooling.	A	46,02	49,65	53,27	55,09	56,91
Max absorbed current - Cooling	A	82,91	88,52	94,14	99,92	105,70
Absorbed power - Heating	kW	22,78	25,09	27,40	29,47	31,54
Max absorbed power - Heating	kW	45,40	48,20	51,00	54,90	58,80
Absorbed current in heating	A	37,63	41,44	45,25	48,67	52,09
Max absorbed current - Heating	A	74,98	79,60	84,23	90,67	97,11
EER energy class	W/W	3,23	3,16	3,10	3,18	3,25
COP energy class	W/W	3,95	3,79	3,65	3,60	3,55
SEER energy class	W/W	6,86	6,48	6,48	5,90	5,90
SCOP energy class	W/W	4,21	3,99	3,99	3,93	3,93
$\eta_{s,c}$ %		271	256	256	233	233
$\eta_{s,h}$ %		165	157	157	154	154
Ventilation						
Air flow (High)	m ³ /h	34000	34000	34000	36000	38000
Sound pressure level (High)	dB(A)	65	66	66	66	66
Sound power level (High)	dB(A)	88	88	88	88	88
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858				
Net weight / Gross weight	Kg	366/395 + 366/395			375/404 + 375/404	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4 INV	4 INV	4 INV	4 INV	4 INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	20	20	20
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas recovery side refrigerant pipe	mm (inch)	31,80 (1-1/4)	31,80 (1-1/4)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Ø High-pressure refrigerant gas pipe	mm (inch)	28,58 (1-1/8)	28,58 (1-1/8)	34,9 (1-3/8)	34,9 (1-3/8)	34,9 (1-3/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/ up)*1	m	110/90	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/ down)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50 – 130	50 – 130	50 – 130	50 – 130	50 – 130
Maximum number of connectable IUs	No.	53	56	59	63	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB



42-46HP

AV14IMVURA

AV16IMVURA

AV20IMVURA

AV22IMVURA

Model		AV42IMVURA AV20IMVURA AV22IMVURA	AV44IMVURA AV22IMVURA AV22IMVURA	AV46IMVURA AV14IMVURA AV16IMVURA AV16IMVURA
Capacity				
Power Class	HP	42	44	46
Cooling	kW	116,00	120,00	130,00
Heating	kW	116,00	120,00	130,00
Electrical Parameters				
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	37,23	40,00	40,17
Max absorbed power - Cooling	kW	65,00	66,00	69,40
Absorbed current in cooling.	A	61,49	66,06	66,34
Max absorbed current - Cooling	A	107,35	109,00	114,61
Absorbed power - Heating	kW	33,69	35,82	33,31
Max absorbed power - Heating	kW	59,80	60,80	63,80
Absorbed current in heating	A	55,62	59,16	55,01
Max absorbed current - Heating	A	98,76	100,41	105,37
EER energy class	W/W	3,12	3,00	3,24
COP energy class	W/W	3,44	3,35	3,90
SEER energy class	W/W	5,63	5,63	6,37
SCOP energy class	W/W	3,50	3,50	3,86
η _{s,c} %		222	222	252
η _{s,h} %		137	137	151
Ventilation				
Air flow (High)	m ³ /h	38000	38000	47500
Sound pressure level (High)	dB(A)	67	67	67
Sound power level (High)	dB(A)	88	88	88
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	1410x750x1690 + 1410x750x1690		980x750x1690 + 1410x750x1690 + 1410x750x1690
Packaged unit dimensions WxDxH	mm	1515x850x1858 + 1515x850x1858		1070x850x1838 + 1515x850x1838 + 1515x850x1838
Net weight / Gross weight	Kg	375/404 + 375/404		257/282 + 366/395 + 366/395
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	4 INV	4 INV	5 INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	20	20	30
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas recovery side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Ø High-pressure refrigerant gas pipe	mm (inch)	34,9 (1-3/8)	34,9 (1-3/8)	34,9 (1-3/8)
Maximum piping length	m	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30
Std. drop between IU *4		18	18	18
Static Pressure Fans	Pa	110	110	110
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50 - 130	50 - 130	50 - 130
Maximum number of connectable IUs	No.	64	64	64
External Temperature Operating Limits				
Cooling	°C	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5-RC



48-56HP

AV16IMVURA

AV18IMVURA

AV20IMVURA

Model		AV48IMVURA AV16IMVURA AV16IMVURA AV16IMVURA	AV50IMVURA AV16IMVURA AV16IMVURA AV18IMVURA	AV52IMVURA AV16IMVURA AV18IMVURA AV18IMVURA	AV54IMVURA AV18IMVURA AV18IMVURA AV18IMVURA	AV56IMVURA AV18IMVURA AV18IMVURA AV20IMVURA
Capacity						
Power Class	HP	48	50	52	54	56
Cooling	kW	135,00	140,00	145,00	150,00	156,00
Heating	kW	135,00	140,00	145,00	150,00	156,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	41,80	43,99	46,19	48,39	49,49
Max absorbed power - Cooling	kW	75,30	78,70	82,10	85,50	89,00
Absorbed current in cooling.	A	69,03	72,65	76,28	79,91	81,73
Max absorbed current - Cooling	A	124,36	129,97	135,59	141,20	146,98
Absorbed power - Heating	kW	34,18	36,48	38,79	41,10	43,17
Max absorbed power - Heating	kW	68,10	70,90	73,70	76,50	80,40
Absorbed current in heating	A	56,44	60,25	64,06	67,87	71,29
Max absorbed current - Heating	A	112,47	117,09	121,72	126,34	132,78
EER energy class	W/W	3,23	3,18	3,14	3,10	3,15
COP energy class	W/W	3,95	3,84	3,74	3,65	3,61
SEER energy class	W/W	6,86	6,48	6,48	6,48	5,50
SCOP energy class	W/W	4,21	3,99	3,99	3,99	3,93
$\eta_{s,c}$ %		271	256	256	256	233
$\eta_{s,h}$ %		165	157	157	157	154
Ventilation						
Air flow (High)	m ³ /h	51000	51000	51000	51000	53000
Sound pressure level (High)	dB(A)	67	67	68	68	68
Sound power level (High)	dB(A)	88	88	88.5	89	89
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858				
Net weight / Gross weight	Kg	366/395+366/395+366/395				366/395 + 366/395 + 375/404
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6 INV	6 INV	6 INV	6 INV	6 INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30	30	30	30	30
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas recovery side refrigerant pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Ø High-pressure refrigerant gas pipe	mm (inch)	34,9 (1-3/8)	34,9 (1-3/8)	34,9 (1-3/8)	34,9 (1-3/8)	34,9 (1-3/8)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50 - 130	50 - 130	50 - 130	50 - 130	50 - 130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB



58-66HP

AV18IMVURA

AV20IMVURA

AV22IMVURA

Model		AV58IMVURA AV18IMVURA AV20IMVURA AV20IMVURA	AV60IMVURA AV20IMVURA AV20IMVURA AV20IMVURA	AV62IMVURA AV20IMVURA AV20IMVURA AV22IMVURA	AV64IMVURA AV20IMVURA AV22IMVURA AV22IMVURA	AV66IMVURA AV22IMVURA AV22IMVURA AV22IMVURA
Capacity						
Power Class	HP	58	60	62	64	66
Cooling	kW	162,00	168,0	172,00	176,00	180,00
Heating	kW	162,00	168,00	172,00	176,00	180,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	50,59	51,69	54,46	57,23	6,00
Max absorbed power - Cooling	kW	92,50	96,00	97,00	98,00	99,00
Absorbed current in cooling.	A	83,55	85,37	89,94	94,52	99,09
Max absorbed current - Cooling	A	152,76	158,54	160,20	161,85	163,50
Absorbed power - Heating	kW	45,25	47,31	49,45	51,59	53,73
Max absorbed power - Heating	kW	84,30	88,20	89,20	90,20	91,20
Absorbed current in heating	A	74,71	78,13	81,67	85,20	88,74
Max absorbed current - Heating	A	139,22	145,66	147,31	148,97	150,62
EER energy class	W/W	3,20	3,25	3,16	3,08	3,00
COP energy class	W/W	3,58	3,55	3,48	3,41	3,35
SEER energy class	W/W	5,90	5,90	5,63	5,63	5,63
SCOP energy class	W/W	3,93	3,93	3,50	3,50	3,50
$\eta_{s,c}$ %		233	233	222	222	222
$\eta_{s,h}$ %		154	154	137	137	137
Ventilation						
Air flow (High)	m ³ /h	55000	57000	57000	57000	57000
Sound pressure level (High)	dB(A)	68	68	68	69	69
Sound power level (High)	dB(A)	89	89	89	90	90
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690				
Packaged unit dimensions WxDxH	mm	1485x850x1858+1485x850x1858+1485x850x1858				
Net weight / Gross weight	Kg	366/395 + 375/404 + 375/404	375/404 + 375/404 + 375/404			
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	6 INV	6 INV	6 INV	6 INV	6 INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	30	30	30	30	30
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas recovery side refrigerant pipe	mm (inch)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)
Ø High-pressure refrigerant gas pipe	mm (inch)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)	38,10 (1-1/2)
Maximum piping length	m	1000	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30	30
Std. drop between IU *4	m	18	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110	110
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50 – 130	50 – 130	50 – 130	50 – 130	50 – 130
Maximum number of connectable IUs	No.	64	64	64	64	64
External Temperature Operating Limits						
Cooling	°C	-5-50	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5-RC



68-74HP

AV16IMVURA

AV18IMVURA

AV20IMVURA

Model		AV68IMVURA AV16IMVURA AV16IMVURA AV18IMVURA AV18IMVURA	AV70IMVURA AV16IMVURA AV18IMVURA AV18IMVURA AV18IMVURA	AV72IMVURA AV18IMVURA AV18IMVURA AV18IMVURA AV18IMVURA	AV74IMVURA AV18IMVURA AV18IMVURA AV18IMVURA AV20IMVURA
Capacity					
Power Class	HP	68	70	72	74
Cooling	kW	190,00	195,00	200,00	206,00
Heating	kW	190,00	195,00	200,00	206,00
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	60,12	62,32	64,52	65,62
Max absorbed power - Cooling	kW	107,20	110,60	114,00	117,50
Absorbed current in cooling	A	99,29	102,92	106,55	108,37
Max absorbed current - Cooling	A	177,04	182,66	188,27	194,05
Absorbed power - Heating	kW	50,18	52,49	54,79	56,87
Max absorbed power - Heating	kW	96,40	99,20	102,00	105,90
Absorbed current in heating	A	82,88	86,68	90,49	93,91
Max absorbed current - Heating	A	159,21	163,83	168,45	174,89
EER energy class	W/W	3,16	3,13	3,10	3,14
COP energy class	W/W	3,79	3,72	3,65	3,62
SEER energy class	W/W	6,48	6,48	6,48	5,90
SCOP energy class	W/W	3,99	3,99	3,99	3,93
$\eta_{s,c}$ %		256	256	256	233
$\eta_{s,h}$ %		157	157	157	154
Ventilation					
Air flow (High)	m ³ /h	68000	68000	68000	70000
Sound pressure level (High)	dB(A)	69	69	69	69
Sound power level (High)	dB(A)	90	90	90	90
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858+1515x850x1858			
Net weight / Gross weight	Kg	366/395+366/395+366/395+366/395			366/395 + 366/395 + 366/395 + 375/404
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8 INV	8 INV	8 INV	8 INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40	40
Ø Liquid side refrigerant pipe	mm (inch)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas recovery side refrigerant pipe	mm (inch)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Ø High-pressure refrigerant gas pipe	mm (inch)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2		50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4		18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50 - 130	50 - 130	50 - 130	50 - 130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB



76-82HP

AV18IMVURA

AV20IMVURA

AV22IMVURA

Model		AV76IMVURA AV18IMVURA AV18IMVURA AV20IMVURA AV20IMVURA	AV78IMVURA AV18IMVURA AV20IMVURA AV20IMVURA AV20IMVURA	AV80IMVURA AV20IMVURA AV20IMVURA AV20IMVURA AV20IMVURA	AV82IMVURA AV20IMVURA AV20IMVURA AV20IMVURA AV22IMVURA
Capacity					
Power Class	HP	76	78	80	82
Cooling	kW	212,00	218,00	224,00	228,00
Heating	kW	212,00	218,00	224,00	228,00
Electrical Parameters					
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	66,72	67,82	68,92	71,69
Max absorbed power - Cooling	kW	121,00	124,50	128,00	129,00
Absorbed current in cooling.	A	110,19	112,01	113,83	118,40
Max absorbed current - Cooling	A	199,83	205,61	211,39	213,04
Absorbed power - Heating	kW	58,94	61,01	63,08	65,22
Max absorbed power - Heating	kW	109,80	113,70	117,60	118,60
Absorbed current in heating	A	97,34	100,76	104,18	107,71
Max absorbed current - Heating	A	181,34	187,78	194,22	195,87
EER energy class	W/W	3,18	3,21	3,25	3,18
COP energy class	W/W	3,60	3,57	3,55	3,50
SEER energy class	W/W	5,90	5,90	5,90	5,63
SCOP energy class	W/W	3,93	3,93	3,93	3,50
η _{s,c} %		233	233	233	222
η _{s,h} %		154	154	154	137
Ventilation					
Air flow (High)	m³/h	72000	74000	76000	76000
Sound pressure level (High)	dB(A)	69	69	69	69
Sound power level (High)	dB(A)	90	90	90	90
Installation - Dimensions - Components					
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690			
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858+1515x850x1858			
Net weight / Gross weight	Kg	366/395 + 366/395 + 375/404 + 375/404	366/395 + 375/404 + 375/404 + 375/404	375/404 + 375/404 + 375/404 + 375/404	
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8 INV	8 INV	8 INV	8 INV
Refrigerant type		R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40	40
Ø Liquid side refrigerant pipe	mm (inch)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)	22,20 (7/8)
Ø Gas recovery side refrigerant pipe	mm (inch)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)	44,50 (1-3/4)
Ø High-pressure refrigerant gas pipe	mm (inch)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)	41,30 (1-5/8)
Maximum piping length	m	1000	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30	30
Std. drop between IU *4	m	18	18	18	18
Static Pressure Fans	Pa	110	110	110	110
Connectable Indoor Capacity Ratio					
Indoor / Outdoor Capacity Ratio	%	50 - 130	50 - 130	50 - 130	50 - 130
Maximum number of connectable IUs	No.	64	64	64	64
External Temperature Operating Limits					
Cooling	°C	-5-50	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21	-23-21

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV 5-RC



84-88HP

AV20IMVURA

AV22IMVURA

Model		AV84IMVURA	AV86IMVURA	AV88IMVURA
		AV20IMVURA	AV20IMVURA	AV22IMVURA
Capacity				
Power Class	HP	84	86	88
Cooling	kW	232,00	236,00	240,00
Heating	kW	232,00	236,00	240,00
Electrical Parameters				
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	74,46	77,23	80,00
Max absorbed power - Cooling	kW	130,00	131,00	132,00
Absorbed current in cooling	A	122,97	127,55	132,12
Max absorbed current - Cooling	A	214,70	216,35	218,00
Absorbed power - Heating	kW	67,36	69,50	71,64
Max absorbed power - Heating	kW	119,60	120,60	121,60
Absorbed current in heating	A	111,25	114,78	118,31
Max absorbed current - Heating	A	197,52	199,17	200,82
EER energy class	W/W	3,12	3,06	3,00
COP energy class	W/W	3,44	3,40	3,35
SEER energy class	W/W	5,63	5,63	5,63
SCOP energy class	W/W	3,50	3,50	3,50
$\eta_{s,c}$ %		222	222	222
$\eta_{s,h}$ %		137	137	137
Ventilation				
Air flow (High)	m ³ /h	76000	76000	76000
Sound pressure level (High)	dB(A)	70	70	70
Sound power level (High)	dB(A)	91	91	91
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	1410x750x1690+1410x750x1690+1410x750x1690+1410x750x1690		
Packaged unit dimensions WxDxH	mm	1515x850x1858+1515x850x1858+1515x850x1858+1515x850x1858		
Net weight / Gross weight	Kg	375/404+375/404+375/404+375/404		
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	8 INV	8 INV	8 INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	40	40	40
Ø Liquid side refrigerant pipe	mm (inch)	22,20 (7/8)	25,40 (1)	25,40 (1)
Ø Gas recovery side refrigerant pipe	mm (inch)	44,50 (1-3/4)	50,80 (2)	50,80 (2)
Ø High-pressure refrigerant gas pipe	mm (inch)	41,30 (1-5/8)	44,50 (1-3/4)	44,50 (1-3/4)
Maximum piping length	m	1000	1000	1000
Max linear piping length (Equivalent/Real)	m	260/220	260/220	260/220
Max. drop between IU and OU (O.U. down/up)*1	m	110/90	110/90	110/90
Std. drop between IU and OU (O.U. up/down)*2	m	50/40	50/40	50/40
Max. drop between IU *3	m	30	30	30
Std. drop between IU *4	m	18	18	18
Static Pressure Fans	Pa	110	110	110
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50 - 130	50 - 130	50 - 130
Maximum number of connectable IUs	No.	64	64	64
External Temperature Operating Limits				
Cooling	°C	-5-50	-5-50	-5-50
Heating	°C	-23-21	-23-21	-23-21

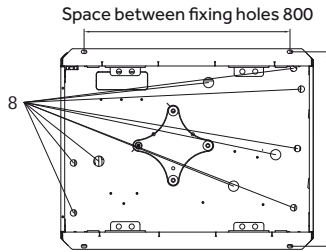
The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

MRV OUTDOOR UNITS

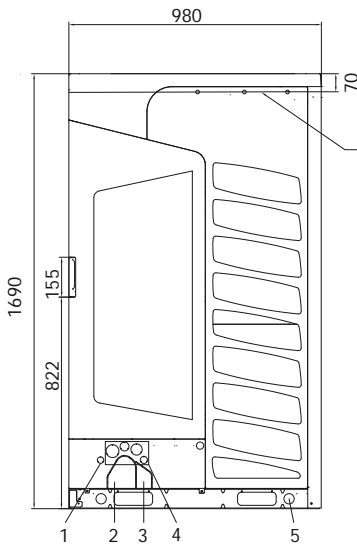
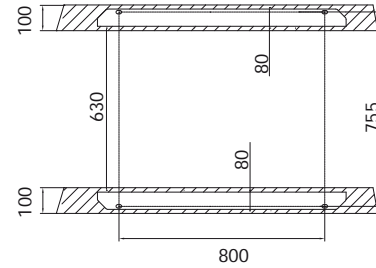
AV08IM**A AV10IM**A AV12IM**A AV14IM**A AV16IM**A

Unit:mm

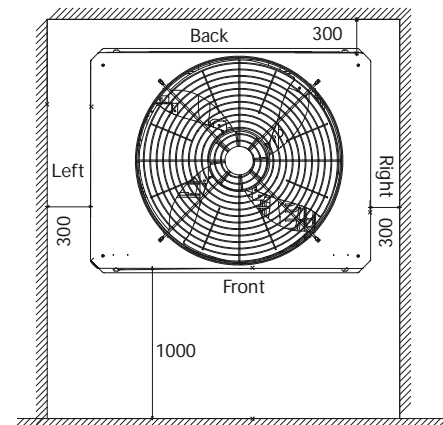
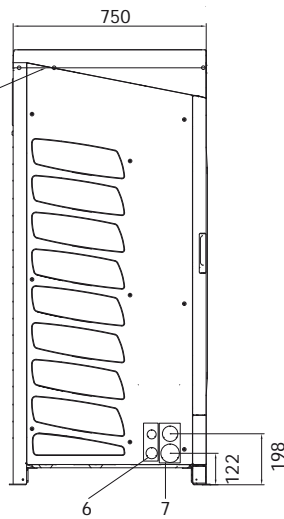


Space between fixing holes 800

Space between fixing holes 755



Air outlet duct connection position



(*1) 50 m when the outdoor unit is above the indoor unit / 40 m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

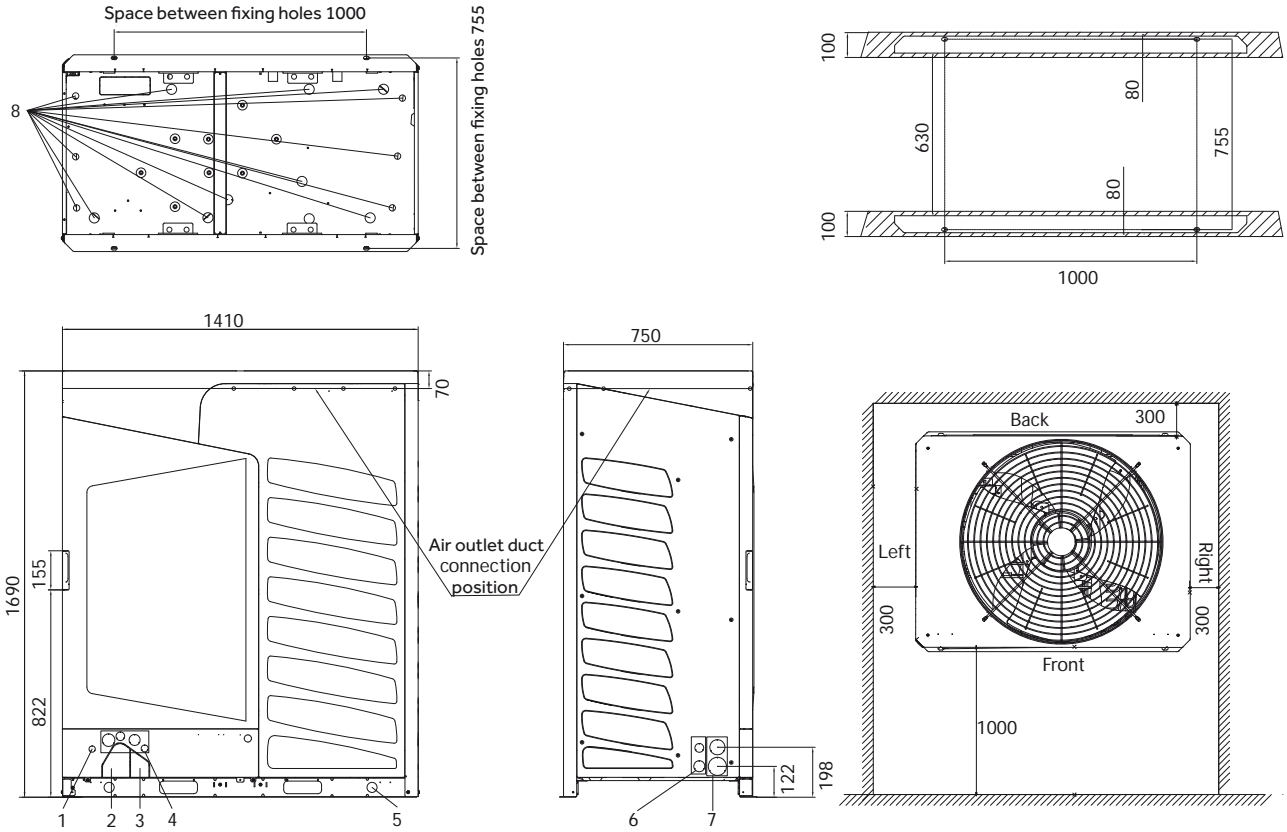
Outdoor Units

MRV

MRV OUTDOOR UNITS

AV18IM**A AV20IM**A AV22IM**A AV24IM**A AV26IM**A

Unit:mm



(*1) 50m when the outdoor unit is above the indoor unit / 40m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



MRV W

Heat Pump
System Full DC
Inverter Water
Cooled

MRV-W - FEATURES

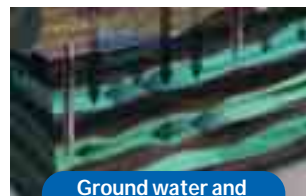
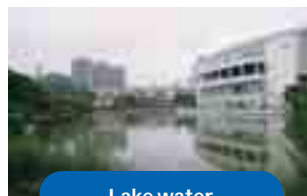
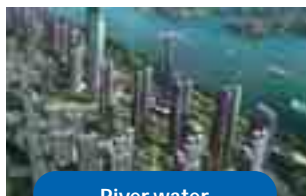
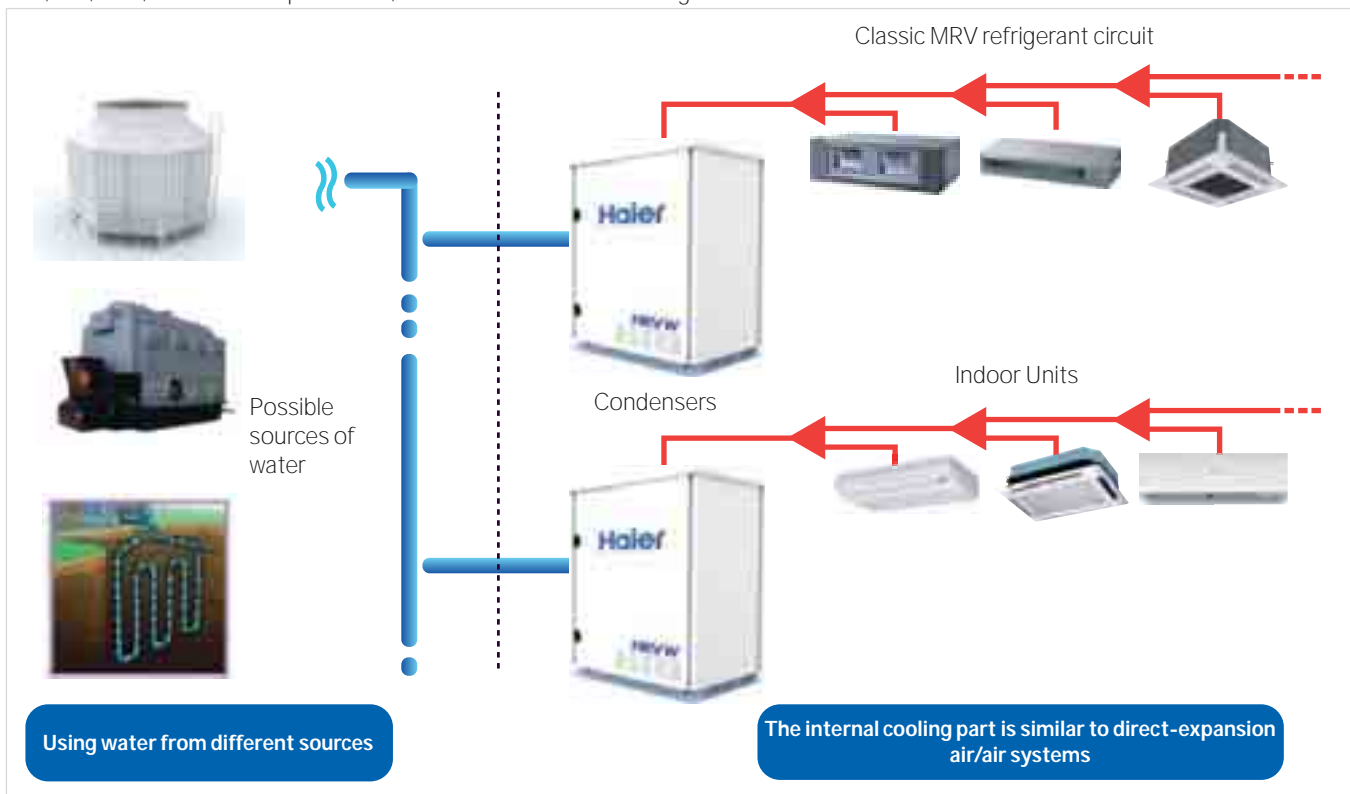
OPERATING PRINCIPLE

MRV-W are MRV/VRF systems with direct refrigerant expansion and inverter compressors that use the same indoor units as the classic MRV systems, controls and joints.

The design and implementation of the internal circuit follows the same rules as a normal MRV/VRF system, the only difference is that they use water and not air to condense or evaporate on the outdoor unit. MRV-W therefore does not have fans and large air/refrigerant exchangers but uses special water/refrigerant exchangers. This allows to significantly reduce the size of the product compared to a classic MRV of equal cooling capacity.

Thanks to its small footprint, of only W 775 x D 545 x H 995, the installation of the MRV-W takes place inside technical rooms, basements, garages and corridors as it does not need to exchange energy with the outdoor air.

The water needed for operation reaches the units through small diameter pipes. Water can have different origins such as ground water, lake, sea, river, end industrial processes, accumulation of non-drinking water.

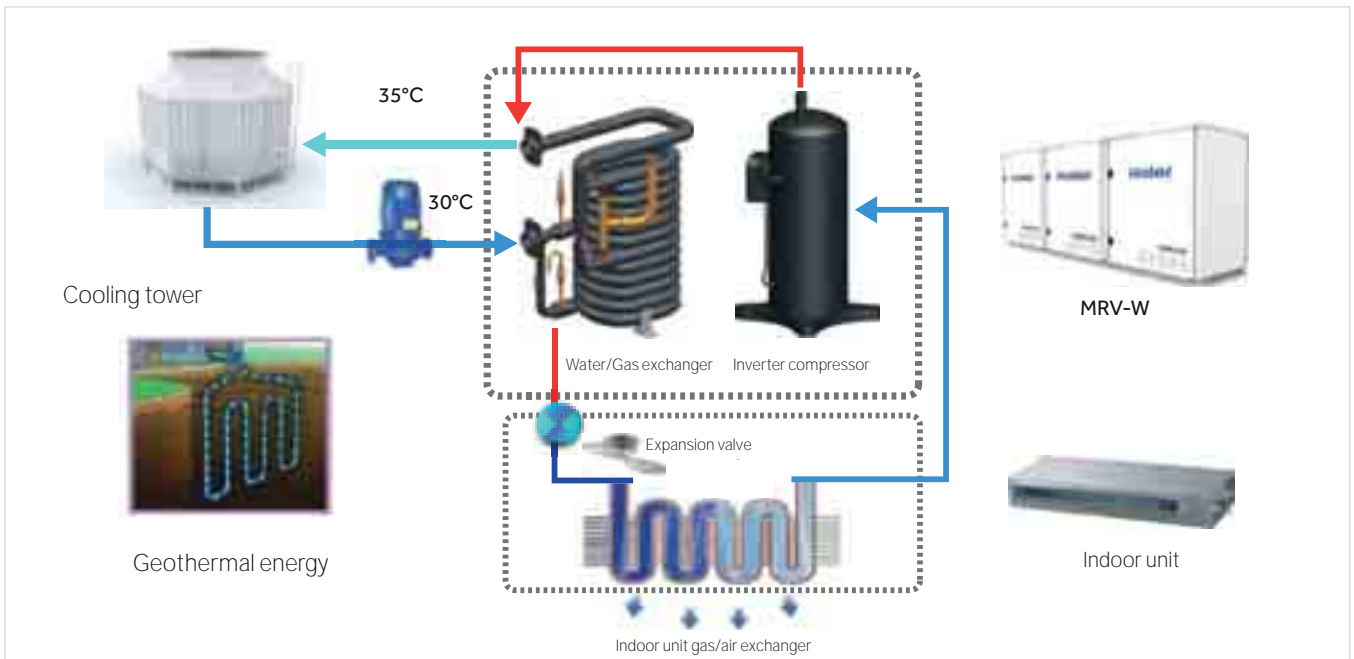


CONFIGURATION

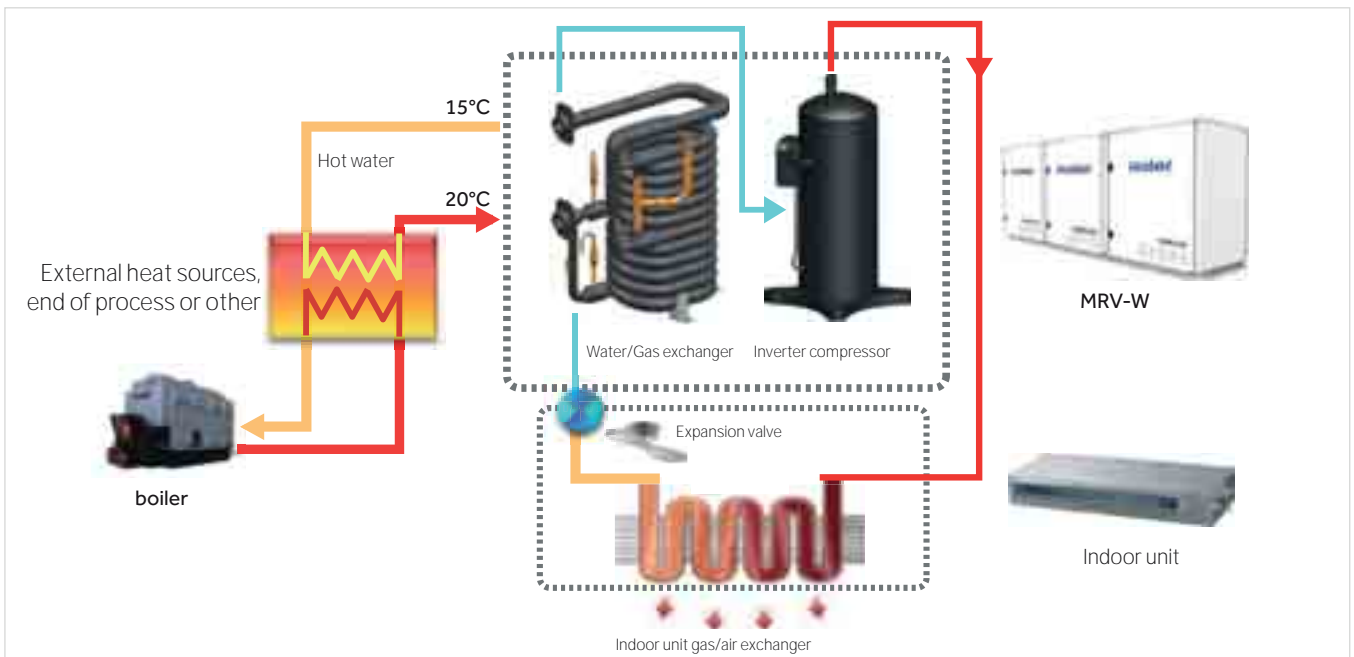
MRV-W is a direct expansion system that combines the efficiency of the VRF technology with the use of water from a variety of sources.



EXAMPLE OF COOLING OPERATION

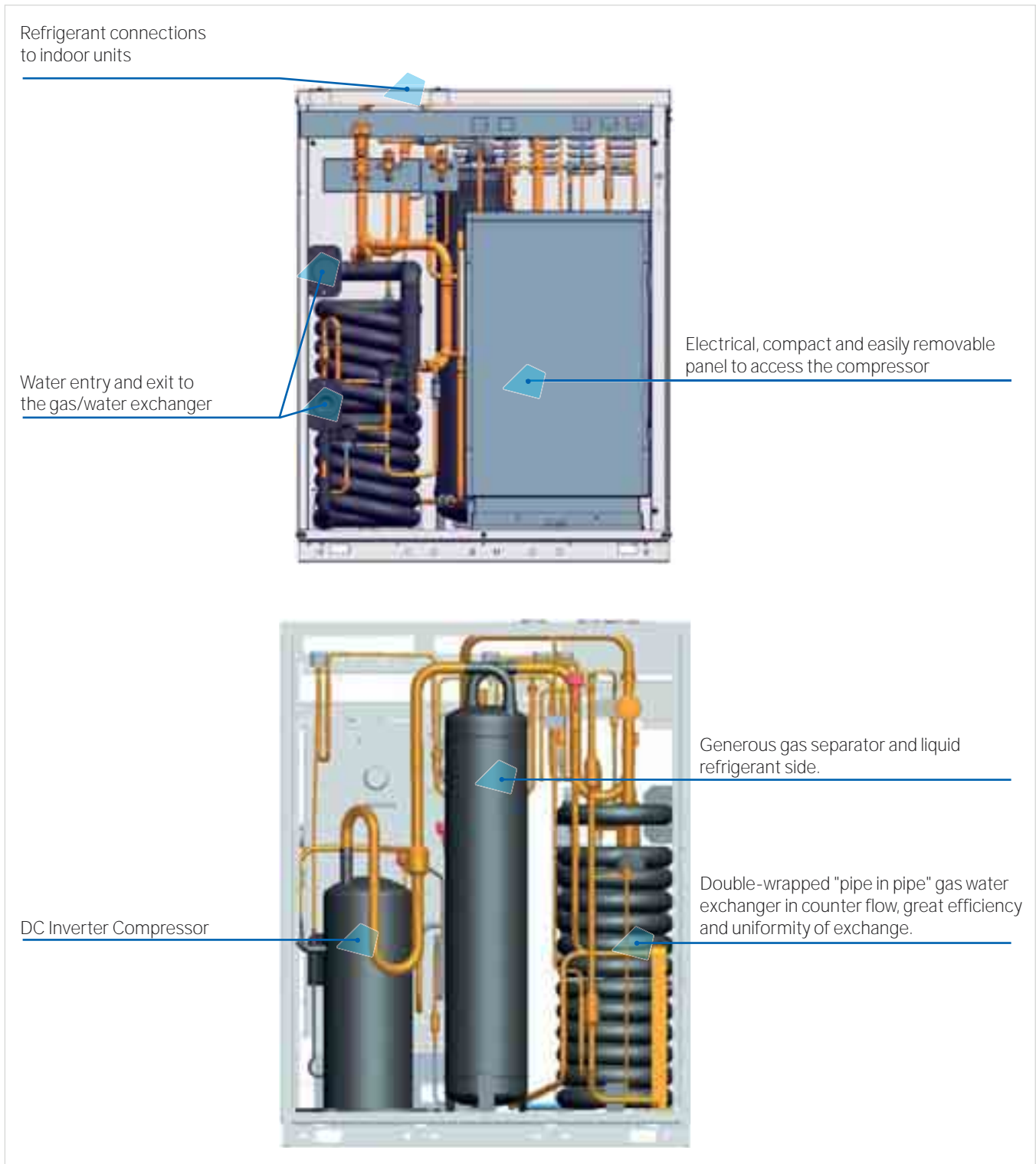


EXAMPLE OF HEATING OPERATION



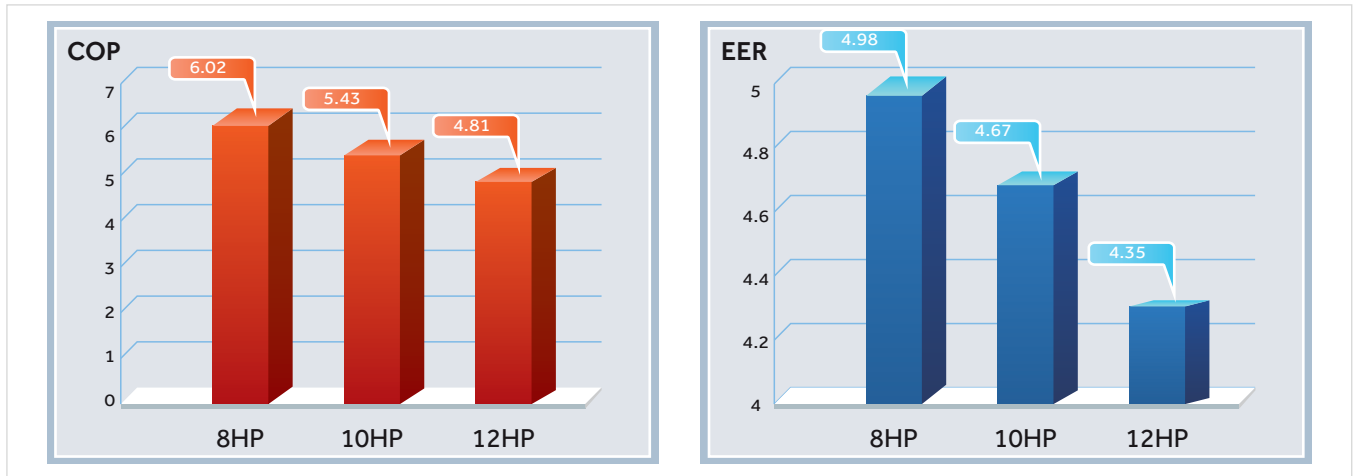
MRV-W - FEATURES

MRV-W INTERNAL STRUCTURE



HIGH EFFICIENCY

Using a constant source, the COP can also reach values of 6.02, much higher than an air/air system. As a result, EER values are also increased in equal proportion.



HIGH-EFFICIENCY COMPRESSOR

DC Inverter Scroll



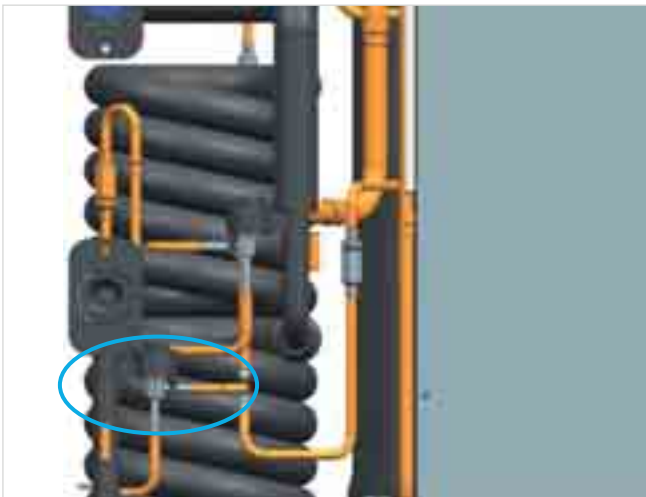
COUNTER CURRENT "PIPE IN PIPE" EXCHANGER

Water circulates inside and refrigerant circulates outside. The internal star-section and spiral tube offers a greater exchange surface than a classic circular section, for the benefit of efficiency.



DUAL ELECTRONIC EXPANSION VALVE

To modulate the surface of the active exchanger according to the thermal demand.



2-SIDED SUB-COOLING SYSTEM

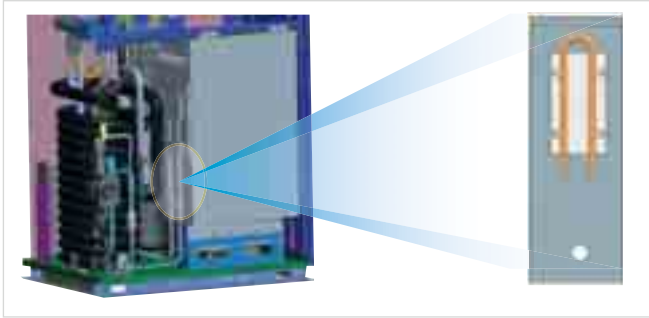
- The first stage acts on the condenser
- The second stage acts independently
- The independent or joint activity of the two stages allows to increase the exchange of refrigerant by 46% and to reduce the loss of load through the pipes by 55%, leading to an increase in overall efficiency of 9% compared to single circuits "Under cooling"



MRV-W - FEATURES

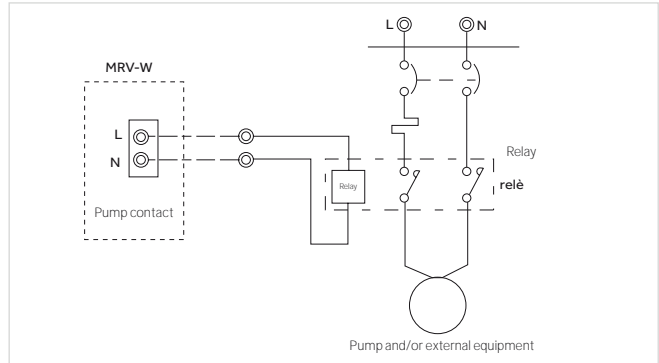
COOLING ELECTRONIC CIRCUITS

The circuits are cooled by special static exchangers where the refrigerant gas circulates inside. This allows you to cool and keep the temperature of the electric panel and power modules constant, avoiding cumbersome sinks and especially the use of noisy electric fans.

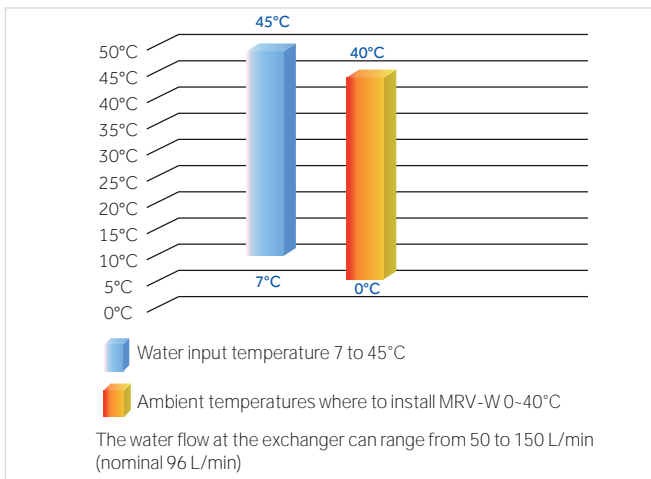


RELIABILITY

The management of the external pump or electro-valves to power the flow of water to the MRV-W systems, is controlled by the unit itself according to the activity of the compressor and the real need for water. Avoiding unnecessary waste of energy.

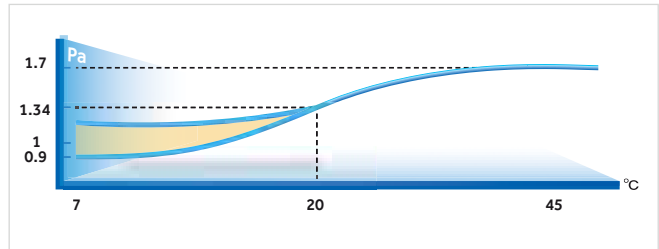


TEMPERATURE RANGE



CONSTANT PRESSURE

Accurate system to maintain the pressure adequate to the compressor according to the operating temperature of the refrigerant in order to maintain a more stable output capacity and for the reliability over time of the component itself.

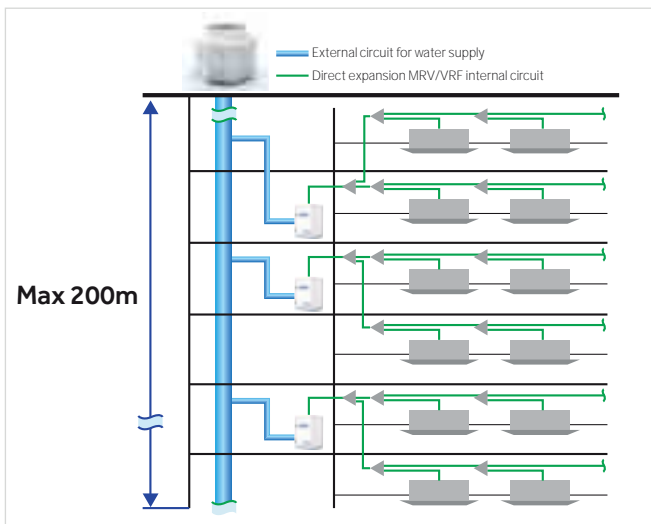


POSSIBLE ENVIRONMENTS WHERE MRV-W CAN BE INSTALLED INDOOR



FLEXIBLE INSTALLATION

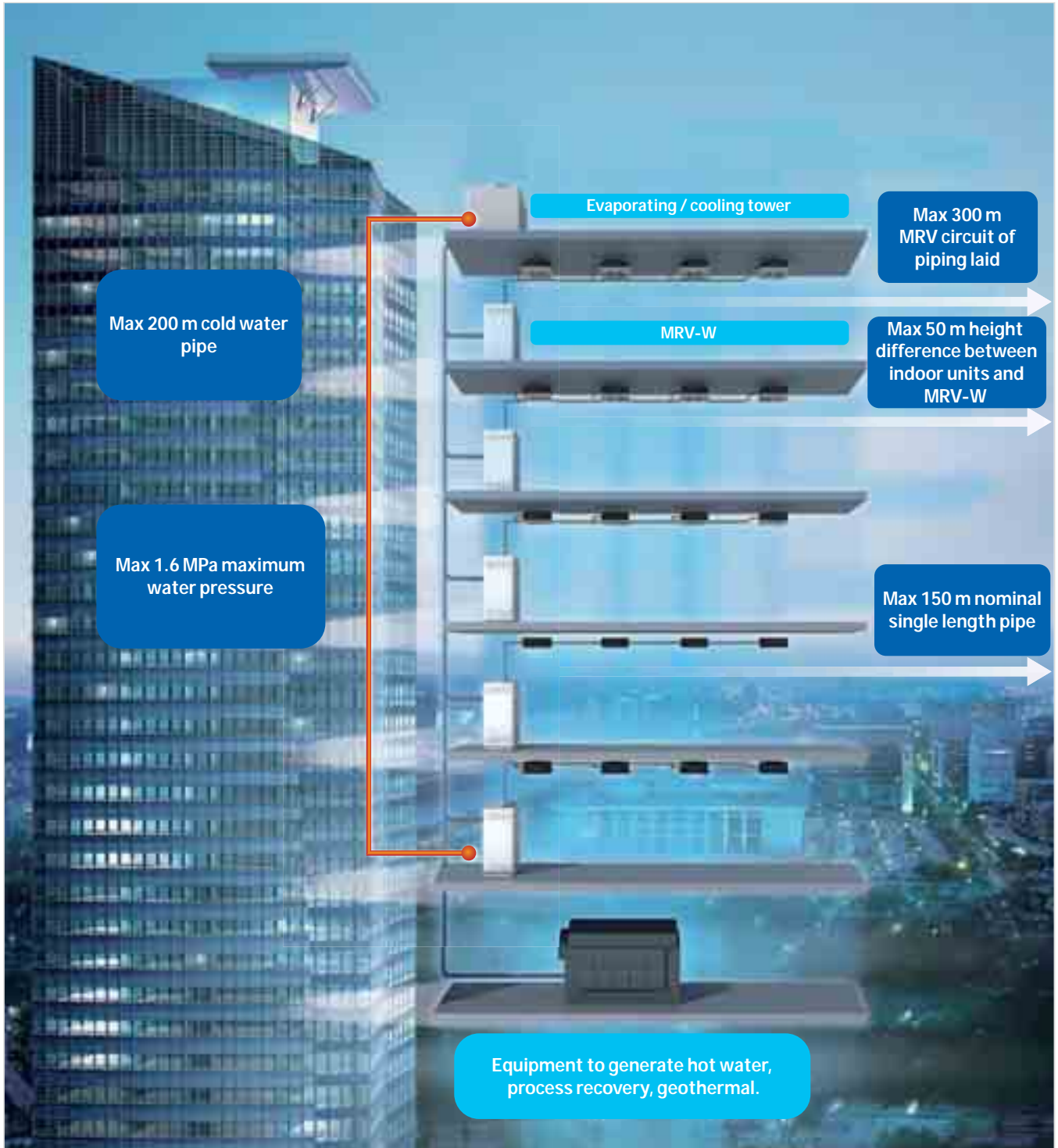
Using water as a condenser, you can air-condition very tall buildings, where you can reach up to 200 meters in height with a pressure of 1.6 MPa.



MRV-W - FEATURES

EXAMPLES OF PIPING LENGTHS

Ability to achieve large elevations and lengths within each floor served by an MRV-W.





8-12HP

AV08IMWEWA

AV10IMWEWA

AV12IMWEWA

Model		AV08IMWEWA	AV10IMWEWA	AV12IMWEWA
Capacity				
Power Class	HP	8	10	12
Cooling	kW	22,40	28,00	33,50
Heating	kW	25,00	31,50	37,50
Electrical Parameters				
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	4,50	6,00	7,70
Max absorbed power - Cooling	kW	13,00	15,00	17,00
Absorbed current in cooling.	A	7,20	9,60	12,32
Max absorbed current - Cooling	A	20,79	23,99	27,19
Absorbed power - Heating	kW	4,15	5,80	7,80
Max absorbed power - Heating	kW	13,00	15,00	17,00
Absorbed current in heating	A	6,64	9,28	12,47
Max absorbed current - Heating	A	20,79	23,99	27,19
EER energy class	W/W	4,98	4,67	4,35
COP energy class	W/W	6,02	5,43	4,81
SEER energy class	W/W	5,87	5,76	5,69
SCOP energy class	W/W	6,13	6,01	5,96
Performance				
Water flow (High)	m ³ /h	4,80	6,00	7,20
Sound pressure level (High)	dB(A)	50	51	53
Sound power level (High)	dB(A)	61	62	64
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	775x545x995		
Packaged unit dimensions WxDxH	mm	875x655x1128		
Net weight / Gross weight	Kg	172/183	172/183	172/183
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	1 INV	1 INV	1 INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	2	2	2
Ø Liquid side refrigerant pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,7 (1/2)
Ø Gas side refrigerant pipe	mm (inch)	19,05 (3/4)	22,22 (7/8)	25,40 (1)
Ø OU Oil Equalisation Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Maximum piping length	m	300	300	300
Max linear piping length (Equivalent/Real)	m	150/120	150/120	150/120
Max height difference between IU and OU (*)	m	50/40	50/40	50/40
Water/gas exchanger				
Type		Double - tube in tube	Double - tube in tube	Double - tube in tube
Material		Copper/steel	Copper/steel	Copper/steel
Water input connection		DN32	DN32	DN32
Water output connection		DN32	DN32	DN32
Exchanger pressure drop	Kpa	35	50	70
Connection type		Internal thread	Internal thread	Internal thread
Max water input pressure	Mpa	1.6	1.6	1.6
Water input temperature range (Cooling/ Heating)	°C	7-45	7-45	7-45
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	13	16	19

(*1) 50 m when the outdoor unit is above the indoor unit / 40 m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units MRV-W

Haier

MRV W



16-24HP

AV08IMWEWA

AV10IMWEWA

AV12IMWEWA

Model		AV16IMWEWA AV08IMWEWA AV08IMWEWA	AV18IMWEWA AV08IMWEWA AV10IMWEWA	AV20IMWEWA AV10IMWEWA AV10IMWEWA	AV22IMWEWA AV10IMWEWA AV12IMWEWA	AV24IMWEWA AV12IMWEWA AV12IMWEWA
Capacity						
Power Class	HP	16	18	20	22	24
Cooling	kW	44,80	50,40	56,00	61,50	67,00
Heating	kW	50,00	56,50	63,00	69,00	75,00
Electrical Parameters						
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	9,00	10,50	12,00	13,70	15,40
Max absorbed power - Cooling	kW	26,00	28,00	30,00	32,00	34,00
Absorbed current in cooling	A	14,39	16,79	19,19	21,91	24,63
Max absorbed current - Cooling	A	41,58	44,78	47,98	51,18	54,38
Absorbed power - Heating	kW	8,30	9,95	11,60	13,60	15,60
Max absorbed power - Heating	kW	26,00	28,00	30,00	32,00	34,00
Absorbed current in heating	A	13,27	15,91	18,55	21,75	24,95
Max absorbed current - Heating	A	41,58	44,78	47,98	51,18	54,38
EER energy class	W/W	4,98	4,8	4,67	4,49	4,35
COP energy class	W/W	6,02	5,68	5,43	5,07	4,81
SEER energy class	W/W	5,87	5,82	5,76	5,73	5,69
SCOP energy class	W/W	6,13	6,10	6,01	5,98	5,96
Performance						
Water flow (High)	m ³ /h	9,60	10,80	12,00	13,20	14,40
Sound pressure level (High)	dB(A)	53	54	54	55	56
Sound power level (High)	dB(A)	64	65	65	66	67
Installation - Dimensions - Components						
Unit Dimensions WxDxH	mm	775x545x995+775x545x995				
Packaged unit dimensions WxDxH	mm	875x655x1128+875x655x1128				
Net weight / Gross weight	Kg	344/366	344/366	344/366	344/366	344/366
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	2 INV	2 INV	2 INV	2 INV	2 INV
Refrigerant type		R410A	R410A	R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	4	4	4	4	4
Ø Liquid side refrigerant pipe	mm (inch)	12,7 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Ø Gas side refrigerant pipe	mm (inch)	28,58 (1 - 1/8)	28,58 (1 - 1/8)	28,58 (1 - 1/8)	28,58 (1 - 1/8)	28,58 (1 - 1/8)
Ø OU Oil Equalisation Pipe	mm (inch)	99,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Maximum piping length	m	300	300	300	300	300
Max linear piping length (Equivalent/Real)	m	150/120	150/120	150/120	150/120	150/120
Max height difference between IU and OU (*)	m	50/40	50/40	50/40	50/40	50/40
Water/gas exchanger						
Type		Double - tube in tube	Double - tube in tube	Double - tube in tube	Double - tube in tube	Double - tube in tube
Material		Copper/steel	Copper/steel	Copper/steel	Copper/steel	Copper/steel
Water input connection		DN32	DN32	DN32	DN32	DN32
Water output connection		DN32	DN32	DN32	DN32	DN32
Exchanger pressure drop	Kpa	35+35	35+50	50+50	50+70	70+70
Connection type		Internal thread	Internal thread	Internal thread	Internal thread	Internal thread
Max water input pressure	Mpa	1,6	1,6	1,6	1,6	1,6
Water input temperature range (Cooling/ Heating)	°C	7-45	7-45	7-45	7-45	7-45
Connectable Indoor Capacity Ratio						
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130	50-130	50-130
Maximum number of connectable IUs	No.	23	29	33	36	39

(*1) 50 m when the outdoor unit is above the indoor unit / 40 m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



26-30HP

AV08IMWEWA

AV10IMWEWA

AV12IMWEWA

Model		AV26IMWEWA AV08IMWEWA AV08IMWEWA AV10IMWEWA	AV28IMWEWA AV08IMWEWA AV10IMWEWA AV10IMWEWA	AV30IMWEWA AV10IMWEWA AV10IMWEWA AV10IMWEWA
Capacity				
Power Class	HP	26	28	30
Cooling	kW	72,80	78,40	84,00
Heating	kW	81,50	88,00	94,50
Electrical Parameters				
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	15,00	16,50	18,00
Max absorbed power - Cooling	kW	41,00	43,00	45,00
Absorbed current in cooling.	A	23,99	26,39	28,79
Max absorbed current - Cooling	A	65,57	68,77	71,97
Absorbed power - Heating	kW	14,10	15,75	17,40
Max absorbed power - Heating	kW	41,00	43,00	45,00
Absorbed current in heating	A	22,55	25,19	27,83
Max absorbed current - Heating	A	65,57	68,77	71,97
EER energy class	W/W	4,85	4,75	4,67
COP energy class	W/W	5,78	5,59	5,43
SEER energy class	W/W	5,84	5,8	5,76
SCOP energy class	W/W	6,11	6,1	6,01
Performance				
Water flow (High)	m³/h	15,60	16,80	18,00
Sound pressure level (High)	dB(A)	55	55	56
Sound power level (High)	dB(A)	66	66	67
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	775x545x995+775x545x995+775x545x995		
Packaged unit dimensions WxDxH	mm	875x655x1128+875x655x1128+875x655x1128		
Net weight / Gross weight	Kg	516/549	516/549	516/549
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	3 INV	3 INV	3 INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	6	6	6
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	31,80 (1-1/4)	31,80 (1-1/4)	31,80 (1-1/4)
Ø OU Oil Equalisation Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Maximum piping length	m	300	300	300
Max linear piping length (Equivalent/Real)	m	150/120	150/120	150/120
Max height difference between IU and OU (*)	m	50/40	50/40	50/40
Water/gas exchanger				
Type		Double - tube in tube	Double - tube in tube	Double - tube in tube
Material		Copper/steel	Copper/steel	Copper/steel
Water input connection		DN32	DN32	DN32
Water output connection		DN32	DN32	DN32
Exchanger pressure drop	Kpa	35+35+50	35+50+50	50+50+50
Connection type		Internal thread	Internal thread	Internal thread
Max water input pressure	Mpa	1,6	1,6	1,6
Water input temperature range (Cooling/ Heating)	°C	7-45	7-45	7-45
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	43	46	50

(*1) 50 m when the outdoor unit is above the indoor unit / 40 m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

Outdoor Units

MRV-W



32-36HP

AV08IMWEWA

AV10IMWEWA

AV12IMWEWA

Model		AV32IMWEWA AV10IMWEWA AV10IMWEWA AV12IMWEWA	AV34IMWEWA AV10IMWEWA AV12IMWEWA AV12IMWEWA	AV36IMWEWA AV12IMWEWA AV12IMWEWA
Capacity				
Power Class	HP	32	34	36
Cooling	kW	89,50	95,00	100,50
Heating	kW	100,50	106,50	112,50
Electrical Parameters				
Power supply	Ph-V/Hz	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)	3/380-400/50/60 (5 wires L1+L2+L3+N+T)
Absorbed power - Cooling	kW	19,70	21,40	23,10
Max absorbed power - Cooling	kW	47,00	49,00	51,00
Absorbed current in cooling.	A	31,51	34,23	36,95
Max absorbed current - Cooling	A	75,17	78,37	81,57
Absorbed power - Heating	kW	19,40	21,40	23,40
Max absorbed power - Heating	kW	47,00	49,00	51,00
Absorbed current in heating	A	31,03	34,23	37,42
Max absorbed current - Heating	A	75,17	78,37	81,57
EER energy class	W/W	4,54	4,44	4,35
COP energy class	W/W	5,18	4,98	4,81
SEER energy class	W/W	5,74	5,72	5,69
SCOP energy class	W/W	5,99	5,97	5,96
Performance				
Water flow (High)	m ³ /h	19,20	20,40	21,60
Sound pressure level (High)	dB(A)	57	57	58
Sound power level (High)	dB(A)	68	68	69
Installation - Dimensions - Components				
Unit Dimensions WxDxH	mm	775x545x995+775x545x995+775x545x995		
Packaged unit dimensions WxDxH	mm	875x655x1128+875x655x1128+875x655x1128		
Net weight / Gross weight	Kg	516/549	516/549	516/549
Compressor type		DC Inverter Scroll	DC Inverter Scroll	DC Inverter Scroll
Quantity and type of the compressor	No.	3 INV	3 INV	3 INV
Refrigerant type		R410A	R410A	R410A
Pre-charged refrigerant qty.	Kg	6	6	6
Ø Liquid side refrigerant pipe	mm (inch)	19,05 (3/4)	19,05 (3/4)	19,05 (3/4)
Ø Gas side refrigerant pipe	mm (inch)	31,80 (1-1/4)	31,80 (1-1/4)	31,80 (1-1/2)
Ø OU Oil Equalisation Pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Maximum piping length	m	300	300	300
Max linear piping length (Equivalent/Real)	m	150/120	150/120	150/120
Max height difference between IU and OU (*)	m	50/40	50/40	50/40
Water/gas exchanger				
Type		Double - tube in tube	Double - tube in tube	Double - tube in tube
Material		Copper/steel	Copper/steel	Copper/steel
Water input connection		DN32	DN32	DN32
Water output connection		DN32	DN32	DN32
Exchanger pressure drop	Kpa	50+50+70	50+70+70	70+70+70
Connection type		Internal thread	Internal thread	Internal thread
Max water input pressure	Mpa	1,6	1,6	1,6
Water input temperature range (Cooling/ Heating)	°C	7-45	7-45	7-45
Connectable Indoor Capacity Ratio				
Indoor / Outdoor Capacity Ratio	%	50-130	50-130	50-130
Maximum number of connectable IUs	No.	53	56	59

(*1) 50 m when the outdoor unit is above the indoor unit / 40 m when it is below

The specifications indicated are obtained with the following test conditions: in Cooling mode, Indoor temperature of 27°C WB / 19°C DB and Outdoor temperature of 35°C WB / 24°C DB. In Heating mode, Indoor temperature of 20°C WB and Outdoor temperature of 7°C WB / 6°C DB

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.





MRV

Indoor Units

Cassette Smart Flow

4-Way Cassette compact

4-Way Cassette

Wall Mounted

1-Way Cassette

2-Way Cassette

Ceiling-Floor

Duct

Floor console, built-in

Floor Console
exposed type, double flow

Fresh Air Duct

Cross-Flow
Heat Recovery Unit

Hydrobox

Wide range of OPTIONAL controllers.
Indoor units are NOT equipped with controller.



AB072MRERA
AB092MRERA
AB122MRERA
AB162MRERA
AB182MRERA
AB242MRERA

These controllers does not allow individual vane control.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HQS01



Optional controller
YR-E16B

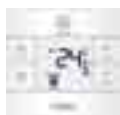
- Exclusive 360° air flow system for a uniform air distribution
- Independent control of the 4 vanes
- 6 levels of positioning per individual vane
- DC inverter fan motor
- 5 fan speeds ONLY selectable with wired controller YR-E16B, YR-E17A and with wireless controller YR-HQS01.
- Standard condensate drain pump with 700mm lift.
- Preparation for fresh air input (pre-cut)

Model		AB072MRERA	AB092MRERA	AB122MRERA	AB162MRERA	AB182MRERA	AB242MRERA
Capacity							
Cooling	kW	2,20	2,80	3,60	4,50	5,60	7,10
Heating	kW	2,50	3,20	4,00	5,00	6,30	8,00
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
Ventilation							
Air flow (H/M/L)	m ³ /h	1000/810/620	1000/810/620	1000/810/620	1000	1000	1380
Sound pressure (H/M/L)	dB(A)	30/27/25	30/27/25	30/27/25	32/29/27	33/30/29	35/34/31
Installation – Dimensions							
Net dimensions (WxDxH)	mm	840x840x180	840x840x180	840x840x180	840x840x183	840x840x183	840x840x204
Packaged unit dimensions (WxDxH)	mm	983x983x268	983x983x268	983x983x268	983x983x268	983x983x268	983x983x290
Net/gross weight	Kg	25,0/28,0	25,0/28,0	25,0/28,0	28/31	28/31	29/32
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)
Panel							
Model		PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB
Panel Net dimensions (WxDxH)	mm	950x950x50	950x950x50	950x950x50	950x950x50	950x950x50	950x950x50
Panel Packaging dimensions (WxDxH)	mm	1013x1025x123	1013x1025x123	1013x1025x123	1013x1025x123	1013x1025x123	1013x1025x123
Panel Net/gross weight	Kg	6,5/9,0	6,5/9,0	6,5/9,0	6,5/9	6,5/9	6,5/9



AB282MRERA
 AB302MRERA
 AB382MRERA
 AB482MRERA
 AB602MRERA

These controllers does not allow individual vane control.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HQS01



Optional controller
YR-E16B

- Exclusive 360° air flow system for a uniform air distribution
- Independent control of the 4 vanes
- 6 levels of positioning per individual vane
- DC inverter fan motor
- 5 fan speeds ONLY selectable with wired controller YR-E16B, YR-E17A and with wireless controller YR-HQS01.
- Standard condensate drain pump with 700mm lift
- Preparation for fresh air input (pre-cut)

Model		AB282MRERA	AB302MRERA	AB382MRERA	AB482MRERA	AB602MRERA
Capacity						
Cooling	kW	8,00	9,00	11,20	14,00	16,00
Heating	kW	9,00	10,00	12,50	16,00	18,00
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
Ventilation						
Air flow (H/M/L)	m³/h	1380/1190/1000	2050/1860/1670	2050/1860/1670	2100/1910/1720	2100/1910/1720
Sound pressure (H/M/L)	dB(A)	37/35/31	37/35/31	37/35/31	44/40/36	44/40/36
Installation – Dimensions						
Net dimensions (WxDxH)	mm	840x840x204	840x840x246	840x840x246	840x840x288	840x840x288
Packaged unit dimensions (WxDxH)	mm	983x983x290	983x983x331	983x983x331	983x983x373	983x983x373
Net/gross weight	Kg	27,0/30,0	31,0/36,0	31,0/36,0	33,0/38,0	33,0/38,0
Ø Liquid pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Panel						
Model		PB-950KB	PB-950KB	PB-950KB	PB-950KB	PB-950KB
Panel Net dimensions (WxDxH)	mm	950x950x50	950x950x50	950x950x50	950x950x50	950x950x50
Panel Packaging dimensions (WxDxH)	mm	1013x1025x123	1013x1025x123	1013x1025x123	1013x1025x123	1013x1025x123
Panel Net/gross weight	Kg	6,5/9,0	6,5/9,0	6,5/9,0	6,5/9,0	6,5/9,0



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

These controllers does not allow individual vane control.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HQS01



Optional controller
YR-E16B

- Panel design max 620x620 dimensions, maximum compatibility with module ceilings
- Independent control of the 4 Vanes
- 6 positioning levels per single vane, with 1296 possible combinations.
- DC inverter fan motor
- 5 fan speeds ONLY selectable with wired controller YR-E16B, YR-E17A and with wireless controller YR-HQS01.
- Standard condensate drain pump
- Preparation for fresh air input (pre-cut)

Model		AB052MCERA(M)	AB072MCERA(M)	AB092MCERA(M)	AB122MCERA(M)	AB162MCERA(M)	AB182MCERA(M)
Capacity							
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30
Electrical Parameters							
Power supply	Ph-V/Hz	1/220-240/50/600	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
Ventilation							
Air flow (H/M/L)	m ³ /h	650/540/430	700/590/480	700/590/480	700/590/480	700/590/480	700/590/480
Sound pressure (H/M/L)	dB(A)	32/30/29	32/30/29	32/30/29	33/30/29	33/30/29	34/32/30
Sound power (H/M/L)	dB(A)	46/44/43	46/44/43	46/44/43	47/44/43	47/44/43	48/46/44
Installation – Dimensions							
Net dimensions (WxDxH)	mm	570x570x260	570x570x260	570x570x260	570x570x260	570x570x260	570x570x260
Packaged unit dimensions (WxDxH)	mm	718x680x380	718x680x380	718x680x380	718x680x380	718x680x380	718x680x380
Net/gross weight	Kg	16,0/19,0	16,0/19,0	16,0/19,0	19,0/22,0	19,0/22,0	19,0/22,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)
Panel							
Model		PB-620KB	PB-620KB	PB-620KB	PB-620KB	PB-620KB	PB-620KB
Panel Net dimensions (WxDxH)	mm	620x620x60	620x620x60	620x620x60	620x620x60	620x620x60	620x620x60
Panel Packaging dimensions (WxDxH)	mm	660x660x115	660x660x115	660x660x115	660x660x115	660x660x115	660x660x115
Panel Net/gross weight	Kg	3.1/4.8	3.1/4.8	3.1/4.8	3.1/4.8	3.1/4.8	3.1/4.8



AB052MCERA
 AB072MCERA
 AB092MCERA
 AB122MCERA
 AB162MCERA
 AB182MCERA(C)

*Until stocks last.

Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	Optional remote control YR-HRS01	Optional controller YR-E16B

- Aesthetic Panel 700x700
- Preparation for fresh air input (pre-cut)
- Standard condensate drain pump
- Silent operation

Model		AB052MCERA	AB072MCERA	AB092MCERA	AB122MCERA	AB162MCERA	AB182MCERA(C)
Capacity							
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30
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
Ventilation							
Air flow (H/M/L)	m ³ /h	650/540/430	700/590/480	700/590/480	700/590/480	700/590/480	700/590/480
Sound pressure (H/M/L)	dB(A)	31/29/28	32/30/29	32/30/29	32/30/29	33/30/29	33/30/29
Sound power (H/M/L)	dB(A)	45/43/42	46/44/43	46/44/43	46/44/43	47/44/43	47/44/43
Installation – Dimensions							
Net dimensions (WxDxH)	mm	570x570x260	570x570x260	570x570x260	570x570x260	570x570x260	570x570x260
Packaged unit dimensions (WxDxH)	mm	718x680x380	718x680x380	718x680x380	718x680x380	718x680x380	718x680x380
Net/gross weight	Kg	16,0/19,0	16,0/19,0	16,0/19,0	19,0/22,0	19,0/22,0	19,0/22,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)
Panel							
Model		PB-700IB	PB-700IB	PB-700IB	PB-700IB	PB-700IB	PB-700IB
Panel Net dimensions (WxDxH)	mm	700x700x60	700x700x60	700x700x60	700x700x60	700x700x60	700x700x60
Panel Packaging dimensions (WxDxH)	mm	740x740x115	740x740x115	740x740x115	740x740x115	740x740x115	740x740x115
Panel Net/gross weight	Kg	2,8/4,5	2,8/4,5	2,8/4,5	2,8/4,5	2,8/4,5	2,8/4,5



AB182MNERA
AB242MNERA
AB282MNERA
AB302MNERA
AB382MNERA
AB482MNERA

*Until stocks last.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HRS01



Optional controller
YR-E16B

- Linear and compact panel design
- Preparation for fresh air input (pre-cut)
- Standard condensate drain pump
- Preparation for additional air delivery from unit body

Model		AB182MNERA	AB242MNERA	AB282MNERA	AB302MNERA	AB382MNERA	AB482MNERA	AB602MNERA
Capacity								
Cooling	kW	5,60	7,10	8,00	9,00	11,20	14,00	16,00
Heating	kW	6,30	8,00	9,00	10,00	12,50	16,00	18,00
Electrical Parameters								
Power supply	Ph-V/Hz	1/220-230/50/60						
Ventilation								
Air flow (H/M/L)	m³/h	1000/810/620	1380/1190/1000	1380/1190/1000	2050/1860/1670	2050/1860/1670	2100/1910/1720	2100/1910/1720
Sound pressure (H/M/L)	dB(A)	33/30/29	35/34/31	37/35/31	37/35/31	37/35/31	44/40/36	44/40/36
Sound pressure (H/M/L)	dB(A)	47/44/43	49/48/45	51/49/45	51/49/45	51/49/45	58/54/50	58/54/50
Installation – Dimensions								
Sound pressure (H/M/L)	mm	840x840x180	840x840x204	840x840x204	840x840x246	840x840x246	840x840x288	840x840x288
Packaged unit dimensions (WxDxH)	mm	983x983x268	983x983x290	983x983x290	983x983x331	983x983x331	983x983x373	983x983x373
Net/gross weight	Kg	25,0/28,0	25,0/28,0	25,0/28,0	25,0/28,0	25,0/28,0	25,0/28,0	25,0/28,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Panel								
Model		PB-950JB	PB-950JB	PB-950JB	PB-950JB	PB-950JB	PB-950JB	PB-950JB
Panel Net dimensions (WxDxH)	mm	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60	950x950x60
Panel Packaging dimensions (WxDxH)	mm	992x992x115	992x992x115	992x992x115	992x992x115	992x992x115	992x992x115	992x992x115
Panel Net/gross weight	Kg	6,0/7,5	6,0/7,5	6,0/7,5	6,0/7,5	6,0/7,5	6,0/7,5	6,0/7,5



AS052MNERAB
AS072MNERAB
AS092MNERAB
AS122MNERAB
AS162MNERA
AS182MNERA
AS242MNERA
AS282MNERA
AS302MNERA

*Until stocks last.

Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	Optional remote control YR-HRS01	Optional controller YR-E16B

- Compact, linear design with dimmable information display
- Silenced EEV modulation valve
- DC inverter fan motor
- 5 fan speeds selectable with wired controller YR-E16B and YR-E17A.

Model		AS052MNERAB	AS072MNERAB	AS092MNERAB	AS122MNERAB	AS162MNERA	AS182MNERA	AS242MNERA	AS282MNERA	AS302MNERA
Capacity										
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60	7,10	8,00	9,00
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30	8,00	9,00	10,00
Electrical Parameters										
Power supply	Ph-V/Hz	1/220-240/50/60								
Ventilation										
Air flow (H/M/L)	m ³ /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 (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 (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 – Dimensions										
Net dimensions (WxDxH)	mm	855x208x280	855x208x280	855x208x280	855x208x280	1115x243x336	1115x243x336	1115x243x336	1316x270x365	1316x270x365
Packaged unit dimensions (WxDxH)	mm	954x279x355	954x279x355	954x279x355	954x279x355	1206x342x418	1206x342x418	1206x342x418	1403x384x463	1403x384x463
Net/gross weight	Kg	9,9/12,0	9,9/12,0	9,9/12,0	9,9/12,0	15,8/18,9	15,8/18,9	15,8/18,9	21,8/26,3	21,8/26,3
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)



AS052MNERAC
AS072MNERAC
AS092MNERAC
AS122MNERAC
AS162MNERAC
AS182MNERAC
AS242MNERAC
AS282MNERAC
AS302MNERAC

The external EEV modulation valve must be installed in the liquid pipe, between 2m and 5m from the unit. This allows to move this sound source out of the room, reaching high levels of silence for the perfect confort in hotels, commerces or offices.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HRS01



Optional controller
YR-E16B

- Compact, linear design with dimmable information display
- External EEV modulation valve
- DC inverter fan motor
- 5 fan speeds selectable with wired controller YR-E16B and YR-E17A.

Model		AS052MNERAC	AS072MNERAC	AS092MNERAC	AS122MNERAC	AS162MNERAC	AS182MNERAC	AS242MNERAC	AS282MNERAC	AS302MNERAC
Capacity										
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60	7,10	8,00	9,00
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30	8,00	9,00	10,00
Electrical Parameters										
Power supply	Ph-V/Hz	1/220-240/50/60								
Ventilation										
Air flow (H/M/L)	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 (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 (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 – Dimensions										
Net dimensions (WxDxH)	mm	855x208x280	855x208x280	855x208x280	855x208x280	1115x243x336	1115x243x336	1115x243x336	1316x270x365	1316x270x365
Packaged unit dimensions (WxDxH)	mm	1054x279x355	1054x279x355	1054x279x355	1054x279x355	1306x342x418	1306x342x418	1306x342x418	1503x384x463	1503x384x463
Net/gross weight	Kg	9,9/14,2	9,9/14,2	9,9/14,2	9,9/14,2	15,8/21,2	15,8/21,2	15,8/21,2	21,8/27,2	21,8/27,2
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)

MRV INDOOR UNIT Wall Mounted



FLEXIS PLUS (MW3) White



- AS20S2SF1FA-MW3
- AS25S2SF1FA-MW3
- AS35S2SF1FA-MW3
- AS42S2SF1FA-MW3
- AS50S2SF1FA-MW3
- AS71S2SF1FA-MW3



FLEXIS PLUS (MB3) Black

- AS20S2SF1FA-MB3
- AS25S2SF1FA-MB3
- AS35S2SF1FA-MB3
- AS42S2SF1FA-MB3
- AS50S2SF1FA-MB3
- AS71S2SF1FA-MB3



				
Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	Optional remote control YR-HRS01	Optional controller YR-E16B

- Silent performance, down to 16db(A) 2,0kW and 2,5kW
 - External EEV modulation valve
 - ECO presence sensor to optimize the energy consumption and the airflow
 - Standard Wi-Fi with hOn App
 - 3D ventilation
 - Easy installation thanks to the removable part in the bottom of the unit that gives access to the piping
- *Easy MRV kit needed to integrate with MRV system.

MS1-036A/MS1-060A

MS3-036A



Model	White	AS20S2SF1FA-MW3	AS25S2SF1FA-MW3	AS35S2SF1FA-MW3	AS42S2SF1FA-MW3	AS50S2SF1FA-MW3	AS71S2SF1FA-MW3
	Black	AS20S2SF1FA-MB3	AS25S2SF1FA-MB3	AS35S2SF1FA-MB3	AS42S2SF1FA-MB3	AS50S2SF1FA-MB3	AS71S2SF1FA-MB3
Capacity							
Cooling	kW	2,00	2,60	3,50	4,20	5,20	7,00
Heating	kW	2,50	3,20	4,20	4,40	6,00	8,0
Electrical Parameters							
Power supply	Ph-V/Hz	1/220-240/50/60					
Ventilation							
Air flow	m³/h	600	600	650	750	900	1100
Sound pressure (H/M/L)	dB(A)	38/32/25/16	38/32/25/16	39/33/26/17	42/36/30/23	45/41/37/28	47/43/37/33
Sound power	dB(A)	53	53	55	58	57	60
Installation – Dimensions							
Net dimensions (WxDxH)	mm	856x197x300	856x197x300	856x197x300	856x197x300	999x225x323	1115x235x343
Packaged unit dimensions (WxDxH)	mm	954x279x355	954x279x355	954x279x355	954x279x355	1206x342x418	1206x342x418
Net/gross weight	Kg	9,5/12,0	9,5/12,0	9,5/12,0	9,5/12,0	12,0/18,9	15,2/18,9
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	15,88 (5/8)



AB052MAERA
AB072MAERA
AB092MAERA
AB122MAERA



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HRS01



Optional controller
YR-E16B

- Modern, thin and linear design panel
- Automatic opening and closing of air discharge and air intake louvres
- 3D ventilation
- DC inverter fan motor
- 5 fan speeds selectable with wired controller YR-E16B and YR-E17A.
- Quiet and thin
- Standard intake filter
- Standard condensate drain pump

Model		AB052MAERA	AB072MAERA	AB092MAERA	AB122MAERA
Capacity					
Cooling	kW	1,50	2,20	2,80	3,60
Heating	kW	1,70	2,50	3,20	4,00
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
Ventilation					
Air flow (High)	m ³ /h	530/490/450	530/490/450	530/490/450	550/530/490
Sound pressure (H/M/L)	dB(A)	32/29/24	32/29/24	32/29/24	34/30/25
Sound power (H/M/L)	dB(A)	46/43/38	46/43/38	46/43/38	48/44/39
Installation – Dimensions					
Net dimensions (WxDxH)	mm	875x505x185	875x505x185	875x505x185	875x505x185
Packaged unit dimensions (WxDxH)	mm	1028x581x270	1028x581x270	1028x581x270	1028x581x270
Net/gross weight	Kg	15,3/17,9	15,3/17,9	15,3/17,9	15,3/17,9
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)
Panel					
Model		P1B-1050IB	P1B-1050IB	P1B-1050IB	P1B-1050IB
Panel Net dimensions (WxDxH)	mm	1050x560x122	1050x560x122	1050x560x122	1050x550x125
Panel Packaging dimensions (WxDxH)	mm	1133x623x197	1133x623x197	1133x623x197	1133x623x197
Panel Net/gross weight	Kg	5,3/8,3	5,3/8,3	5,3/8,3	5,3/8,3



AB072MBERA
 AB092MBERA
 AB122MBERA
 AB162MBERA
 AB182MBERA

Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	optional remote control YR-HRS01 (RE-02 remote control receiver)	Optional controller YR-E16B

- Thin design, only 220 mm high
- Standard condensate drain pump
- Silent operation

Model		AB072MBERA	AB092MBERA	AB122MBERA	AB162MBERA	AB182MBERA
Capacity						
Cooling	kW	2,20	2,80	3,60	4,50	5,60
Heating	kW	2,50	3,20	4,00	5,00	6,30
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
Ventilation						
Air flow (H/M/L)	m³/h	840/700/550	840/700/550	840/700/550	840/700/550	840/700/550
Sound pressure (H/M/L)	dB(A)	42/37/33	42/37/33	42/37/33	44/39/34	44/39/34
Sound power (H/M/L)	dB(A)	55/50/46	55/50/46	55/50/46	57/52/47	57/52/47
Installation – Dimensions						
Net dimensions (WxDxH)	mm	817x620x220	817x620x220	817x620x220	817x620x220	817x620x220
Packaged unit dimensions (WxDxH)	mm	1015x695x278	1015x695x278	1015x695x278	1015x695x278	1015x695x278
NNet/gross weight	Kg	21,0/23,0	21,0/23,0	21,0/23,0	21,0/23,0	21,0/23,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)
Panel						
Model		P2B-1055IB	P2B-1055IB	P2B-1055IB	P2B-1055IB	P2B-1055IB
Panel Net dimensions (WxDxH)	mm	1055x680x68	1055x680x68	1055x680x68	1055x680x68	1055x680x68
PPanel Packaging dimensions (WxDxH)	mm	1110x720x161	1110x720x161	1110x720x161	1110x720x161	1110x720x161
Panel Net/gross weight	Kg	7,0/8,0	7,0/8,0	7,0/8,0	7,0/8,0	7,0/8,0



AC092MDERA
AC122MDERA
AC162MDERA
AC182MDERA
AC242MDERA
AC282MDERA
AC302MDERA
AC382MDERA
AC482MDERA



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



Optional remote control
YR-HRS01



Optional controller
YR-E16B



- New design, subtle and harmonious
- DC inverter fan motor
- 5 fan speeds selectable with wired controller YR-E16B and YR-E17A.
- 3D ventilation with independent right and left wing group
- Outstanding installation height - the 14kW model can be installed up to 4.2 m high still ensuring adequate air distribution in the environment

Model		AC092MDERA	AC122MDERA	AC162MDERA	AC182MDERA	AC242MDERA	AC282MDERA	AC302MDERA	AC382MDERA	AC482MDERA
Capacity										
Cooling	kW	2,80	3,60	4,50	5,60	7,10	8,00	9,00	11,20	14,00
Heating	kW	3,20	4,00	5,00	6,30	8,00	9,00	10,00	12,50	16,00
Electrical Parameters										
Power supply	Ph-V/Hz	1/220-230/50/60								
Ventilation										
Air flow (H/M/L)	m³/h	820/750/690	820/750/690	950/820/690	950/820/690	1420/1270/1240	1570/1420/1240	1570/1420/1240	2110/1990/1750	2110/1990/1750
Sound pressure (H/M/L)	dB(A)	38/36/34	38/36/34	42/38/35	42/38/35	46/44/41	47/44/41	47/44/41	50/46/43	50/46/43
Sound power (H/M/L)	dB(A)	52/50/47	52/50/47	55/51/48	55/51/48	60/58/54	61/58/54	61/58/55	63/60/57	63/60/57
Installation – Dimensions										
Net dimensions (WxDxH)	mm	1000x230x680				1325x230x680			1650x230x680	
Packaged unit dimensions (WxDxH)	mm	1100x305x779				1425x305x779			1750x305x779	
Net/gross weight	Kg	27.9/33.6	27.9/33.6	27.9/33.6	27.9/33.6	35.8/42.1	35.8/42.1	35.8/42.1	43.5/50.5	43.5/50.5
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)



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



AD182MSERA(H)
AD242MSERA(H)



Panel Kit OPTIONAL

New panel with built-in receiver for infrared remote control and temperature info display dimmable from controller

Air discharge grill equipped with vertical and horizontal 3D effect motorised fins

Air intake grill equipped with filter



Optional controller HW-BA116ABK

Static pressure values PA of the fan cannot be modified using this controller



Optional controller HW-BA101ABT



Optional controller YR-E17A



optional remote control YR-HRS01 (in combination with the RE-02 receiver, not necessary if the panel kit is used)



Optional controller YR-E16B

- Ideal for bedrooms, hotel rooms and quiet environments
- Extremely thin, only 185 mm
- Preparation for fresh air input
- Standard condensate drain pump
- Intake of lower or rear air by moving the panel as standard
- Silent operation
- Incorporates standard UVC ray generator to sterilize the air that flows through the unit
- Designed for free-mount installation without duct, with a standard prevalence of 0 PA. You can increase static pressure to 15 or 30 PA by using this unit with the flush wired controllers: HW-BA101ABT, YR-E17A, YR-E16B.
- Possibility of optional functional aesthetic control kit panel
- DC inverter fan motor
- 5 fan speeds only selectable with wired controller YR-E16B and YR-E17A

Model		AD052MSERA(H)	AD072MSERA(H)	AD092MSERA(H)	AD122MSERA(H)	AD162MSERA(H)	AD182MSERA(H)	AD242MSERA(H)
Capacity								
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60	7,10
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30	8,00
Electrical Parameters								
Power supply	Ph-V/Hz	1/220-230/50/60						
Ventilation								
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 – Dimensions								
Unit Dimensions WxDxH	mm	850x420x185	850x420x185	850x420x185	850x420x185	850x420x185	1170x420x185	1170x420x185
Packaged unit dimensions WxDxH	mm	1045x540x270	1045x540x270	1045x540x270	1045x540x270	1045x540x270	1365x540x270	1365x540x270
Net weight / Gross 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	24,0/30,0
Ø Liquid side refrigerant pipe	mm	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Ø Gas side refrigerant pipe	mm	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)
Static pressure (Standard / Max)	Pa	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30	0/15/30
Panel								
Model		P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-890IA/D	P1B-1210IA/D	P1B-1210IA/D
Dimensions WxDxH (delivery deflector)	mm	890x190x100	890x190x100	890x190x100	890x190x100	890x190x100	1210x190x100	1210x190x100
Dimensions WxDxH (intake panel with filter)	mm	890x290,5x32,4	890x290,5x32,4	890x290,5x32,4	890x290,5x32,4	890x290,5x32,4	1210x290,5x32,4	1210x290,5x32,4
Packaging dimensions WxDxH	mm	938x335x220	938x335x220	938x335x220	938x335x220	938x335x220	1258x335x220	1258x335x220
Net weight / Gross weight	Kg	4,0/5,0	4,0/5,0	4,0/5,0	4,0/5,0	4,0/5,0	5,0/6,0	5,0/6,0



AD052MJERA(H)
AD072MJERA(H)
AD092MJERA(H)
AD122MJERA(H)
AD162MJERA(H)
AD182MJERA(H)
AD242MJERA(H)
AD282MJERA(H)
AD302MJERA(H)
AD382MJERA(H)
AD482MJERA(H)
AD542MJERA(H)



The inbuilt UV-C ray emitter module performs an effective and efficient air sterilization both on the unit's coil surface and the air that passes through. This module's performance has been certified by the independent laboratory Texcell.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



optional remote control YR-HRS01
(RE-02 remote control receiver)



Optional controller
YR-E16B

- Compact Ducted Medium Pressure
- Static pressure fan 20 / 200 PA.
- The standard static pressure is 20 PA.
- It is possible to increase the PA from 20 to 200 by only using wired controller models HW-BA101ABT, YR-E17A, YR-E16B .
- With all other controllers, the pressure remains fixed at 50 PA.
- Standard condensate drain pump
- Incorporates standard UVC ray generator to sterilize the air that flows through the unit

Model		AD052MJERA(H)	AD072MJERA(H)	AD092MJERA(H)	AD122MJERA(H)	AD162MJERA(H)	AD182MJERA(H)	AD242MJERA(H)	AD282MJERA(H)	AD302MJERA(H)	AD382MJERA(H)	AD482MJERA(H)	AD542MJERA(H)	
Capacity														
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,60	7,10	8,00	9,00	11,20	14,00	16,00	
Heating	kW	1,70	2,50	3,20	4,00	5,00	6,30	8,00	9,00	10,00	13,00	16,30	18,00	
Electrical Parameters														
Power supply	Ph/V/Hz	1/220-230/50/60												
Ventilation														
Air flow (H/M/L)	m ³ /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 pressure (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 (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	
Installation – Dimensions														
Net dimensions (WxDxH)	mm	700x700x248					1100x700x248				1500x700x248			
Packaged unit dimensions (WxDxH)	mm	932x835x280					1332x835x280				1698x857x305			
Net/gross weight	Kg	27,0/32,0	27,0/32,0	27,0/32,0	27,0/32,0	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	
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	
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	

MRV INDOOR UNIT Ducted High Pressure



INDOOR UNITS

AD182MHERA
AD242MHERA
AD282MHERA
AD302MHERA
AD382MHERA
AD482MHERA



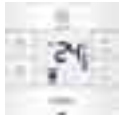
*Until stocks last.

NEW

AD722MTERAD
AD962MTERAD



* Forecast launch date July



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



optional remote control YR-HRS01
(RE-02 remote control receiver)



Optional controller
YR-E16B

- Flexible and simple ductwork
- Simple maintenance
- Static pressure varies from 100 to 300 Pa using included booster cable.
- Not equipped with condensate drain pump
- 3 speeds + booster

Model		AD182MHERA	AD242MHERA	AD282MHERA	AD302MHERA	AD382MHERA	AD482MHERA	AD722MTERAD	AD962MTERAD
Capacity									
Cooling	kW	5,60	7,10	8,00	9,00	11,20	14,00	22,60	28,00
Heating	kW	6,30	8,00	9,00	10,00	12,50	16,00	25,20	31,50
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
Ventilation									
Air flow (H/m/l)	m ³ /h	900/800/700	900/800/700	900/800/700	1560/1470/1390	1600/1500/1400	2100/2000/1900	4000/3600/3200	4500/3700/3300
Sound pressure level (H/L)	dB(A)	42/40	42/40	42/40	45/40	45/40	45/40	50/46	51/47
Sound power level (H/L)	dB(A)	55/53	55/53	55/53	58/53	58/53	58/53	64/60	65/61
Installation – Dimensions									
Unit Dimensions WxDxH	mm	975x876x360	975x876x360	975x876x360	1355x876x360	1355x876x360	1355x876x360	1438x748x495	1438x748x495
Packaged unit dimensions WxDxH	mm	1050x945x405	1050x945x405	1050x945x405	1386x966x418	1386x966x418	1386x966x418	1558x896x652	1558x896x652
Net weight / Gross weight	Kg	48/58	48/58	48/58	62/77	62/77	62/77	86/102	86/102
Ø Liquid side refrigerant pipe	mm	6,35 (1/4)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)
Ø Gas side refrigerant pipe	mm	12,70 (1/2)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	22,22 (7/8)	22,22 (7/8)
Static pressure (Standard / Max)	Pa	100/196	100/196	100/196	100/196	100/196	100/196	100/300	100/300



AD072MQERA
AD092MQERA
AD122MQERA
AD152MQERA
AD182MQERA
AD242MQERA

*Until stocks last.



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



optional remote control YR-HRS01
(RE-02 remote control receiver)



Optional controller
YR-E16B






- Automatic system to maintain nominal air flow, offsetting duct losses of up to 200 PA
- Useful Static pressure up to 200 Pa with automatic selection.
- Maximum flexibility for the construction of air distribution ducts.
- Standard condensate drain pump
- DC inverter fan motor
- 5 fan speeds only selectable with wired controller YR-E16B and YR-E17A.

Model		AD072MQERA	AD092MQERA	AD122MQERA	AD152MQERA	AD182MQERA	AD242MQERA
Capacity							
Cooling	kW	2,20	2,80	3,60	4,50	5,60	7,10
Heating	kW	2,50	3,20	4,00	5,00	6,30	8,00
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
Ventilation							
Air flow (H/M/L)	m ³ /h	500/410/360	600/510/450	700/580/500	780/680/600	900/780/600	1100/1020/920
Sound pressure (H/M/L)	dB(A)	30/25/23	30/25/23	32/29/26	32/29/26	32/29/26	33/29/25
Installation – Dimensions							
Net dimensions (WxDxH)	mm	750x635x280	750x635x280	750x635x280	750x635x280	750x635x280	950x635x280
Packaged unit dimensions (WxDxH)	mm	980x740x335	980x740x335	980x740x335	980x740x335	980x740x335	1180x740x335
Net/gross weight	Kg	29,0/35,0	29,0/35,0	29,0/35,0	29,0/35,0	29,0/35,0	34,0/41,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)
Static pressure (Standard/Max.)	Pa	0/200	0/200	0/200	0/200	0/200	50/200

AD302MQERA
AD362MQERA
AD422MQERA
AD482MQERA
AD542MQERA



*Until stocks last.

				
Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	optional remote control YR-HRS01 (RE-02 remote control receiver)	Optional controller YR-E16B

- Automatic system to maintain nominal air flow, offsetting duct losses of up to 200 PA
- Useful Static pressure up to 200 Pa with automatic selection.
- Maximum flexibility for the construction of air distribution ducts.
- Standard condensate drain pump.
- DC inverter fan motor
- 5 fan speeds only selectable with wired controller YR-E16B and YR-E17A.
- For sizes 36-42-48-54 it is possible to fix the PA pressure at 50-100-150-200 excluding automatic function. This setting can only be achieved with the wired controller YR-E17A and YR-E16B.

Model		AD282MQERA	AD302MQERA	AAD362MQERA	AD422MQERA	AD482MQERA	AD542MQERA
Capacity							
Cooling	kW	8,00	2,80	3,60	12,50	14,00	16,00
Heating	kW	9,00	3,20	4,00	15,00	16,00	18,00
Electrical Parameters							
Power supply	Ph-V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/600	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
Ventilation							
Air flow (H/M/L)	m ³ /h	1500/1320/1220	1500/1320/1220	1700/1510/1400	2000/1780/1620	2280/1920/1780	2280/1920/1780
Sound pressure (H/M/L)	dB(A)	33/29/25	33/29/25	38/36/30	38/36/30	40/34/29	40/34/29
Installation – Dimensions							
Net dimensions (WxDxH)	mm	950x635x280	950x635x280	1370x740x280	1370x740x280	1370x740x280	1370x740x280
Packaged unit dimensions (WxDxH)	mm	1180x740x335	1180x740x335	1555x839x380	1555x839x380	1555x839x380	1555x839x380
Net/gross weight	Kg	34,0/41,0	34,0/41,0	54,0/68,0	54,0/68,0	54,0/68,0	54,0/68,0
Ø Liquid pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)	9,52 (3/8)
Ø Gas pipe	mm (inch)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)	15,88 (5/8)
Static pressure (Standard/Max.)	Pa	0/200	0/200	0/200	0/200	0/200	50/200



AE072MLERA
AE092MLERA
AE122MLERA
AE162MLERA
AE182MLERA
AE242MLERA



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



optional remote control YR-HRS01
(RE-02 remote control receiver)



Optional controller
YR-E16B

- Compact and thin, only 220 mm depth
- Ideal for installation under window
- High-efficiency standard filter

Model		AE072MLERA	AE092MLERA	AE122MLERA	AE162MLERA	AE182MLERA	AE242MLERA
Capacity							
Cooling	kW	2,20	2,80	3,60	4,50	5,60	7,10
Heating	kW	2,50	3,20	4,00	5,00	6,30	8,00
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
Ventilation							
Air flow (H/M/L)	m ³ /h	750/650/550	750/650/550	750/650/550	950/830/720	950/830/720	950/830/720
Sound pressure (H/M/L)	dB(A)	38/35/33	38/35/33	40/37/35	40/37/35	42/39/36	42/39/36
Sound power level (H/M/L)	dB(A)	51/48/46	51/48/46	53/50/48	53/50/48	55/52/49	55/52/49
Installation – Dimensions							
Net dimensions (WxDxH)	mm	1116x221x624	1116x221x624	1116x221x624	1116x221x624	1116x221x624	1116x221x624
Packaged unit dimensions WxDxH	mm	1425x315x685	1425x315x685	1425x315x685	1425x315x685	1425x315x685	1425x315x685
Net weight / Gross weight	Kg	29,0/37,0	29,0/37,0	29,0/37,0	31,0/39,0	31,0/39,0	31,0/39,0
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	9,52 (3/8)
Ø Gas pipe	mm (inch)	9,52 (3/8)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	15,88 (5/8)
Static pressure (Standard/Max.)	Pa	0/30	0/30	0/30	0/30	0/30	0/30



AF052MBERA
 AF072MBERA
 AF092MBERA
 AF122MBERA
 AF162MBERA
 AF182MBERA

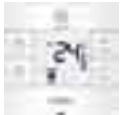
Optional controller HW-BA116ABK	Optional controller HW-BA101ABT	Optional controller YR-E17A	Optional remote control YR-HRS01	Optional controller YR-E16B

- Double air delivery, upper and lower.
In heating mode: both outputs are enabled, to spread hot air at floor level preventing the "cold feet" effect typical of only higher deliveries. By acting on the on-board selector it is possible to inhibit the lower output in heating mode.
In cooling mode: The unit works only with the top delivery, the lower output automatically closes.
- Compact and elegant design
- Silent operation
- DC inverter fan motor
- 5 fan speeds only selectable with wired controller YR-E16B and YR-E17A.

Model		AF052MBERA	AF072MBERA	AF092MBERA	AF122MBERA	AF162MBERA	AF182MBERA
Capacity							
Cooling	kW	1,50	2,20	2,80	3,60	4,50	5,00
Heating	kW	1,70	2,60	3,20	4,00	5,00	5,50
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
Ventilation							
Air flow (H/M/L)	m ³ /h	540/460/390/310/270	540/460/390/310/270	540/460/390/310/270	580/500/420/350/270	620/540/460/390/270	620/540/460/390/270
Sound pressure (H/M/L)	dB(A)	45/42/38/33/30	45/42/38/33/30	45/42/38/33/30	47/44/40/36/30	48/45/42/38/30	48/45/42/38/30
Sound power (H/M/L)	dB(A)	58/55/52/48/45	58/55/52/48/45	58/55/52/48/45	60/57/54/51/47	61/58/55/42/48	61/58/55/42/48
Installation – Dimensions							
Net dimensions (WxDxH)	mm	700x210x600	700x210x600	700x210x600	700x210x600	700x210x600	700x210x600
Packaged unit dimensions (WxDxH)	mm	783x303x695	783x303x695	783x303x695	783x303x695	783x303x695	783x303x695
Net/gross weight	Kg	15,2/18,7	15,2/18,7	15,2/18,7	15,2/18,7	15,2/18,7	15,2/18,7
Ø Liquid pipe	mm (inch)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)	6,35 (1/4)
Ø Gas pipe	mm (inch)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)	12,70 (1/2)



AD482MJERAF
AD722MTERAF
AD962MTERAF



Optional controller
HW-BA116ABK



Optional controller
HW-BA101ABT



Optional controller
YR-E17A



optional remote control YR-HRS01
(RE-02 remote control receiver)



Optional controller
YR-E16B

- Static pressure selection (16 speed for AD722/962MTERAF and 10 speed for AD482MTERAF)
- Can be installed together with other indoor units on the same refrigerating circuit, to pre-treat the outdoor air before sending it to indoor units or in the environment.
- Please notice that the nominal potential in heating is always lower than that of cooling.
- Integrated flow switch.

Model		AD482MJERAF	AD722MTERAF	AD962MTERAF
Capacity				
Cooling	kW	14,00	22,60	28,00
Heating	kW	8,90	15,20	17,80
Electrical Parameters				
Power supply	Ph/V/Hz	1/220-230/50/60	1/220-230/50/60	1/220-230/50/60
Ventilation				
Air flow (H/M/L)	m ³ /h	1600/1460/1070	4000/3500/3000	4500/4000/3600
Sound pressure (H/M/L)	dB(A)	48/47/42	50/47/44	51/48/45
Sound power (H/M/L)	dB(A)	61/60/56	68/65/60	68/66/62
Installation - Dimensions				
Net dimensions (WxDxH)	mm	1500x700x248	1512x856x502	11512x856x502
Packaged unit dimensions (WxDxH)	mm	1718x848x345	1558x896x612	1558x896x612
Net/gross weight	Kg	43,6/50,4	102,0/116,0	102,0/116,0
Ø Liquid pipe	mm (inch)	9,52 (3/8)	12,70 (1/2)	12,70 (1/2)
Ø Gas pipe	mm (inch)	15,88 (5/8)	22,22 (7/8)	22,22 (7/8)
Static pressure (Standard/Max.)	Pa	100/200	100/250	100/250

ERV0150ANW
ERV0260ANW
ERV0500ANW
ERV0800ANW
ERV1000ANW

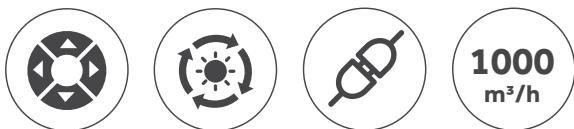


*Forecast launch date: October 2022

Not compatible with with MRV-S and MRV-5RC



Controller
W9301

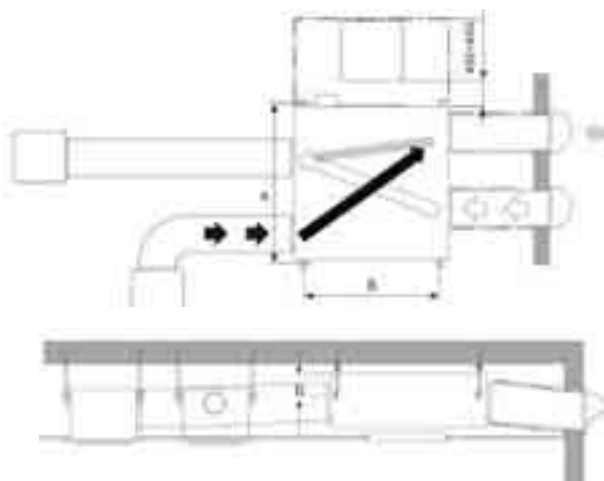


- Can be used in an MRV system, combined with other indoor units
- Efficient heat recovery and ventilation
- High treated airflow capacities, up to 1000m³/h max.

Model		ERV0150ANW	ERV0260ANW	ERV0500ANW	ERV0800ANW	ERV1000ANW
Electrical Parameters						
Power supply	Ph/V/Hz	1/220-230/50/60	1/220-230/50/61	1/220-230/50/62	1/220-230/50/63	1/220-230/50/64
Rated power input	Ph/V/Hz	135	165	280	360	420
Rated current	Ph/V/Hz	0,65	0,79	1,34	1,72	2,01
Enthalpy exchange effectiveness						
Rated current	Ph/V/Hz	58 %	57 %	61 %	68 %	61 %
Rated current	Ph/V/Hz	65 %	65 %	68 %	72 %	65 %
Ventilation						
Air flow (H/M/L)	m ³ /h	150/110/70	250/200/160	500/430/375	800/680/600	1000/810/730
Sound pressure (H/M/L)	dB(A)	38/35/30	40/38/35	45/42/40	48/46/43	50/48/45
Sound power (H/M/L)	dB(A)	48/45/40	50/48/45	55/52/50	58/56/53	60/58/55
Installation - Dimensions						
Net dimensions (WxDxH)	mm	750x530x240	750x530x270	1000x710x270	1200x940x324	1250x935x350
Packaging dimensions (WxDxH)	mm	955x575x305	955x575x335	1205x755x335	1405x985x389	1455x980x415
Net/gross weight	kg	26,0/28,0	30,0/32,0	40,0/42,0	55,0/59,0	56,0/60,0

DIMENSIONS

Model	A	B	H
ERV0150ANW	530	750	230
ERV0260ANW	530	750	270
ERV0500ANW	690	1000	256
ERV0800ANW	920	1200	324
ERV1000ANW	915	1250	350





HU092WVLNA
HU162WVLNA
HU312WVLNA

9 / 16 / 31kW

*Expected launch date October 2022.

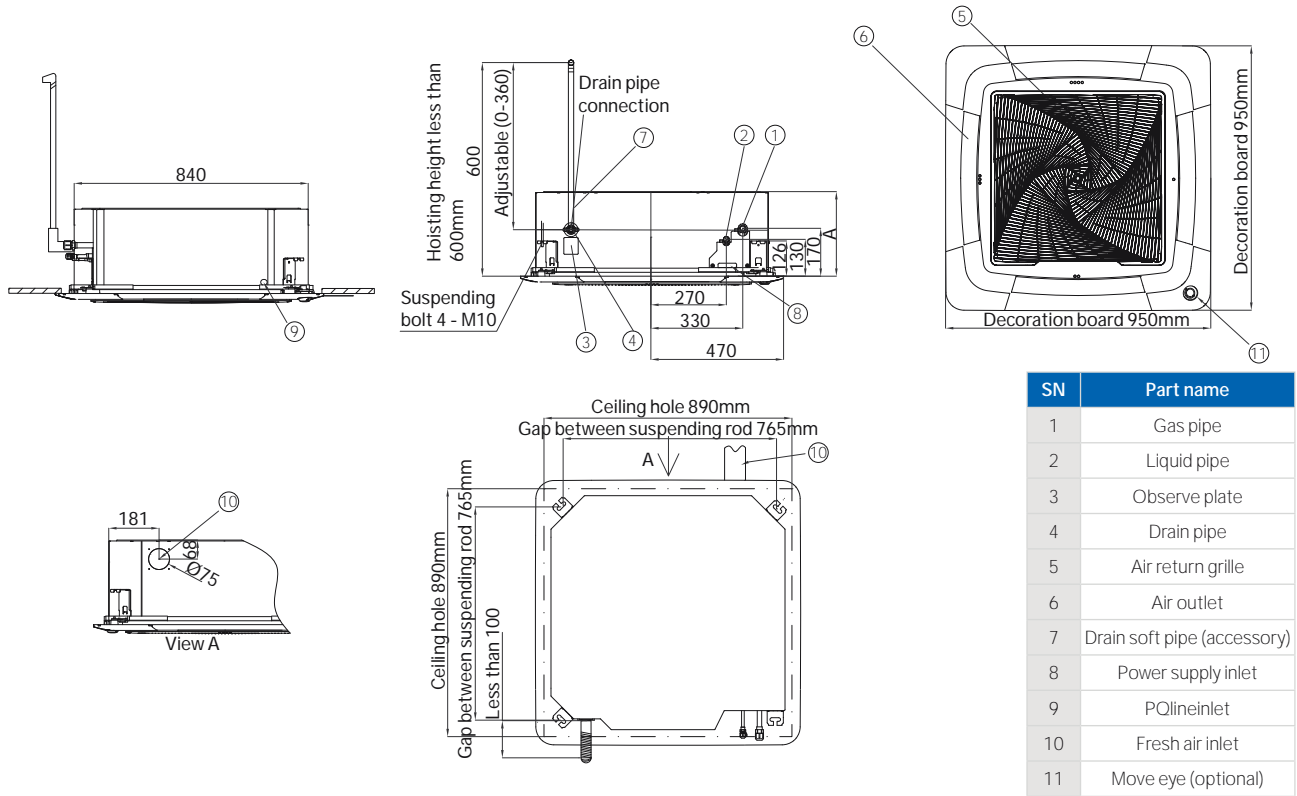
Haier hydro unit makes it possible to use VRF systems to provide users with comfortable air conditioner, hot water heating and domestic hot water. This solution is suitable for both residential area and commercial area, such as residences, office buildings, hotels, hospitals, etc.

- Integrated solutions (ATA, ATW, DHW) In one system
- Stylish appearance
- Water outlet temperature up to 50°C.
- Multiple modules combination for bigger capacity demand
- Wall-Mounted type saving space
- Connectable to MRV 5, MRV 5-H, MRV 5-RC and MRV S^{II}
- Easy maintenance due to patented design



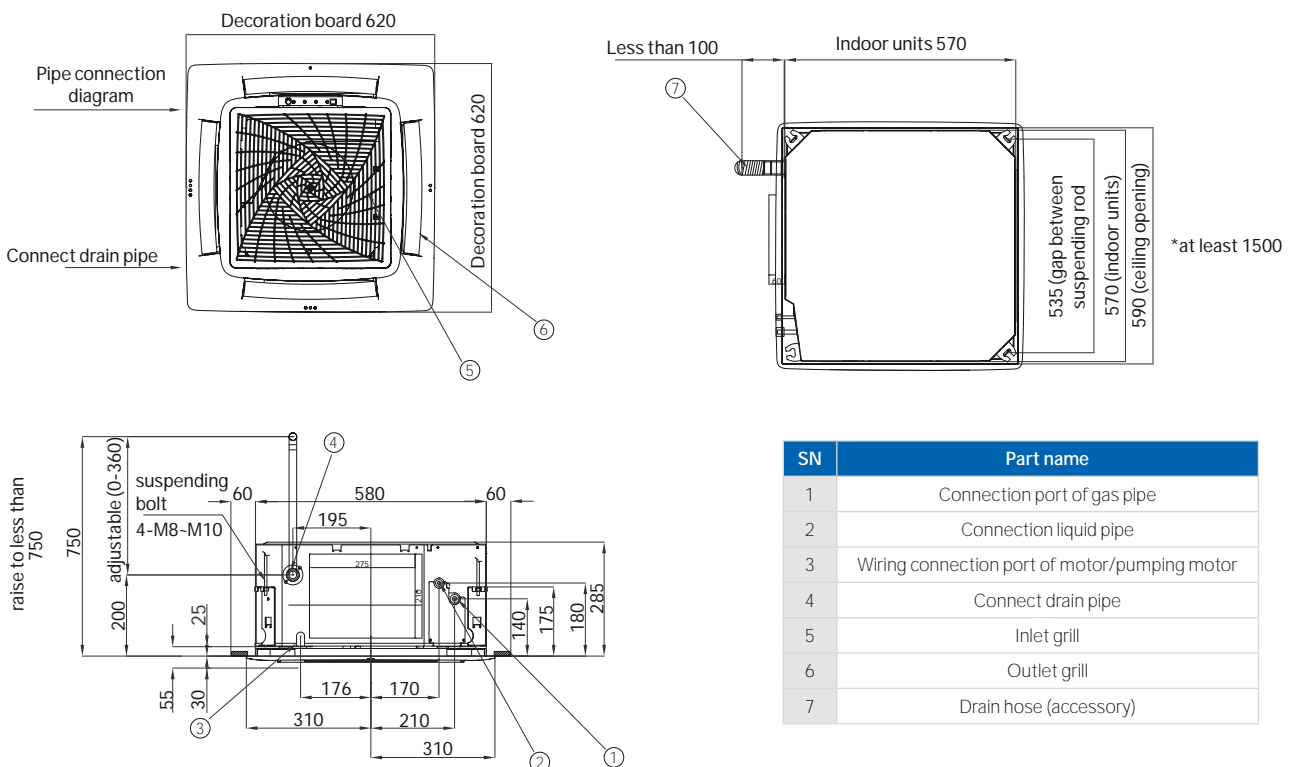
MRV INDOOR UNITS CASSETTE SMART FLOW

AB072MRERA AB092MRERA AB122MRERA AB162MRERA AB182MRERA AB242MRERA
 AB282MRERA AB302MRERA AB382MRERA AB482MRERA AB602MRERA



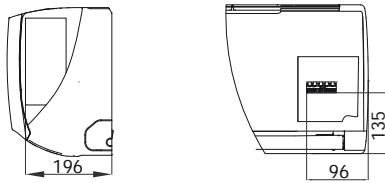
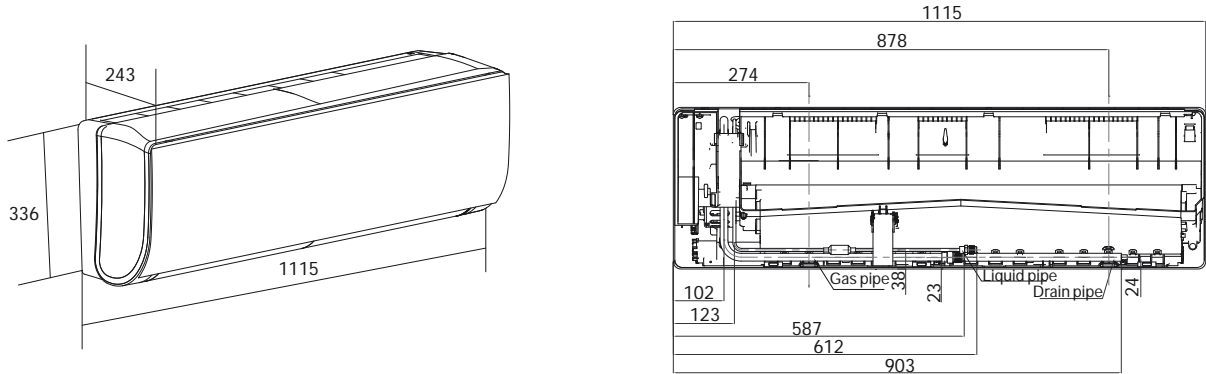
MRV INDOOR UNIT 4-WAY CASSETTE 60X60

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

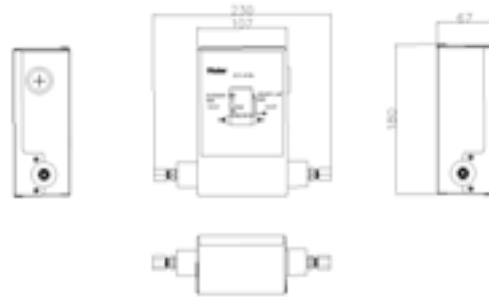


MRV INDOOR UNIT WALL MOUNTED

AS162MNERA AS182MNERA AS242MNERA AS162MNERAC AS182MNERAC AS242MNERAC

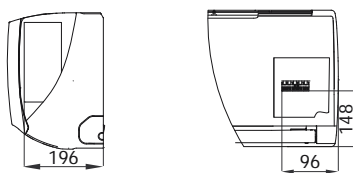
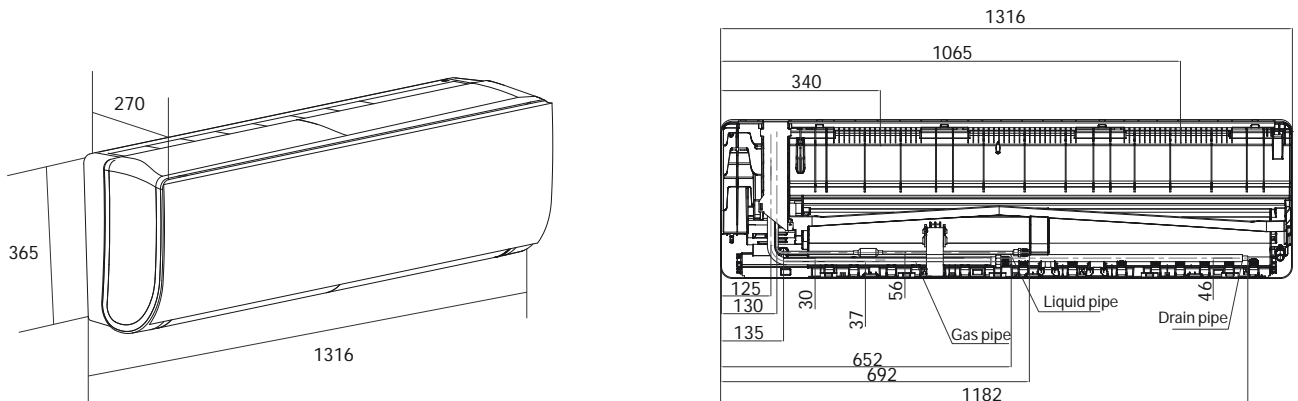


EXTERNAL EEV VALVE

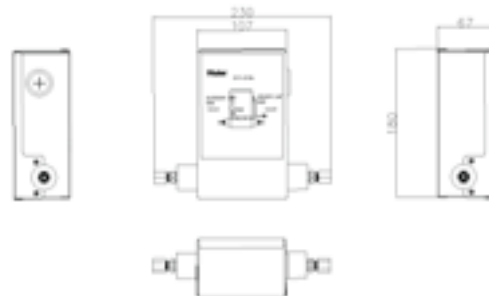


MRV INDOOR UNIT WALL MOUNTED

AS282MNERA AS302MNERA AS282MNERAC AS302MNERAC

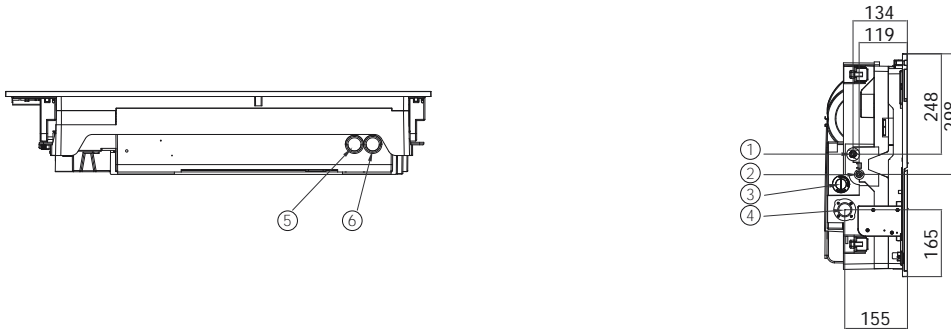


EXTERNAL EEV VALVE

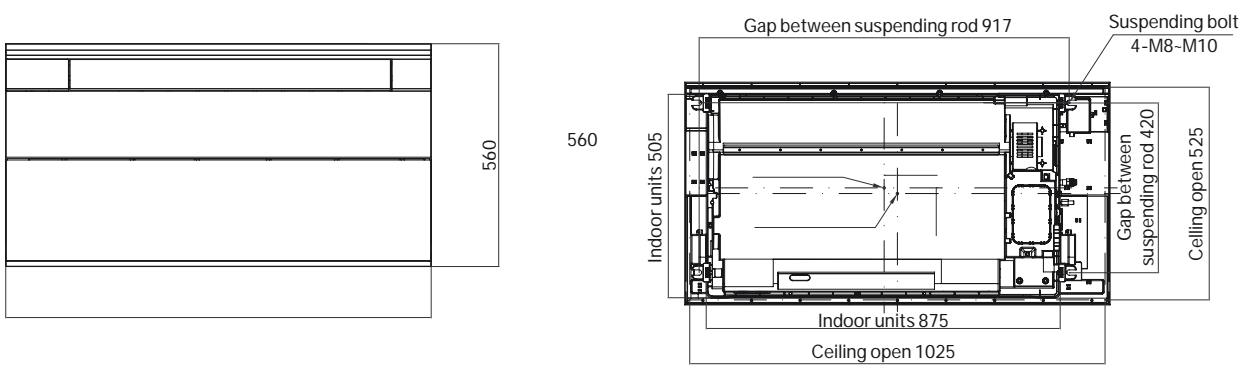


MRV INDOOR UNIT 1-WAY CASSETTE

AB052MAERA AB072MAERA AB092MAERA AB122MAERA

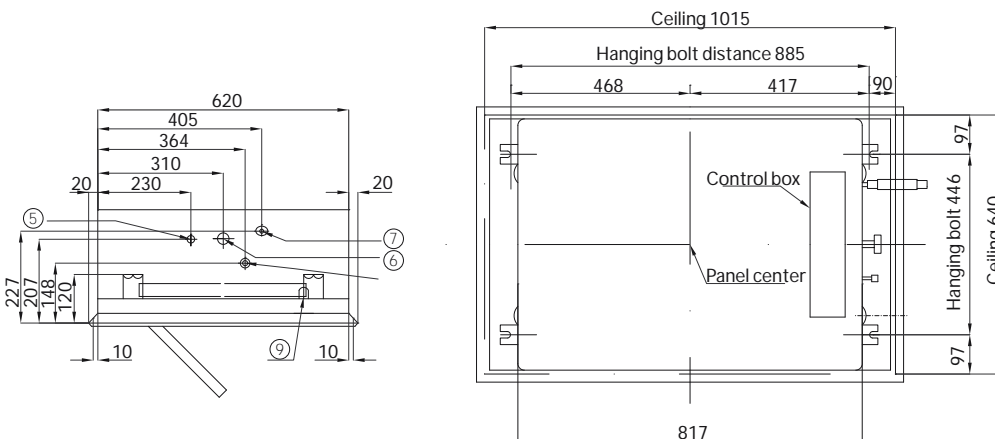
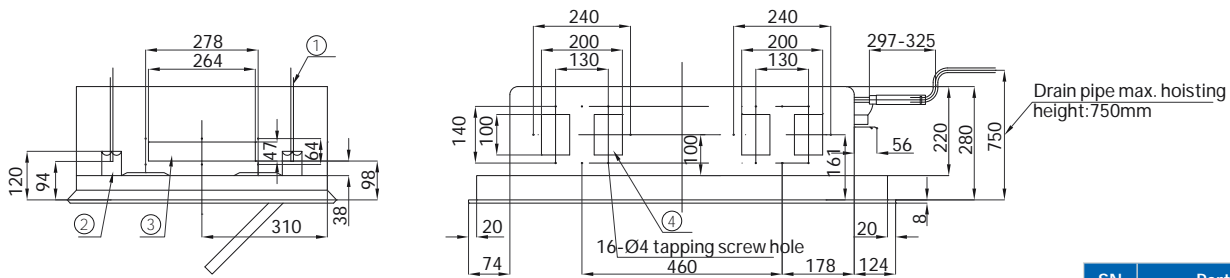


SN	Part name
1	Gas pipe
2	Liquid pipe
3	Water filling hole
4	Drain pipe
5	Power supply
6	Communication wire



MRV INDOOR UNIT 2-WAY CASSETTE

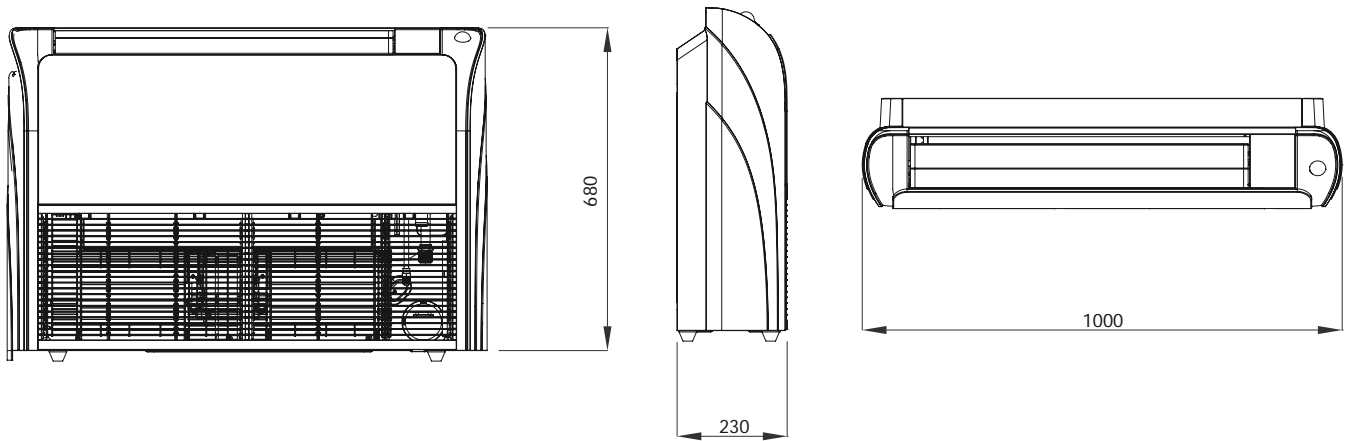
AB072MBERA AB092MBERA AB122MBERA AB162MBERA AB182MBERA



SN	Part name
1	Hanging bolt
2	Pothead
3	Fresh air entrance
4	Exhaust outlet: 4
5	Liquid pipe connect hole
6	Gas pipe connect hole
7	Drain pipe connect hole
8	Natural drain
9	Power line entrance

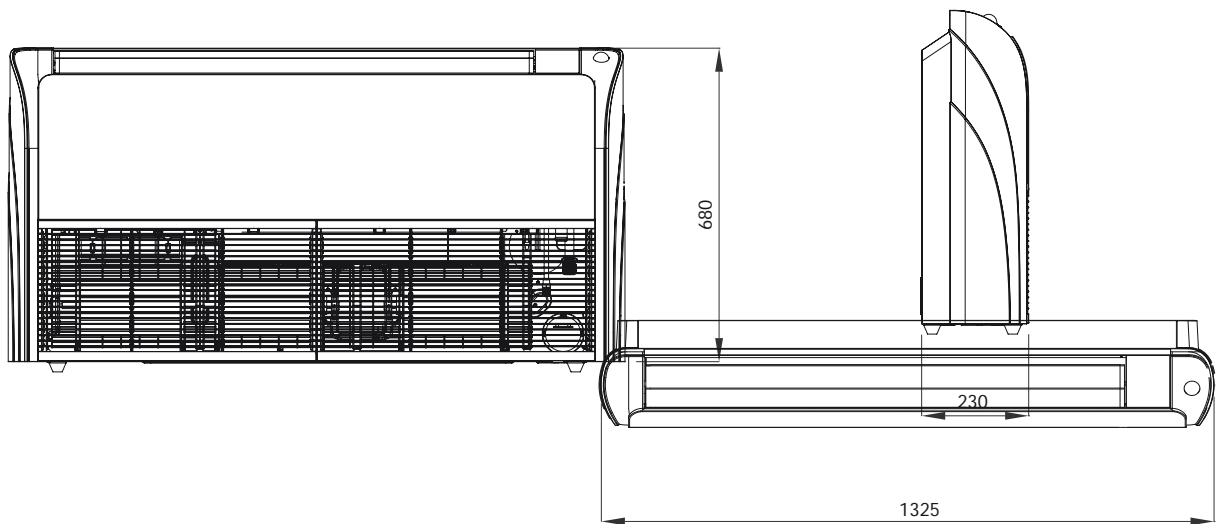
CONVERTIBLE

AC092MDERA AC122MDERA AC162MDERA AC182MDERA



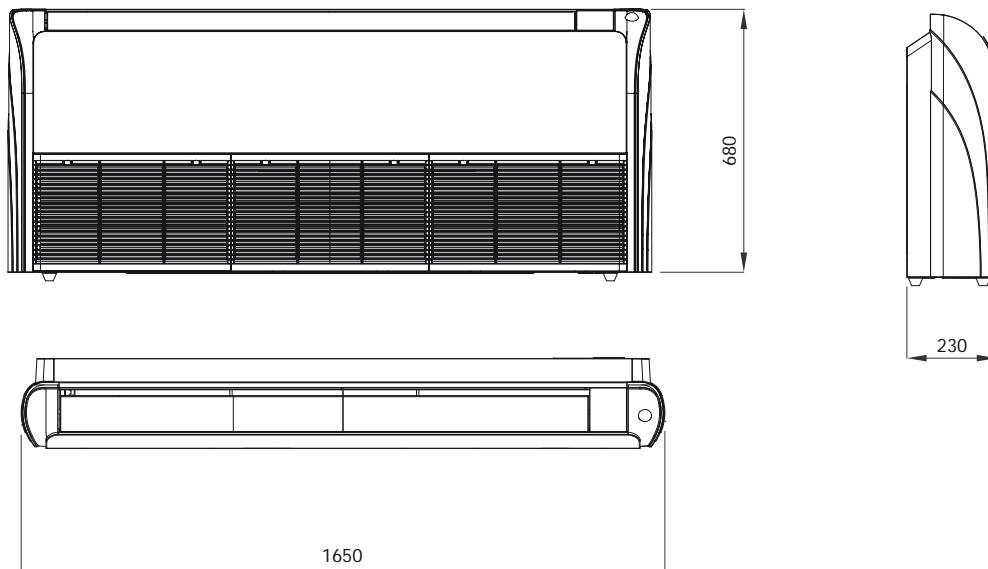
CONVERTIBLE

AC242MDERA AC282MDERA AC302MDERA



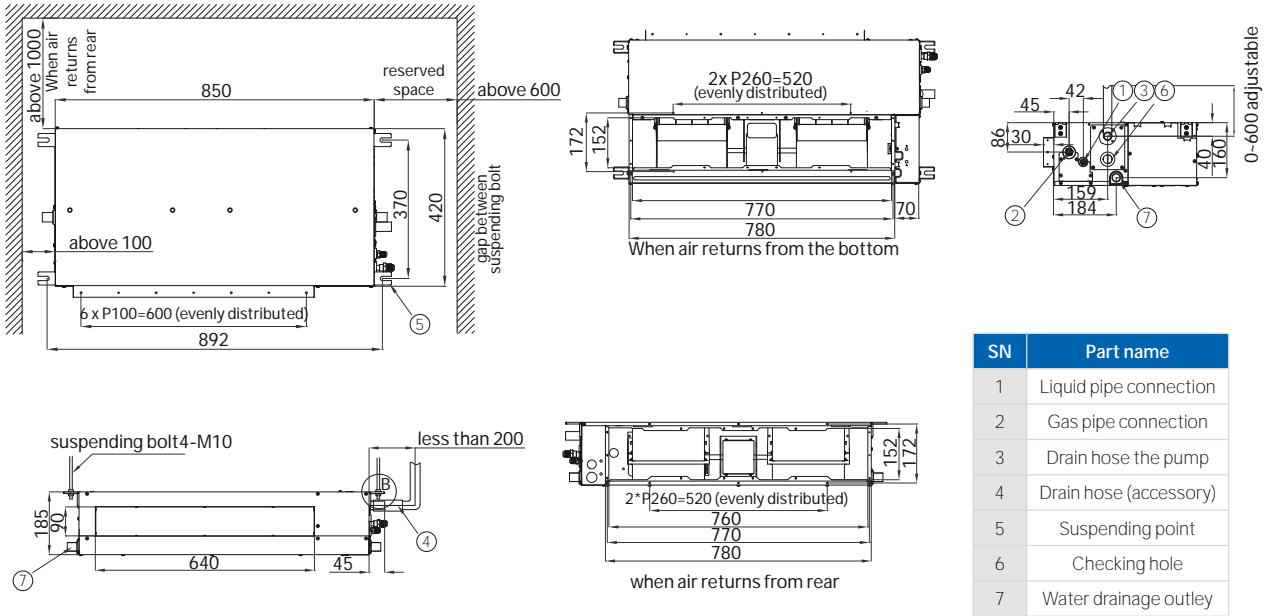
CONVERTIBLE

AC382MDERA AC482MDERA



MRV INDOOR UNIT SLIM DUCT LOW PRESSURE

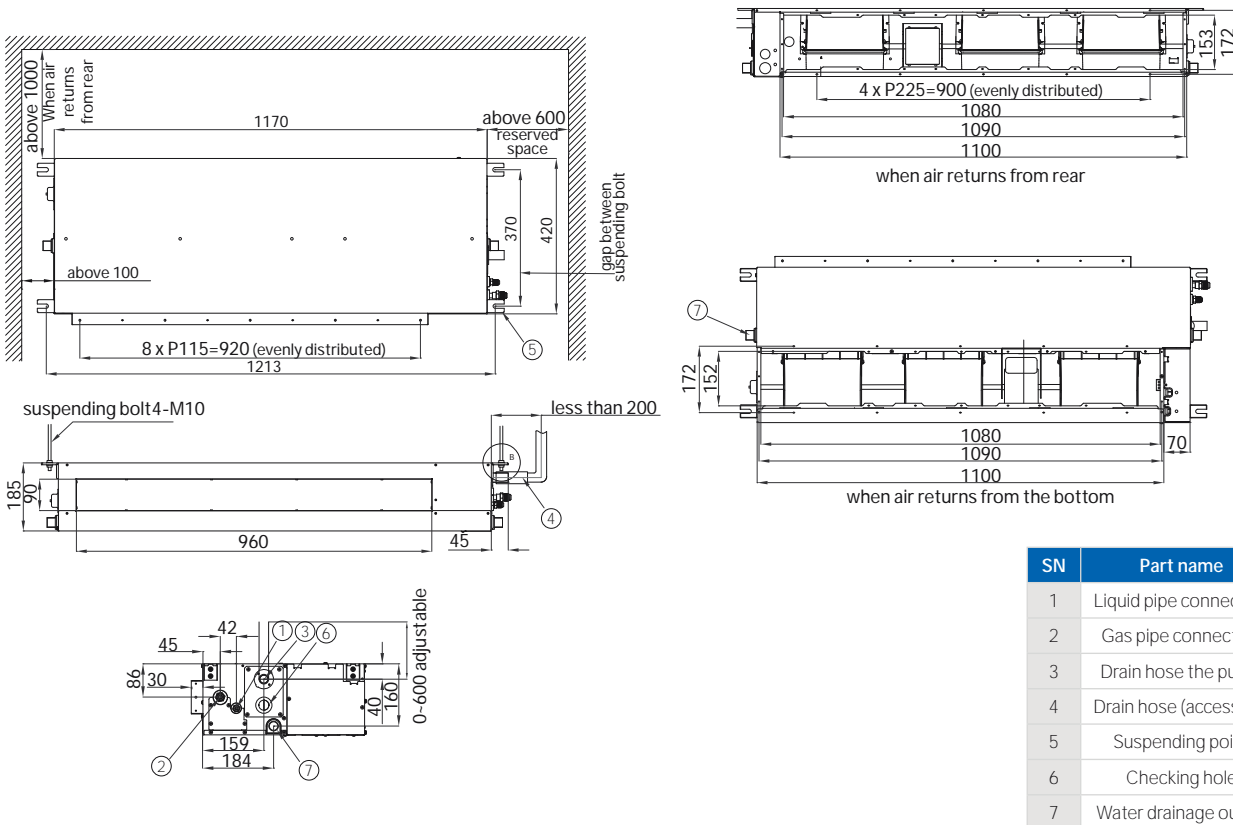
AD052MSERA(D) AD072MSERA(D) AD092MSERA(D) AD122MSERA(D) AD162MSERA(D)
 AD052MSERA(H) AD072MSERA(H) AD092MSERA(H) AD122MSERA(H) AD162MSERA(H)



SN	Part name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose the pump
4	Drain hose (accessory)
5	Suspending point
6	Checking hole
7	Water drainage outley

MRV INDOOR UNIT SLIM DUCT LOW PRESSURE

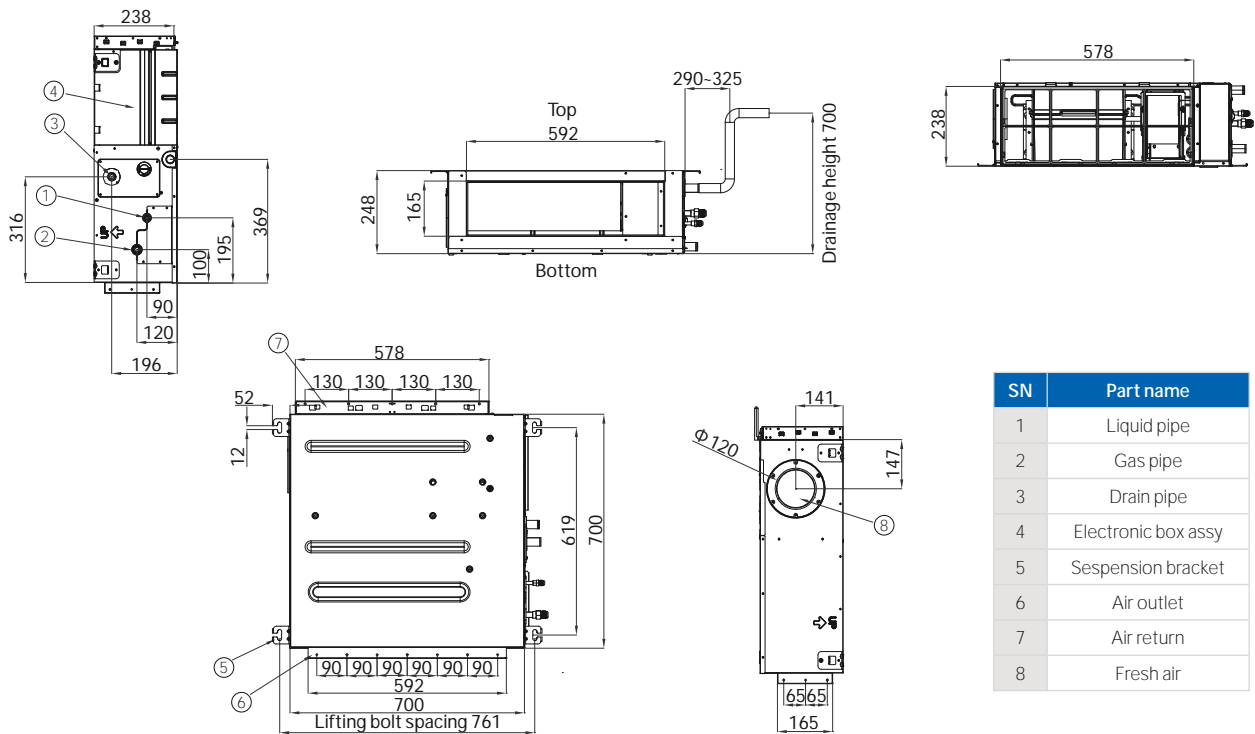
AD182MSERA(D) AD242MSERA(D) AD182MSERA(H) AD242MSERA(H)



SN	Part name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain hose the pump
4	Drain hose (accessory)
5	Suspending point
6	Checking hole
7	Water drainage outley

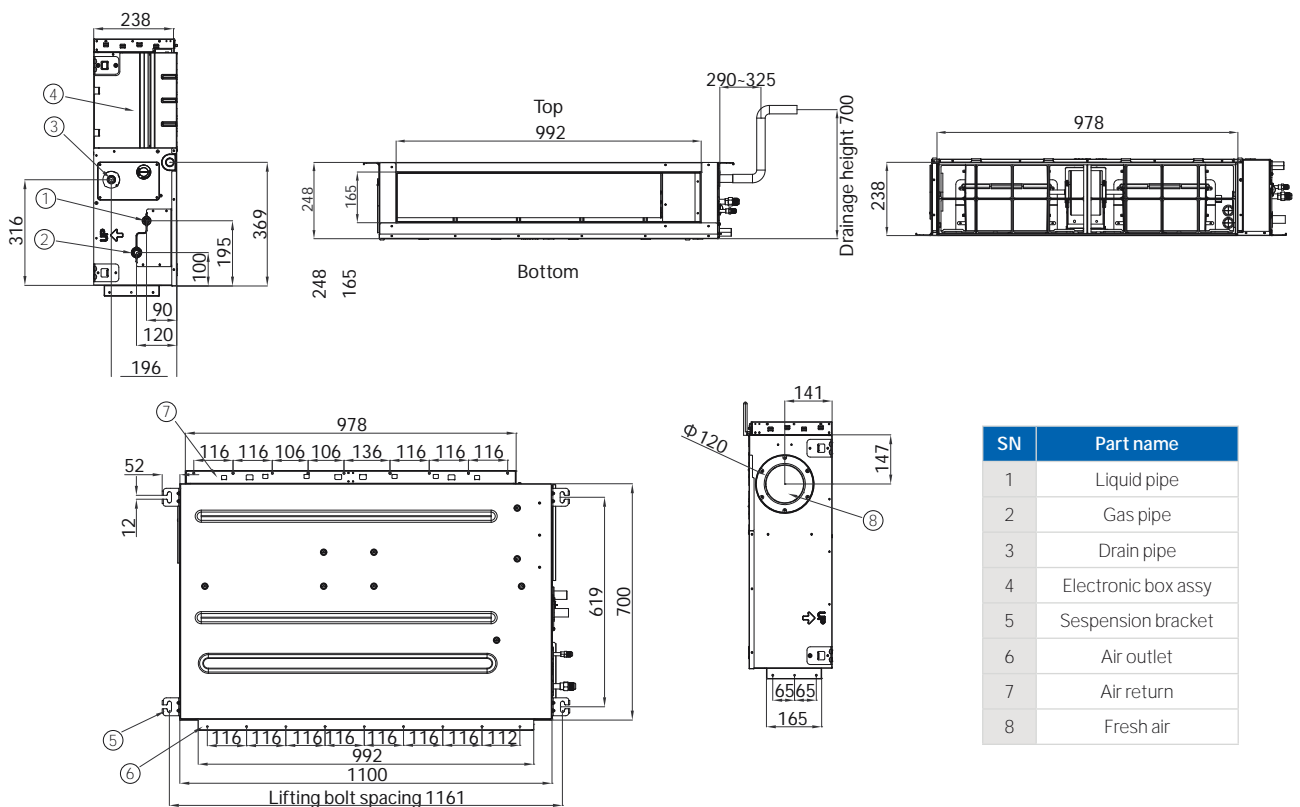
MRV INDOOR UNIT DUCTED MEDIUM PRESSURE

AD52MJERAD AD72MJERAD AD92MJERAD AD122MJERAD AD162MJERAD
 AD052MJERA(H) AD072MJERA(H) AD092MJERA(H) AD122MJERA(H) AD162MJERA(H)



MRV INDOOR UNIT DUCTED MEDIUM PRESSURE

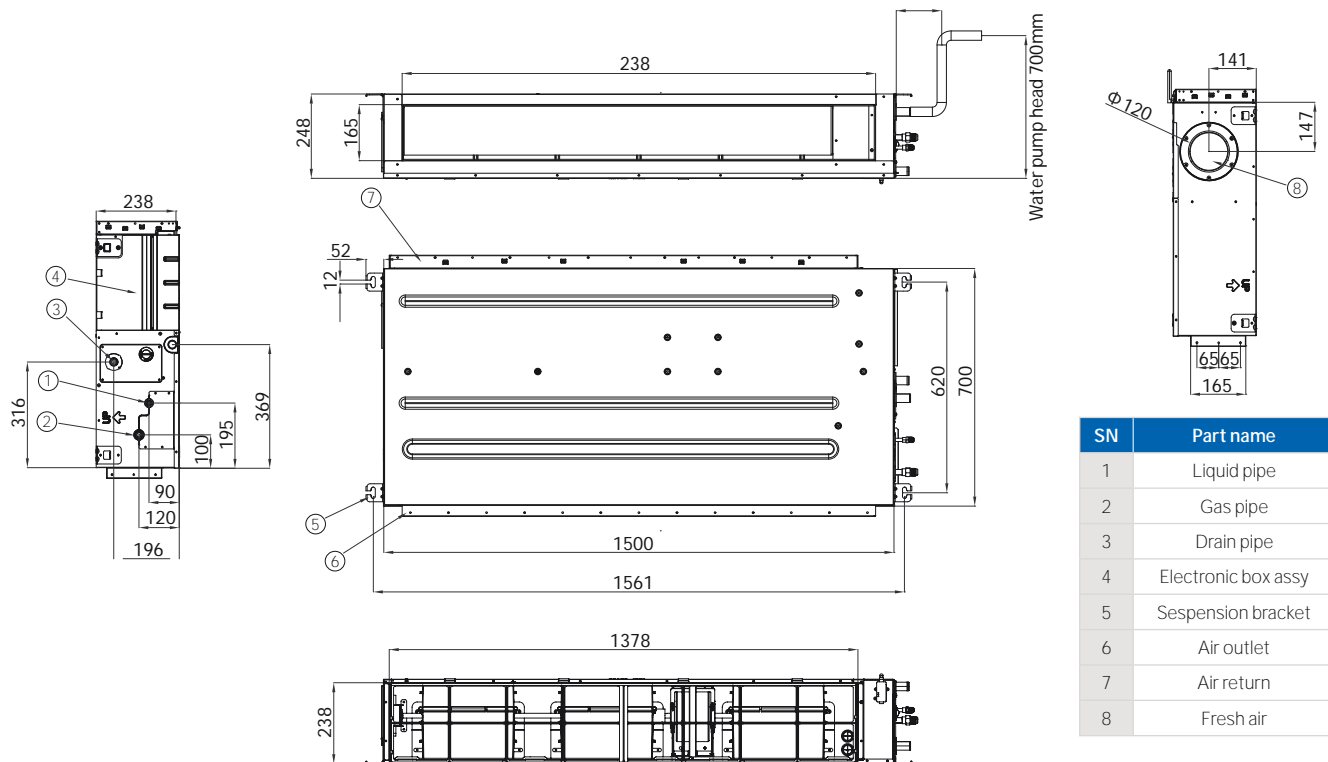
AD182MJERAD AD242MJERAD AD282MJERAD AD302MJERAD
 AD182MJERA(H) AD242MJERA(H) AD282MJERA(H) AD302MJERA(H)



The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

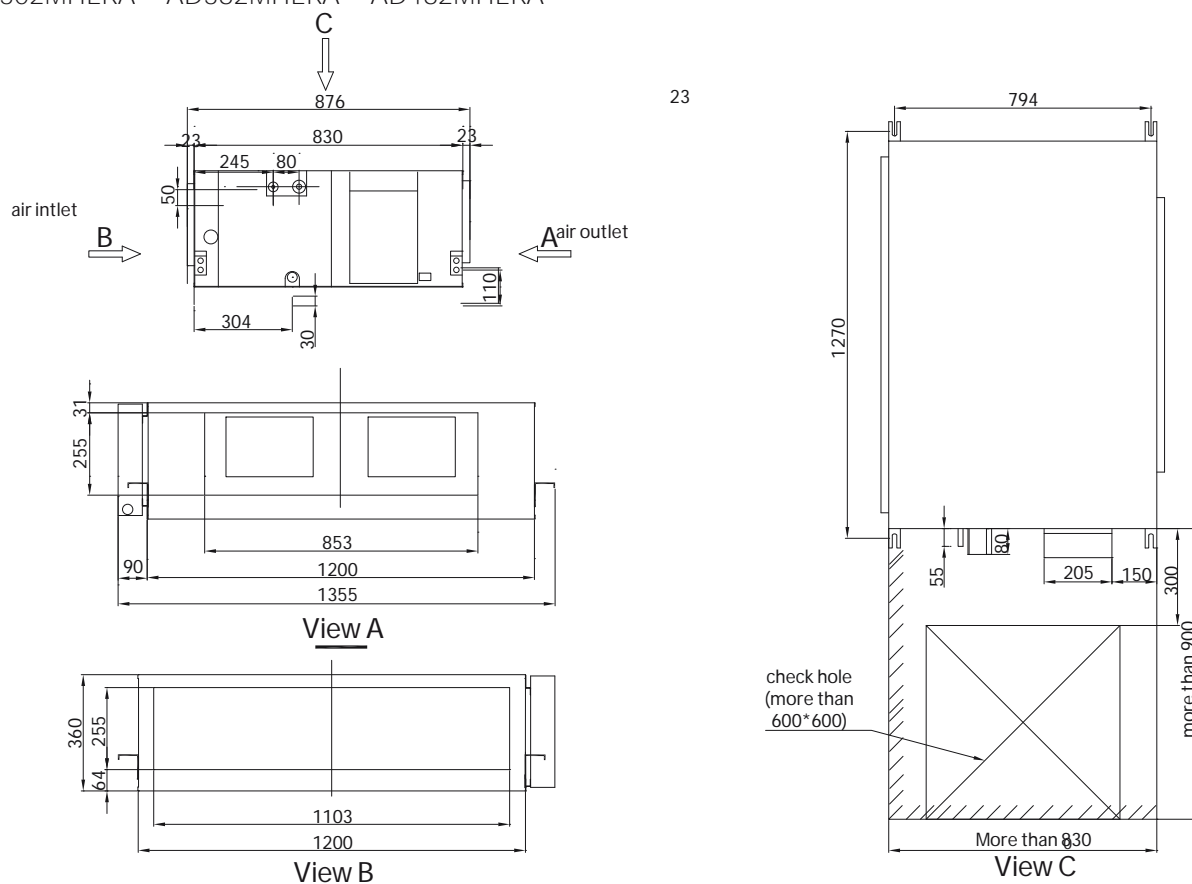
MRV INDOOR UNIT DUCTED MEDIUM PRESSURE

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



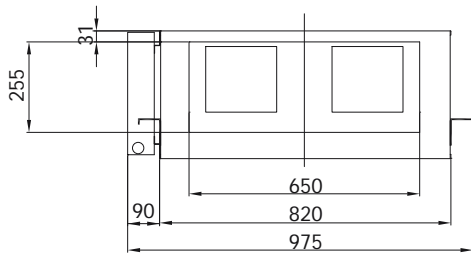
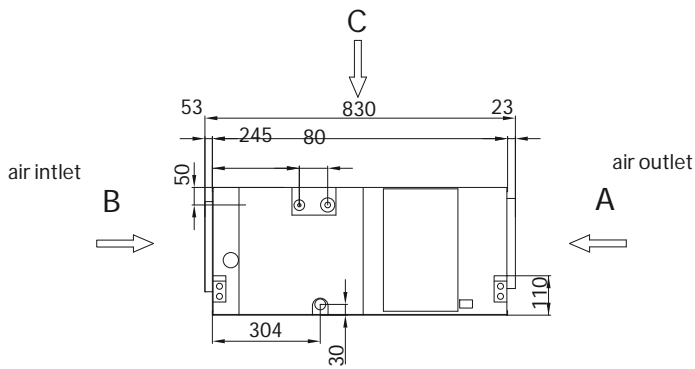
MRV INDOOR UNIT DUCTED MEDIUM PRESSURE

AD302MHERA AD382MHERA AD482MHERA

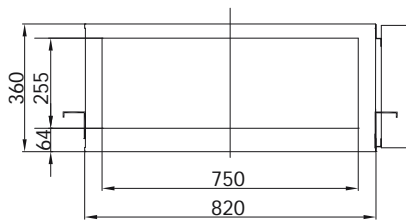


MRV INDOOR UNIT DUCTED HIGH PRESSURE

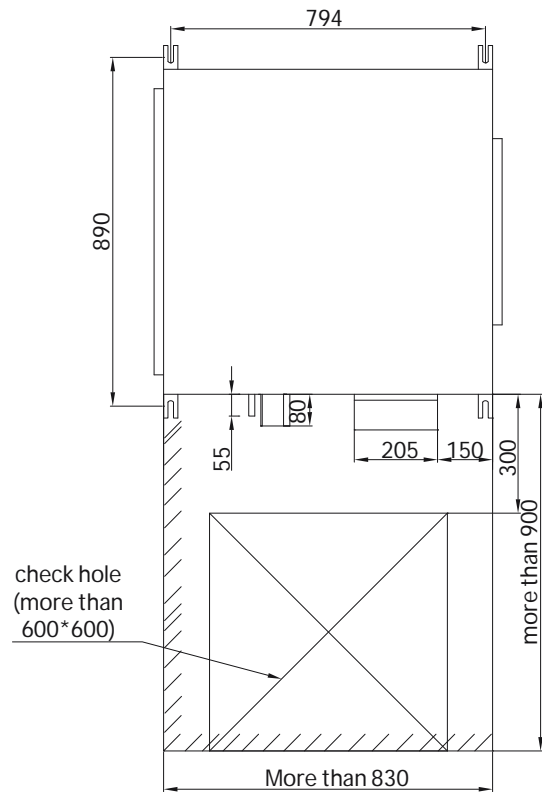
AD182MHERA AD242MHERA AD282MHERA



View A



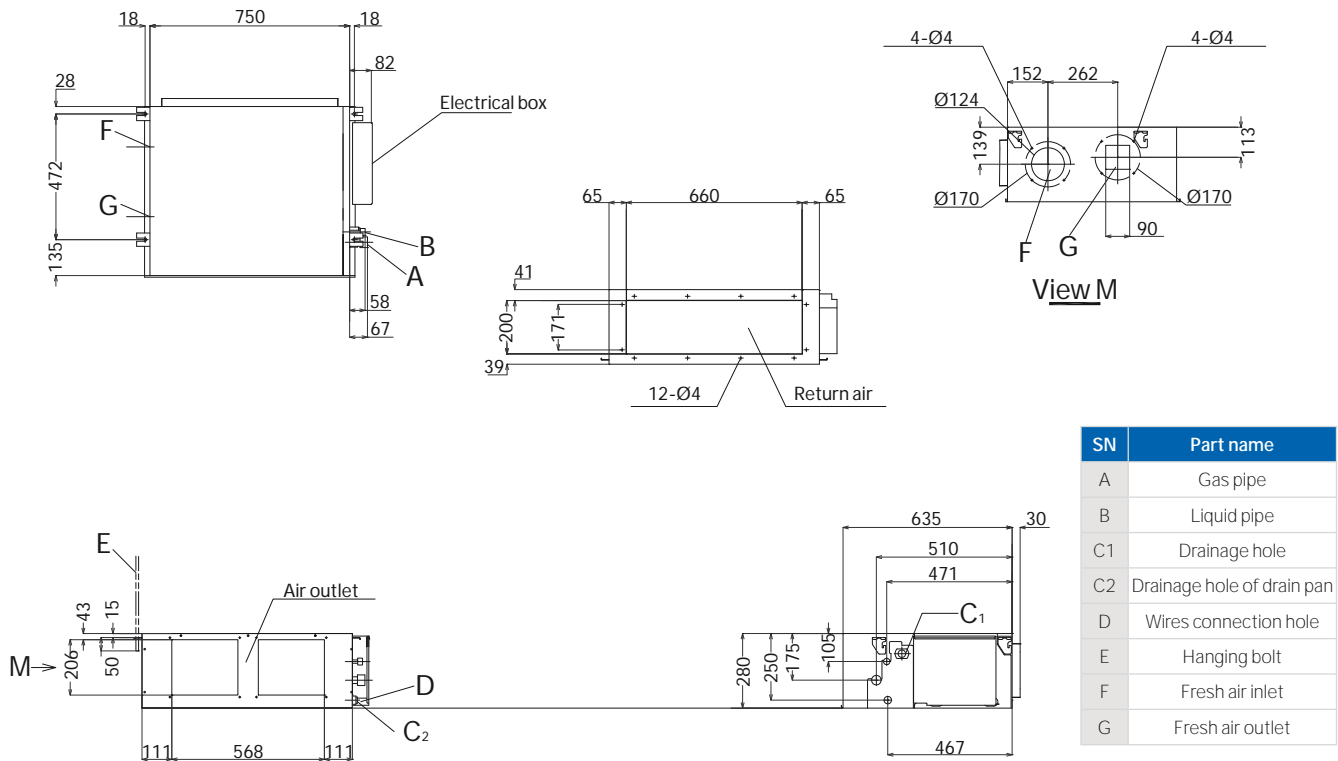
View B



View C

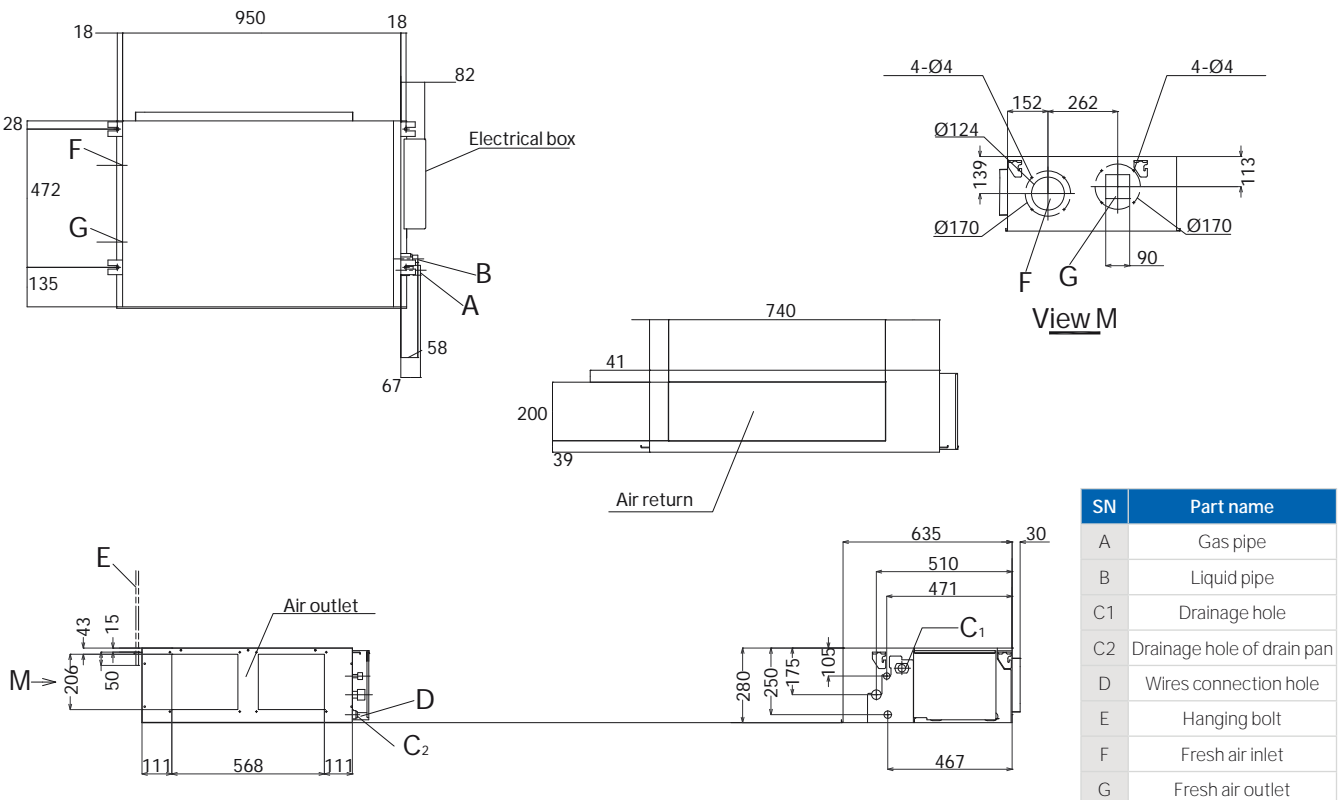
MRV INDOOR UNIT DUCTED - FIXED FLOW

AD072MQERA AD092MQERA AD122MQERA AD152MQERA AD182MQERA



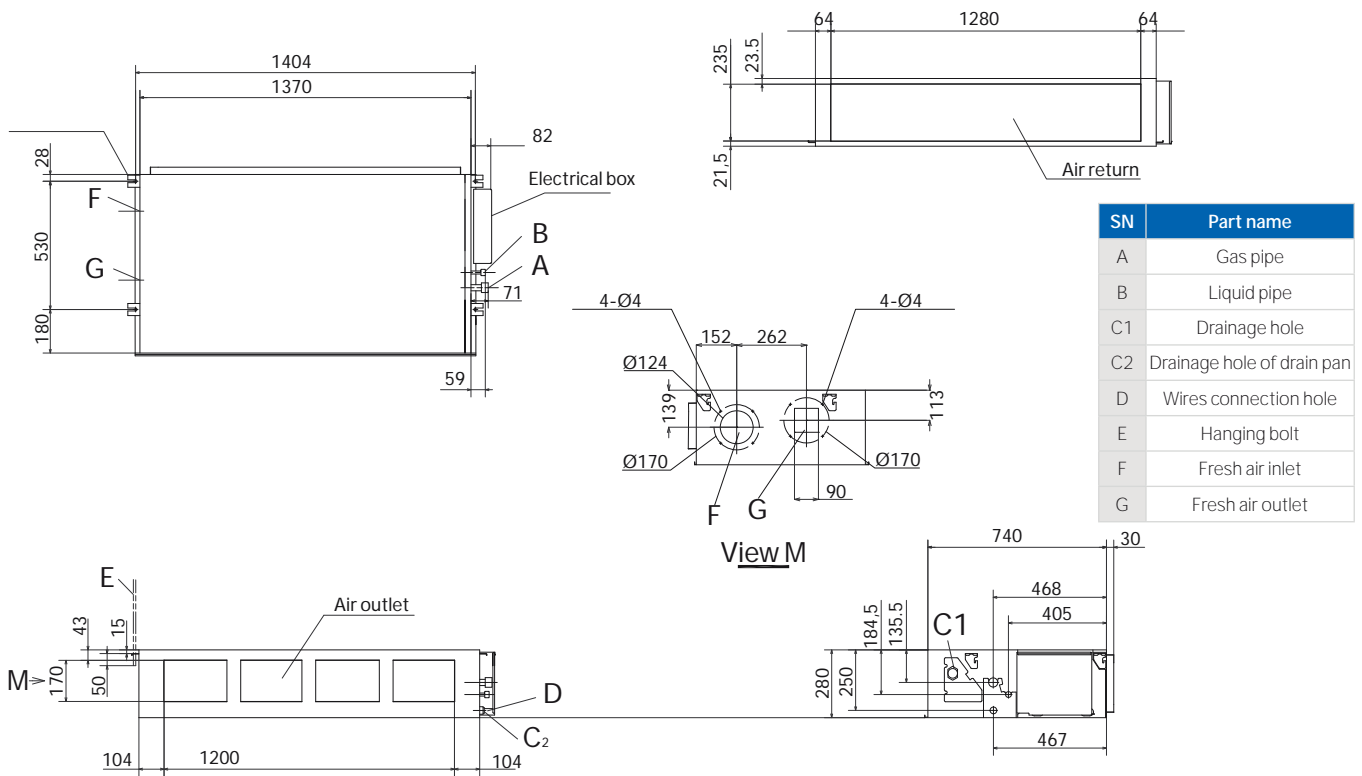
MRV INDOOR UNIT DUCTED - FIXED FLOW

AD242MQERA AD282MQERA AD302MQERA



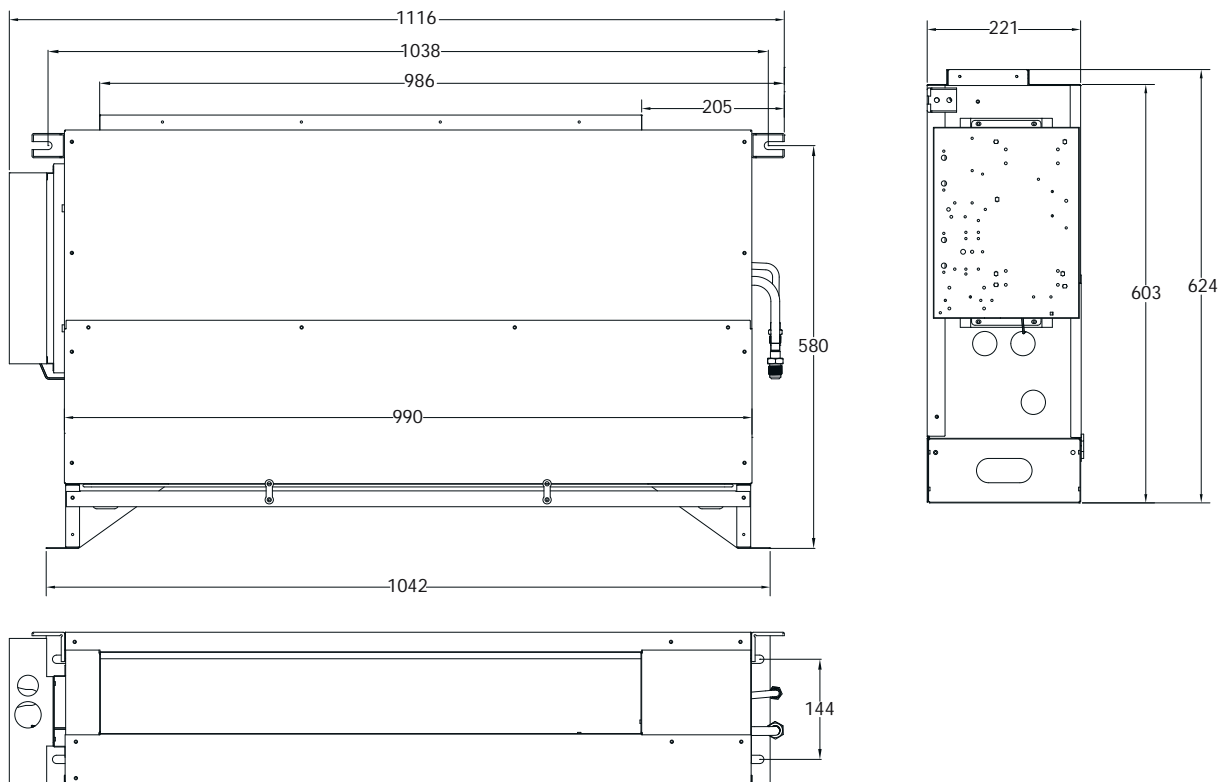
MRV INDOOR UNIT DUCTED - FIXED FLOW

AD362MQERA AD422MQERA AD482MQERA AD542MQERA



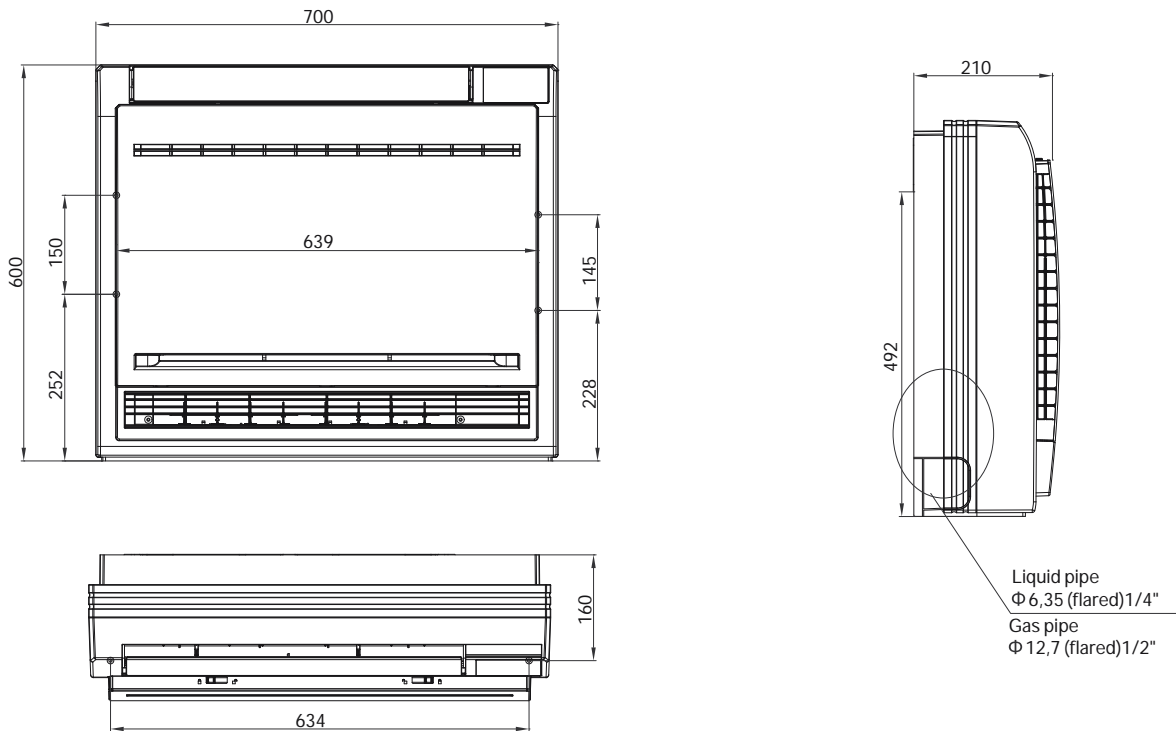
UNIT INTERNAL FLOOR CONSOLE, BUILT-IN

AE072MLERA AE092MLERA AE122MLERA AE162MLERA AE182MLERA AE242MLERA



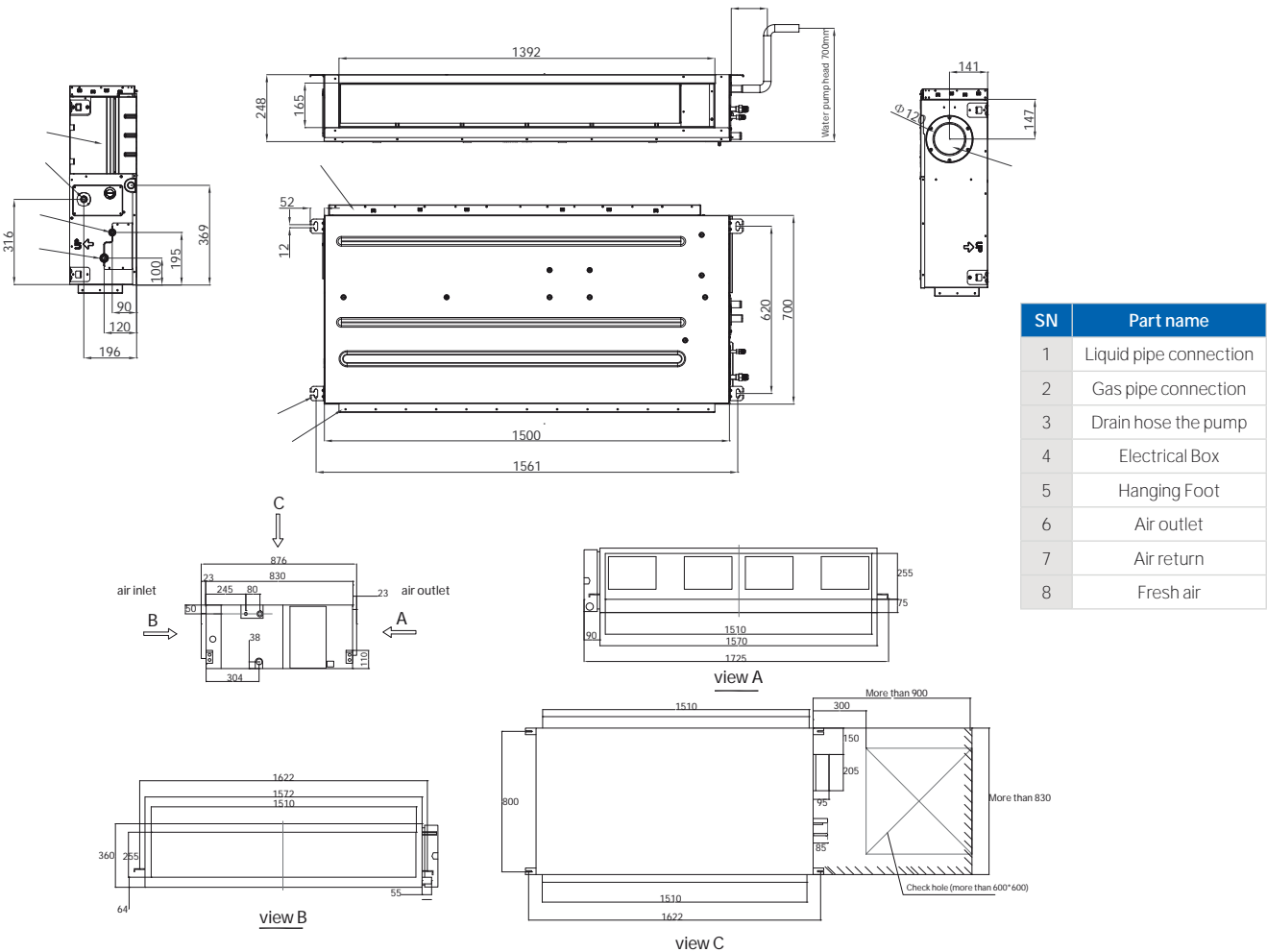
MRV INDOOR UNIT FLOOR CONSOLE, EXPOSED TYPE, DOUBLE FLOW

AF052MBERA AF072MBERA AF092MBERA AF122MBERA AF162MBERA AF182MBERA



MRV INDOOR UNITS DUCTED HIGH-PRESSURE AT ALL OUTDOOR AIR

AD482MJERF AD722MJERF AD962MJERF



EASY MRV

Flexible,
high-efficiency
MRV systems

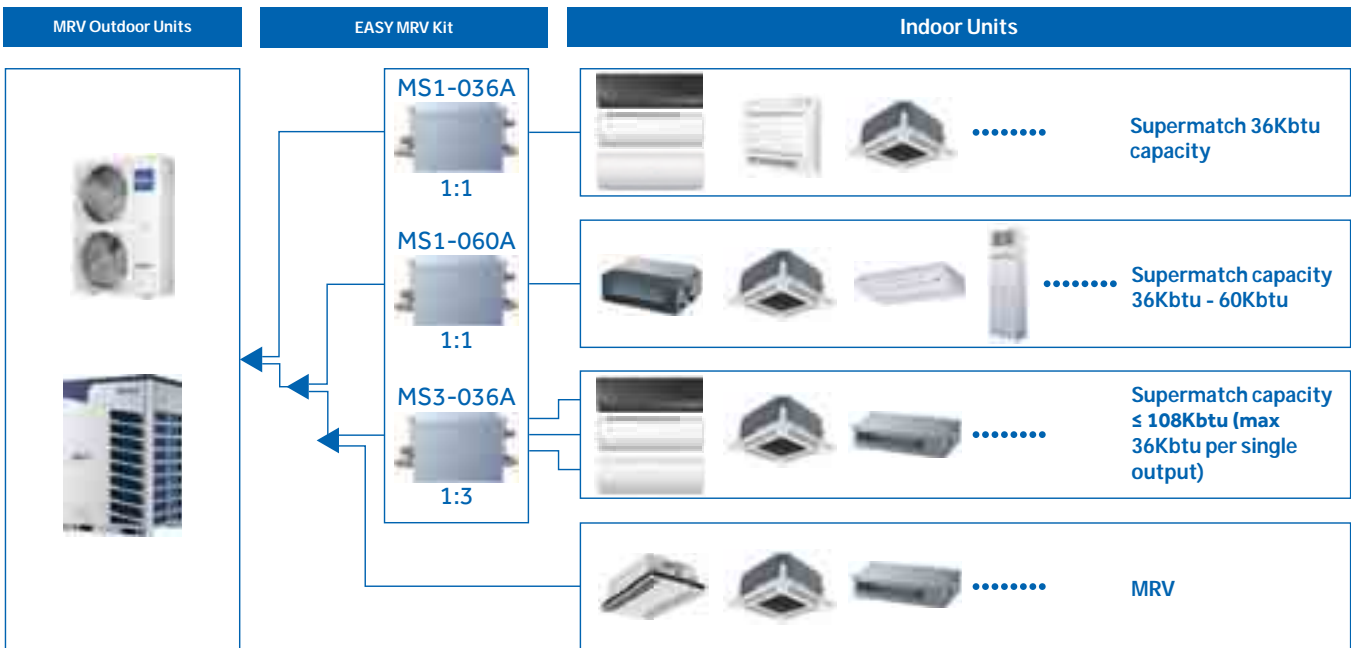
MS valves for
connecting residential
and commercial units

EASY MRV - FEATURES

EASY MRV SYSTEMS

Haier's "Easy MRV" system is the ideal solution for environments where an exceptionally low sound level is required by the indoor air conditioning unit.

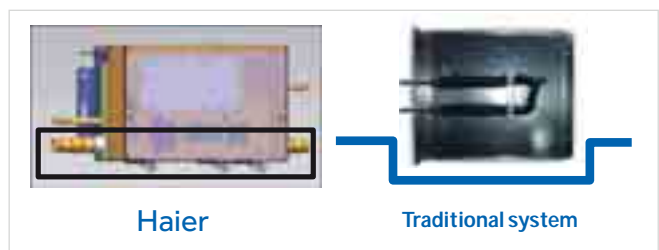
Thanks to the external remote thermal expansion valves (MS valve box) it is possible to connect to our Supermatch indoor residential units. Which as standard are not equipped with a valve and ensure very low operating sound levels, to the MRV outdoor units (with some types of indoor units, you can reach 16 dBA). In addition, if you are looking for internal wall units with a modern and different design, with high class functionality and features, our FLEXIS and PEARL series connected to an "Easy MRV" system will meet your requirements.



CONNECTIONS



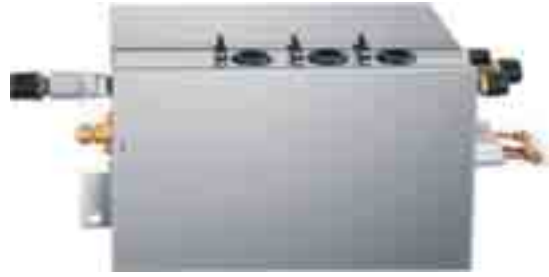
Haier's valve boxes have built-in gas pipes to facilitate installation without requiring welds due to utilising a flare connection.



EASY MRV



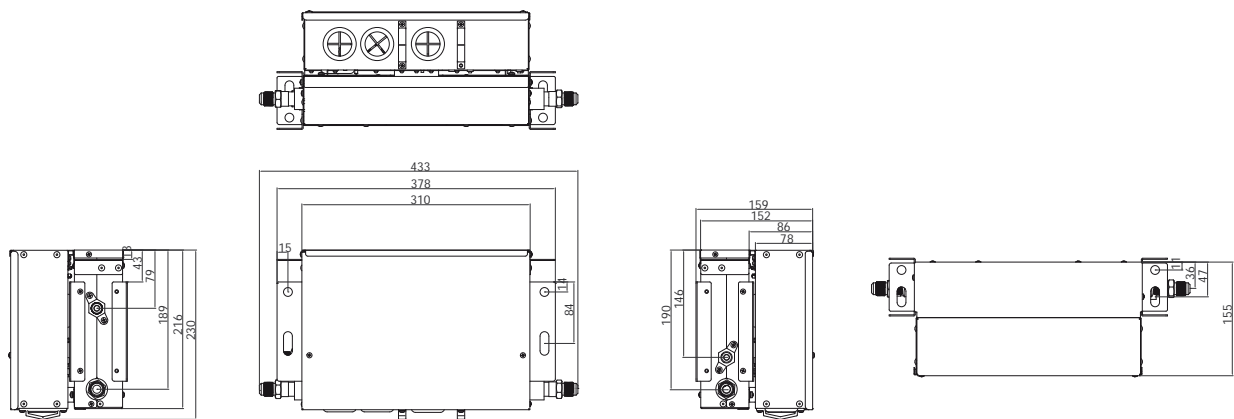
MS1-036A
MS1-060A



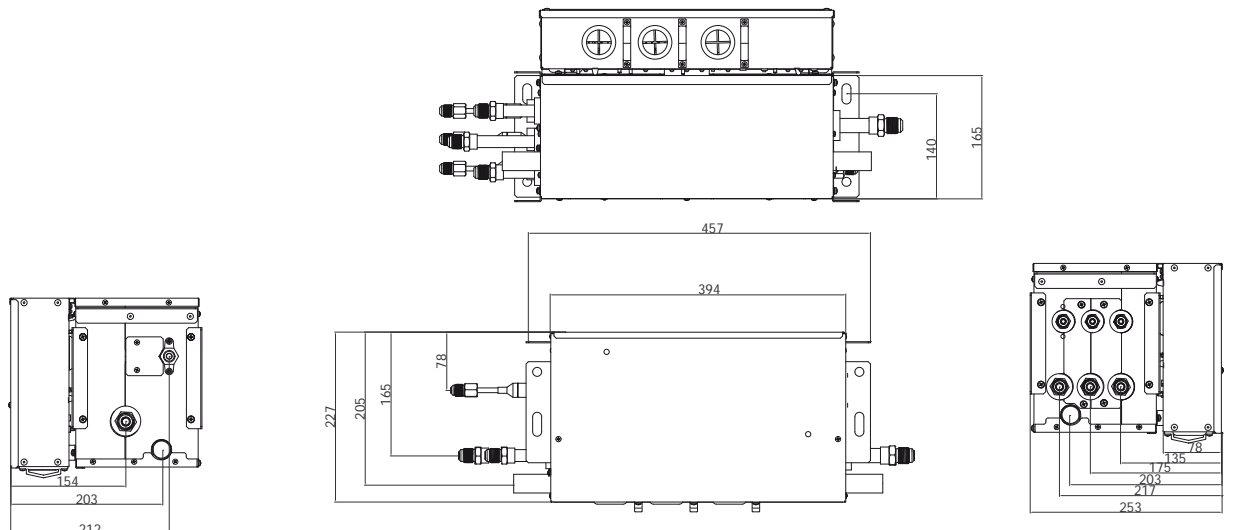
MS3-036A

Model		MS1-036A	MS1-060A	MS3-036A
Max number of indoor units	No.	1	1	3
Maximum connectable indoor unit capacity	Btu/h	≤ 36Kbtu	36Kbtu - 60Kbtu	≤ 36Kbtu per single output (Tot. max 108Kbtu)
	kW	11,2	11,2 to 18,0 kW	Max 33,6 kW (max 11,2 kW per single output)
Power supply	V-Ph-Hz	220-230-1-50/60	220-230-1-50/60	220-230-1-50/60
Dimensions WxDxH	mm	310x217x155	310x217x155	394x227x253
Shipping Dimensions WxDxH	mm	509x285x209	509x285x209	687x295x303
Net weight	Kg	5	5	9
Material		Galvanised steel	Galvanised steel	Galvanised steel
Colour		Grey	Grey	Grey
Liquid pipe Ø	mm	9,52 (male) / 6,35	9,52 (male) / 12,7	6,35 (male) / 9,52 (male) / 12,7
Gas pipe Ø	mm	15,88 (male) / 12,7 / 9,52	19,05 (male) / 15,88	19,05 (male) / 15,88 - 15,88 (male) / 12,7 / 9,52
Connection type		Flare connection	Flare connection	Flare connection
Maximum piping length (BOX - IU)	m	15	15	15
Maximum height difference of pipes (BOX - IU)	m	15	15	15

AS25 - AS35 - AS42



AS25 - AS35 - AS42



The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

JOINTS FOR 3-PIPE CIRCUIT - INDOOR UNIT SIDE

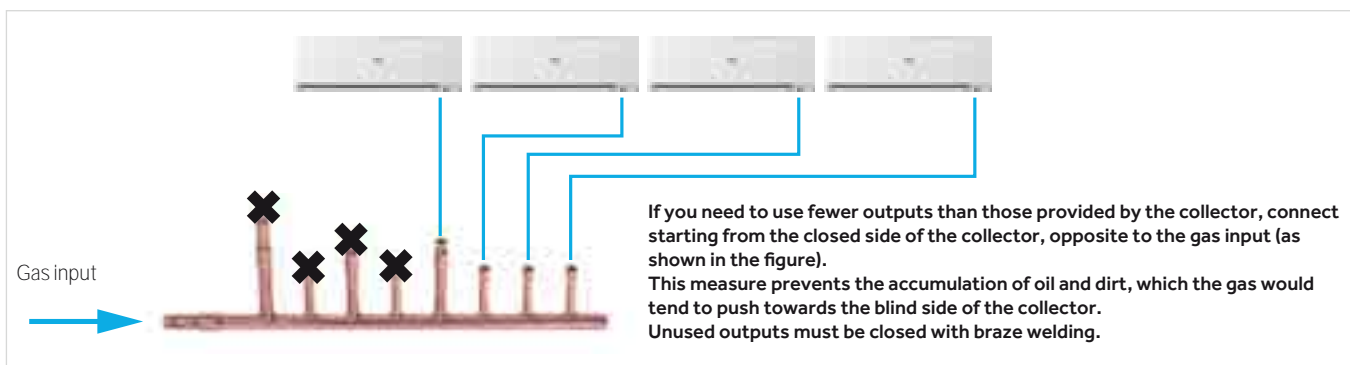
Measurements in millimetres ID - inner diameter / OD - outer diameter

Model	Gas Side Joint Recovery/Return	Gas Side Joint High Pressure	Liquid Side Joint	Adapters side Gas Recovery/Return included in the kit	Adapters Side Gas High Pressure included in the kit	Adapters Side Liquid included in the kit	Applicable Power in kW (total sum of the nominal cooling powers of the indoor units to be powered downstream of the joint)
FOG-R335A							Up to 33,5
FOG-R506A							33,5 to 50,6
FOG-R730A							50,6 to 73,0
FOG-R1350A							73,0 to 135,0
FOG-R2040A							Over 135,0

COLLECTORS FOR 2-PIPE CIRCUIT ON THE SIDE OF INDOOR UNITS

Model	Pipes	Branch	Adapter, Included in the kit	Applicable power in kW (total sum of the nominal cooling powers of the indoor units connected to the collector)
FQG-H3704	Gas		2 PZ	up to 30 total (sum of all outputs) If you need to connect indoor units with power exceeding 5,6 kW, you must use model FQG-H3705 with more than 5 outputs for pipe diameter requirements
	Liquid			
FQG-H3705	Gas			up to 30 total (sum of all outputs)
	Liquid			
FQG-H3708_35kW	Gas			up to 35 total (sum of all outputs)
	Liquid			
FQG-H3708_70kW	Gas		1 PZ	up to 70 total (sum of all outputs)
	Liquid		1 PZ	

Diameters in inches (")											
1	6,35 mm	1/4"	5	19,05 mm	3/4"	9	31,75 mm	1"1/4	13	44,45 mm	1"3/4
2	9,52 mm	3/8"	6	22,40 mm	7/8"	10	34,92 mm	1"3/8	14	50,80 mm	2"
3	12,70 mm	1/2"	7	25,40 mm	1"	11	38,10 mm	1"1/2			
4	15,88 mm	5/8"	8	28,57 mm	1"1/8	12	41,28 mm	1"5/8			



SOLDER JOINTS TO CREATE COOLING CIRCUITS

JOINTS TO COMBINE OUTDOOR UNITS WITH 2 TUBES.

Measurements in millimetres ID - inner diameter / OD - outer diameter

HZG-20B - kit to be provided to combine 2 modules				
Model	Pipes	ID	Branch	Gas Side Adapters Recovery/Return included in the kit
HZG-20B	Gas Side Joint	A		
	Liquid Side Joint	B		
HZG-30B - kit to be provided to combine 3 modules				
Model	Pipes	ID	Branch	Gas Side Adapters Recovery/Return included in the kit
HZG-30B	Gas Side Joint	C		
		D		
	Liquid Side Joint	E		
		F		

JOINTS TO COMBINE OUTDOOR UNITS WITH 3 HEAT RECOVERY TUBES

Measurements in millimetres ID - inner diameter / OD - outer diameter

HZG-R30B - kit to be provided to combine 3 modules			
Model	Pipes	ID	Branch
HZG-R30B	Gas Side Joint Recovery/ Return	D	
		E	
	Gas High Pressure Side Joint	F	
		G	
	Joint side Liquid	H	
		I	

The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.

JOINTS TO COMBINE OUTDOOR UNITS WITH 3 HEAT RECOVERY TUBES

Measurements in millimetres ID - inner diameter / OD - outer diameter

HZG-R40B – kit to be provided to combine 4 modules				
Model	Pipes	ID	Branch	Gas Side Adapters Recovery/Return included in the kit
HZG-R40B	Gas Side Joint Recovery/Return	J		
		K		
		L		
	Gas High Pressure Side Joint	M		
		N		
		O		

JOINTS TO COMBINE OUTDOOR UNITS WITH 3 HEAT RECOVERY TUBES

Measurements in millimetres ID - inner diameter / OD - outer diameter

HZG-R40B – kit to be provided to combine 4 modules				
Model	Pipes	ID	Branch	Gas Side Adapters Recovery/Return included in the kit
HZG-R40B	Joint side Liquid	P		
		Q		
		R		



MRV AHU

Applications

MRV AHU

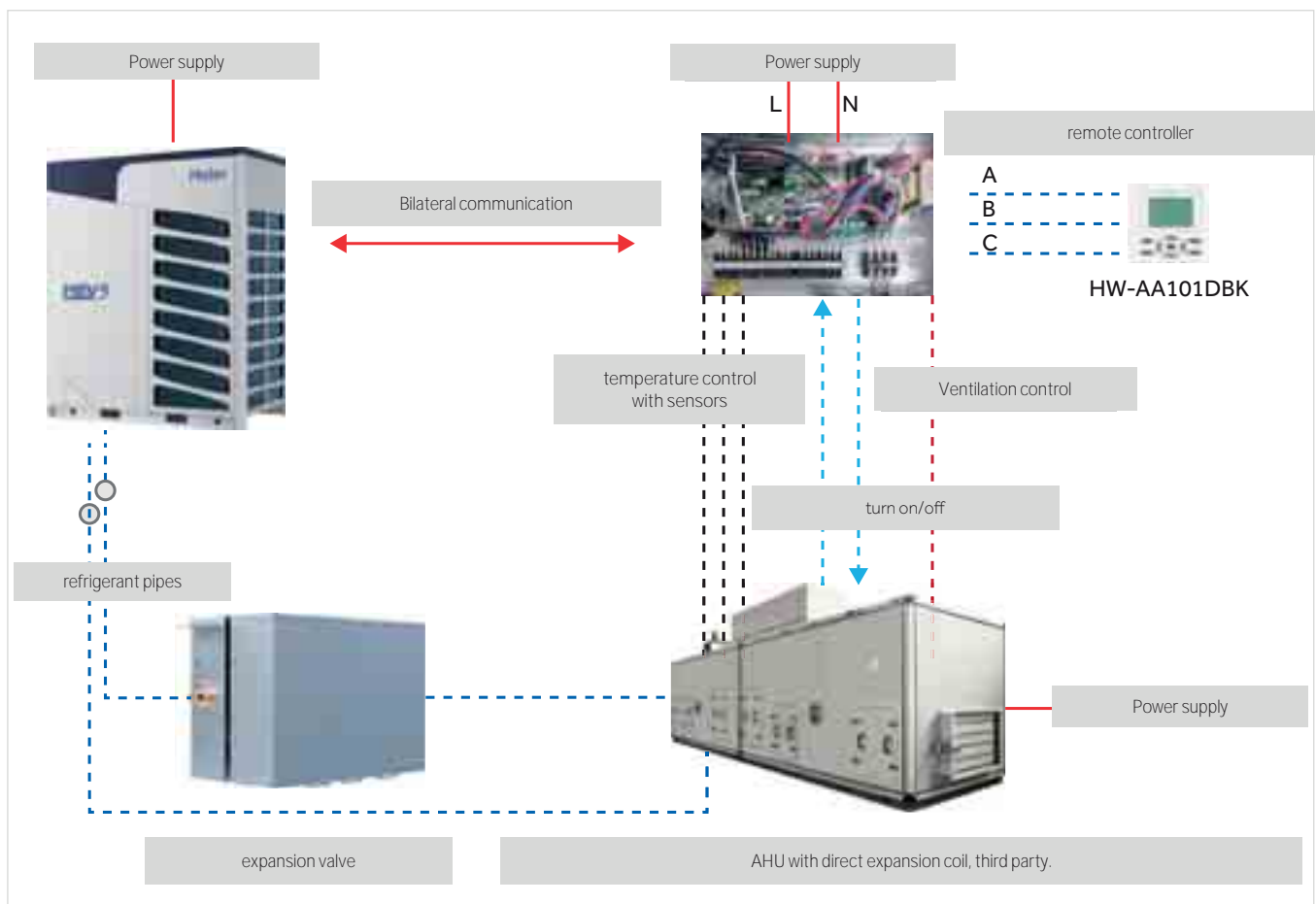
INTRODUCTION & BENEFITS

APPLICATIONS

Regulations require adequate air renewal in the premises according to the activity carried out inside the building. Thanks to the interface kit between high efficiency MRV units and direct expansion air treatment units, Haier is able to meet the needs for air renewal and treatment.



GENERIC CONNECTION SCHEME



MRV AHU


CONNECTABLE OUTDOOR UNITS

Valve box	 MRV-S	 MRV5
	AH1-070B - AH1-140B - AH1-280B	AH1-280B - AH1-560B - AH1-730B
Valve box		
	1HP (3,5kW) < AHU connection capacity ≤10HP (28,0kW)	10HP (28,0kW) < AHU connection capacity ≤26HP (73,0kW)
AHU	 AHU, Haier	 Third-party AHU

CONTENTS OF THE AHU KIT


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

= Refrigerant expansion valve included + Control electronics included + Temperature sensors and wiring included + HW-AA101DBK wired touch screen remote control included



AH1-560B
 AH1-730B

= Refrigerant expansion valve included + Control electronics included + Temperature sensors and wiring included + HW-AA101DBK wired touch screen remote control included

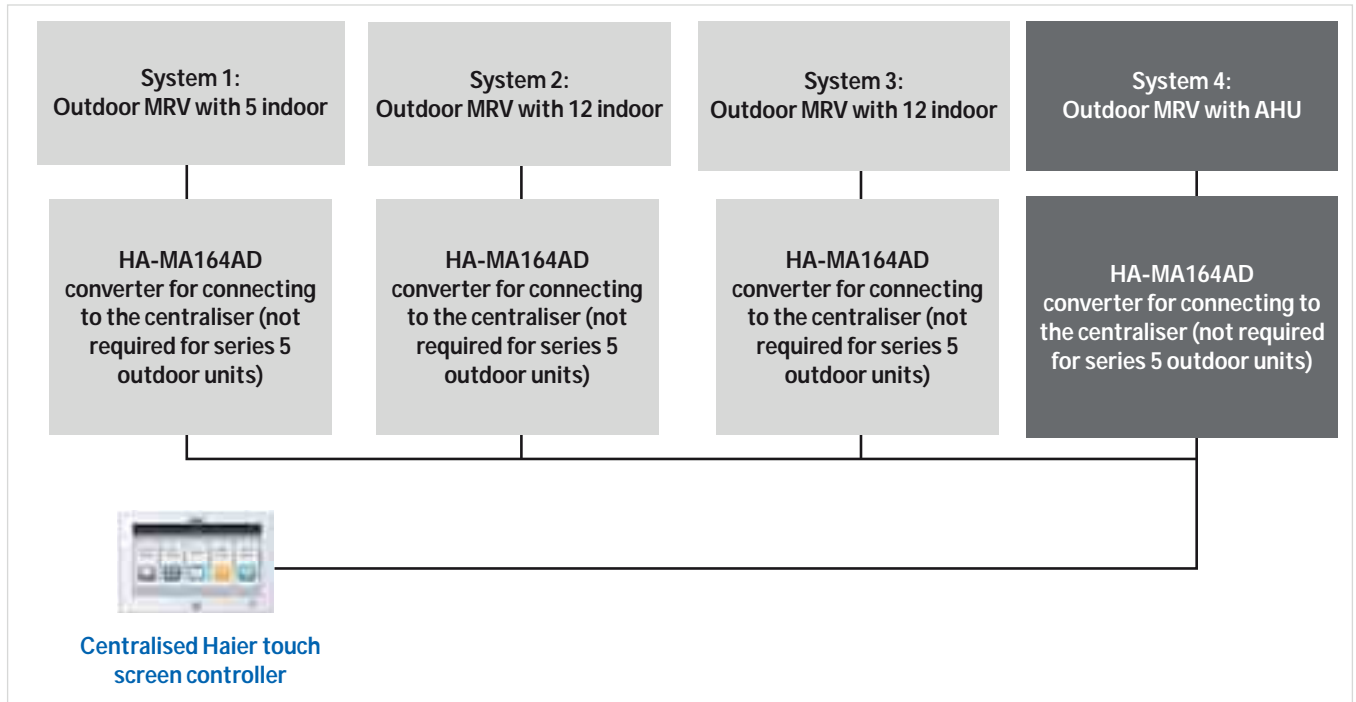


MRV AHU

CONTROL AND MANAGEMENT SYSTEMS

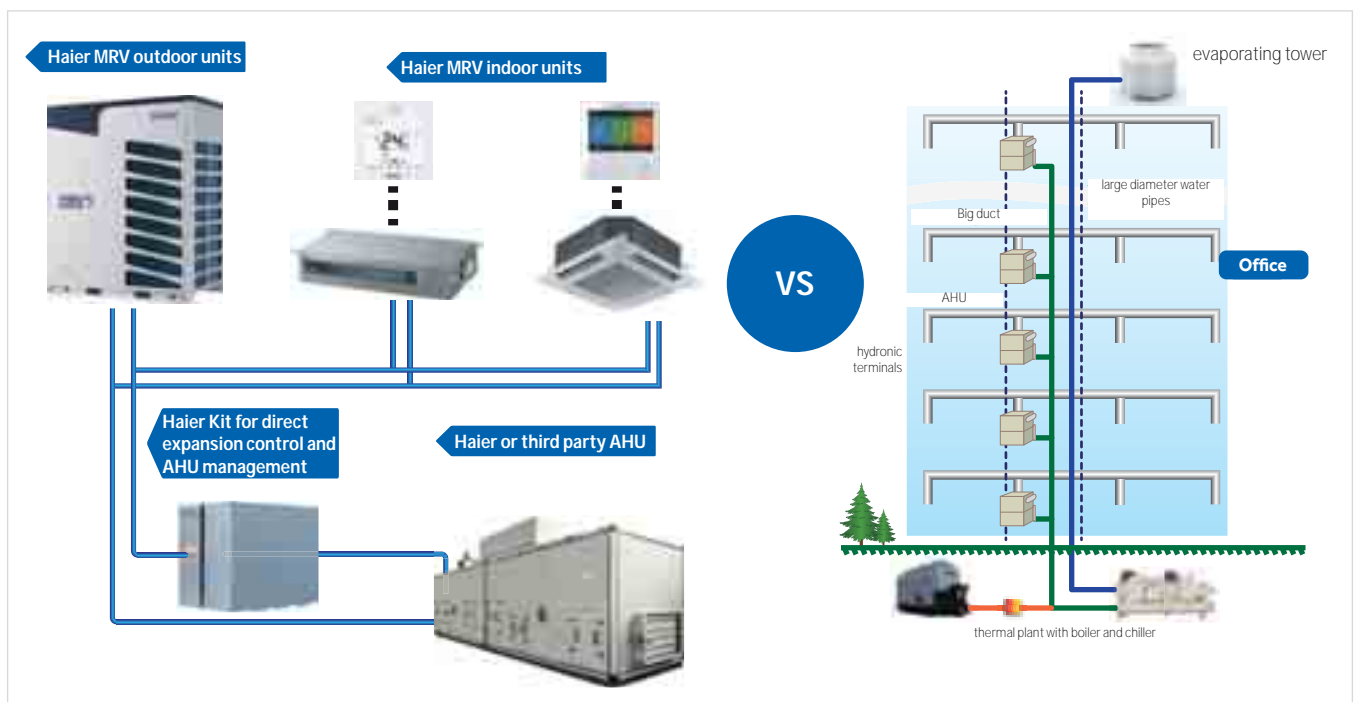
A Haier MRV-AHU system is comparable to a classic VRF system, therefore it can be inserted in a group control context.

Example



SIMPLE INSTALLATION

Compared to a traditional water system, Haier's AHU-MRV direct-expansion technology minimises plant components. No cooling towers, large water pipes or pumps are needed. In addition, the efficiency of MRV/VRF/VRV systems is notoriously higher than traditional air/water systems. Haier AHU-MRV systems can be independently or centrally controlled thanks to Haier's multiple solutions for product control and management. It is also possible to power MRV and AHU indoor units within the same plant.



MRV AHU

CHARACTERISTICS AND FUNCTIONS

- Ability to control third-party AHU
- Compatible with MRV 5-series outdoor units and MRV SII series" (4-12 HP)
- A single box covers a power range of 3,5 to 73,0 kW. Can to connect up to 3 boxes in parallel for large capacity.
- Expansion valve and paired electronic boards, with separation possibilities for greater flexibility during installation.
- Managing 0-10 V DDC inbound signal from third-party controller
- Temperature signal control provided by a DDC control or return from the Haier sensor
- Remote contact input to select Hot/Cold mode
- Clean contact input for managing 3 ventilation speeds
- Status signal output "Defrost / Defrost"

TECHNICAL SPECIFICATIONS





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



AH1-560B
AH1-730B

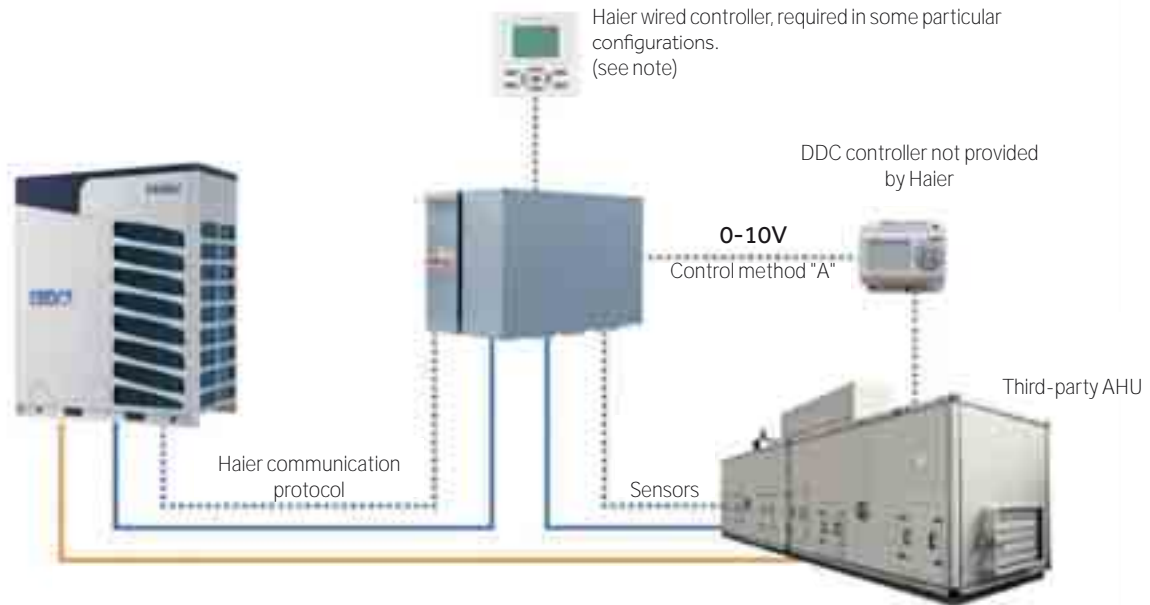
Model		AH1-070B	AH1-140B	AH1-280B	AH1-560B	AH1-730B
Connectable capacity (kW AHU intertial exchanger)	kW	3,5≤X≤7,0kW (1-3HP)	7,0≤X≤14,0kW (3-5HP)	14,0≤X≤28,0kW (5-10HP)	28,0≤X≤56,0kW (10-20HP)	56,0≤X≤73,0kW (20-26HP)
Power supply	V-Ph-Hz	220-230-1-50/60	220-230-1-50/60	220-230-1-50/60	220-230-1-50/60	220-230-1-50/60
Unit Dimensions WxDxH	mm	420x260x165	420x260x165	420x260x165	420x260x215	420x260x215
Packaged unit dimensions WxDxH	mm	520x340x225	520x340x225	520x340x225	520x340x275	520x340x275
Net weight / Gross weight	Kg	5,5 / 8,5	5,5 / 8,5	5,5 / 8,5	6,5 / 10,0	6,5 / 10,0
Material		Galvanised sheet				
Colour		Grey	Grey	Grey	Grey	Grey
Liquid pipe diameter (input/output to AHU)	mm (inch)	9,52 (3/8) / 6,35 (1/4)	9,52 (3/8) / 6,35 (1/4)	9,52 (3/8) / 6,35 (1/4)	12,70 (1/2) / 15,88 (5/8)	12,70 (1/2) / 15,88 (5/8)
Connection method		Flare	Flare	Flare	Flare	Flare
Maximum distance between BOX and AHU	m	5	5	5	5	5
Maximum height difference between BOX and AHU	m	5	5	5	5	5

ADVANTAGES

Valve capacity	Possibility to control AHU with power values from 3 to 73 kW with a single valve
High compatibility	The same electronic boards as the MRV indoor units for simple management and maintenance
Reliability	<p>The expansion valve is produced by FUJIKOKI, the Japanese leader in this sector.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div>

Control method "A"

The third-party control system generates a signal ranging from 0-10 V to represent the required power demand. Haier's AHU Kit uses this input signal to adjust the power delivered by the MRV unit to meet the real need for thermal air treatment.



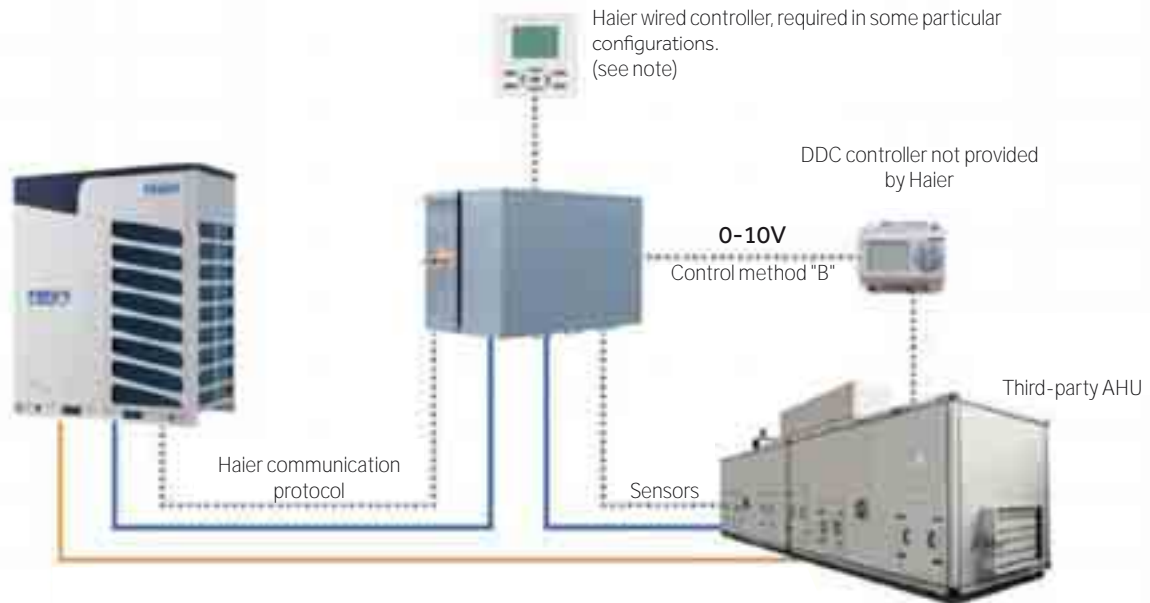
Liquid/Gas refrigerant pipes, only the liquid pipe enters the valve box and then continues to the direct expansion coil. The Gas pipe goes directly from the outdoor unit to the coil inside the AHU.

Note:

If the third-party DDC controller generates only the 0-10 V demand indicator signal, the Haier wired controller is necessary to handle the following signals: Hot/cold operating mode, switching AHU on/off, alarms.
If the DDC controller generates all the necessary signals, the Haier controller is not required.

Control method "B"

The temperature is controlled by the third-party DDC, which sends the 0-10 V modulating signal to the Haier kit that will control the temperature set point.



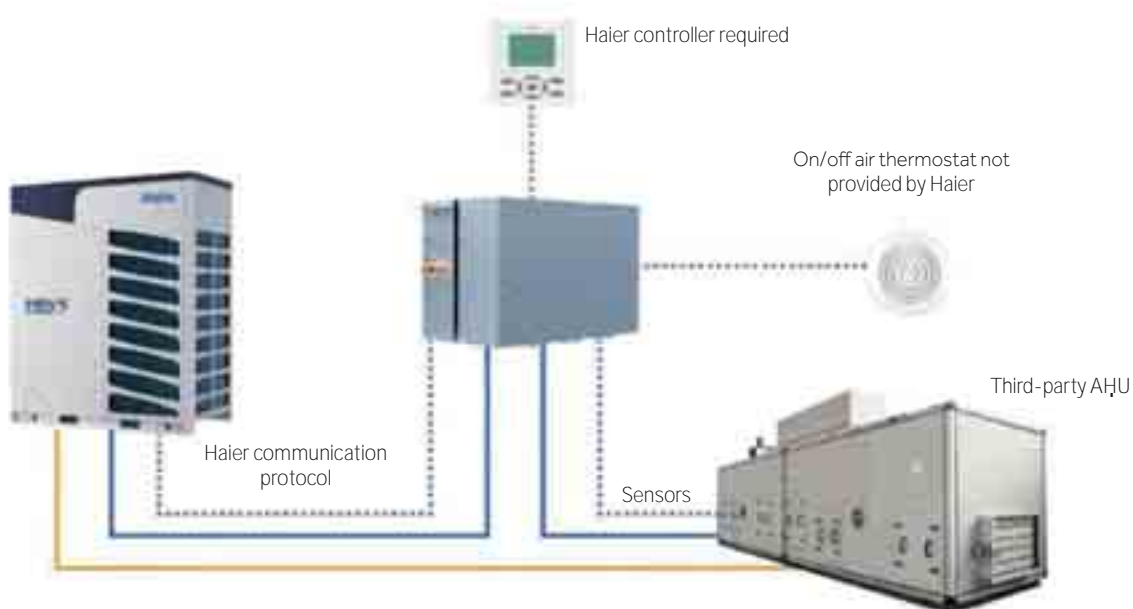
Liquid/Gas refrigerant pipes, only the liquid pipe enters the valve box and then continues to the direct expansion coil. The Gas pipe goes directly from the outdoor unit to the coil inside the AHU.

Note:

If the third-party DDC controller only generates the 0-10 V signal corresponding to the required temperature set point, the Haier wired controller is necessary to handle the following signals: Hot/cold operating mode, switching AHU on/off, alarms. If the DDC controller generates all the necessary signals, the Haier controller is not required.

Control method "C", special applications

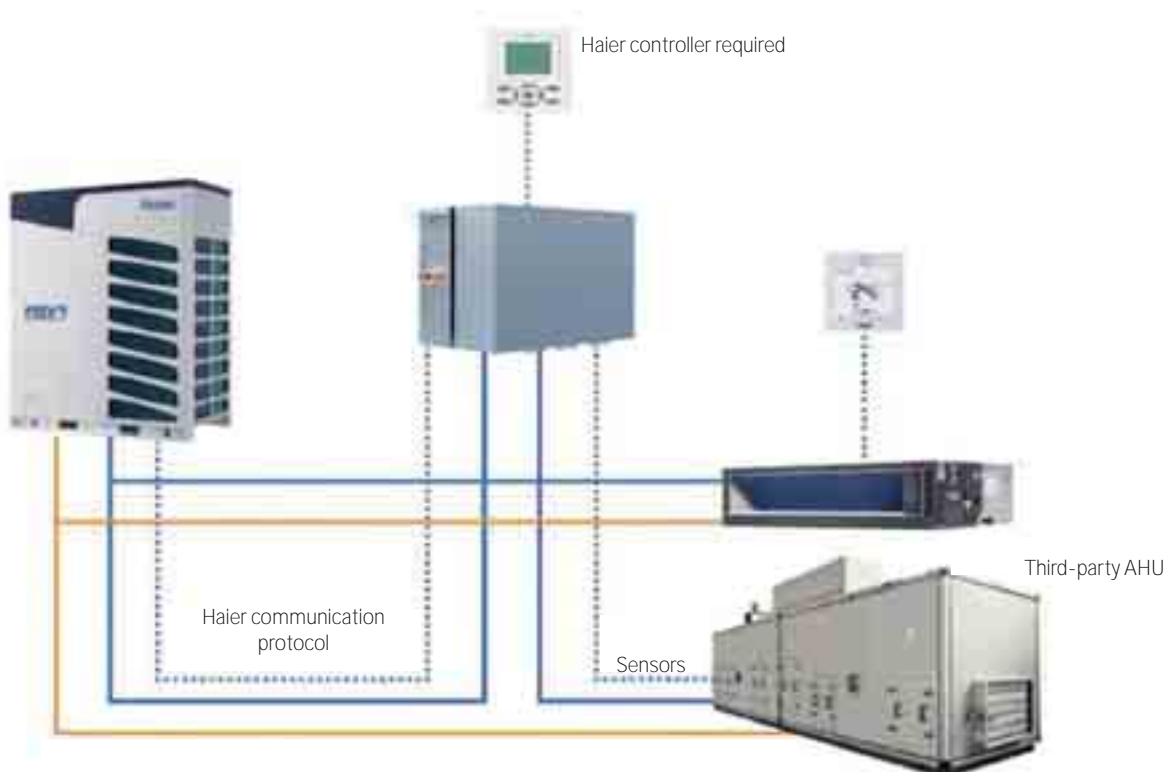
Configuring the system WITHOUT a third-party DDC. In this case, the Haier controller is necessary to make all the settings. This system requires the installation of an on/off thermostat that switches on or off the AHU when the temperature set point is reached. This "C" method is used to continuously heat or cool in an on/off manner, without modulation and therefore with less comfort in the environments.



Liquid/Gas refrigerant pipes, only the liquid pipe enters the valve box and then continues to the direct expansion coil. The Gas pipe goes directly from the outdoor unit to the coil inside the AHU.

Control method "D"

MRV and AHU mixed air conditioning system work in the same cooling circuit with MRV Haier and third-party AHU indoor unit. In this case Haier controller is required.



Liquid/Gas refrigerant pipes, only the liquid pipe enters the valve box and then continues to the direct expansion coil. The Gas pipe goes directly from the outdoor unit to the coil inside the AHU.



Control & Management Systems

SIMPLE AND INTUITIVE SOLUTIONS TO MANAGE PLANTS

A SINGLE INTEGRATED SYSTEM

Haier's communication protocol is unique to MRV systems and the residential and commercial products of the Supermatch line. This allows the same controls to be used for both small and large MRV plants.

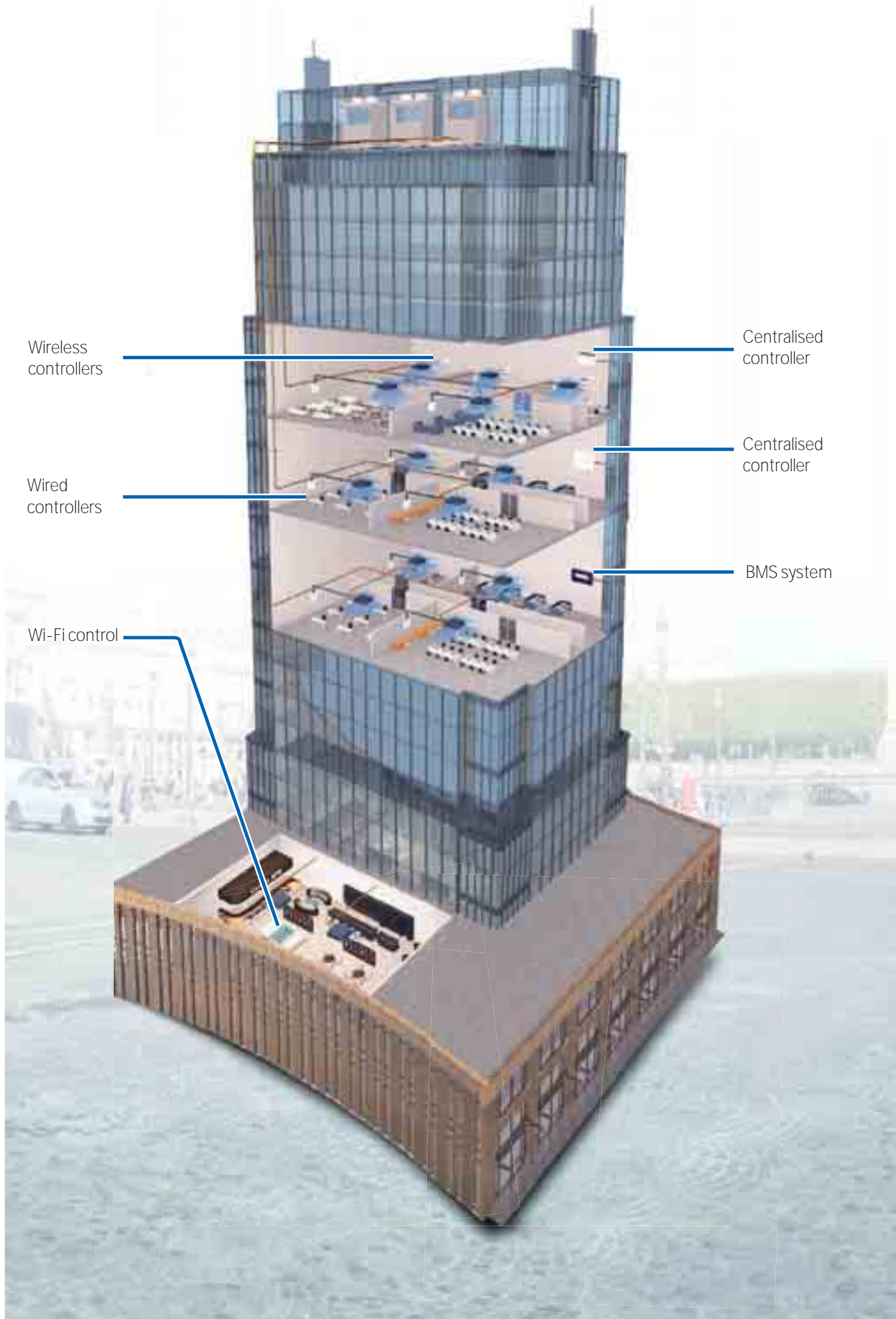
MANAGEMENT AND SUPERVISION

Haier provides reliable and professional supervision systems for better management of preventive maintenance as well.

"SMART" CONTROLS

Systems that can be customised to meet your needs.





CENTRALISED CONTROL

The centralised controls provide a customised control of the entire system from a single point. Manage individual units, groups, or zones and define different settings for each of them.

5" **HC-SA164DBT**
UP TO 64 INDOOR UNITS



7" **YCZ-A004**
UP TO 256 INDOOR UNITS



12,5" **HC-LA1CDBT**
UP TO 800 INDOOR UNITS



HC-SA164DBT

- Possibility to control via WEB/Internet by means of optional Wi-Fi module HI-WA164DBI
- Intelligent system for plants up to 64 indoor units
- 5" LCD TFT full touchscreen display backlit
- Built-in weekly timer
- Possibility of naming units and groups
- Displaying alarms
- Require HA-MA164AD converter (see diagrams on page 129)
- 32 independent cooling circuits, each with their own HA-MA164AD converter
- Ability to simultaneously control MRV units and line units
Supermatch / Residential.
- MODBUS output as standard



YCZ-A004

- Smart system for medium size plants up to 256 indoor units
- Large 7" LCD TFT full touchscreen display
- Built-in weekly timer
- Possibility of naming units and groups
- Displaying alarms
- Require HA-MA164AD converter (see diagrams on page 129)
- 32 independent cooling circuits, each with their own HA-MA164AD converter
- **You cannot control MRV units and Supermatch/Residential line units at the same time.**
- MODBUS output as standard



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
- Total electricity consumption display
- Data curve
- Electricity consumption distribution for tenant billing
- - Multi language



HA-MA164AD

- Haier protocol converter to RS-485
- To be connected to centralised systems (not required for series 5 outdoor units)
- Each cooling circuit needs 1 converter (see diagrams from page 129)
- 1 converter can handle max 64 internal units on single cooling circuit
- This accessory, if NOT connected to a centralised controller as a dedicated converter, can be used individually to transform the communication protocol "Homebus Haier" into "MODBUS".
(For this feature, configure the selectors in the desired mode)



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



HI-WA164DBI WI-FI MODULE

Features:

This module, connected to an Internet access with Wi-Fi, allows remote control via dedicated APP on tablets and smartphones (no PC).

Each Wi-Fi module can control up to 64 indoor units.

Through the APP, the same functionality as the centraliser, connected to the MRV system, is replicated and managed.

Specifications:

- Compact 86x86x10 mm
- Control functions, on/off, temperature setting, timer settings, weekly, fan speed.
- Alarm monitoring function, errors, error history.
- User account management, including account registration, password change and account information modification via APP.
- Convenient sharing of the management authority. The primary account can share the management of the primary account with the secondary accounts, without re-registering the units.
- Each individual APP can handle up to 256 indoor units.
Example: 4 Wi-Fi modules with 64 Interior each, or 7 Wi-Fi modules with 36 interiors each
- If a HC-SA164DBT centralised controller is used directly, the Wi-Fi module can be connected directly to the centraliser on a dedicated terminal.
- The Wi-Fi module can be connected directly to the MRV series 5 outdoor units, or to the HA-MA164AD converter if the outdoor units are NOT series 5.

With this configuration it is possible to control the MRV system even without local centralised controllers, using only the APP installed on tablet or smartphone, by ensuring stable and fast Wi-Fi coverage to the module.



If used independently (not connected to a centralized controller) it is necessary to provide 12 DC electric supply (not provided by Haier)

HC-SA164DBT



- Control of up to 64 indoor units
- Control of the operating mode, temperature, ventilation, deflectors
- Error control and alarm memory

- Daily and weekly programming for single unit
- Free and independent programming

HC-LA1CDBT



- Monitoring the status of each individual unit

HA-MA1ADB



- Individual - group - total visualisation

- Password setting at different levels of operation

YCZ-A004



Monitoring and control

- Control of up to 256 indoor units
- Control of the operating mode, temperature, ventilation, deflectors
- Icons displayed similar to those on remote commands

Power-saving function

- User function locking mode
- Defining lower and upper limits for desired temperature selection



Zone management

- Defining zones as per user requests

Timer programmer

- Daily and weekly programming for single unit
- Free and independent programming

WI-FI FEATURES

This module, connected to an Internet access with Wi-Fi, allows remote control via dedicated APP on tablets and smartphones (no PC). Each Wi-Fi module can control up to a maximum of 64 indoor units, which is the limit of the centraliser. Through the APP, the same functionality as the centraliser, connected to the MRV system, is replicated and managed.

SPECIFICATIONS

- Compact 86x86x10 mm
- It is connected to the centraliser through the cable supplied, from which it is powered.
- It can be connected up to 100 meters from the centraliser, so as to reach an area covered by Wi-Fi
- Control functions, on/off, temperature setting, timer settings, weekly, fan speed.
- Alarm monitoring function, errors, error history.
- User account management, including account registration, password change and account information modification via APP.
- Convenient sharing of the management authority. The primary account can share the management of the primary account with the secondary accounts, without re-registering the units.
- Each individual APP can handle up to 256 indoor units.
Example: 4 Wi-Fi modules with 64 Interior each, or 7 Wi-Fi modules with 36 interiors each
- The Wi-Fi module can be connected directly to the MRV series 5 outdoor units, or to the HA-MA164AD converter if the outdoor units are NOT series 5.
With this system you can control the MRV system even without a centraliser installed, but through the APP alone by ensuring adequate Wi-Fi coverage to the module.
- The APP is available for Android and iOS.



WI-FI MODULE
HI-WA164DBI

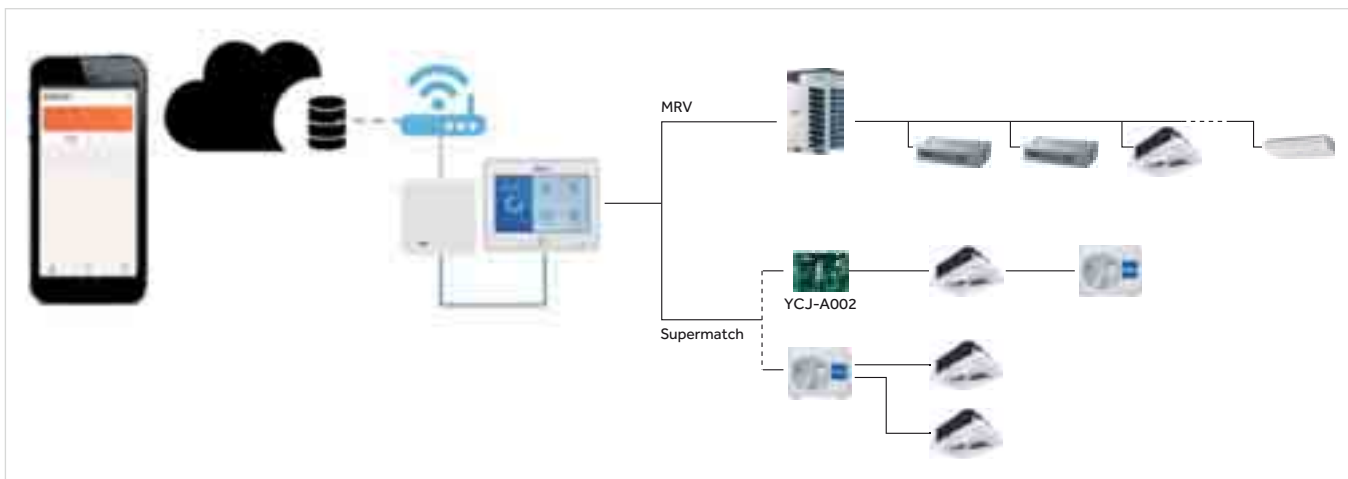
HAIER SMART AIR 2



HI-WA164DBI WI-FI MODULE FOR CENTRALISED CONTROLLER HC-SA164DBT

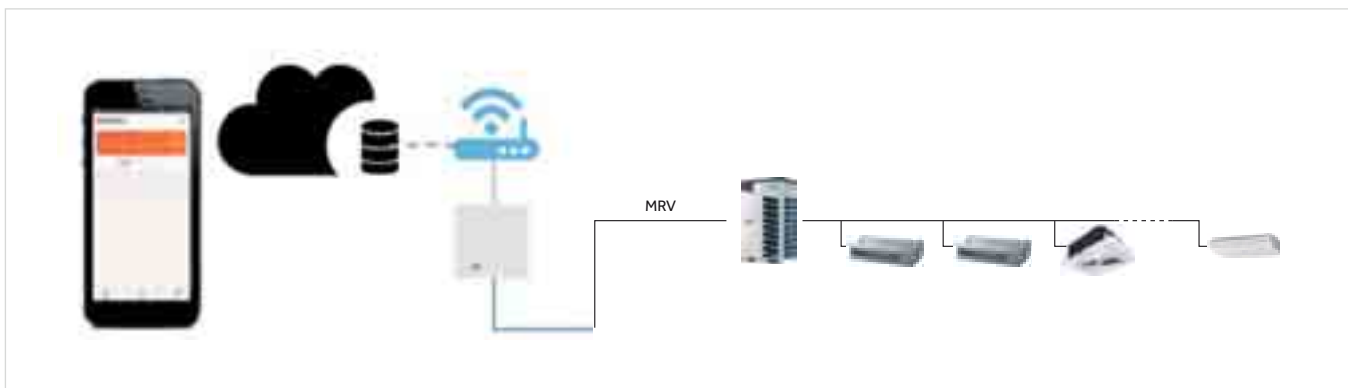


CONFIGURATION WITH CENTRALISER



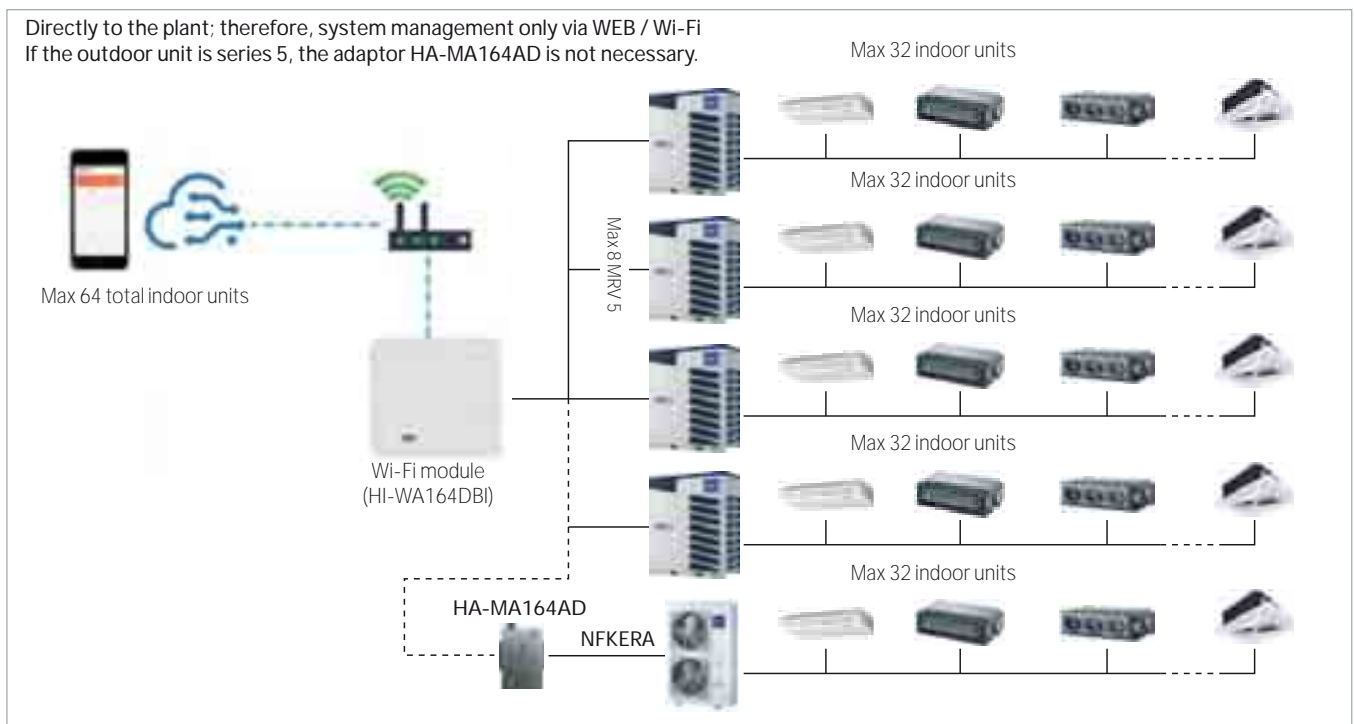
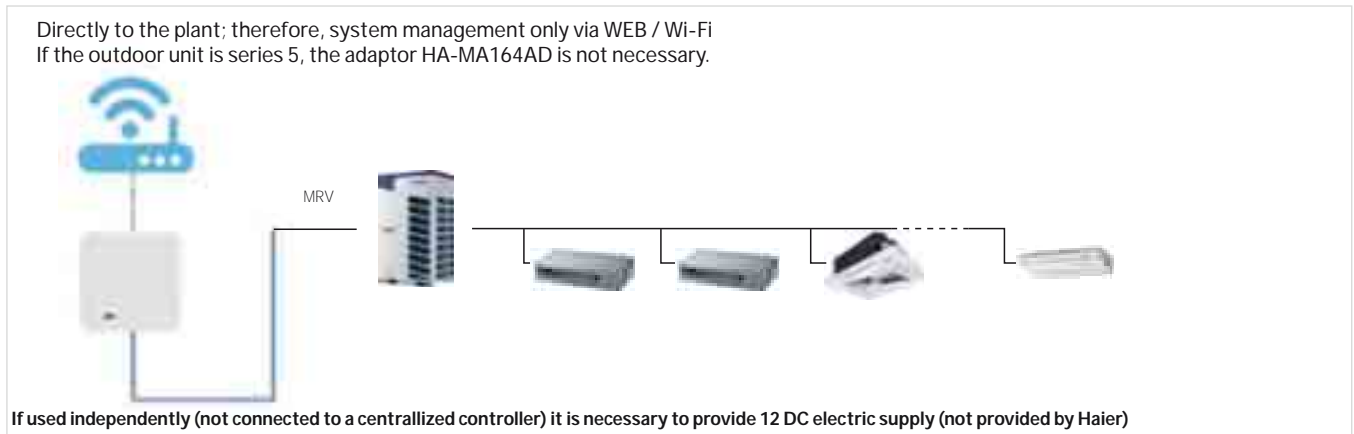
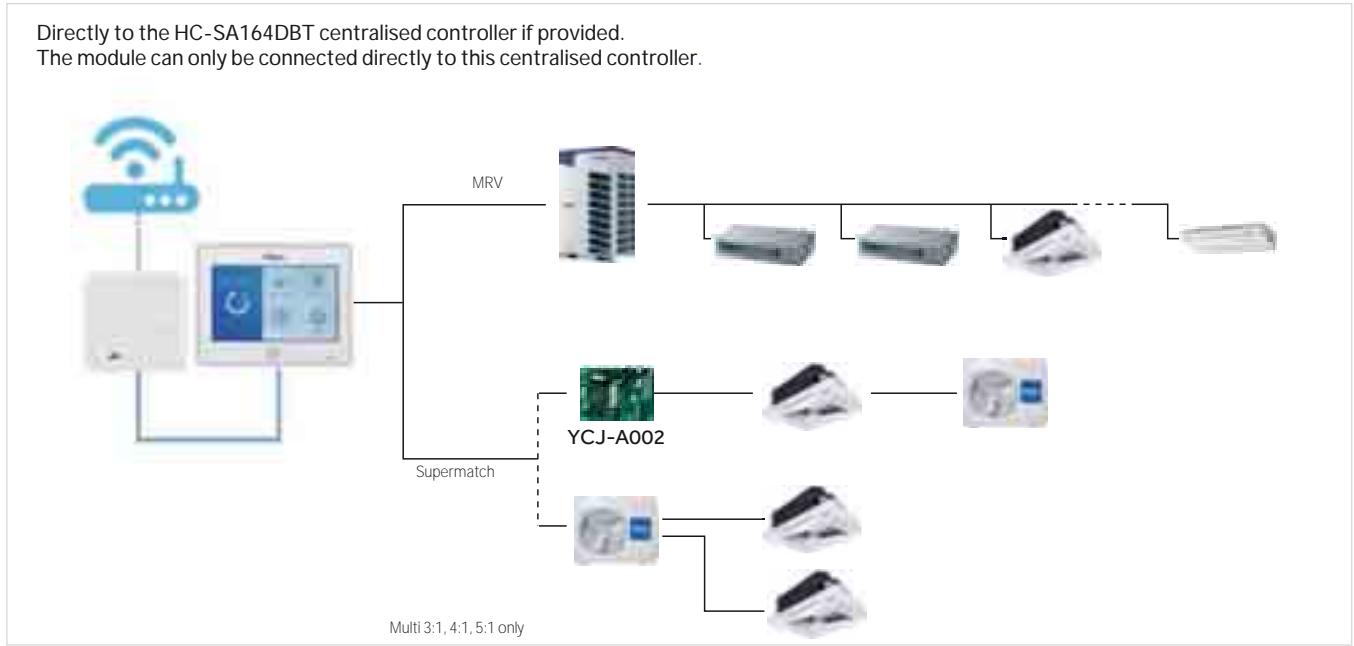
CONFIGURATION WITHOUT CENTRALISER

The Wi-Fi module can be connected directly to the MRV series 5 outdoor units, or to the HA-MA164AD converter connected to other non-series 5 MRV outdoor units. With this system you can control the MRV system even without a centraliser installed, but through the APP alone by ensuring adequate Wi-Fi coverage to the module.

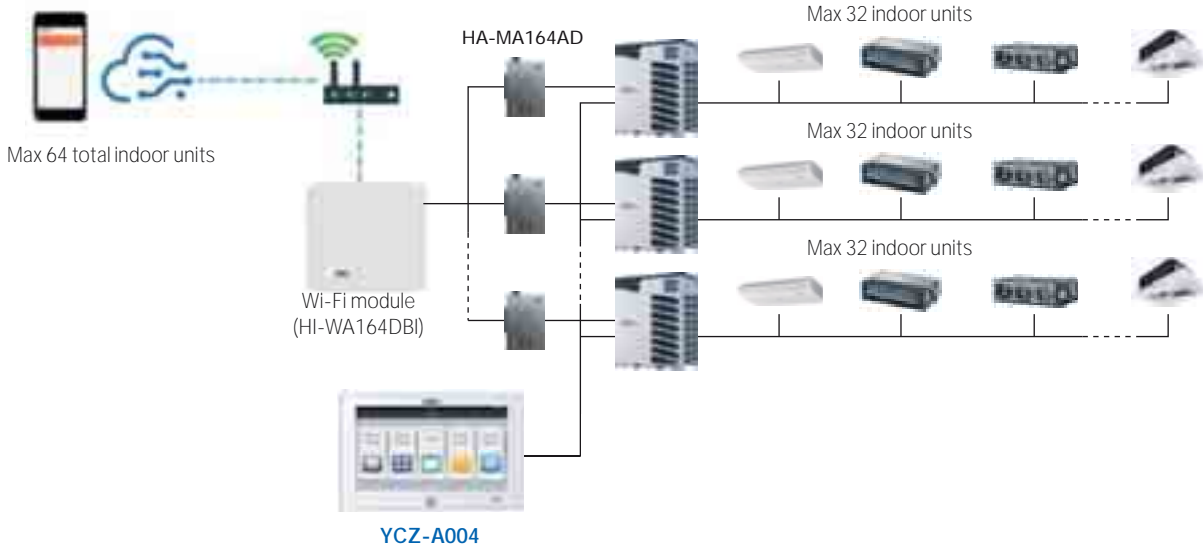


If used independently (not connected to a centralized controller) it is necessary to provide 12 DC electric supply (not provided by Haier)

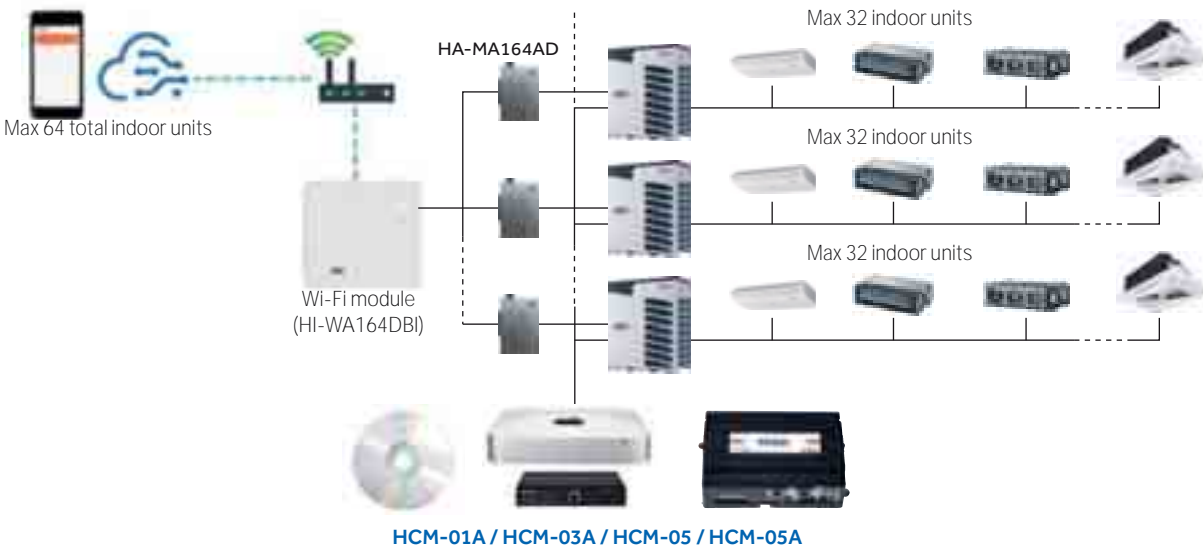
EXAMPLES OF CONNECTION FOR THE "HI-WA164DBI" WI-FI MODULE ACCORDING TO THE TYPE OF SYSTEM AND THE EXPECTED PRODUCTS



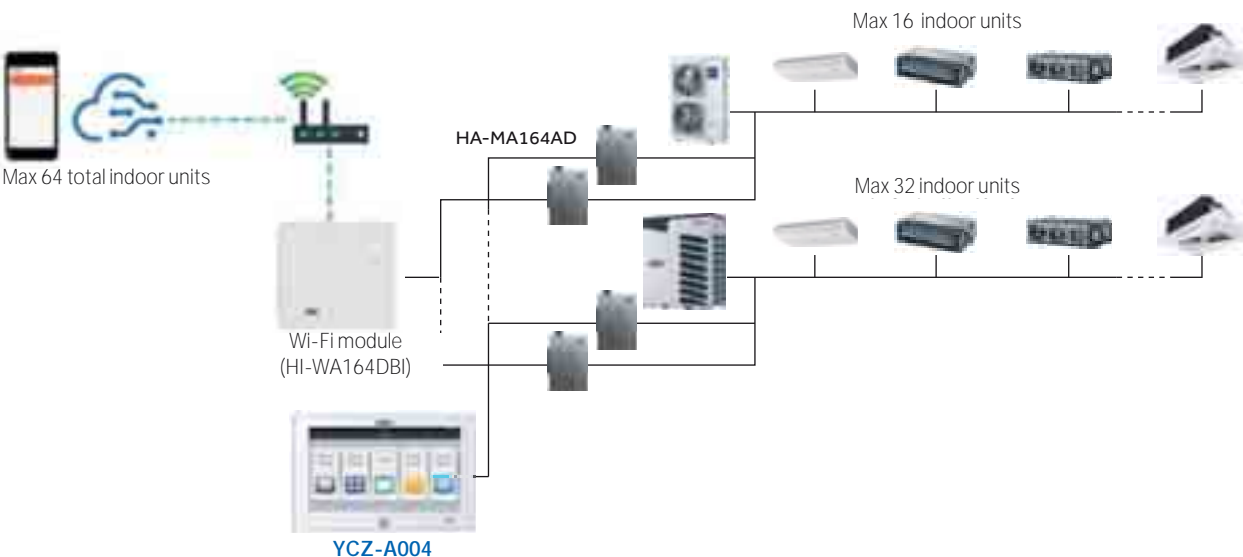
If a centralised controller OTHER THAN the HC-SA164DBT model is required locally, it is necessary to add 1 HA-MA interface for each external unit



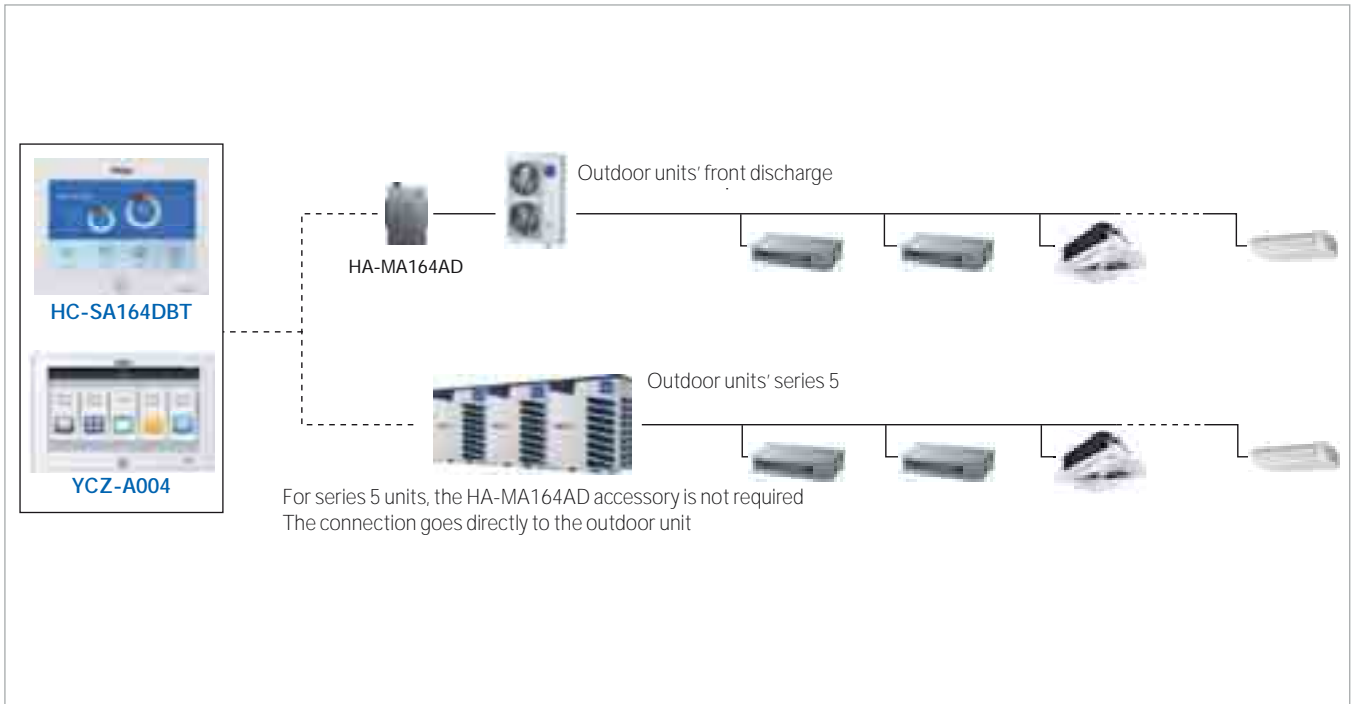
Coupled to a BMS-web or local system, always with the addition of HA-MA adapters



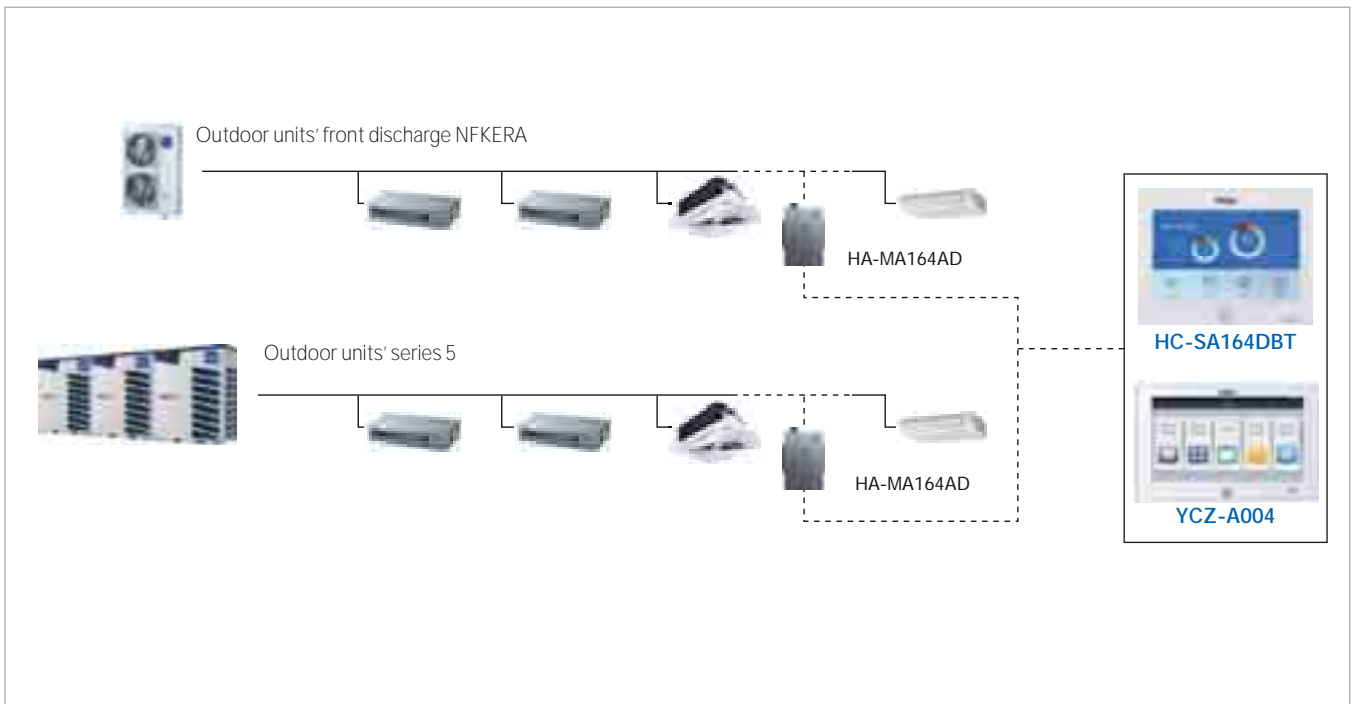
If a centralised controller is required locally and the external units are NOT 5 series, but S-series (front discharge), it is necessary to add 2 HA-MA interface for each outdoor unit, 1 for Wi-Fi and 1 for the centraliser



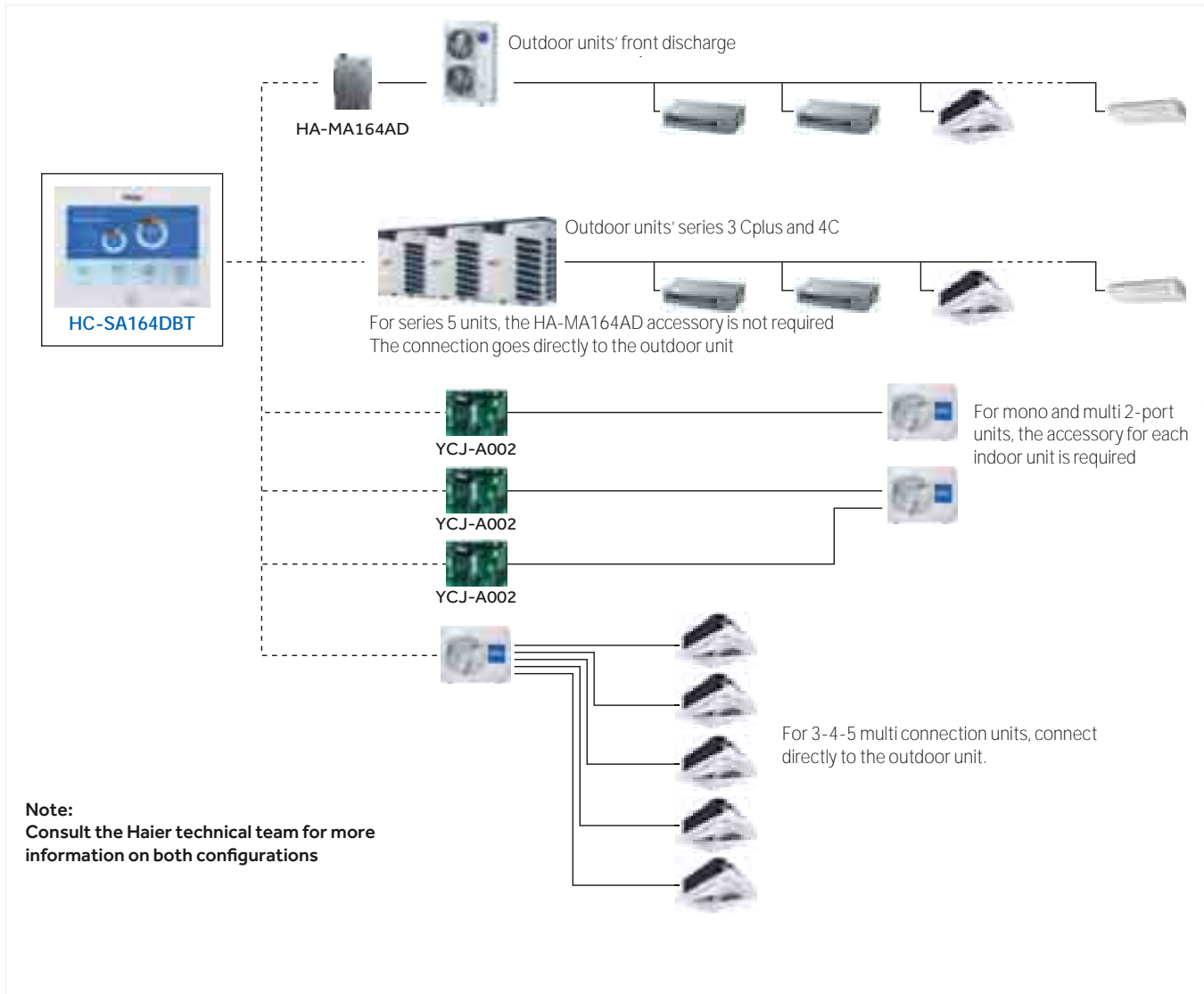
CONNECTION OF CENTRALISED CONTROLLERS DIRECTLY TO OUTDOOR UNITS



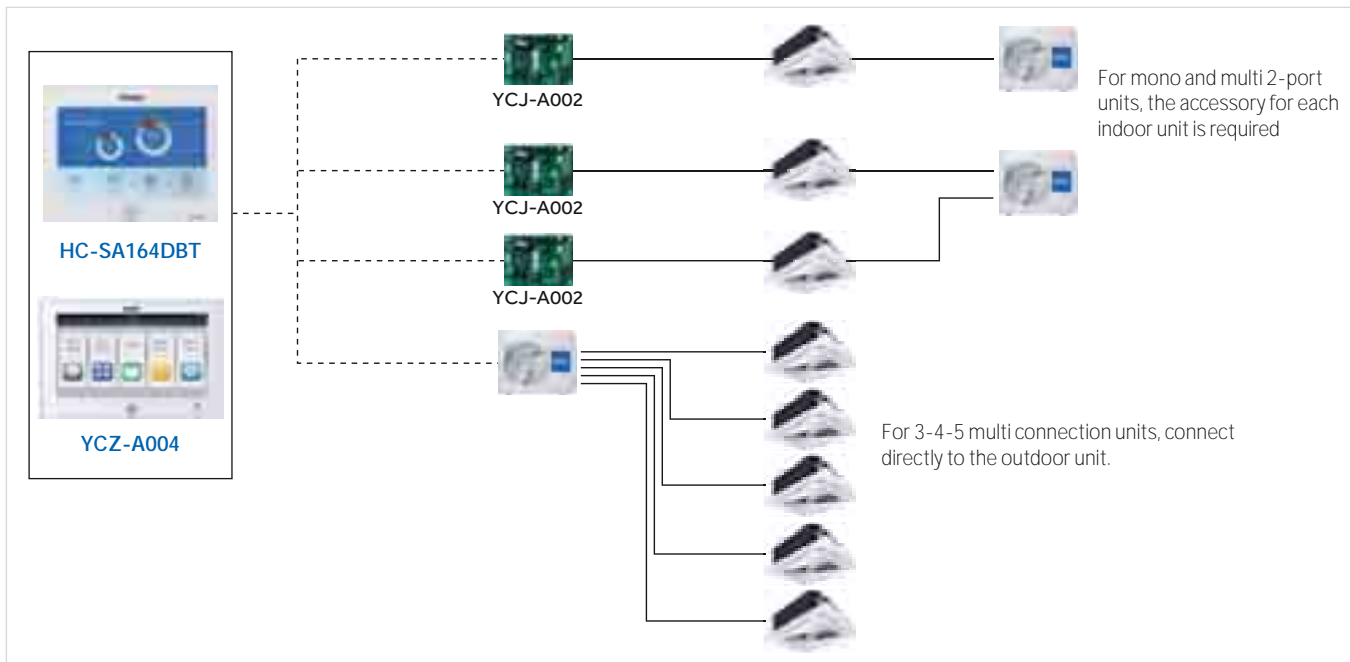
CONNECTION OF CENTRALISED CONTROLLERS IN AN INTERNAL POINT OF THE PLANT
IN THIS CONFIGURATION, THE 5 SERIES UNITS ALSO REQUIRE THE HA-MA164AD ACCESSORY



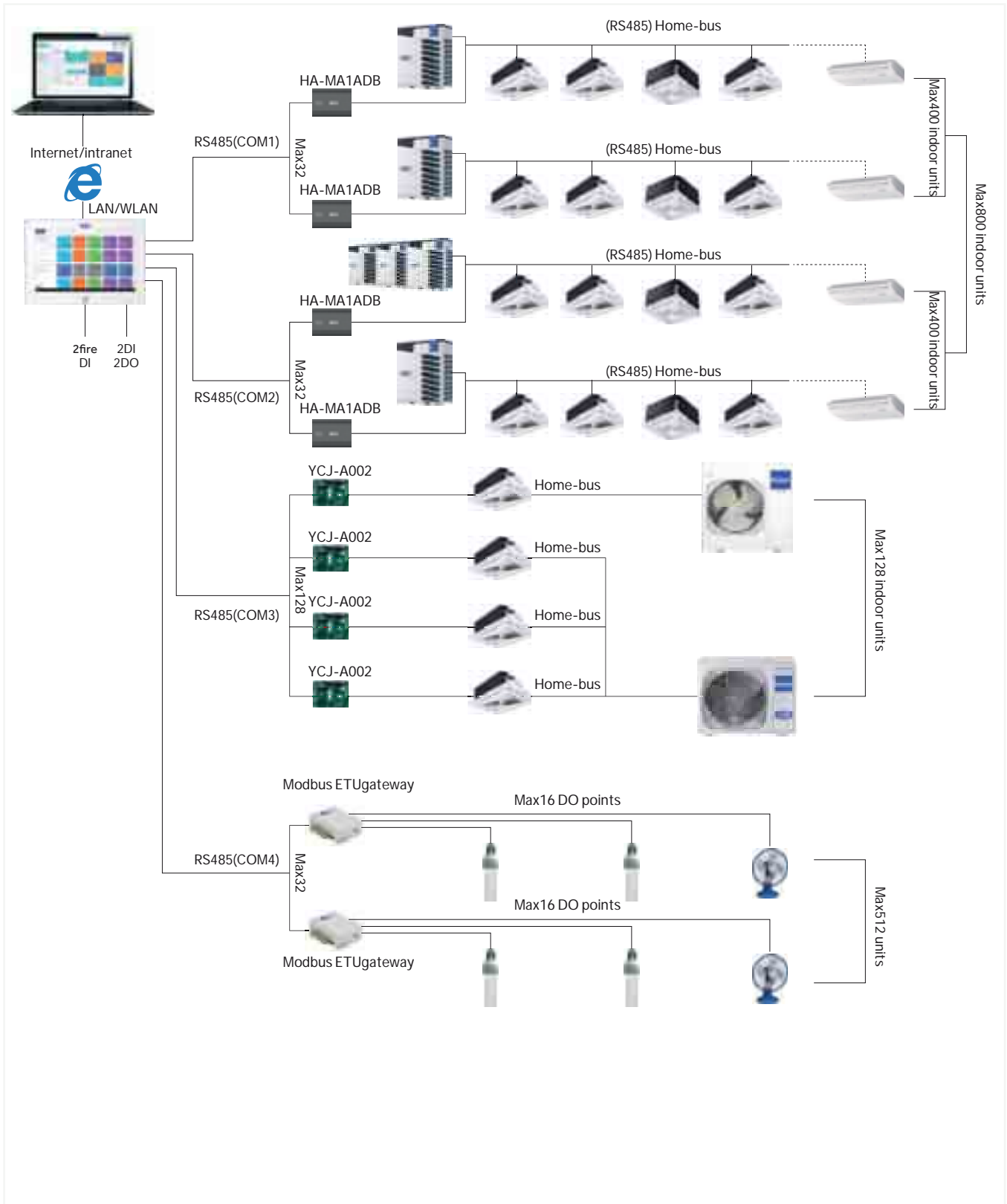
CONNECTION OF CENTRALISED CONTROLLERS IN MIXED MRV AND SUPERMATCH SYSTEMS ONLY FOR HC-SA164DBT



CONNECTION OF CENTRALISED CONTROLLERS TO SYSTEMS COMPOSED ONLY OF SUPERMATCH UNITS



CONNECTION OF THE CENTRALIZED CONTROLLER IN MRV-SUPERMATCH MIXED SYSTEMS ONLY WITH HC-LA1CDBT



REMOTE CONTROLLERS

Haier offers different types of remote controllers to choose from based on your functional and design requirements.

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



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



RE-02

- Universal receiver for wireless remote controllers
- Required for all units installed in the concealed position, without aesthetic panel.
- Only the 2-way cassette requires the receiver even if equipped with an aesthetic panel.



HW-BA116ABK

- On/off, temperature mode, deflectors
- Limited features ideal for hotels
- Filter cleaning interval indication
- Error control
- NOT equipped with a clock or timer
- On-board receiver for wireless infrared remote controllers, to create a double control mode (see diagram on page 135)
- Standard ambient temperature sensor. Select the ambient temperature control on the controller if you want a more accurate reading at standing height or in particular installation conditions.
- Possibility of group management with a single controller, (max 16 indoor units on a single controller), the functions and operating modes of all the indoor units connected to that controller will be identical to each other. Independent management is not possible. Each command will be replicated on all indoor units connected to that controller in the same way. (see diagrams on page 135)



YR-E17A

- Can act as IR receiver for wireless controllers.
- On/off, temperature mode, deflectors
- Smart and compact design with only 86x86x13 mm.
- Touch keys with large backlit display
- Independent control of deflectors [only for cassette AB-MRERA-MCERA(M)]
- Daily clock and timer
- Simple installation and intuitive operation
- Error display
- PA static pressure management of indoor unit fans (on models where possible)
- Standard ambient temperature sensor. Select the ambient temperature control on the controller if you want a more accurate reading at standing height or in particular installation conditions.
- Possibility of group management with a single controller, (max 16 indoor units on a single controller), the functions and operating modes of all the indoor units connected to that controller will be identical to each other. Independent management is not possible. Each command will be replicated on all indoor units connected to that controller in the same way. (see diagrams on page 135)



HW-BA101ABT

- Modern, high-intensity LED design
- Full touch black display. Automatic lighting when the keys are pressed. Black screen at rest position.
- NOT equipped with a clock or timer
- Double temperature and fan speed setting mode; a continuous infinite range or by acting on the classic + and -
- Quiet operation
- Operating mode, deflectors in on / off mode
- Possibility of group control of up to 16 indoor units with the same operating mode
- Limited features ideal for hotels
- Filter cleaning interval indication
- Error control
- Function block from centraliser
- On-board receiver for wireless infrared remote controllers, to create a double control mode (see diagram on page 135)
- Standard ambient temperature sensor. Select the ambient temperature control on the controller if you want a more accurate

reading at standing height or in particular installation conditions.

- Possibility of group management with a single controller, (max 16 indoor units on a single controller), the functions and operating modes of all the indoor units connected to that controller will be identical to each other. Independent management is not possible. Each command will be replicated on all indoor units connected to that controller in the same way. (see diagrams on page 135)



YR-E16B

- On/off, temperature mode, deflectors
- Large backlit touch screen display
- Independent control of deflectors [only cassette AB-MRERA-MCERA(M)]
- Weekly clock and timer
- Alarm history
- Fan static pressure management function
- Selection between Celsius and Fahrenheit, (+/- 0,5 °C - +/- 1 °F)
- Standard ambient temperature sensor. Select the ambient temperature control on the controller if you want a more accurate reading at standing height or in particular installation conditions.

- Possibility of group management with a single controller, (max 16 indoor units on a single controller), the functions and operating modes of all the indoor units connected to that controller will be identical to each other. Independent management is not possible. Each command will be replicated on all indoor units connected to that controller in the same way. (see diagrams on page 135)



HI-WB201DEI WI-FI MODULE FOR INDIVIDUAL UNITS

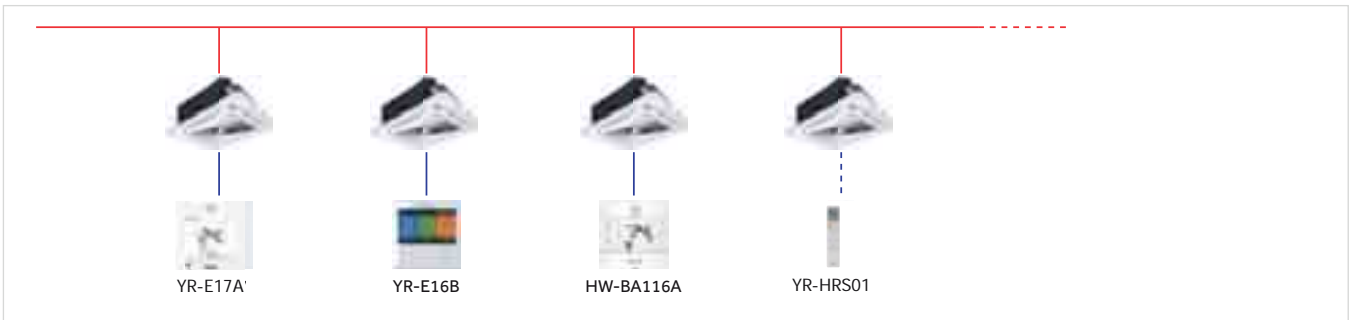
- Ideal for small plants with stable Wi-Fi coverage that reaches all indoor units. The end user and/or user of the system must ensure their own Wi-Fi coverage that has access to the internet.
- The module must be installed and connected to the electronic board of the MRV series indoor units that you want to control with Wi-Fi.
- The user will have to download the APP "Haier Smart Air" for android, create a profile and then register each individual indoor unit following the step-by-step instructions that the APP shows on the screen.
- Control: on/off, mode, temperature, deflectors, fan speed, weekly timer, function check, generic alarm signalling.
- By carrying out a group management with the wired controllers, (max 16 indoor units on a single controller), only one Wi-Fi module will have to be installed on the Master unit which

will be the one where the wired controller will be connected. In a group management with a single wired controller, the functions and operating modes of all the internal units connected to that controller will be identical to each other. Independent management is not possible. As for the wired controller, also by acting through the web with the APP, each command will be replicated on all the indoor units connected to that Wi-Fi controller / module in the same way. (see diagrams on page 135)



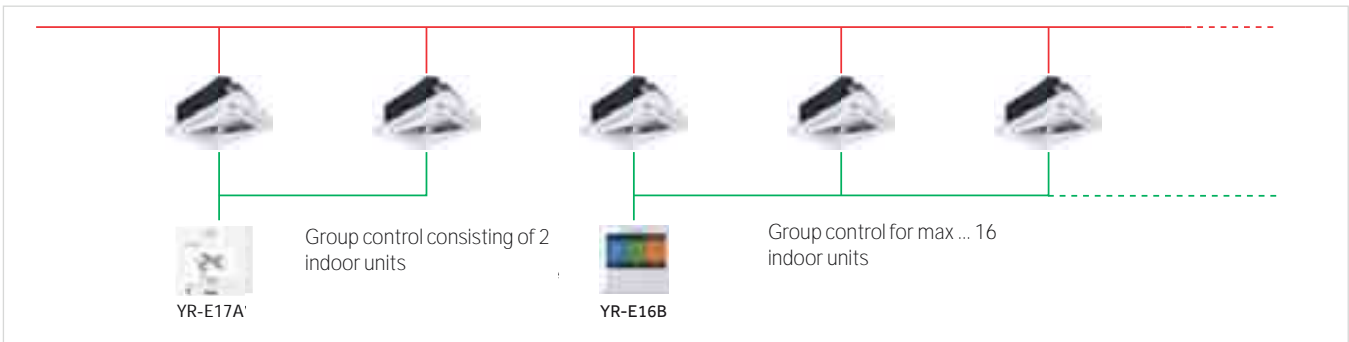
EXAMPLES OF CONNECTION OF REMOTE CONTROLLERS AND WI-FI MODULES

Example of single controller connection for independent operation of each indoor unit

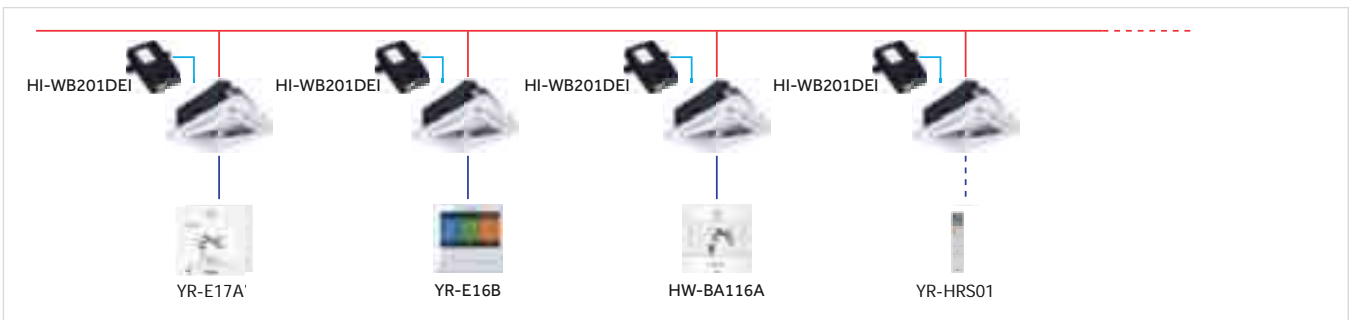


Example of group controller (only for wired controllers - max 16 indoor units on a single controller)

In a group management with a single wired controller, the functions and operating modes of all the internal units connected to that controller will be identical to each other. Independent management is not possible. Each command given will be replicated on all the indoor units in the same way.

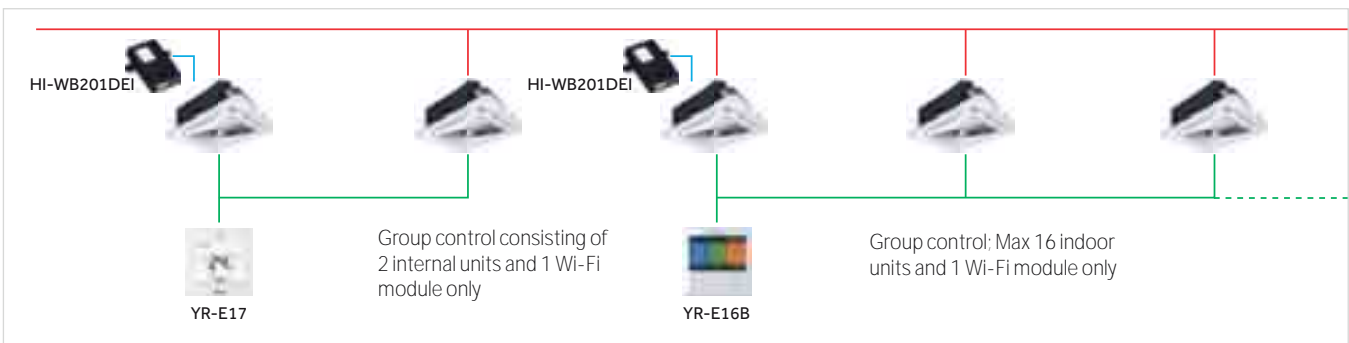


Example of a Wi-Fi module connection, for independent operation of each indoor unit



Example of group management through Wi-Fi module

Connect only one Wi-Fi module on the same Master unit, where the group wired controller is connected. Each command given through the APP, as for a group wire controller, will be replicated in the same way on all the indoor units connected to that wi-fi controller / module.



Infrared receiver on controller.

Wired controller models: HW-BA101ABT, HW-BA116ABK and YR-E17A are equipped with receiver for wireless remote controllers.

This function allows you to control an indoor unit with the wired controller and with a remote control simultaneously. (example: wired controller on the wall and remote control on the desk or on the bedside.)



INTEGRATED MANAGEMENT SYSTEM FOR MEDIUM AND LARGE BMS PLANTS

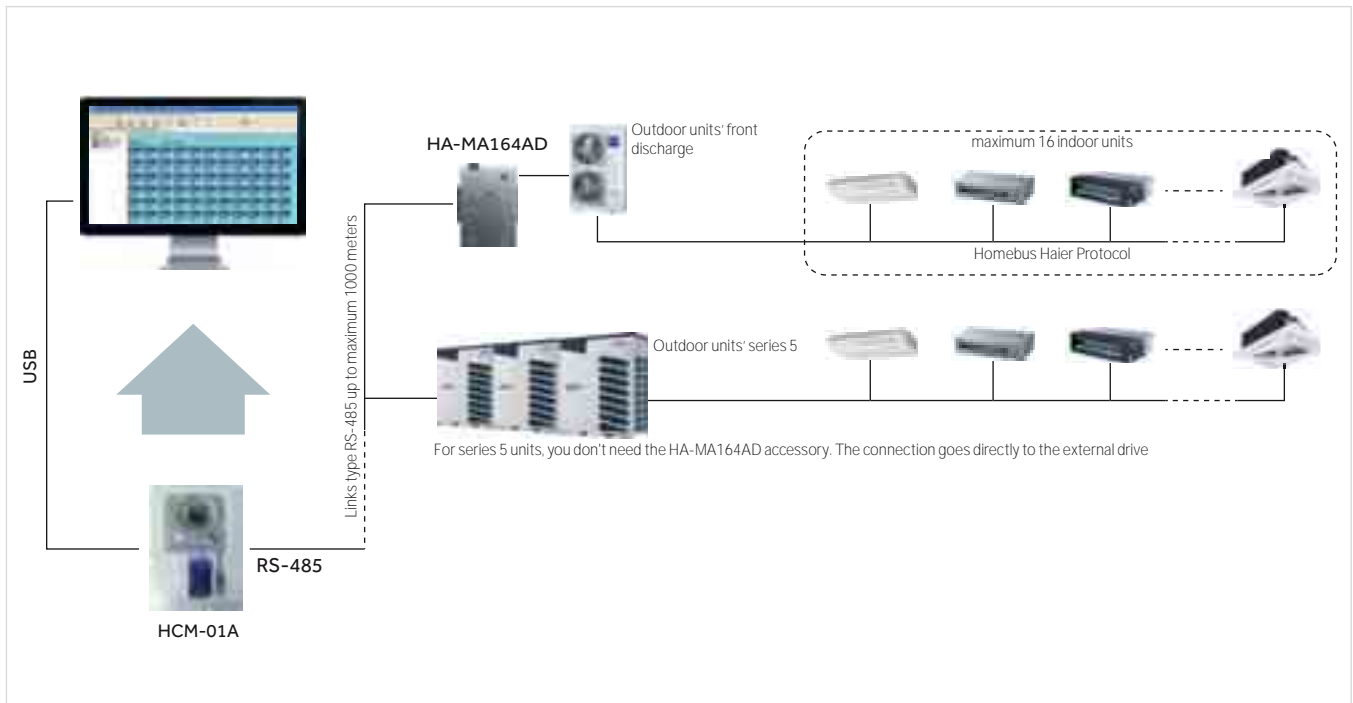


HCM-01A LOCAL MANAGEMENT SYSTEM FOR MEDIUM-SIZED PLANTS

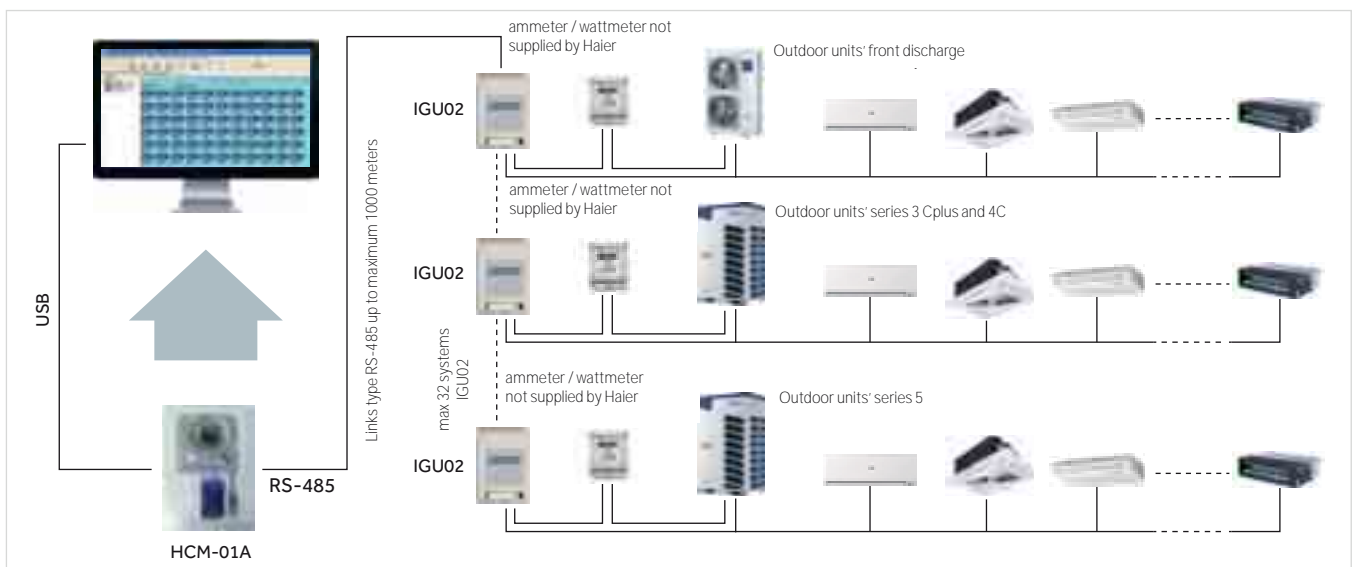
- MRV plant supervision and management system for local use on PC.
 - RS-485 protocol converter in RS-232 via USB adapter for local use on PC.
 - Control max 400 units and/or maximum 32 independent cooling circuits
 - Each cooling circuit requires HA-MA164AD adapter (except for outdoor unit series 5)
 - Management of all system parameters by zones / groups / individual units, weekly and monthly timers, error management and alarm history.
 - Clear and intuitive visualisation software
 - **DOES NOT allow management via web/Internet**
 - The software works on Windows platform (7 32/64 bits- 8 Pro -10 Pro)
 - The software has a license for use on a single PC. If you plan to use on two or more PCs, you need to purchase 2 or more licenses
 - Possibility of accounting for electricity consumption. Providing IGU-02 adapters instead of HA-MA164AD. One IGU-02 for each cooling circuit, also for series 5 outdoor units. For each cooling circuit / IGU-02, a "Wattmeter / pulse generator" must be provided which detects the energy absorption of the outdoor units and proportionally generates counting pulses that the IGU-02 adapter receives and transforms into values to be managed and visualised by the software.
- (the pulse generator wattmeter / ammeter is not supplied by Haier, as it must be selected and sized according to the power of the plants).**



INDICATIVE DIAGRAM FOR LOCAL MANAGEMENT WITH HCM-01A



INDICATIVE DIAGRAM FOR LOCAL MANAGEMENT WITH HCM-01A AND CONSUMPTION ACCOUNTING

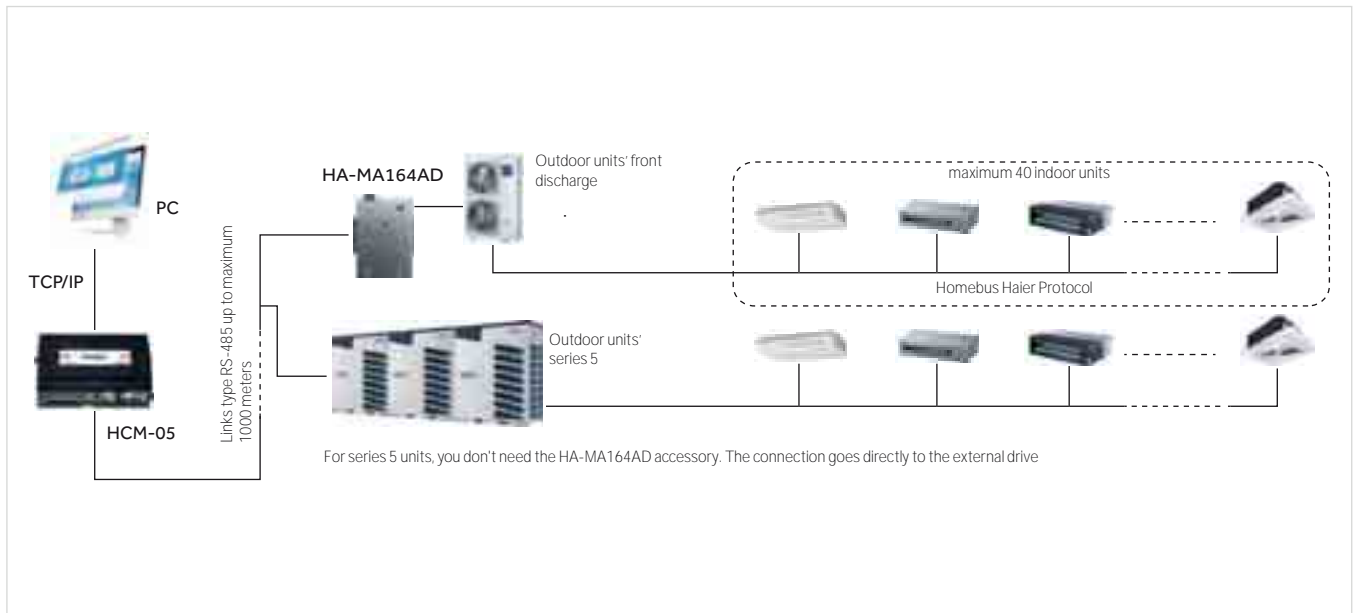


HCM-05 / HCM-05A MEDIUM PLANT MANAGEMENT SYSTEM WITH WEB / INTERNET CONTROL FUNCTION INTEGRATED SYSTEM FOR PLANTS UP TO 250 INTERNAL UNITS AND UP TO 500 FOR THE 05A MODEL

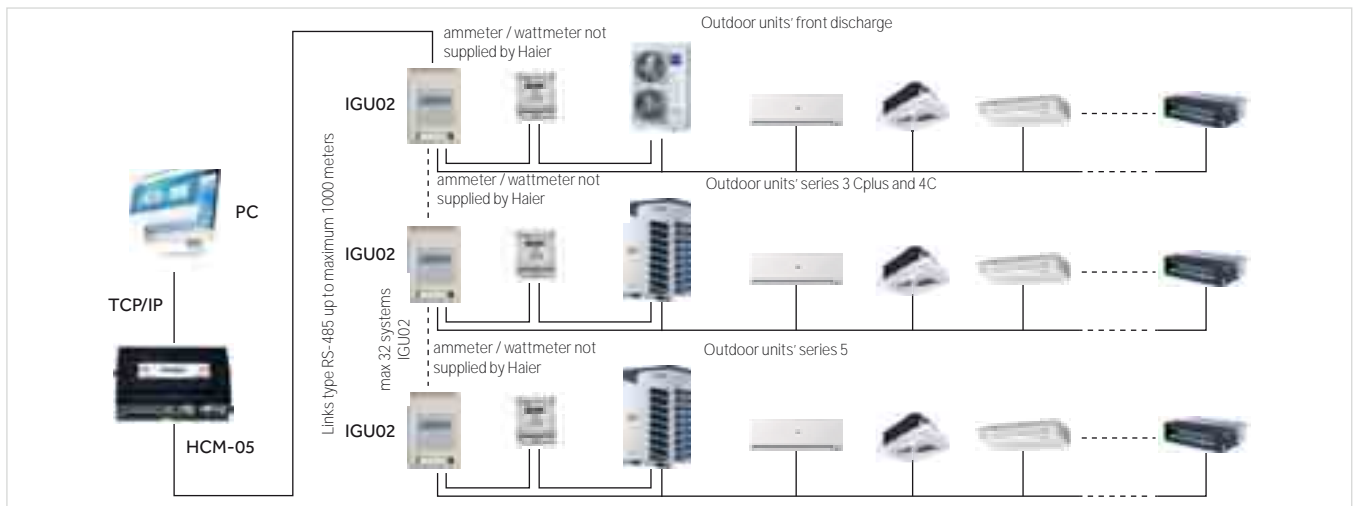
- Local control over the network from PC or remotely via web/internet.
- Each HCM-05 adapter is equipped with a web browser integrated with a specific IP address. Requires a connection to a network with internet access, via ethernet cable. Once configured, anywhere in the world simply enter the IP address supplied with the HCM-05 in the web search engine **Google Chrome** to access the system to be controlled. Access to specific system management is protected by multi-level passwords.
- Possibility of communication with systems, not supplied by Haier, through the BACnet - IP protocol.
- Max 250 indoor units that can be controlled with the HCM-05 model and a maximum 500 indoor units that can be controlled with the HCM-05A model.
- Up to a maximum of 32 independent cooling circuits can be controlled. Each cooling circuit requires HA-MA164AD adapter (except for outdoor unit series 5)
- Management of all system parameters by zones / groups / individual units, weekly and monthly timers, error management and alarm history. Clear and intuitive visualisation software
- Possibility of accounting for electricity consumption. Providing IGU-02 adapters instead of HA-MA164AD. One IGU-02 for each cooling circuit, also for series 5 outdoor units. For each cooling circuit / IGU-02, a "Wattmeter / pulse generator" must be provided which detects the energy absorption of the outdoor units and proportionally generates counting pulses that the IGU-02 adapter receives and transforms into values to be managed and visualised by the software.
(the pulse generator wattmeter / ammeter is not supplied by Haier, as it must be selected and sized according to the power of the plants).



ILLUSTRATIVE DIAGRAM FOR MANAGEMENT VIA WEB WITH HCM-05



ILLUSTRATIVE DIAGRAM FOR MANAGEMENT VIA WEB WITH HCM-05 WITH CONSUMPTION ACCOUNTING



The data in this catalogue is purely indicative as the data may vary. Please be advised to check the accuracy of the data with the supplier before purchasing products.



Monitoring

Independent control of up to 500 indoor units

- Mode, temperature, ventilation, deflectors
- Blocking of user functions
- Controlling of blocking levels
- An icon with all the information for each individual unit



Energy consumption report for each unit

- Data store
- Possibility of defining different costs by usage ranges
- Preview and print the results
- Comparison of operating costs over time



Programming

- Weekly and monthly schedule graph
- Free configuration
- Defining sample programmes



Zone control

- Creation of zones for management that can be customised according to the requests



Alarm management

- History of alarm messages
- Detail of every single alarm



System configuration

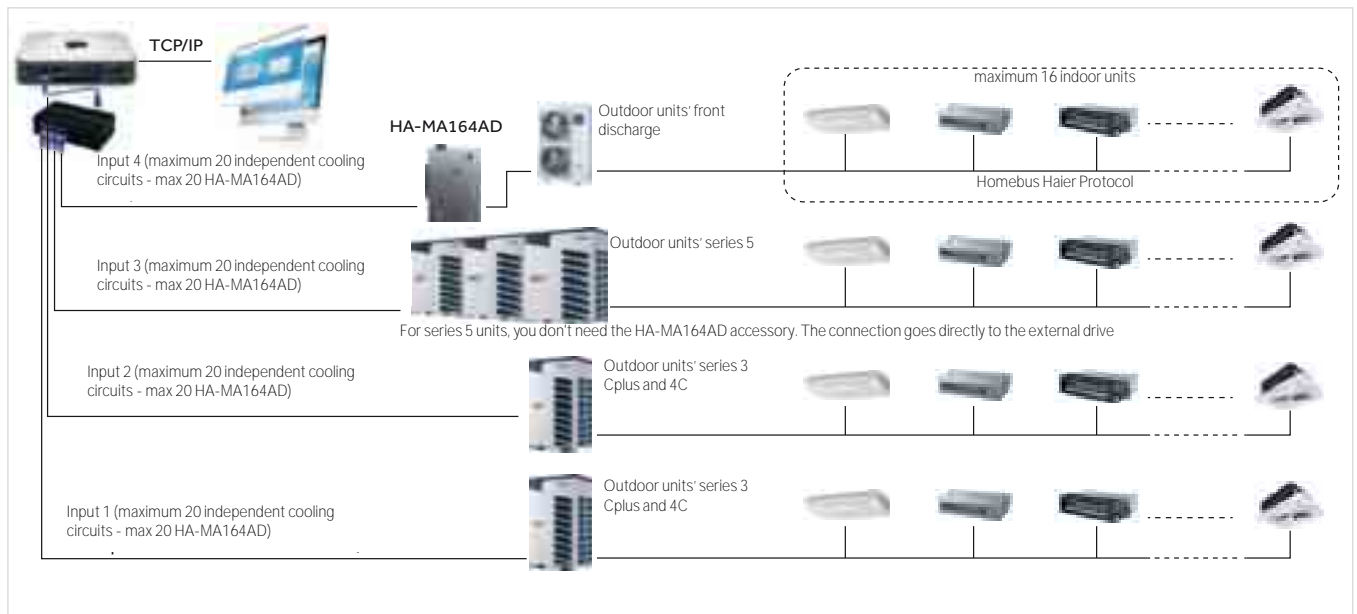
- Building-based configuration
- Equipment configuration
- Management of access levels
- Management of parameters

HCM-03A LARGE PLANT MANAGEMENT SYSTEM WITH WEB/INTERNET CONTROL FUNCTION INTEGRATED SYSTEM FOR PLANTS UP TO 1500 INDOOR UNITS

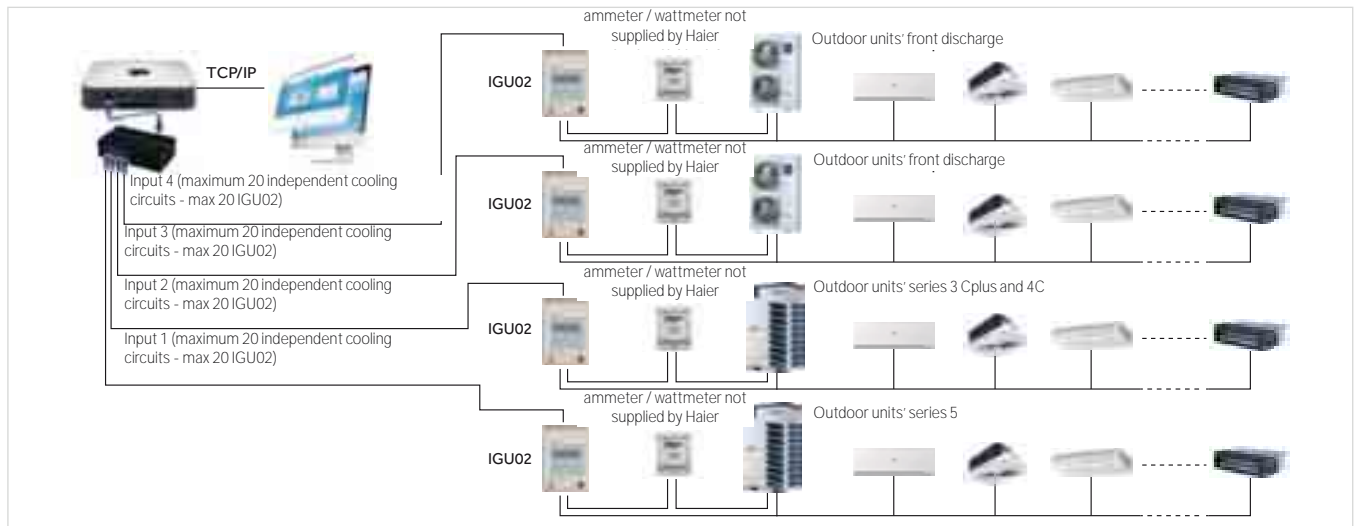
- Local control over the network from PC or remotely via web/internet.
- Each HCM-03A adapter is equipped with a web browser integrated with a specific IP address. Requires a connection to a network with internet access, via ethernet cable. Once configured, anywhere in the world simply enter the IP address supplied with the HCM-03 in the web search engines **Google Chrome or Firefox** to access the system to be controlled. Access to specific system management is protected by multi-level passwords.
- Possibility of communication with systems, not supplied by Haier, through the BACnet - IP, Modbus protocol.
- Max 1500 controllable indoor units.
- Up to 20 independent cooling circuits can be connected to one of the four available ports, in order to obtain a system that provides a maximum of 80 circuits. Each cooling circuit requires HA-MA164AD adapter (except for outdoor unit series 5)
- Management of all system parameters by zones / groups / individual units, weekly and monthly timers, error management and alarm history. Clear and intuitive visualisation software
- Possibility of accounting for electricity consumption. Providing IGU-02 adapters instead of HA-MA164AD. One IGU-02 for each cooling circuit, also for series 5 outdoor units. For each cooling circuit / IGU-02, a "Wattmeter / pulse generator" must be provided which detects the energy absorption of the outdoor units and proportionally generates counting pulses that the IGU-02 adapter receives and transforms into values to be managed and visualised by the software.
(the pulse generator wattmeter / ammeter is not supplied by Haier, as it must be selected and sized according to the power of the plants).
- Possibility to insert the building layout as a file in the HCM-03A system to create specific command buttons within the reference rooms via the loaded floor plan.
- Technology developed in collaboration with **MAC mini**.



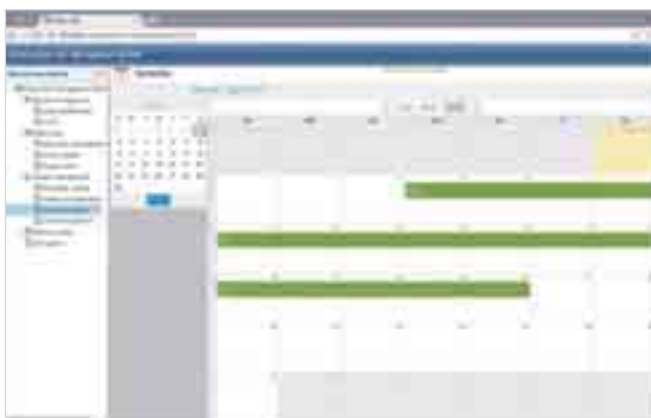
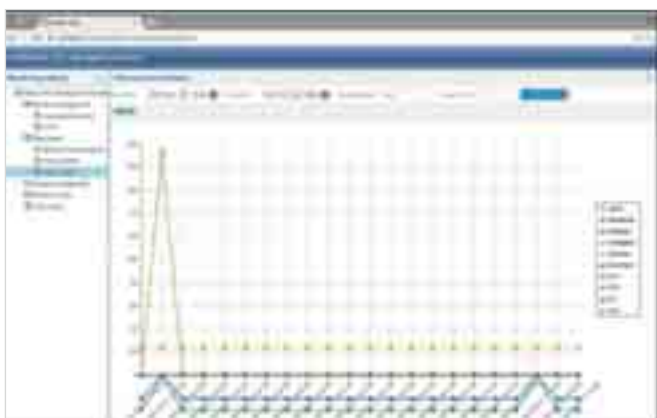
ILLUSTRATIVE DIAGRAM FOR MANAGEMENT VIA WEB WITH HCM-03A.



ILLUSTRATIVE DIAGRAM FOR MANAGEMENT VIA WEB WITH HCM-03A WITH CONSUMPTION ACCOUNTING



SIMPLE AND INTUITIVE NAVIGATION



Building layouts can be inserted as a file in the HCM-03A system to configure by positioning the specific indoor unit and the dedicated controller.

The creation of specific command buttons inside the premises allows direct management of the floor plan, simulating reality more accurately which makes everything more intuitive and simple.



HA-MA164AD - MODBUS ADAPTER

- Haier to MODBUS protocol converter (not required for series 5 outdoor units)
- Each cooling circuit requires 1 converter
- 1 converter can handle max 64 indoor units on single cooling circuit
- Power supply transformer included
- It is not possible to account for electricity consumption

IGU02 - ADAPTOR TO ACCOUNT FOR CONSUMPTION

- Haier protocol converter to RS-485 to be used in conjunction with BMS systems: HCM-01A / 03A / 05-05A, necessary if you want to monitor the electrical consumption of MRV systems.
 - Each IGU-02 can control up to a maximum of 40 indoor units
 - You need an IGU-02 for each cooling circuit, even for outdoor 5 series.
- For each cooling circuit / IGU-02, a "Wattmeter / pulse generator" must be provided which detects the energy absorption of the outdoor units and proportionally generates counting pulses that the IGU-02 adapter receives and transforms into values to be managed and visualised by the software.

(the pulse generator wattmeter / ammeter is not supplied by Haier, as it must be selected and sized according to the power of the plants).

IGU07 - LONWORKS ADAPTER

- Modbus > Lonworks protocol converter
- Each IGU-07 can control only 1 cooling circuit and up to a maximum of 32 indoor units
- The cooling circuit connected require adapter HA-MA164AD (except for series 5 outdoor units)
- **The IGU07 adapter does not have a power transformer, therefore it is necessary to have a 24 Volt DC power supply (24 VDC) fitted by the installer.**
- It is not possible to account for electricity consumption

HA-AC-KNX - KNX ADAPTER

- Haier to KNX protocol converter
- Requires HA-MA164AD adapter
- 3 available models, up to 8, up to 16 and up to 64 controllable indoor units (HA-AC-KNX-8, HA-AC-KNX-16, HA-AC-KNX-64)
- Does not require power supply

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-MA164AD

- Haier protocol converter to RS-485
- To be connected to centralised systems (not required for series 5 outdoor units)
- Each cooling circuit needs 1 converter (see diagrams from page 129)
- 1 converter can handle max 64 internal units on single cooling circuit
- This accessory, if NOT connected to a centralised controller as a dedicated converter, can be used individually

to transform the communication protocol "Homebus Haier" into "MODBUS".
(For this feature, configure the selectors in the desired mode)

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

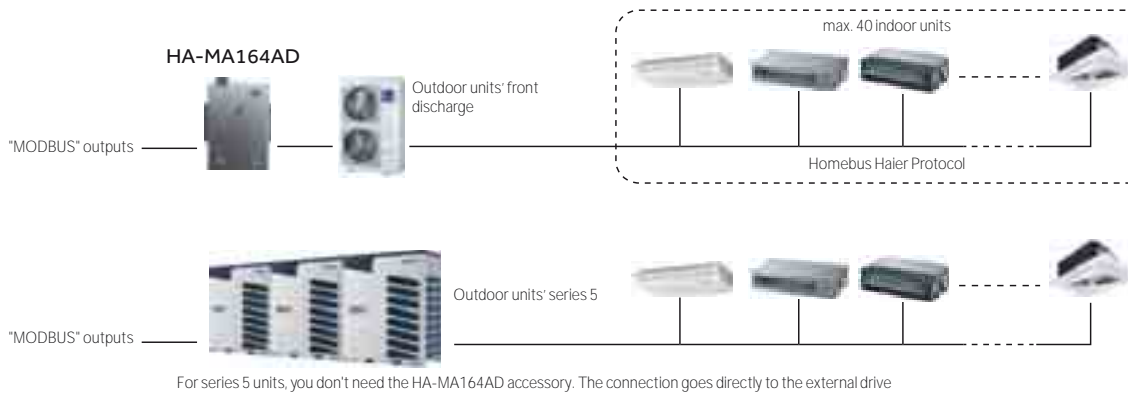
ADDRESS SETTING AND CHECKING TOOL YR-NS

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

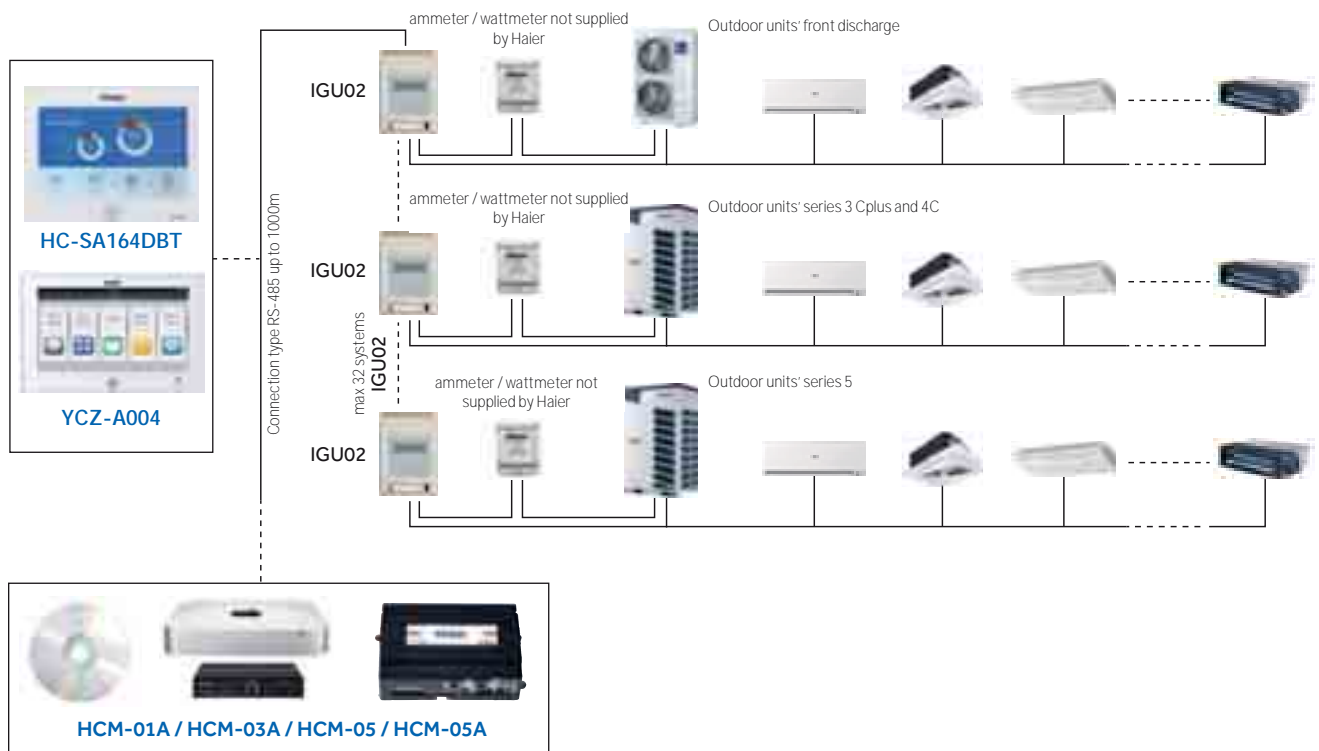


EXAMPLES OF CONNECTION ADAPTERS

HA-MA164AD, MODBUS ADAPTER



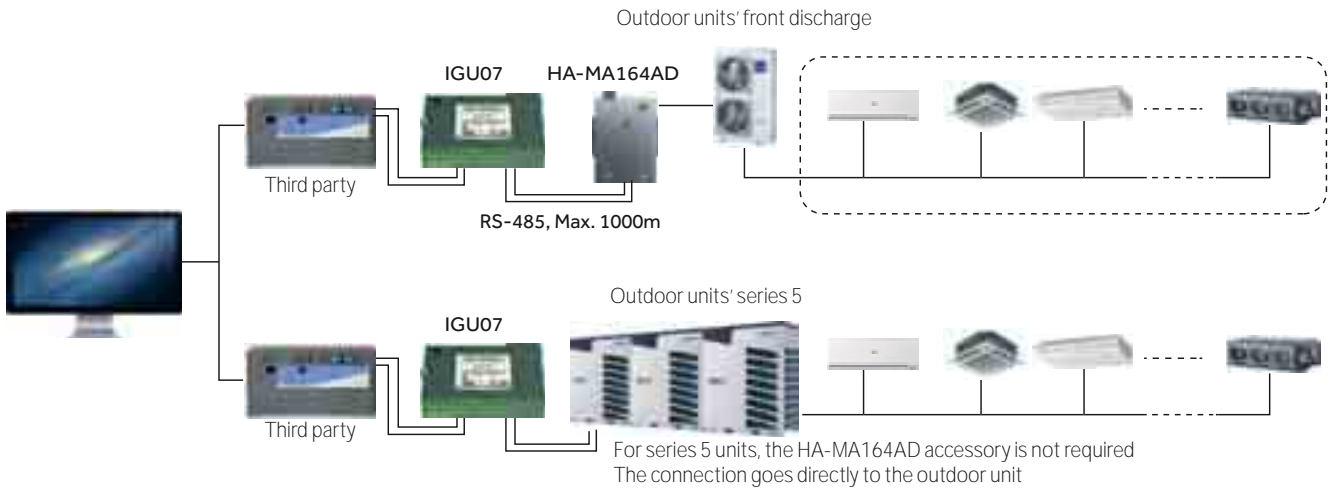
IGU-02 – ADAPTER FOR ACCOUNTING



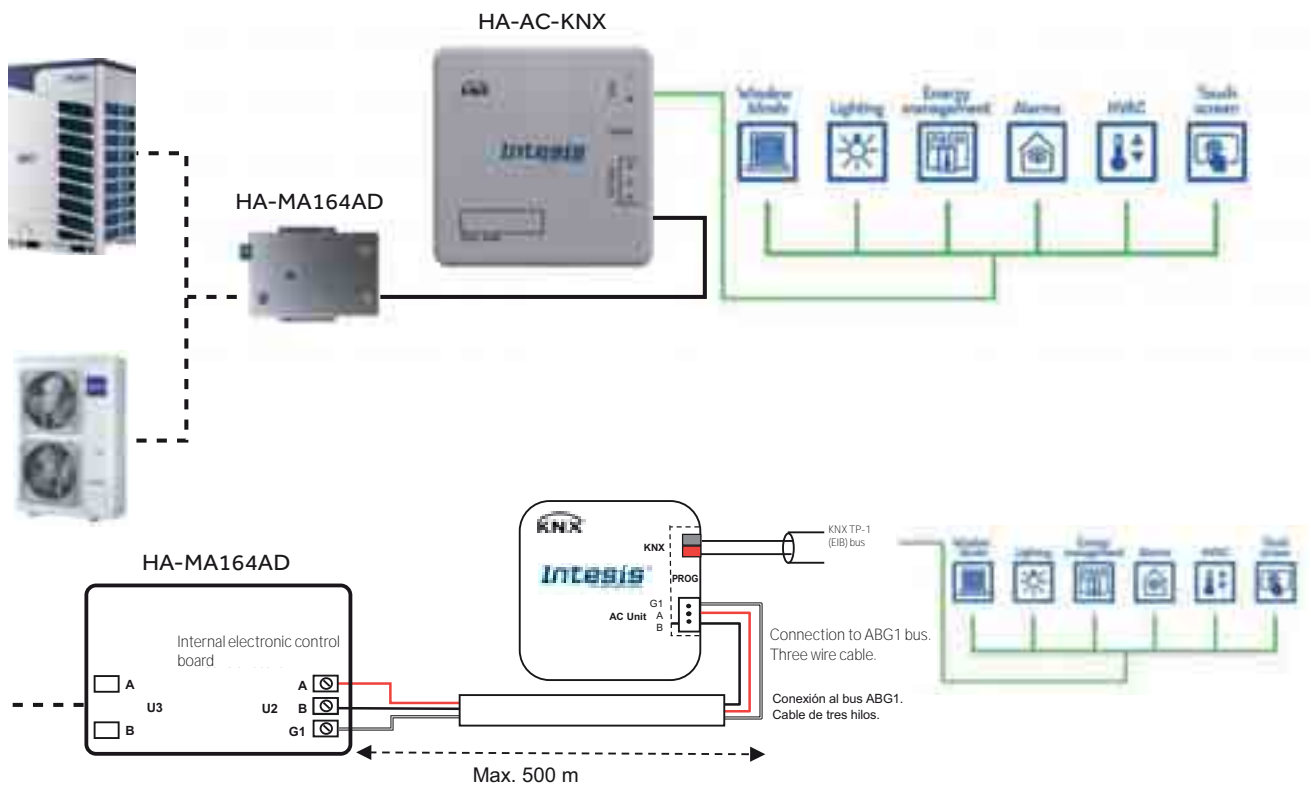
HCM-04



IGU-07 ILLUSTRATIVE CONNECTION SCHEME FOR LONWORKS SYSTEMS



HA-AC-KNX - KNX ADAPTER



Haier

HVAC Solutions

Professional, Smart &
Healthy Air Solutions



Haier HVAC European HQ

Via Marconi, 96. 31020
Revine Lago (TV) - Italy
haierhvac.eu