



Haier Commercial Air Conditioning



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The specifications, designs and information in this brochure are subject to the actual products.
Haier reserves the right to make change without any notice.

2017 General Catalogue

MRV 50/60Hz R410a

Nov 2016

Version 2.0

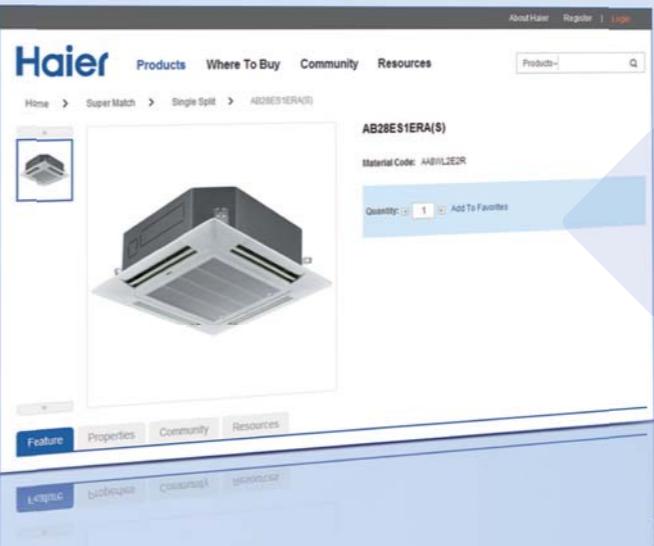


2017 General Catalogue

Haier Commercial Air Conditioning

Haier B2B Platform

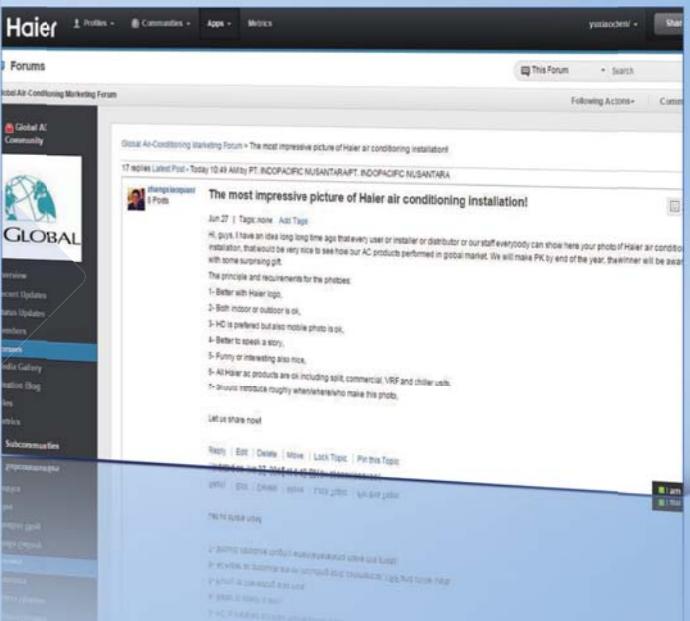
The Haier Air-conditioning dealer portal (www.haierac.com) is a platform to help Haier distributors, installer and professional personals better understand and make business with Haier globally.



This platform offers an opportunity for our business partners to share projects, applications and other exciting stories with Haier.



The portal becomes the official new product release channel, offering the latest materials of Haier A/C products with high resolution pictures, project reference to help our business partners understand how our solutions help the end users globally.



This platform offers a community environment for our business partner to attain valuable resources, including catalogue, brochures, leaflat and other marketing documents. Moreover, the platform is a convenient place where all business partners can communicate with Haier directly.

<http://www.haierac.com>



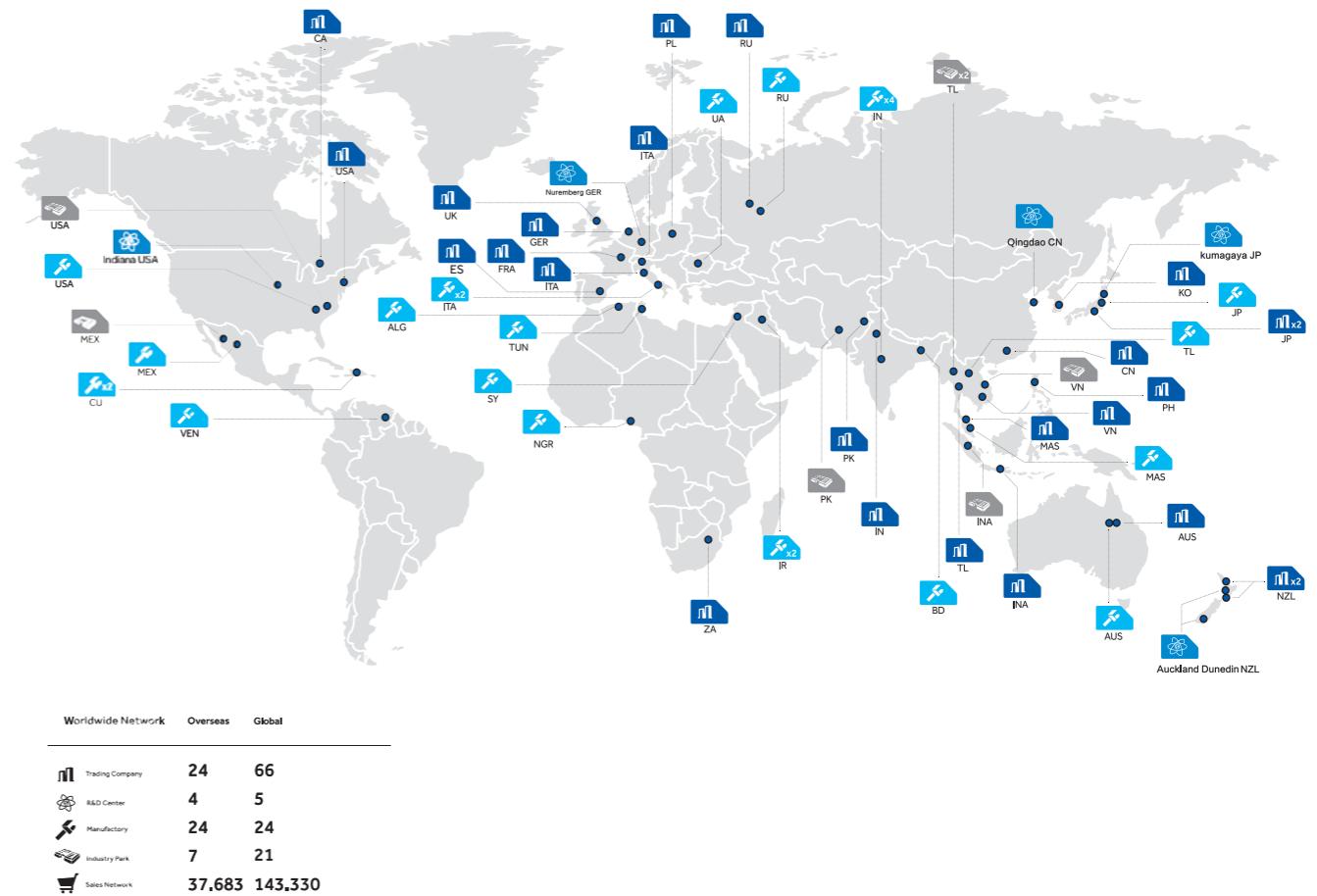
Haier Brand Story

The Internet era is a diverse and unconventional time, where "one size fits all" products and solutions simply aren't enough. Customers want to be treated as individuals and respected for who they are. Everyone wants their unique lifestyle acknowledged. That is why Haier listens closely to you in order to gain a genuine understanding of what is going on in your life and what is on your mind. So each of you can get the smart home experience you deserve: be it simple, sophisticated, organized or enjoyable. As a worldwide industry leader, Haier innovates beyond products and solutions and turns the organization into a wholly connected platform. In doing so, internal and external resources are connected quickly and easily. We believe only by doing so, we can best meet our consumers' expectations in this rapidly evolving world. Be part of the Haier Network. Create new possibilities.

Haier Global Network

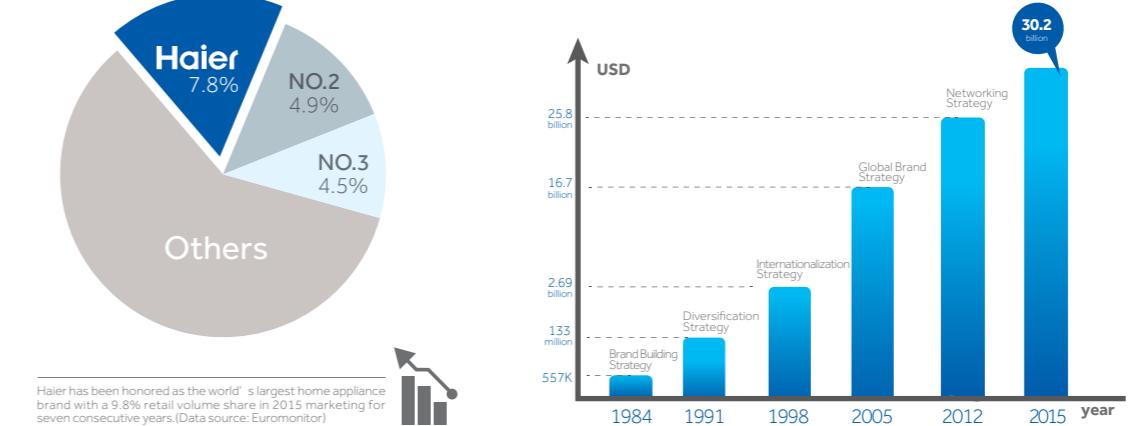
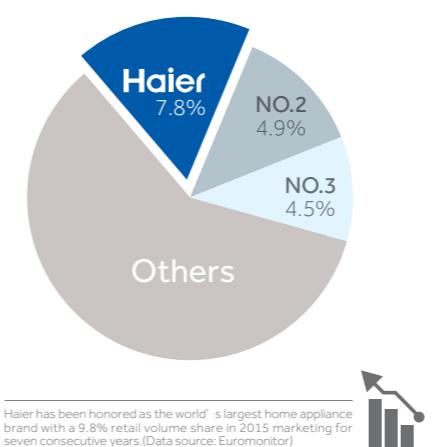
Haier has built up its infrastructures globally to meet the customers' quick evolving demands, including R&D centers, production facilities, trading companies and sales networks etc.

Haier's five R&D centers around the world have forged strategic partnerships with first-class suppliers, research institutions, and prestigious universities to create an innovative ecosystem composed of internal and external scientists and engineers connected by virtual and physical networks.



Haier Global Revenue

Established in 1984, Haier is the world's No. 1 major appliance brand. In the Internet age, Haier aims to become a Networked Enterprise and its global revenue reaching 30.2 billion USD in 2015.



Haier AC Milestones



Brief of R&D Center

Setting New Standards: Haier's new state of the art HVAC R&D Center commences operation in March, 2014



Driving across the world's longest bridge into the beautiful coastal city of Qingdao and taking the off-ramp to the massive Haier Industrial Park, you will find the world's most advanced HVAC R&D center and its adjacent height drop testing facility towering over other buildings in the park. The commencement of the R&D center puts Haier in the leadership position to provide the best HVAC product solutions suitable for different climates and environments around the globe.

Entering the lobby you will be awed by the installation and display of Haier's world leading magnetic bearing oil free centrifugal chiller that cools the building. Also in display are Haier's latest innovation of residential and commercial products and BMS control solutions.

The 6 story building houses 1,000 plus experienced engineers and technicians, and is equipped with 120 test labs. From psychrometric labs that accurately measure product capacity and efficiency to acoustic labs that reduce sound level; from environment simulators to sustainability test labs that ensure product reliability under the harshest ambient conditions, Haier engineers work hand in hand with international team of experts to turn out green and user friendly climate control solutions.

The height drop test tower, standing 106 meters tall, is the tallest test tower of its kind. It allows Haier's latest MRV products to test under all kinds of installation scenarios.

The stage is set, and Haier is ever more ready to provide global customers with world class products. The new R&D Center is the testament of Haier's commitment and vision in being the leading player in the global HVAC industry.

Global Manufacturing Capacity

Domestically, Haier AC is running 9 factories, 1 of which is MHAQ, a JV between Haier and Mitsubishi Heavy. In overseas markets, Haier is running 7 manufacturing plants. With all these factories, Haier AC has a product capacity amounts to 20.1 million sets per year.



2017 NEW PRODUCT

NEW



MRV III PLUS (380-400V/3Ph/50/60Hz)

- Full DC inverter technology
- Max. 4 modules combination up to 64HP
- Higher energy efficiency
- No oil balance pipe
- Total pipe length up to 500m

8/10HP

12/14/16HP

033



MRV SII

- Full DC inverter technology
- EUROVENT/MEPS certified
- Suitable for both T1&T3 condition
- 4/5/6HP for both 220V&380V

079



MINI 4-Way Cassette

- 5-18k
- Compact design 620*620 panel
- Low sound level

133



1-Way Cassette

- 5-12K
- Ultra thin design
- Ultra low sound level
- Built-in high head drain pump

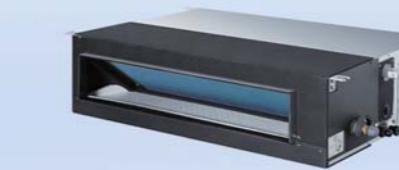
139



Slim Duct (DC)

- Super slim design, only 185mm
- Reserved fresh air inlet
- Built-in high head drain pump
- Static pressure 0/15/30Pa

143



Middle ESP Duct

- 5-28K
- Only 250mm thick
- Built-in drain pump
- 50/100Pa

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Constant Air Volume Duct

- 7-54K
- Auto adjusted ESP 0-200Pa
- Low sound level
- Built-in high head drain pump

157



High Wall

- 5-30K
- Nano aqua
- 3D air flow
- Low sound level
- Long distance air supplying
- VC/ESF Filter optional

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MRV 50/60Hz R410a



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HAIER MRV Milestone

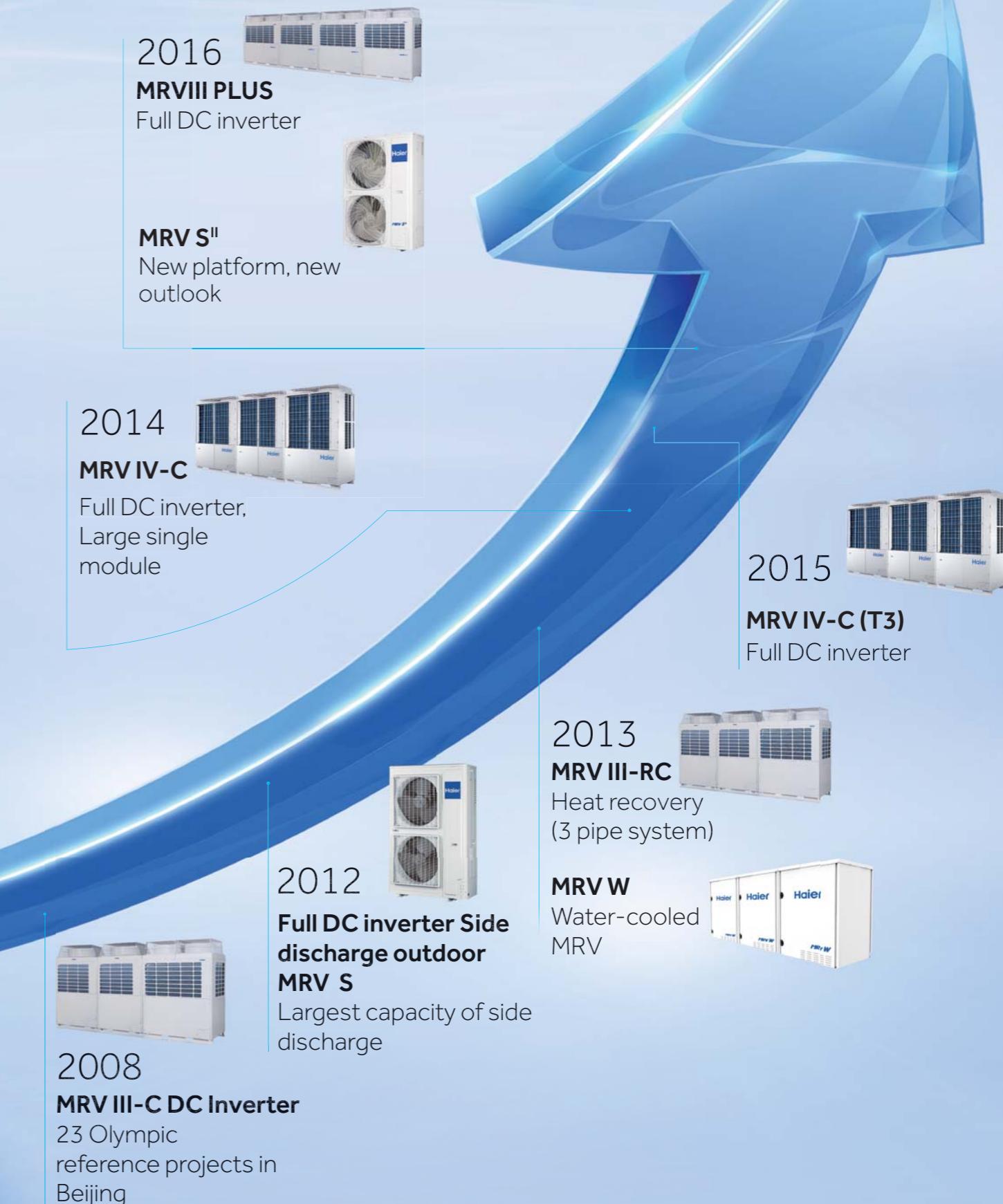
Haier, as China's earliest VRF practitioners, has been always committed to the extreme pursuit to VRF system

1996
Home VRF (Home MRV -First unit in China)
Haier first home inverter multi

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

2005
Modular combination MRV II
First pure DC inverter in China Technology from Toshiba

1993
Haier
Enter into China commercial AC field



PRODUCT LINE-UP

(Outdoor Units)

| Series | HP | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 |
|-----------------------------------|--|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MRV IV-C (T1) | 3/380~400/50 3/380~400/60 3/208~230/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRV IV-C (T3) | 3/380~400/50 3/380~400/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRV III-C ^{PLUS} (T1) | 3/380~400/50 3/380~400/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRVIII-C (T1) | 3/380~400/50 3/380~400/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRVIII-C (T1) | 3/220/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRVIII-C (T3) | 3/460/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRVIII-RC | 3/380~400/50 3/380~400/60 3/208~230/60 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PRODUCT LINE-UP

(Outdoor Units)

| Series | HP | 3 | 4 | 5 | 6 | 7 | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 |
|---------------------|----------------------------------|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| MRV S ^I | 1/220-240/50 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1/220-240/50 1/220-240/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3/380-415/50 3/380-415/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRV S ^{II} | 1/220-240/50 1/220-240/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3/380-415/50 3/380-415/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 3/380-400/50 3/380-400/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MRV W | 3/380-400/50(60) 3/208-230/60 | | | | | | | | | | | | | | | | | | | | | | | | | | |

| EASY MRV | | | | DX AHU Connection Kit | | |
|-------------------------|--|-----------|----------------------------|-----------------------|--|----------------|
| MODEL | MS1-036A | MS1-060A | MS3-036A | MODEL | AH1-280A | AH1-560A |
| Match with indoor | 1 by 1 | 1 by 1 | 1 by 3 | CAPACITY | 14 ≤ x ≤ 28 kW | 28 < x ≤ 56 kW |
| EASY MRV Connection Kit | | | | | | |
| Capacity(Btu/h) | ≤36K | 36K<X≤60K | Every indoor capacity ≤36K | MRV series | MRV IV, MRV III ^{PLUS} , MRV III (2-Pipe), MRV S ^{II} , MRV S ^I (5/7HP) | |
| MRV series | MRV IV, MRV III ^{PLUS} , MRV III (2-Pipe), MRV S ^{II} , MRV S ^I (5/7HP) | | | | | |

PRODUCT LINE-UP

(Indoor Units)

| Series | | KBTU/h kW | | 5 | 7 | 9 | 12 | 16 | 18 | 24 | 28 | 30 | 38 | 42 | 48 | 54 | 72 | 96 |
|-----------------------------------|---|---|-----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|
| | | | | 1.5 | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 | 8.0 | 9.0 | 11.2 | 12.5 | 14.0 | 16.0 | 22.6 | 28.0 |
| Round Way Smart Air Flow Cassette | |  | AB**2MRERA | | | | | | | | | | | | | | | |
| MINI 4 Way Cassette |  |  | AB**2MCERA(M) | | | | | | | | | | | | | | | |
| 4 Way Cassette | |  | AB**2MCERA | | | | | | | | | | | | | | | |
| 2 Way Cassette | |  | AB**2MBERA | | | | | | | | | | | | | | | |
| 1-Way Cassette |  |  | AB**2MAERA | | | | | | | | | | | | | | | |
| Convertible | |  | AC**2MCERA AC**2MFERA | | | | | | | | | | | | | | | |
| Slim Duct(30Pa) | |  | AD**2MSERA(D) AD**2MSERA | | | | | | | | | | | | | | | |
| Low ESP Duct(20Pa) | |  | AD**2MLERA | | | | | | | | | | | | | | | |
| Middle ESP Duct (50/96Pa) | |  | AD**2MMERA | | | | | | | | | | | | | | | |
| Middle ESP Duct (50/100Pa) |  |  | AD**2MJERA | | | | | | | | | | | | | | | |

PRODUCT LINE-UP

(Indoor Units)

| Series | | KBTU/h kW | | | | | | | | | | | | | | | | |
|--|---|--------------------|--|---|--------------------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| | | | | 5 1.5 | 7 2.2 | 9 2.8 | 12 3.6 | 16 4.5 | 18 5.6 | 24 7.1 | 28 8.0 | 30 9.0 | 38 11.2 | 42 12.5 | 48 14.0 | 54 16.0 | 72 22.6 | 96 28.0 |
| Middle ESP Duct (80/120Pa) |  | AD**2MNERA | | | | | | | | | | | | | | | | |
| High ESP Duct (100/196Pa) |  | AD**2MHERA | | | | | | | | | | | | | | | | |
| Constant Air Volume Duct(0-200Pa) |  NEW | AD**2MQERA | | | | | | | | | | | | | | | | |
| Built-in Floor Standing |  | AE**2MLERA | | | | | | | | | | | | | | | | |
| Console |  | AF*2MAERA | | | | | | | | | | | | | | | | |
| High Wall-EK |  | AS**2MGERA | | | | | | | | | | | | | | | | |
| High Wall-N |  NEW | AS**2MNERA | | | | | | | | | | | | | | | | |
| |  NEW | AS**2MFERA | | | | | | | | | | | | | | | | |
| Fresh Air Duct |  | AD*2MPERA | | | | | | | | | | | | | | | | |
| HRV (Heat Reclaim Ventilation) (ERV0150/0260/ 0800/1000ANN) |  | 150m³/h 260m³/h | |  | 500m³/h 800m³/h 1000m³/h | | | | | | | | | | | | | |



MRV IV-C

| 013 Features & Benefits
| 023 MRV IV Outdoor

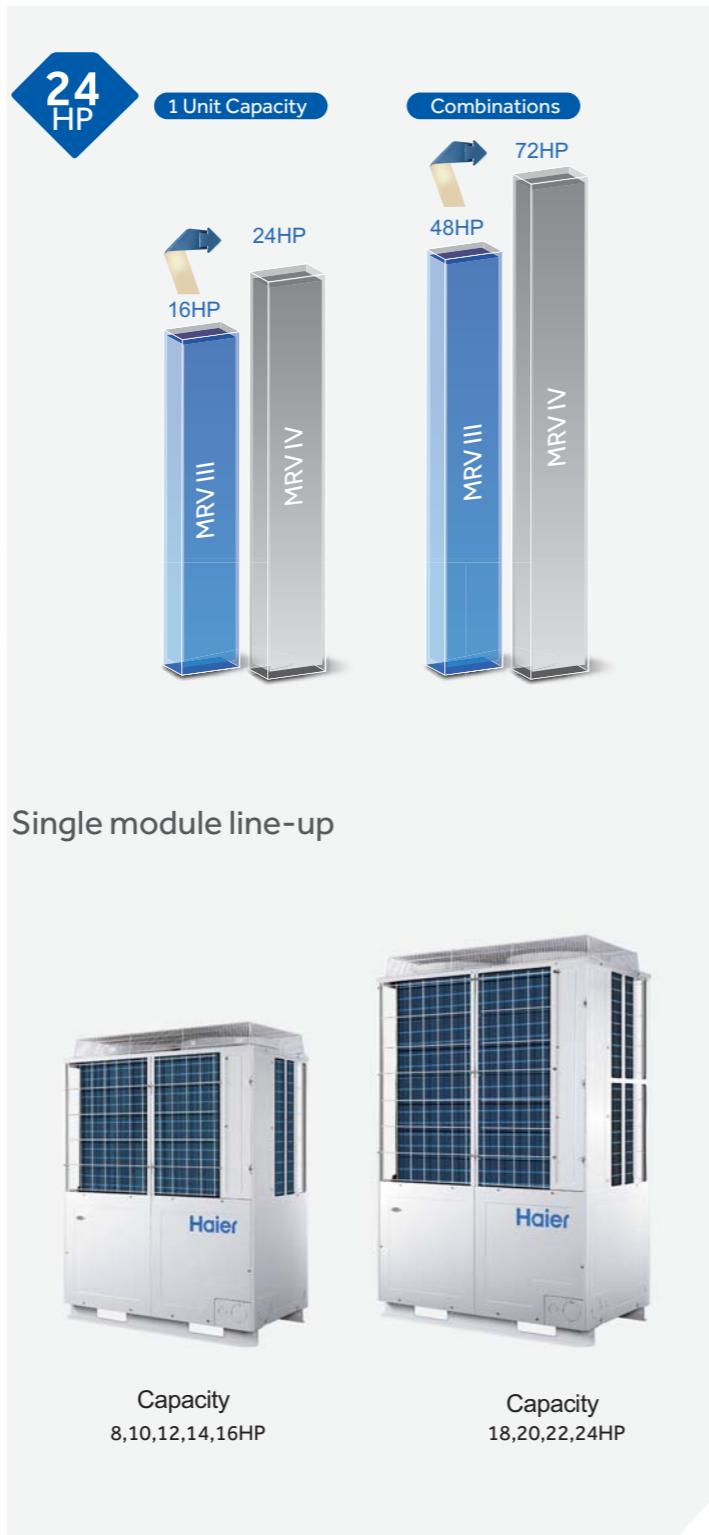
MRV IV-C



FEATURES & BENEFITS

MRV milestones & MRV IV line up

Largest capacity single module



MRV milestones & MRV IV line up

Combination line-up



- Max 3 modules combination 72HP, every 2HP one model.
- Footprint of 72HP only 2.92m², 50% size reduced

| 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | 38 | 40 | 42 | 44 | 46 | 48 | 50 | 52 | 54 | 56 | 58 | 60 | 62 | 64 | 66 | 68 | 70 | 72 |
|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | • | |

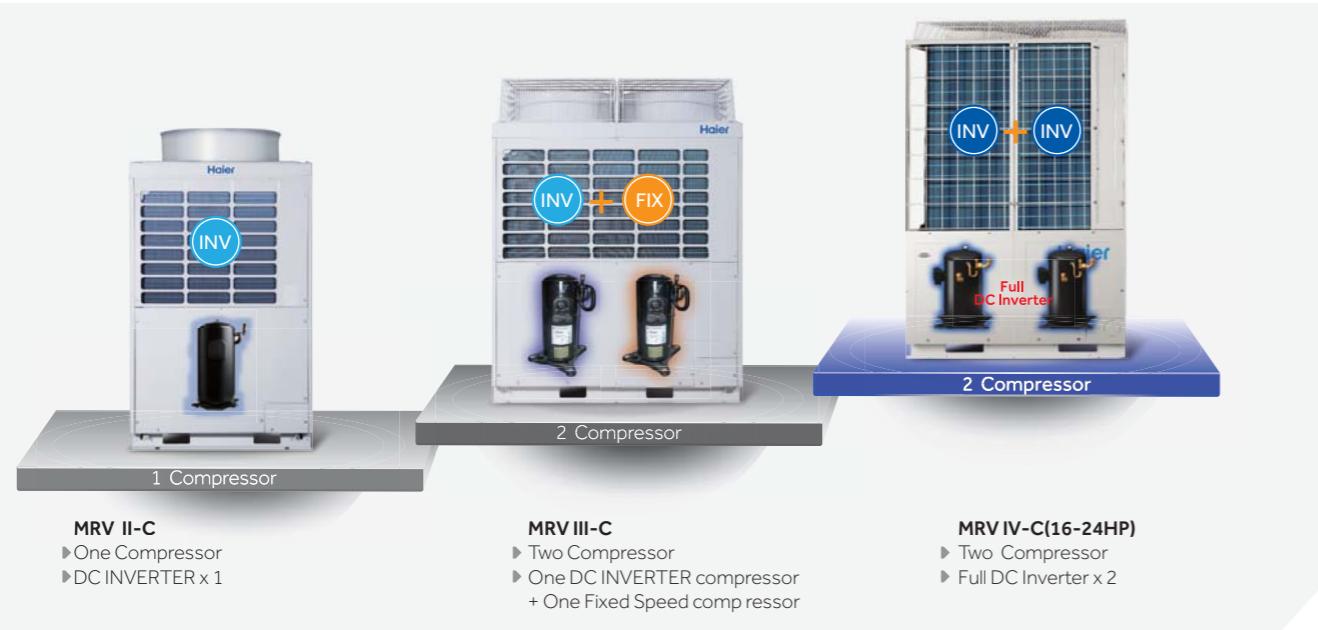


FEATURES & BENEFITS

Full DC Inverter High Efficiency

- 1 Full DC Inverter technology
- 2 Key parts to support full DC inverter technology
- 3 High efficiency

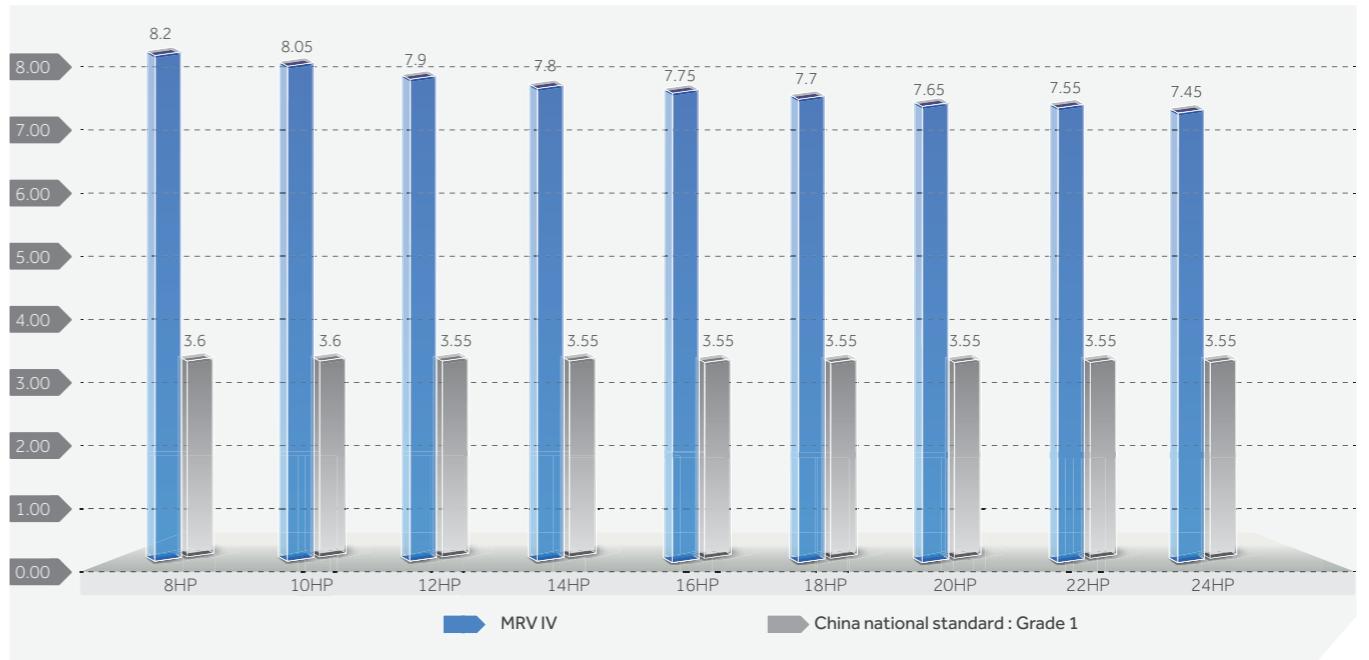
Full DC inverter technology



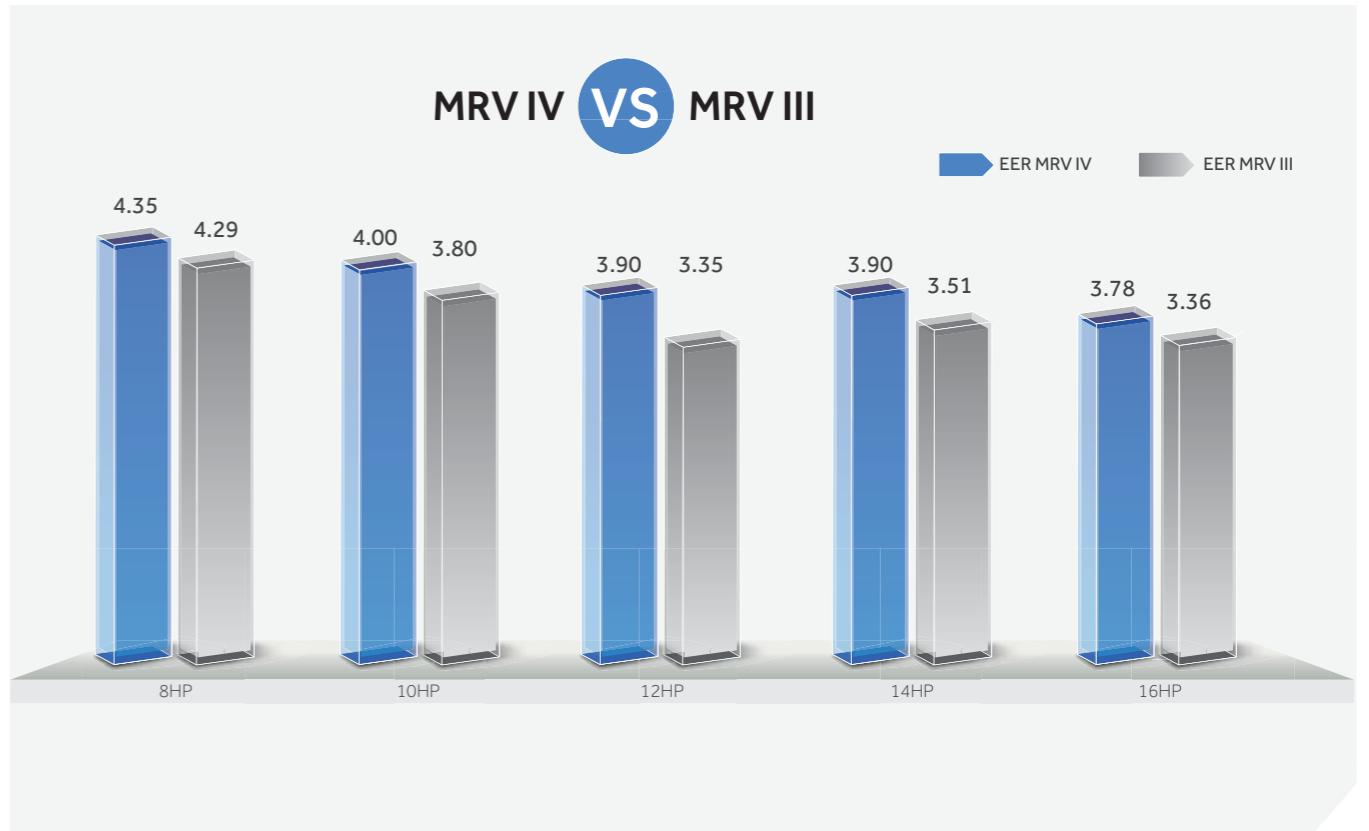
Full new outlook, full DC inverter technology key parts



IPLV(c) up to 8.2, average IPLV(c) up to 7.7, low running cost



Higher energy efficiency than MRV III

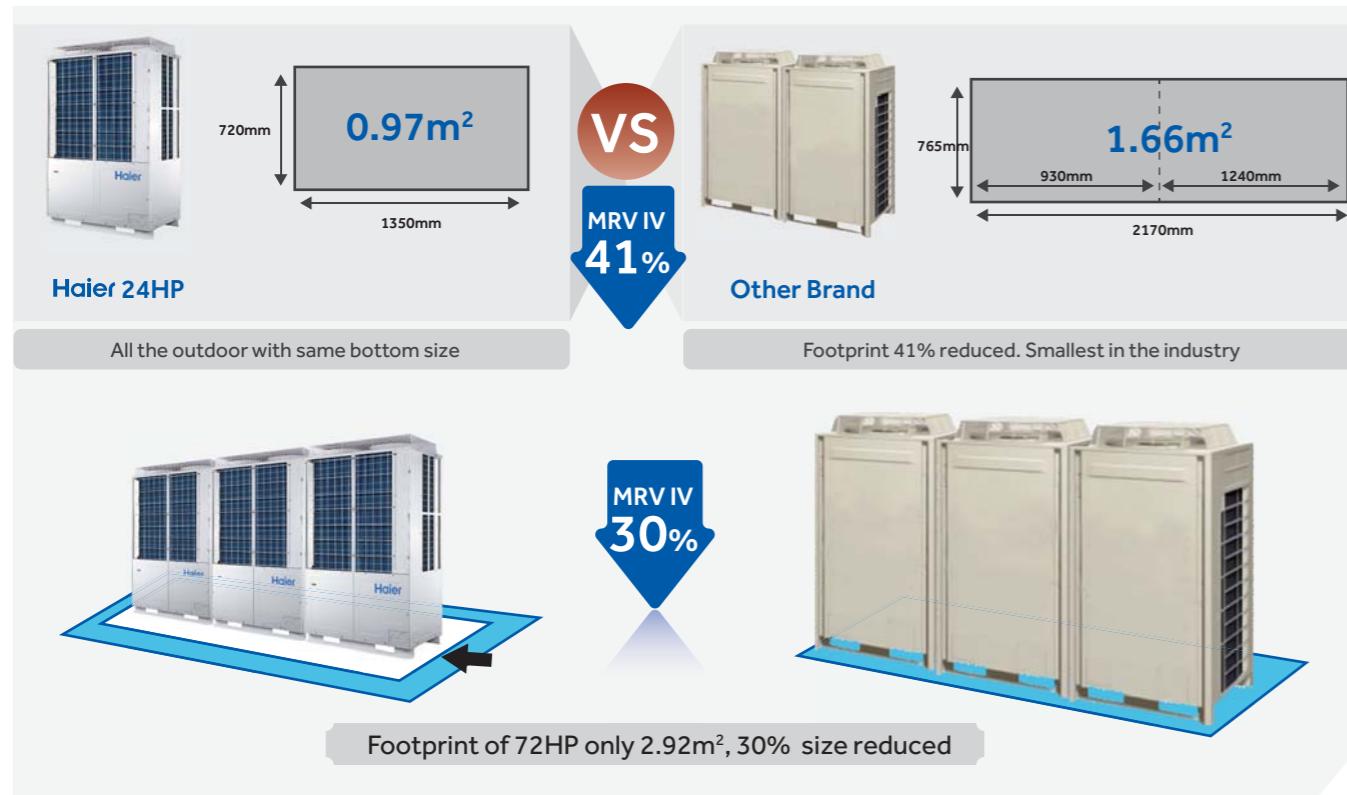


FEATURES & BENEFITS

Easy Installation

- 1 Largest capacity single module, smallest footprint
- 2 Long pipe length, high height drop
- 3 High outdoor ESP

Largest capacity single module in the industry: 24HP ,
Smallest footprint in the industry : 0.97m²



82Pa ESP, Long air duct connecting available



Long pipe length, high height drop



Max. total pipe length 1000m

Max. Single pipe length 165m (equivalent pipe 190m)

Max. Height drop between ID and OD **Max.110m/90m¹** Standard 50m/40m

Max height drop between ID **Max 30m²** (Standard 18m)

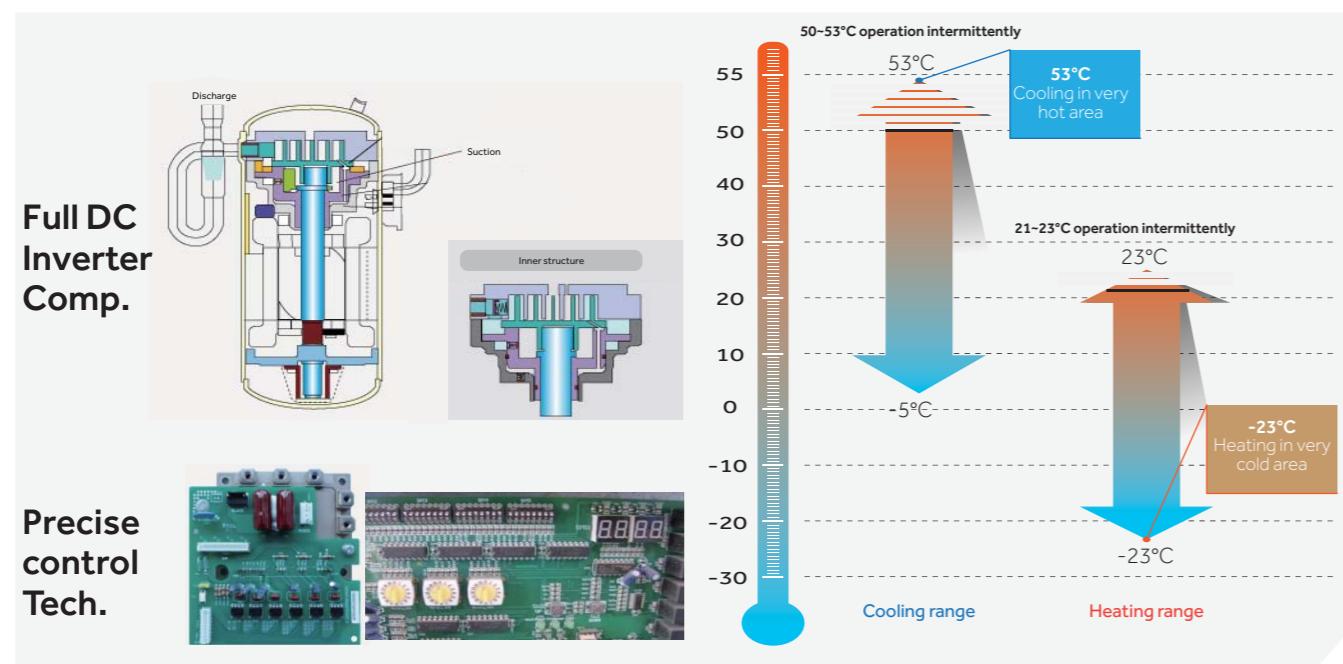
*1 *2 Need contact your local distributor/dealer for individual design.

FEATURES & BENEFITS

Comfort

- 1 Wide operation range
- 2 Low noise, night silent running
- 3 Optimal temperature control

Wide operation range, -23°C heating, 53°C cooling

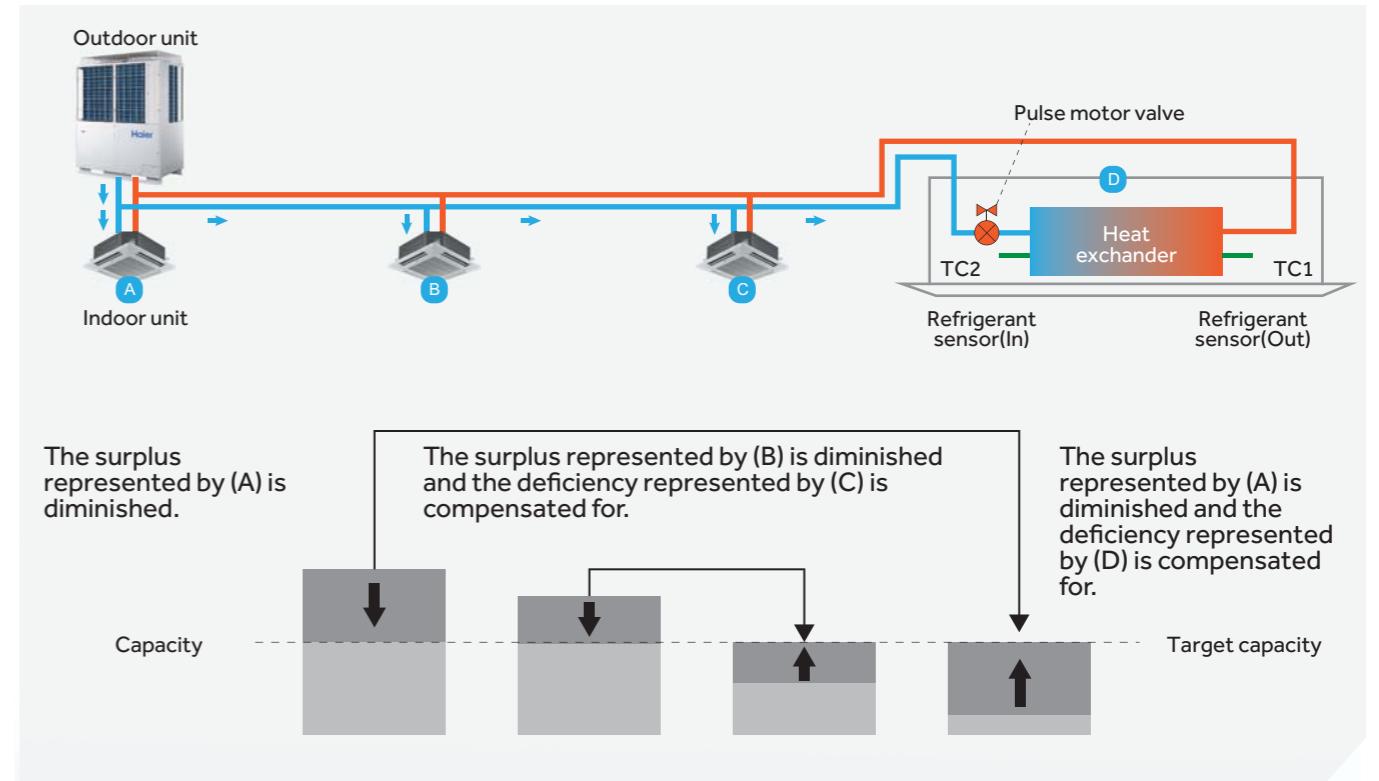


Full DC Inverter Comp.

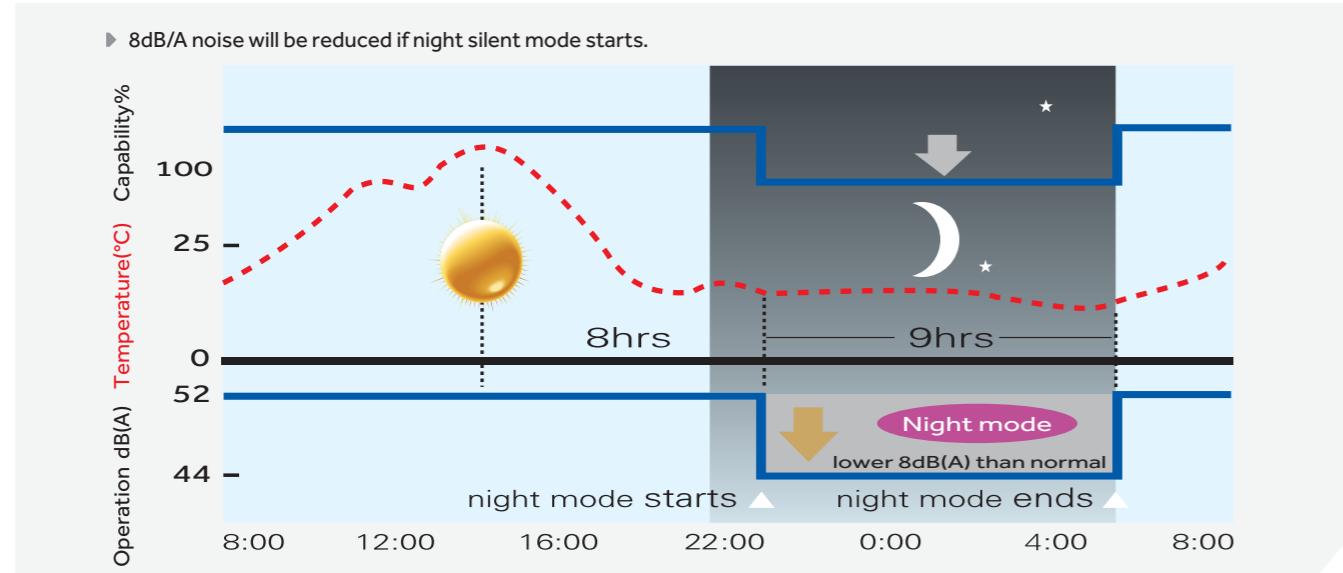
Precise control Tech.

Optimal Temperature Control

- When a multiple number of indoor units are connected, an insufficient or excess amount of refrigerant may be supplied to indoor units depending on the difference in length of the piping connection from outdoor units
- Optimal refrigerant control uses the indoor coil temperature to detect the air conditioning status of each indoor unit and control the capacity(refrigerant amounts) very precisely



Low noise and night silent running



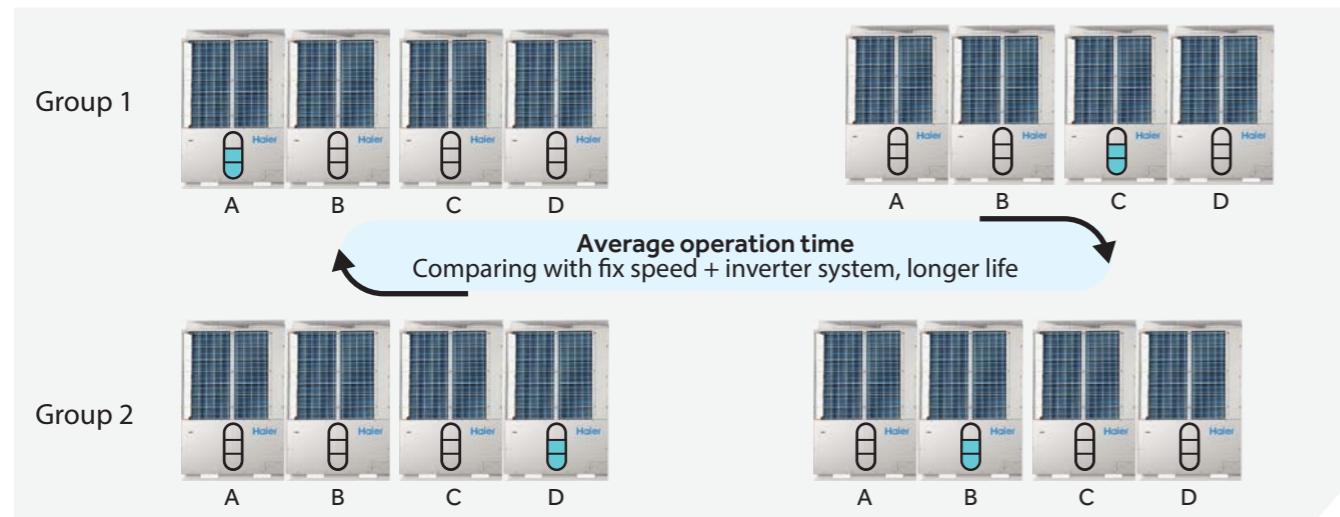
FEATURES & BENEFITS

High Reliability

- 1 Recycling operation
- 2 2 stage oil return
- 3 Oil temperature sensor
- 4 Double Pressure sensor
- 5 Thunder Protection

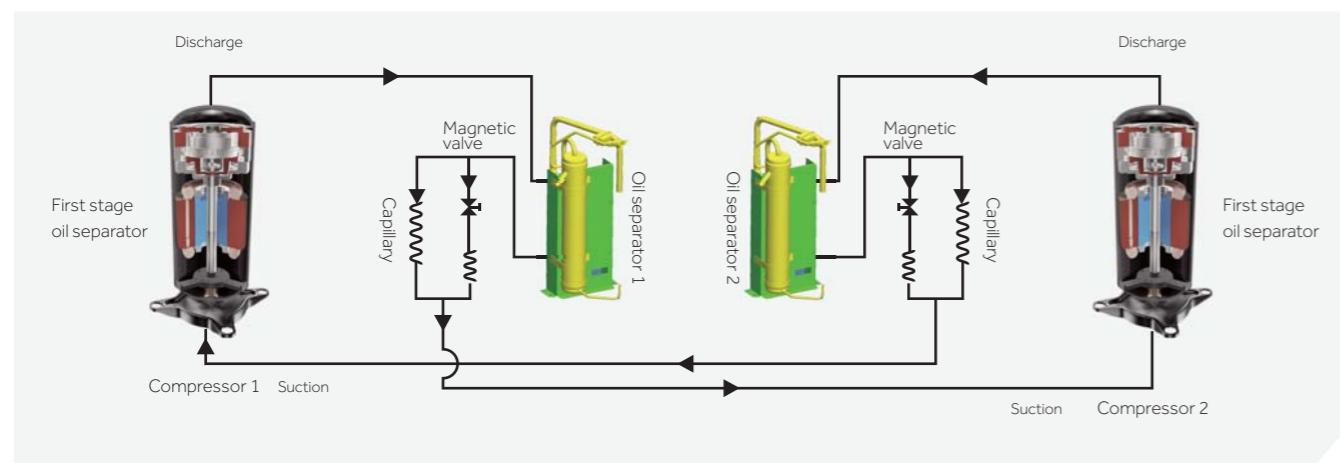
Recycling operation

Recycling operation, longer life of compressor



Oil Return

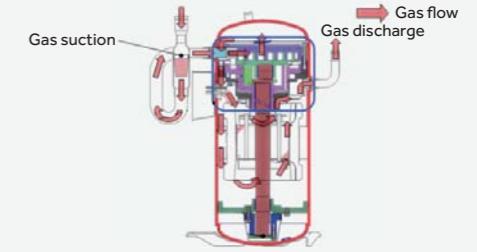
If the compressor operate at low frequency,oil return is only through the capillary. If the compressor operate at high frequency,oil return is through the capillary and magnetic valve.



Compressor double protection

Base on the basic gas discharge sensor, MRV IV add the oil temperature sensor at the bottom of compressor.

- With the oil temperature sensor
- Control the on/off of heater of compressor, preventing from the liquid shock of compressor
- Judge if the liquid refrigerant enter into the compressor
- Compressor oil sub heating protection.
- High pressure sensor for every compressor so for the module with 2 compressors, there are 2 high pressure sensors and 1 low pressure sensors, total 3 sensors



Thunder protection

There are electricity discharge wire in the terminal block, to lead the abnormal voltage into the earth, then to prevent the thunder affect.



Cloud Service Platform

1 Cloud Service

Cloud Service



- 7*24 on-line service
- Intelligent service: failure remind, maintenance mind information
- Energy saving: real-time data saving, provide energy saving solution according to data analysis
- Under development



MRV III-C PLUS

DC FAN MOTOR

| 033 Features & Benefits
| 039 Outdoor Specification

MRV III-CPLUS



033



- Full DC Inverter Technology
- Max. 4 modules combination 64HP
- Total pipe length 500m, height drop 50m
- Without oil balancing pipe

033

FEATURES & BENEFITS

Energy saving

High efficiency DC INVERTER scroll compressor



FULL DC INVERTER

180° vector DC inverter drive,
17% compressor efficiency improved

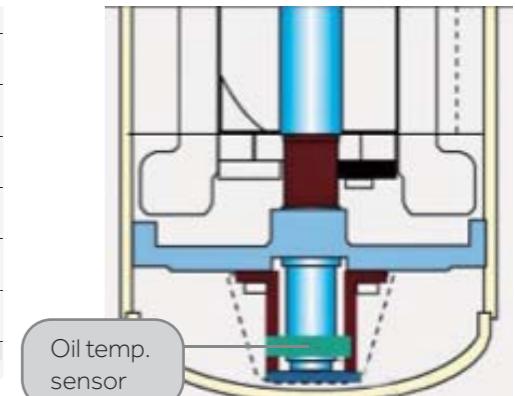
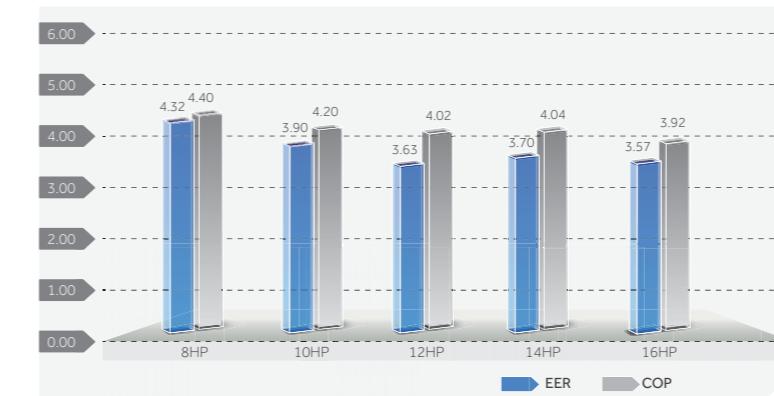
FLEXIBLE SCROLL INVERTER TECHNOLOGY

Flexible scroll design, maximize the compressor efficiency
15-120rps adjustment ensures wide range operating (-5~53)

HIGH EFFICIENCY MOTOR

30% compressor efficiency improved

Smart controlled oil temp., 40% stand-by power consumption reduced



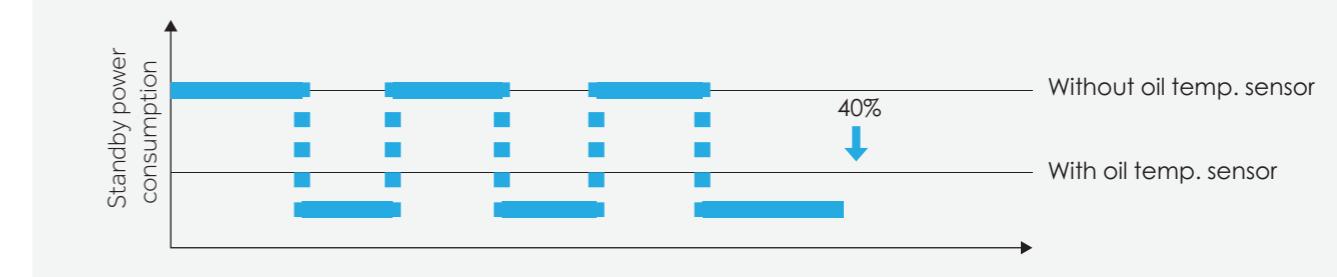
Certain compressor oil temp.

Heating band on



Heating band off

Compressor heating band starts or stops according to the oil temp., lowering the stand-by power consumption.



034

MRV IV-C

MRV IIIC^{PLUS}

MRV III-C

MRV VIII-RC

MRV S

MRV W

Easy MRV

MRV AHU

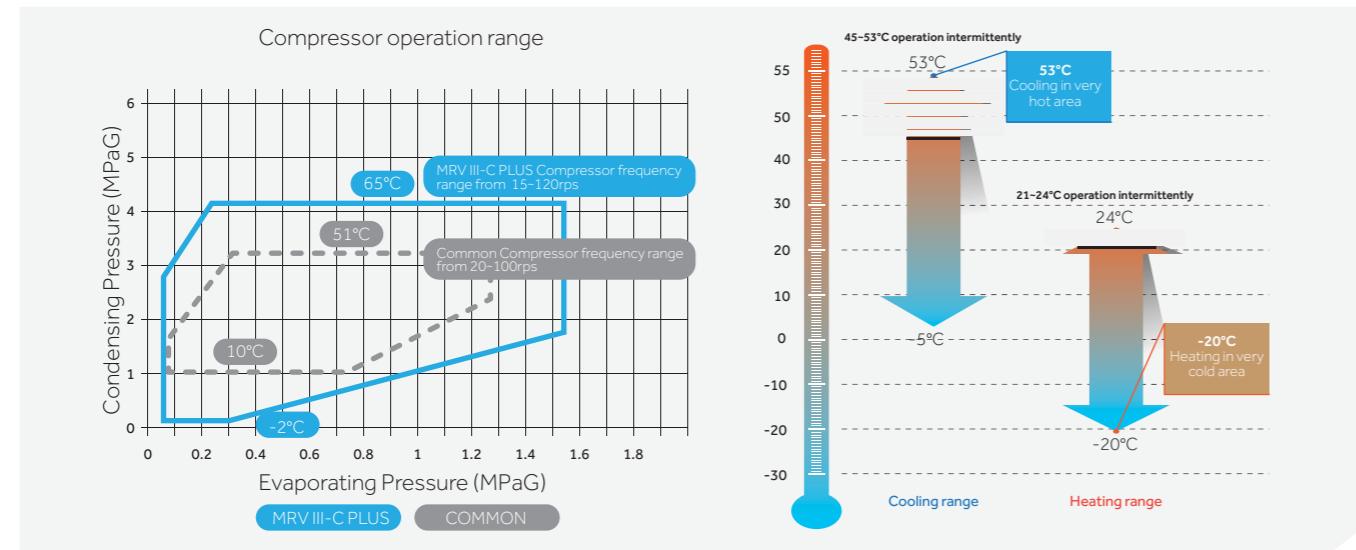
MRV Indoor Control System

Reference Projects

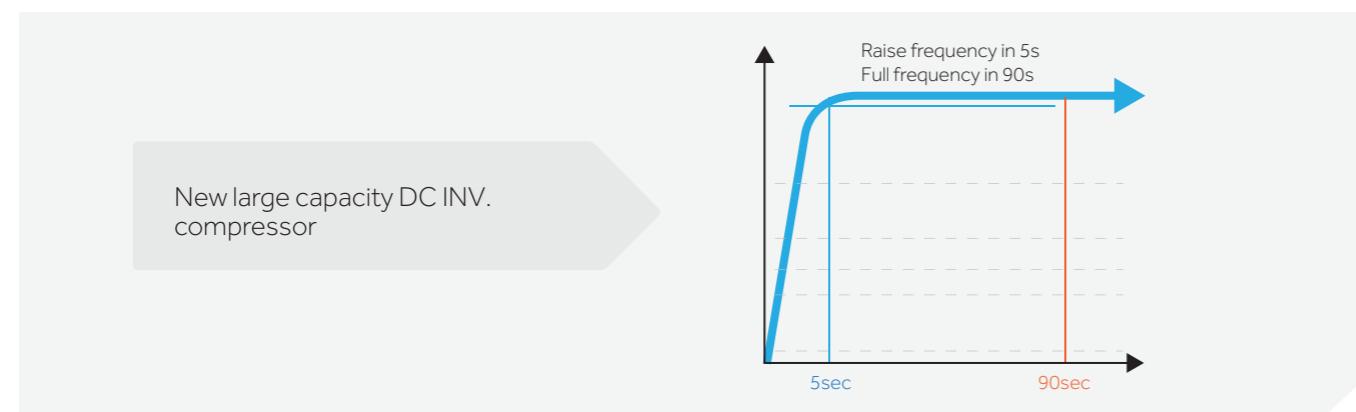
FEATURES & BENEFITS

Comfort

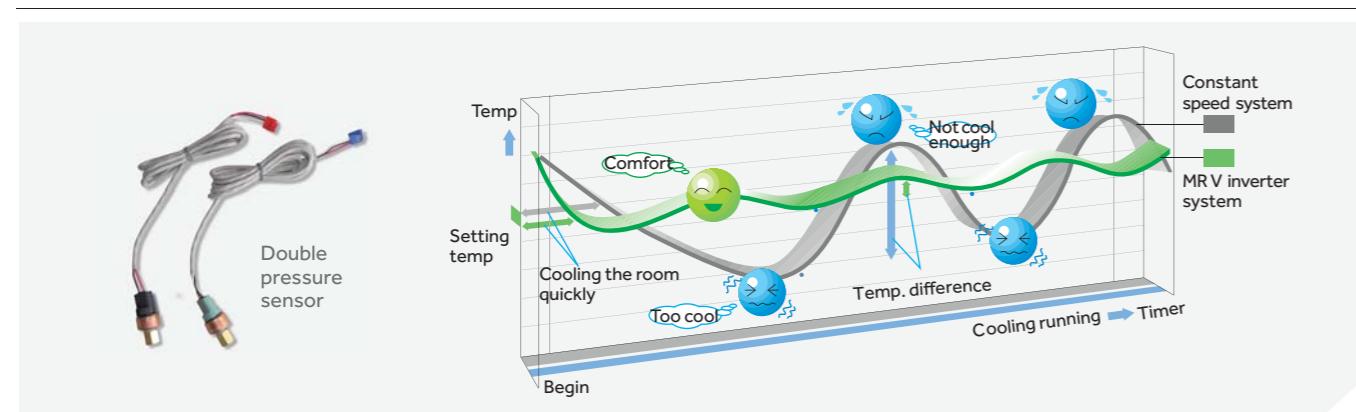
Mitsubishi large capacity compressor, wider operating range



Quick start, quick cooling and heating



Double pressure sensors, $\pm 0.5^\circ\text{C}$ temp. precise control



Comfort

Low sound level, quiet and comfort



Convenience

Separated machine room and air supply room, easier installation and testing



No oil balancing pipe, easy installation and maintenance



FEATURES & BENEFITS

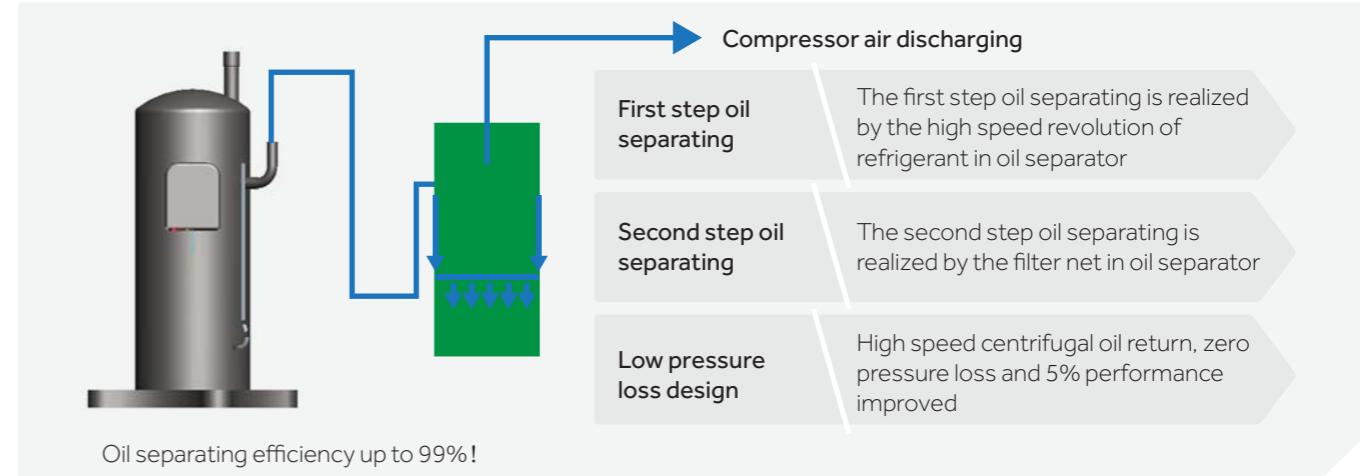
Convenience

Long pipe length, high height drop

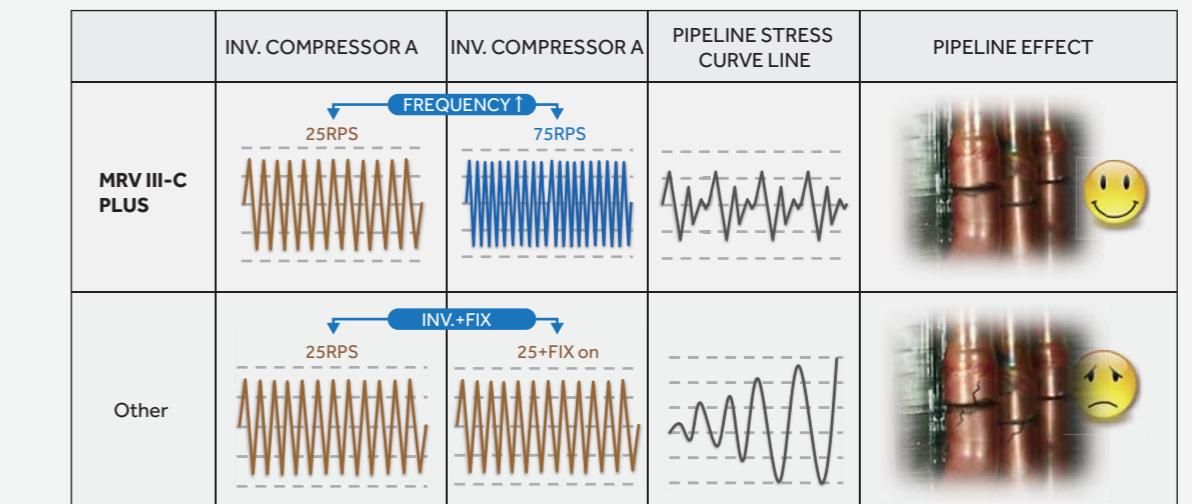


Reliability

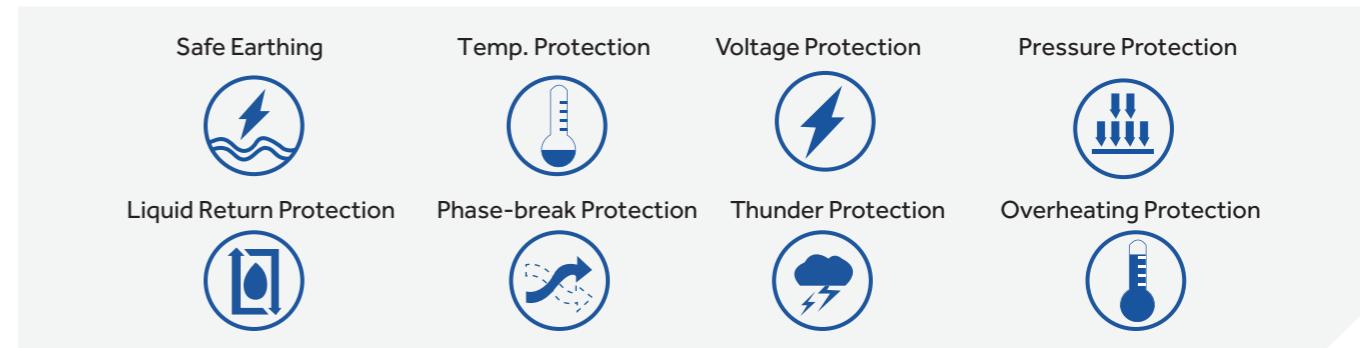
Low pressure loss high efficiency oil separator



Soft start of compressor prevents the shock to the pipeline and extends lifespan



Multi-protection , longer lifespan



MRVIII-C^{PLUS} 3/380~400/50(60)



8/10HP



12/14/16HP



| Model | AV08IMSEVA | AV10IMSEVA | AV12IMSEVA | AV14IMSEVA | AV16IMSEVA | AV18IMSEVA | AV20IMSEVA | | AV22IMSEVA | AV24IMSEVA | AV26IMSEVA | AV28IMSEVA | AV30IMSEVA | AV32IMSEVA | AV34IMSEVA | AV36IMSEVA | | |
|-----------------------|------------------------------------|------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|------------------|----------------|
| Combination model | / | / | / | / | / | AV08IMSEVA | AV10IMSEVA | | AV10IMSEVA | AV10IMSEVA | AV12IMSEVA | AV14IMSEVA | AV14IMSEVA | AV16IMSEVA | AV16IMSEVA | AV16IMSEVA | | |
| Capacity | Capacity range | HP | 8 | 10 | 12 | 14 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 | |
| Cooling | kW | 25.2 | 28 | 33.5 | 40 | 45 | 53.2 | 56 | 61.5 | 68 | 73.5 | 80 | 85 | 90 | 96 | 101 | | |
| Heating | kW | 27.3 | 31.5 | 37.5 | 45 | 50 | 58.8 | 63 | 69 | 76.5 | 82.5 | 90 | 95 | 100 | 108 | 113 | | |
| Electrical parameters | Power supply | V/Hz | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | 3/380-400/50(60) | |
| Cooling | Rated power input | kW | 5.83 | 7.18 | 9.24 | 10.8 | 12.61 | 13.01 | 14.36 | 16.42 | 17.98 | 20.04 | 21.6 | 23.41 | 25.22 | 25.16 | 26.97 | |
| Cooling | Max power input | kW | 14.02 | 14.38 | 16.58 | 16.91 | 19.99 | 28.4 | 28.76 | 30.96 | 31.29 | 33.49 | 33.82 | 36.9 | 39.98 | 45.67 | 48.75 | |
| Heating | Rated current | A | 9.6 | 11.9 | 15.1 | 17.4 | 20.2 | 21.5 | 23.8 | 27 | 29.3 | 32.5 | 34.8 | 37.6 | 40.4 | 41.2 | 44 | |
| Heating | Max current | A | 23.1 | 23.7 | 27.1 | 28.4 | 31.6 | 46.8 | 47.4 | 50.8 | 52.1 | 55.5 | 56.8 | 60 | 63.2 | 75.8 | 79 | |
| Cooling | Rated power input | kW | 6.21 | 7.5 | 9.32 | 11.14 | 12.74 | 13.71 | 15 | 16.82 | 18.64 | 20.46 | 22.28 | 23.88 | 25.48 | 26.14 | 27.74 | |
| Cooling | Max power input | kW | 12.72 | 13.23 | 15.2 | 15.6 | 17.1 | 25.95 | 26.46 | 28.43 | 28.83 | 30.8 | 31.2 | 32.7 | 34.2 | 42.06 | 43.56 | |
| Heating | Rated current | A | 10.2 | 12.4 | 15.2 | 18 | 20.4 | 22.6 | 24.8 | 27.6 | 30.4 | 33.2 | 36 | 38.4 | 40.8 | 42.8 | 45.2 | |
| Heating | Max current | A | 21 | 21.8 | 24.8 | 25.2 | 27.3 | 42.8 | 43.6 | 46.6 | 47 | 50 | 50.4 | 52.5 | 54.6 | 68.8 | 70.9 | |
| EER | | | 4.32 | 3.90 | 3.63 | 3.70 | 3.57 | 4.09 | 3.90 | 3.75 | 3.78 | 3.67 | 3.70 | 3.63 | 3.57 | 3.82 | 3.74 | |
| COP | | | 4.40 | 4.20 | 4.02 | 4.04 | 3.92 | 4.29 | 4.20 | 4.10 | 4.10 | 4.03 | 4.04 | 3.98 | 3.92 | 4.13 | 4.07 | |
| Performance | Air flow (H) | m³/h | 12200 | 12200 | 14100 | 15200 | 15200 | 24400 | 24400 | 26300 | 27400 | 29300 | 30400 | 30400 | 30400 | 39600 | 39600 | |
| Performance | Sound pressure level (H) | dB(A) | 57 | 57 | 59 | 59 | 60 | 60 | 60 | 61 | 61 | 61 | 62 | 62 | 62 | 63 | 63 | |
| Performance | Sound power level (H) | dB(A) | 73 | 73 | 76 | 76 | 76 | 77 | 77 | 79 | 79 | 79 | 80 | 80 | 80 | 82 | 82 | |
| Installation | External dimensions(W/D/H) | mm | 990/750/1808 | 990/750/1808 | 1390/750/1808 | 1390/750/1808 | 1390/750/1808 | 990/750/1808 | 990/750/1808 | 990/750/1808 | 990/750/1808 | 1390/750/1808 | 1390/750/1808 | 1390/750/1808 | 1390/750/1808 | 990/750/1808+ | 990/750/1808+ | |
| Installation | Shipping dimensions(W/D/H) | mm | 1090/860/1990 | 1090/860/1990 | 1490/860/1990 | 1490/860/1990 | 1490/860/1990 | 1090/860/1990 | 1090/860/1990 | 1090/860/1990 | 1090/860/1990 | 1090/860/1990 | 1490/860/1990 | 1490/860/1990 | 1490/860/1990 | 1490/860/1990 | 1090/860/1990+ | 1090/860/1990+ |
| Installation | Net/Shipping weight | kg | 240/260 | 240/260 | 300/320 | 300/320 | 308/333 | 480/520 | 480/520 | 540/580 | 540/580 | 600/640 | 600/640 | 608/653 | 616/666 | 780/840 | 788/853 | |
| Installation | Compressor type | | DC INV.SCROLL | | |
| Installation | Compressor brand | | MITSUBISHI ELECTRIC | | |
| Installation | Compressor quantity | | 1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | 1 INV+1 INV | | |
| Installation | Refrigerant type | | R410A | | |
| Connection Ratio | Refrigerant charge | kg | 7 | 7 | 8.5 | 8.5 | 10 | 14 | 15.5 | 15.5 | 17 | 17 | 18.5 | 20 | 22.5 | 24 | | |
| Connection Ratio | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 12.7 | 15.88 | 15.88 | 15.88 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 | | |
| Connection Ratio | Refrigerant gas pipe | mm | 19.05 | 22.22 | 25.4 | 25.4 | 28.58 | 28.58 | 28.58 | 28.58 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 38.1 | | |
| Connection Ratio | Oil equalization pipe | mm | / | / | / | / | / | / | / | / | / | / | / | / | / | / | | |
| Connection Ratio | Total pipe length | m | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 | | |
| Connection Ratio | Max. pipe length/Equivalent/Actual | m | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | 175/150 | | |
| Connection Ratio | Max drop between I.U.&O.U. | m | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | | |
| Connection Ratio | External static pressure | pa | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | | |
| Working temp. | Connectable indoor unit ratio | % | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | | |
| Working temp. | Maximum number of indoor units | | 13 | 16 | 19 | 23 | 26 | 29 | 33 | 36 | 39 | 43 | 46 | 50 | 53 | 56 | 59 | |
| Working temp. | Cooling (DB) | °C | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | -5-45 | | |
| Working temp. | Heating (WB) | °C | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | -20-21 | | |

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

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



MRV III-C

| 045 Features & Benefits
| 053 Outdoor Specification

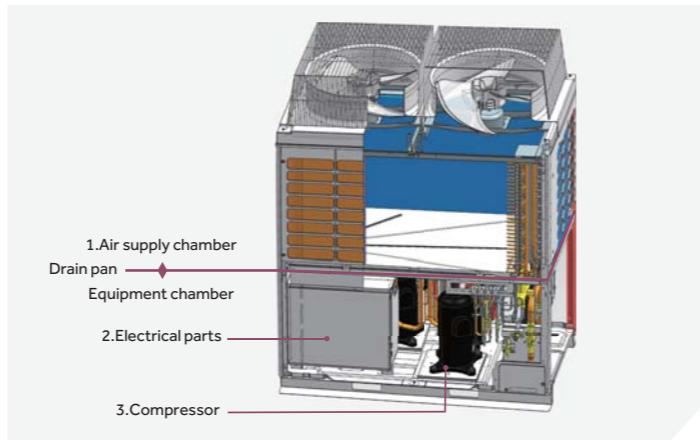
FEATURES & BENEFITS



MRV III-C

Air Supply Chamber and Equipment Chamber Separation Design

1. Prevent electrical parts and the main functional components by the rain Erosion, prolong the service life of components;
2. Compressor running noise was closed in the equipment room, reduce the running noise about 3 dB(A);
3. Air supply chamber complete isolation: During commissioning and maintenance, the units can be used normally.



Special Heat Exchanger Design

4 way air return heat exchanger design

Reduce the heat exchanger height (650mm), and the upper and lower wind speed uniform and high efficiency.



The two stage heat exchanger are respectively controlled by a electronic expansion valve control, which can adjust the condenser volume.

Two-stage heat exchanger design

Two stages heat exchanger can separate control and adjust heat exchanger size, effectively cope with small load operation, to ensure the reliable operation range.



Special Heat Exchanger Design

■ Aviation noise reduction patent fan design

• Streamline vortex fan, sharp fan blade edge, and a certain degree of curvature, reduce the vibration, and pressure loss.

■ DC fan motor

• DC inverter technology • High efficiency • Low noise



Electric Control Box Heat Dissipation Design

Streamline vortex fan forced heat dissipation fan inside the electric control box, to ensure the stable internal temperature and stable system operation, sharp fan blade edge, and a certain degree of curvature, reduce the vibration, and pressure loss.

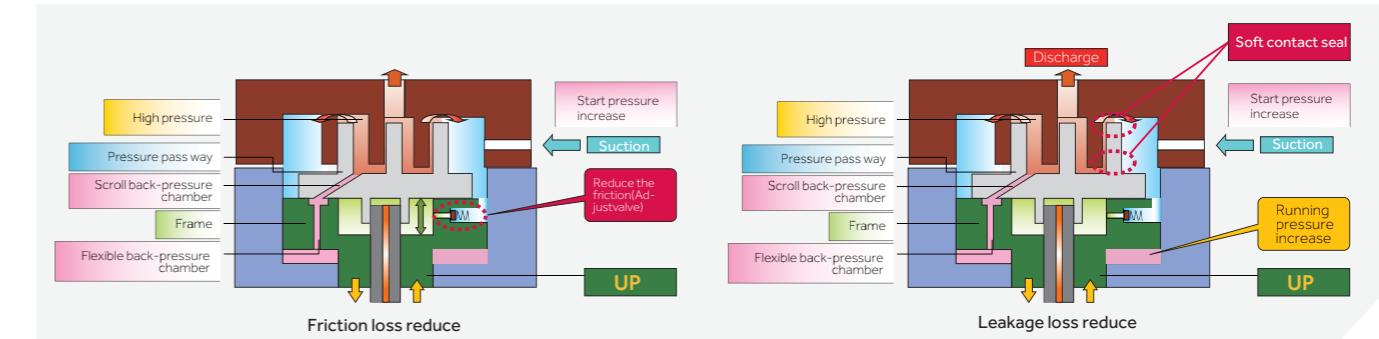


Energy Efficient

High Efficiency DC Inverter Scroll Compressor

• DC inverter scroll compressor imported from mitsubishi electric.

• Equipped with a "Frame Compliance Mechanism" that allows movement in the axial direction of the frame supporting the cradle scroll. This greatly reduces both leakage and friction loss, ensuring very high efficiency throughout the whole speed range.



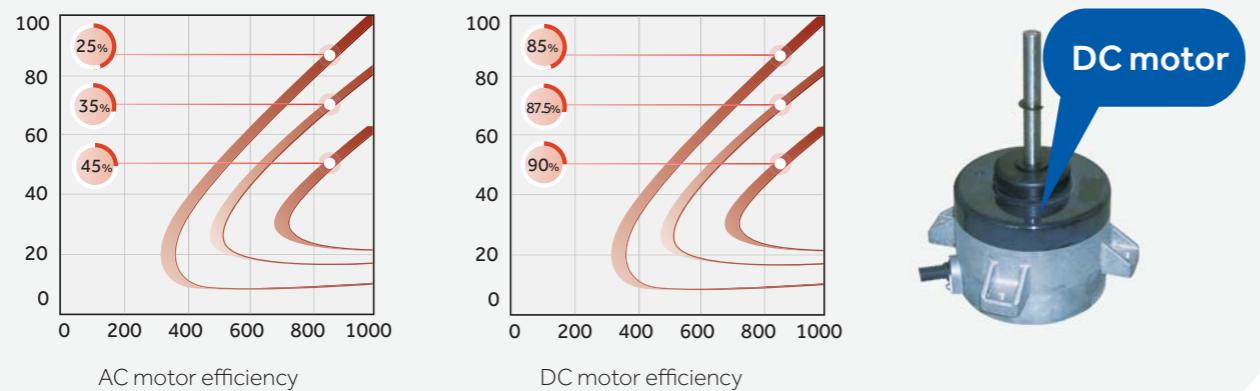
FEATURES & BENEFITS

Energy Efficient

64 Stage Speed Adjustment DC Fan Motor

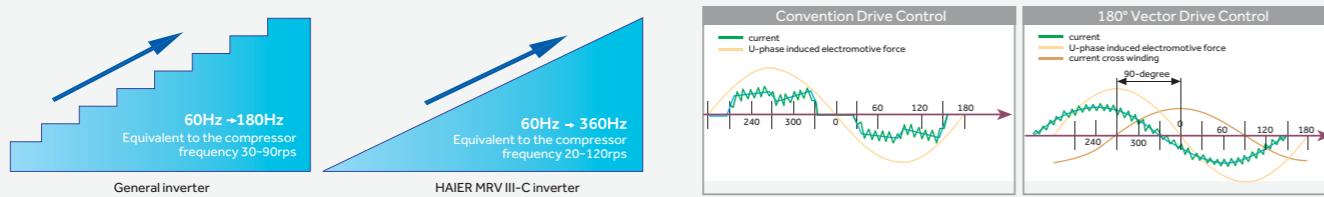
Efficiency increase 45% comparing with AC motor and power input largely decrease.

64 stage speed adjustment plus DC inverter drive, stabilizing compressor discharge pressure and suction pressure to ensure high system reliability.



Stepless DC Inverter Control Technology

High precision control, variable frequency drive from 0 to 360Hz.

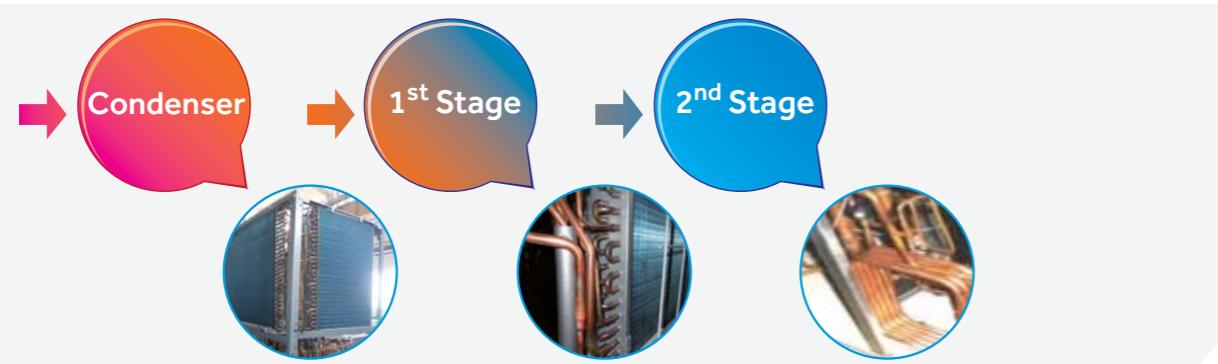


Two Stage Deep Sub Cooling Technology

1st stage sub cooling added a sub cooling coil to condenser.

2nd stage sub cooling added a stand alone sub cooler.

After further cooling, sub-cooling degree can be up to 30°C, with the heat exchanging capacity per unit mass of refrigerant improved by 46% and flow resistance reduced by 55%, and running efficiency improved by 9%.



Energy Management Technology

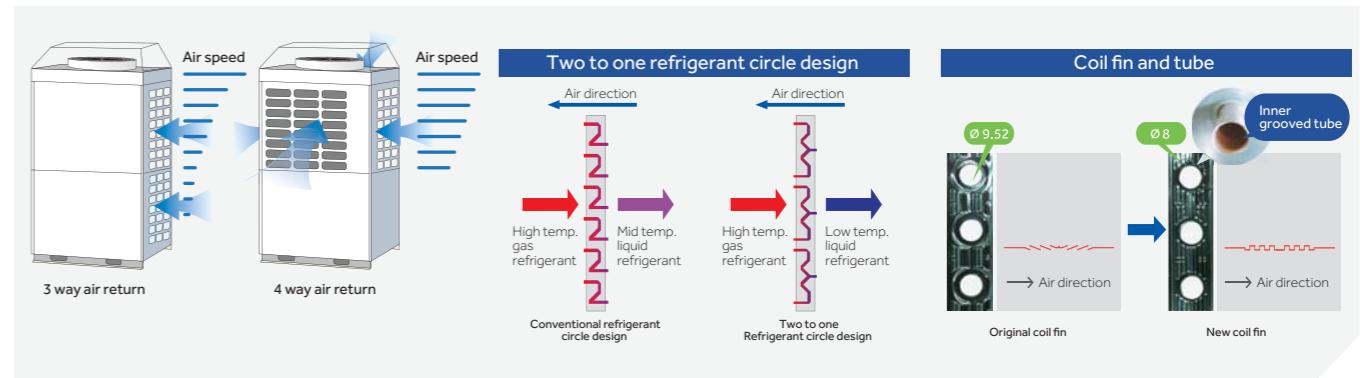
There is energy saving dip switch (SW8-3) in the indoor unit which can be lock the temperature at 26°C in summer and 20°C in winter, to avoid the energy waste and realize the centralized management.

The temperature lock function also can be realized through the new wired controller YR-E16.



High Efficiency Heat Exchanging Technology

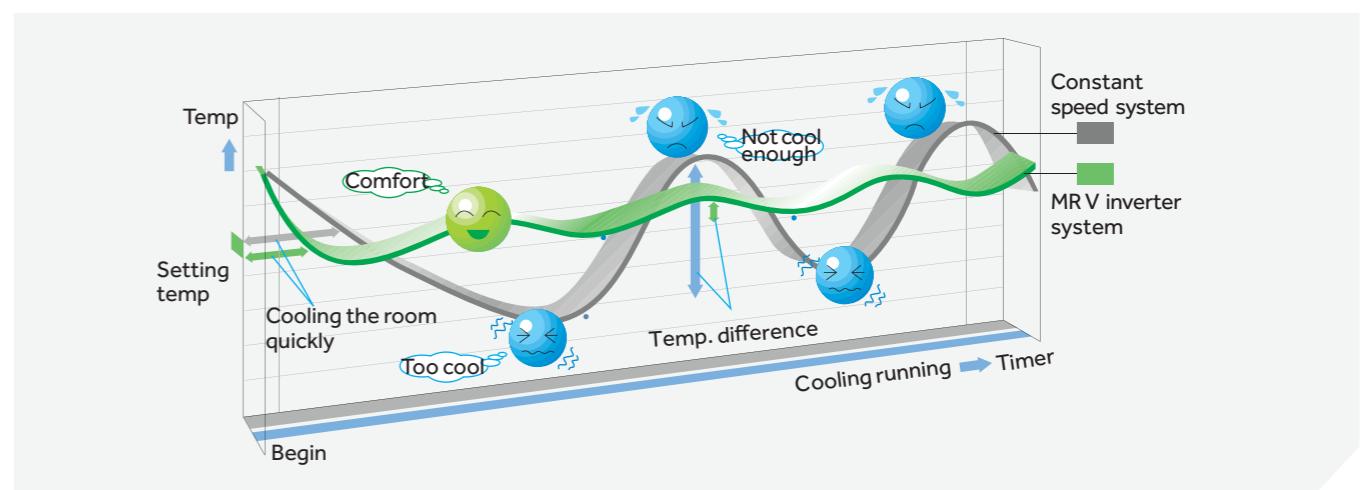
Outdoor high efficiency four way air return heat exchanger design. The compressor and condenser are placed in separated chamber. High efficiency heat exchanger design. Efficient ø8 inner grooved tube and 0.11 hydrophilic aluminum coil fin, corrosion and oxidation resistance treatment.



Comfort

Precise Control

Adopt the inverter control, the temperature could be control precisely within the range of ±0.5°C.



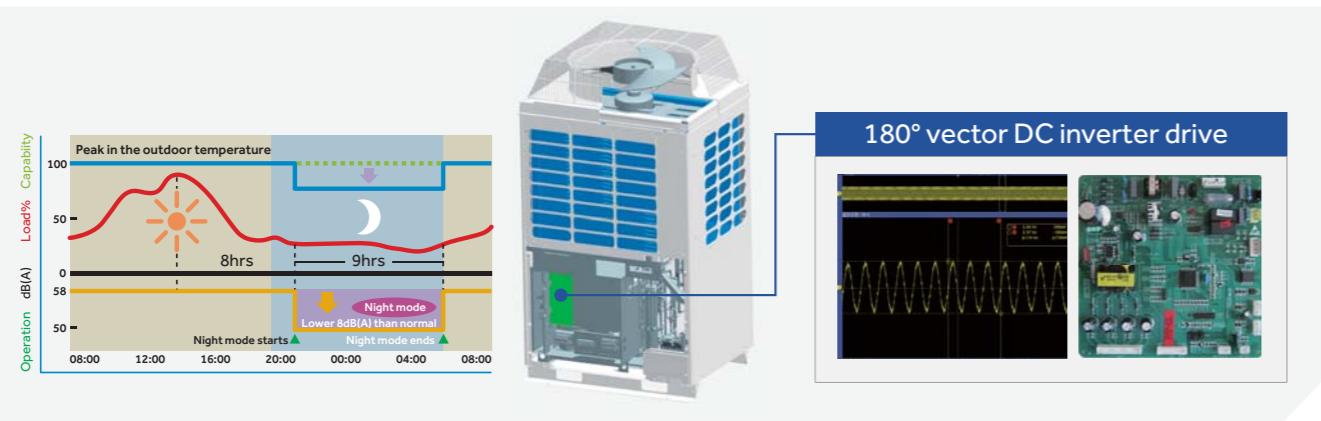
FEATURES & BENEFITS

Comfort

Low Noise and Night Silent Running

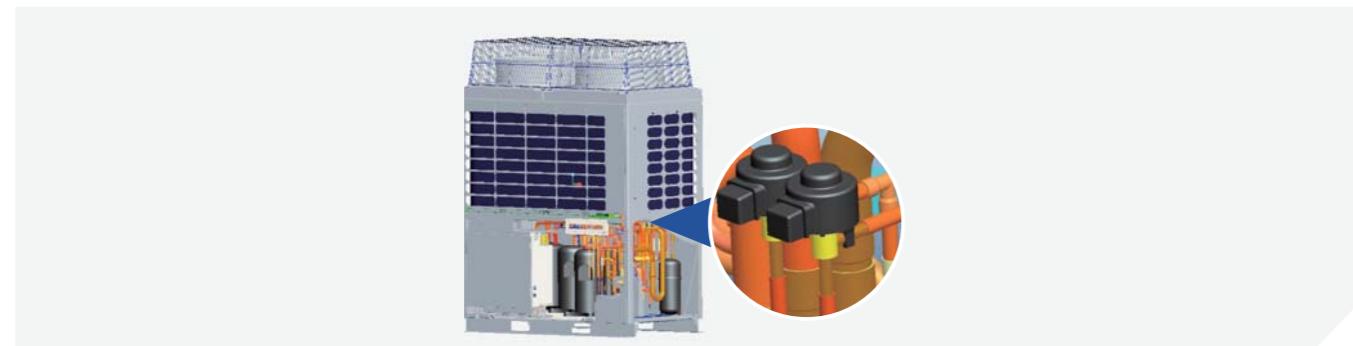
Machinery chamber is separated from air supply chamber; Built-in high efficient muffler in the machinery chamber greatly reduce the compressor noise.

The night silent running function can be set on the outdoor PCB. The noise can be reduced by 8 dB(A) at most.



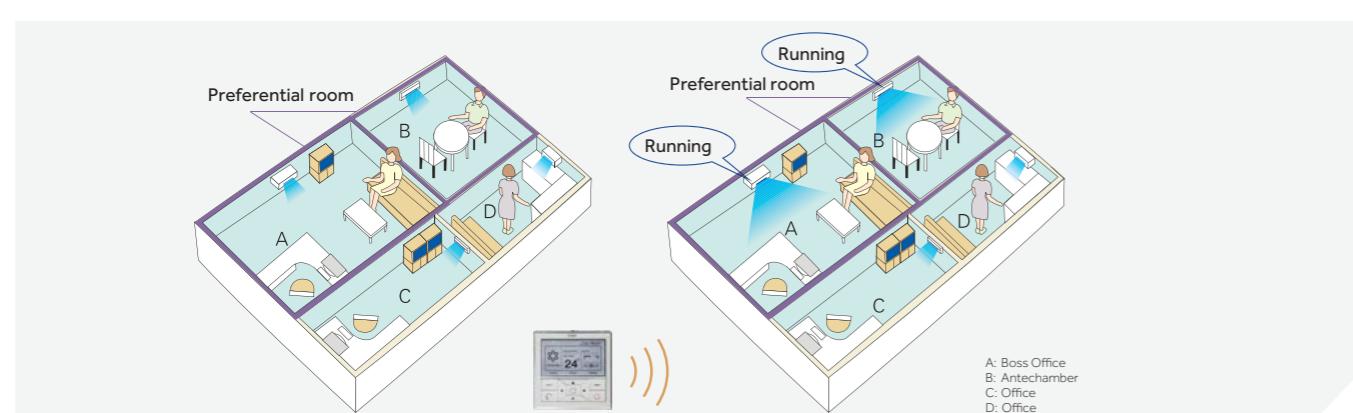
Double EEV Control

Make sure the refrigerant flow equally, to provide more comfort temperature.



Priority Setting

With the human design, you can set different preferential steps of some indoor units according to the room functions, so that it will ensure that the most important room gains high priority.

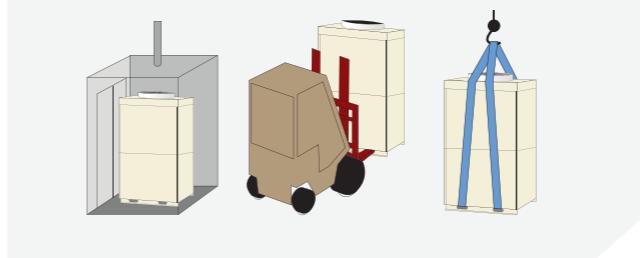


Convenient Installation

Easy Transportation

Outdoor footprint only occupy 0.74m²(8/10HP) and 1.04m²(12/14/16HP).

Can lift with elevators and save lots of transport cost and time.



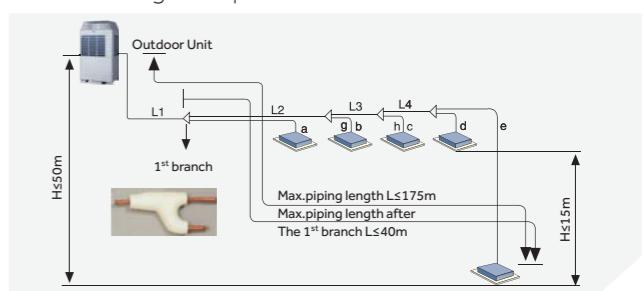
Long Pipe Length, High Height Drop

Total 300m refrigerant piping length.

Max.175m refrigerant piping length.

Max.50m height drop between indoor and outdoor units.

Max.15m height drop between indoor units.



Outdoor High External Static Pressure

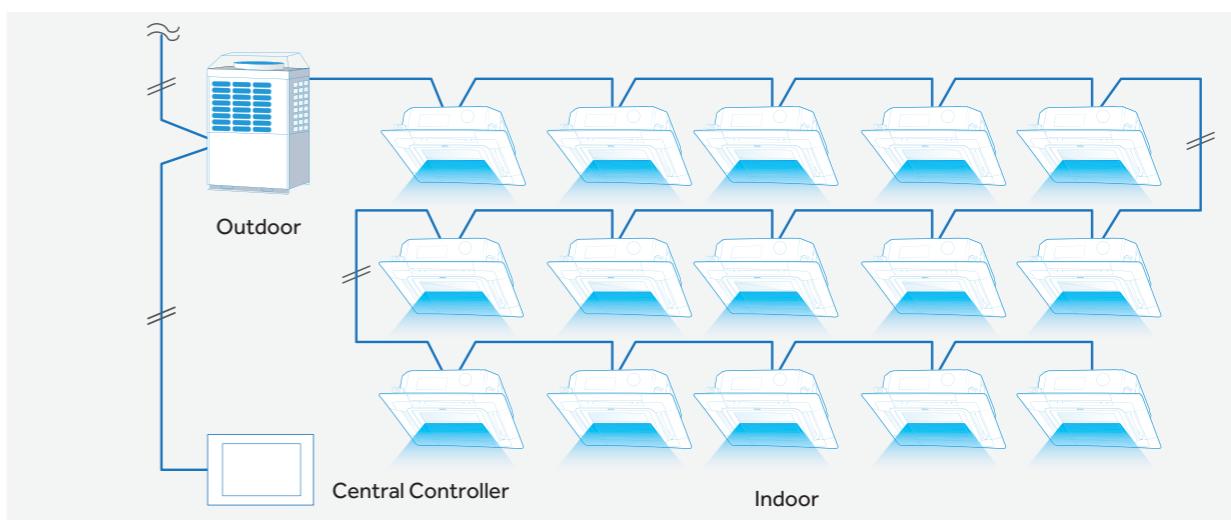
Up to 50Pa and can be installed at different floors.



Connection Wire

Two core nonpolar communication line way, no joint wrong hidden trouble.

Centralized controller bus and indoor/outdoor bus shareable, wiring and access is very simple Indoor address automatically set.



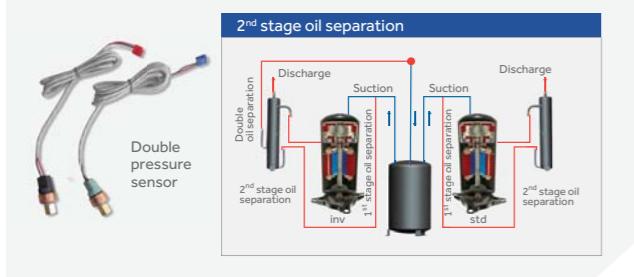
FEATURES & BENEFITS

High Reliability

The First 2-stages Oil Separation and Cross Oil Return Technology in The Industry

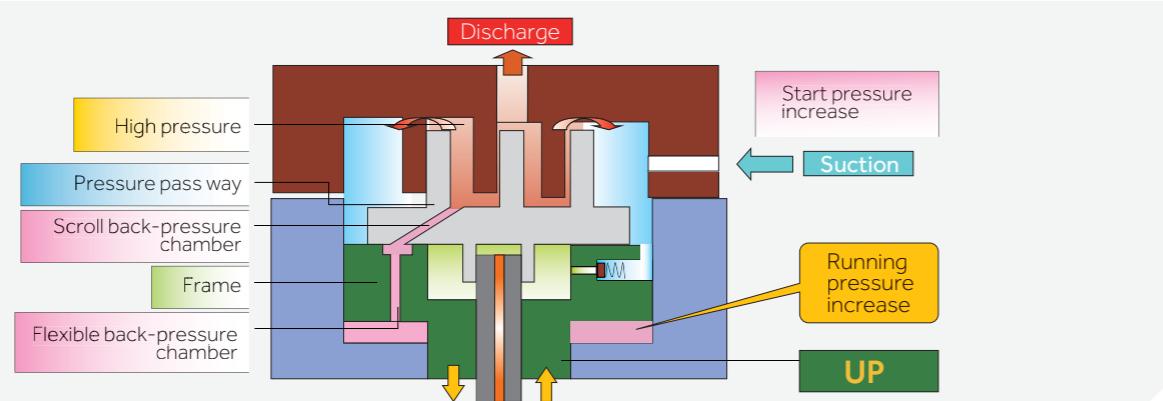
1st stage oil separation: built-in oil separating unit, greatly reduced the oil from the compressor discharge.

2nd stage oil separation: external oil separator to separate the small amount oil from discharge.



Compressor Anti-liquid Shock Technology

Compressor adopt flexible frame mechanism, when any liquid enter into compressor, cradle scroll detaching fixed scroll, discharging liquid refrigerant out of scroll set, to avoid scroll damage.



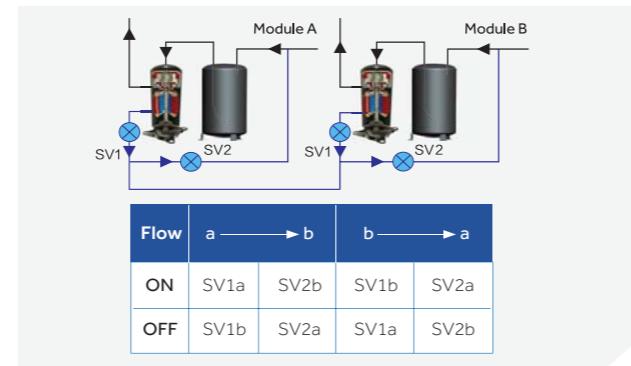
Duty Cycle Operation to Extend the System Lifetime (Combination Model)

The outdoor units priority operating changes every 24 hours. Outdoor units start in turn and operation time can be balanced. Inverter compressor lifetime can be extend maximum 3 times.



High Pressure Difference Oil Equalization

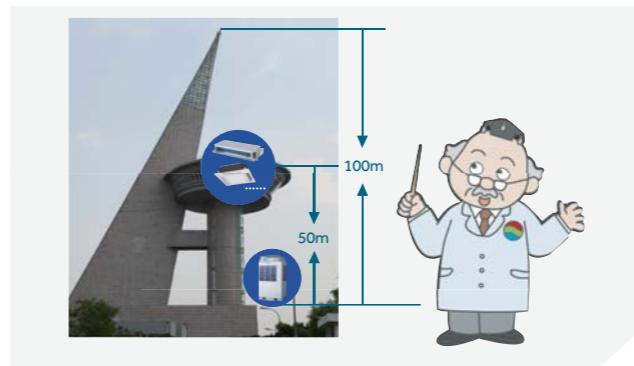
Using the pressure difference between suction and discharge, to realize fast oil balance between module.



High Reliability

Field Test

The system has been running for over 3 years at the jobsite where the vertical height approximately to 100m.



Backup Operation

If one outdoor unit get into malfunction, the other units continue to operate without affecting the whole system.



Test Lab.



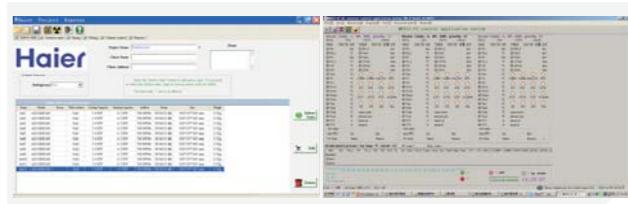
Supporting Tools

■ MRV design express

This software supply a solution of piping & wiring design, can help the designer select the right material lists, basic wiring diagram and control wiring diagram etc., most important thing is to save lots of time during design procedure.

■ On-site service software

Features: Save the installation and maintenance people time. More precise than normal checking method.

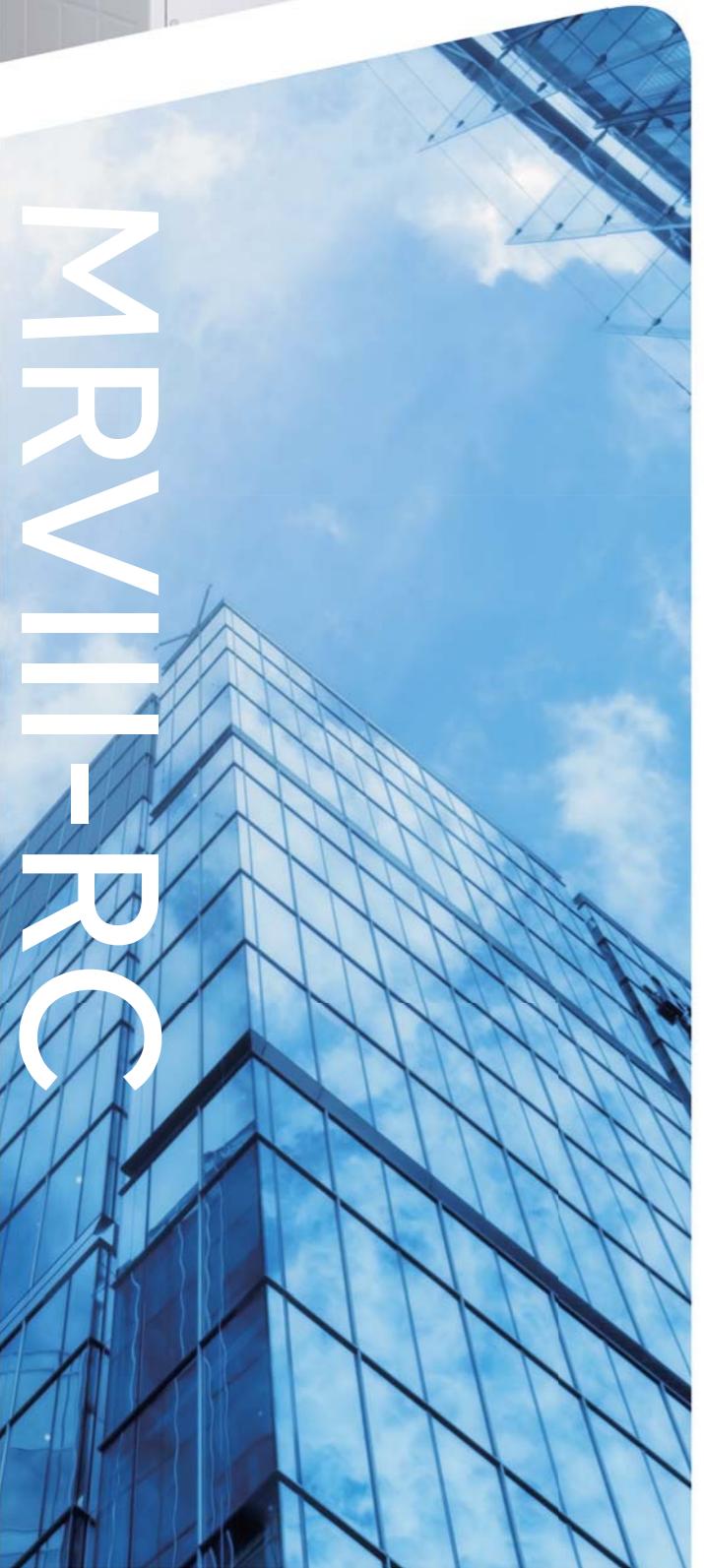




MRV III-RC

| 063 Features & Benefits
| 073 MRV III-RC (Heat Recovery)

MRV VIII-RC

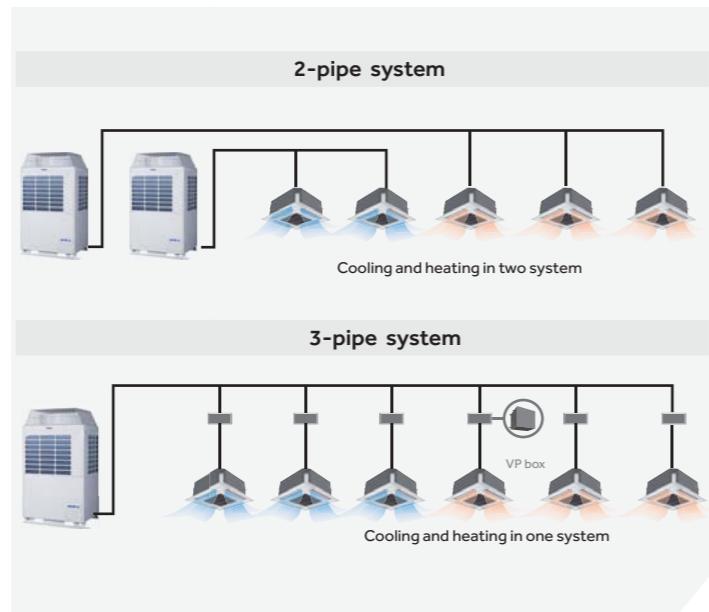


FEATURES & BENEFITS

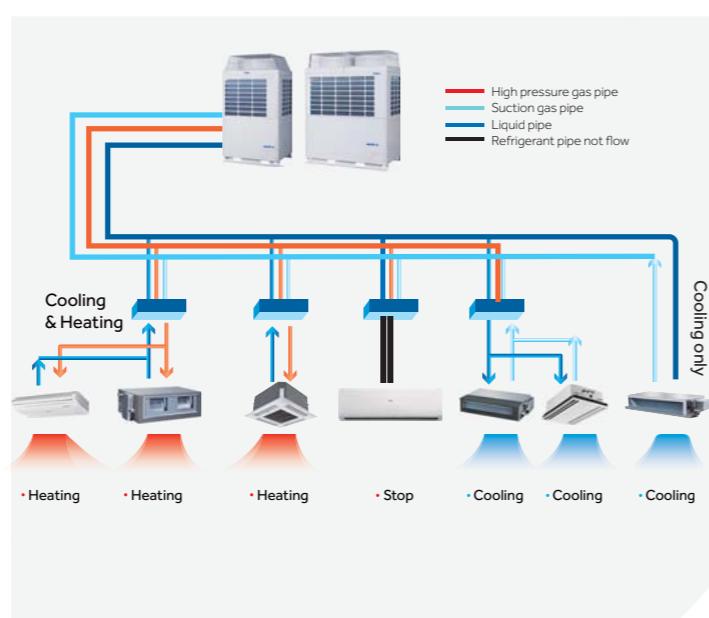
System Introduction

What is MRV VIII-RC

- Cooling and heating simultaneously with only one outdoor unit
- Heat recovery system



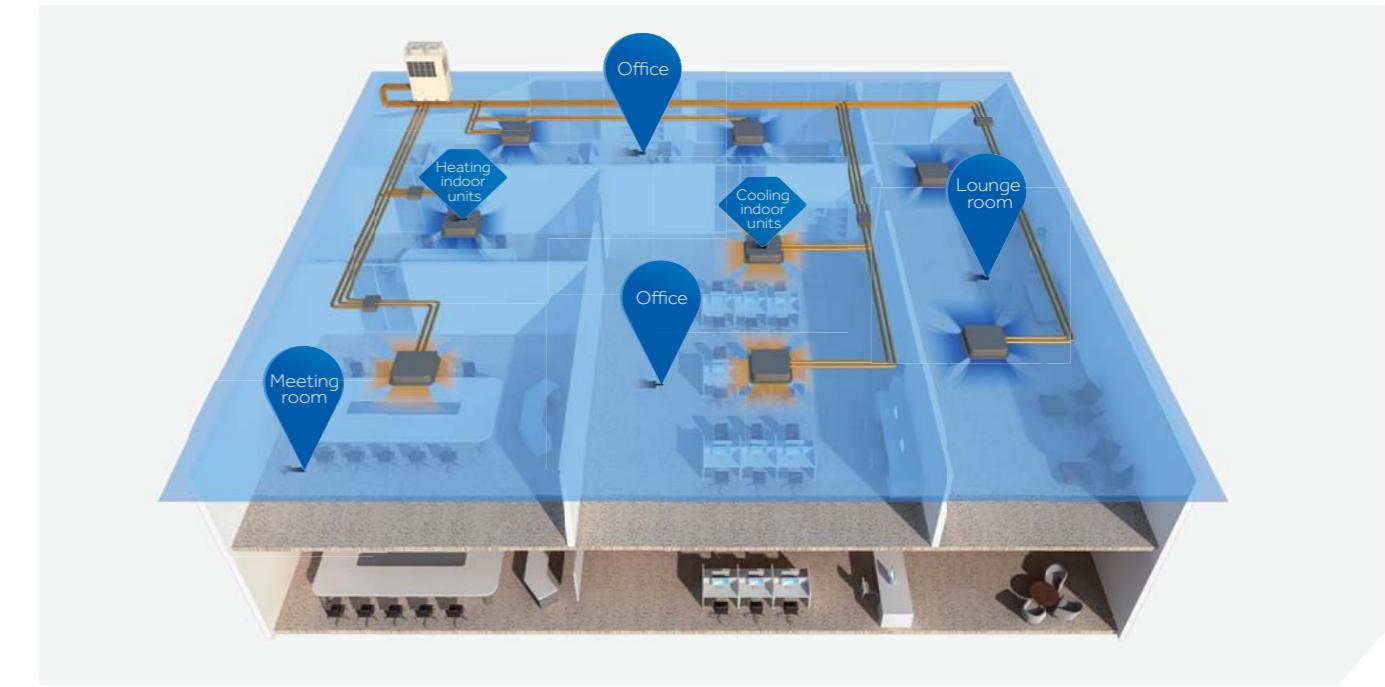
Variable operation mode in one system



• 063 •

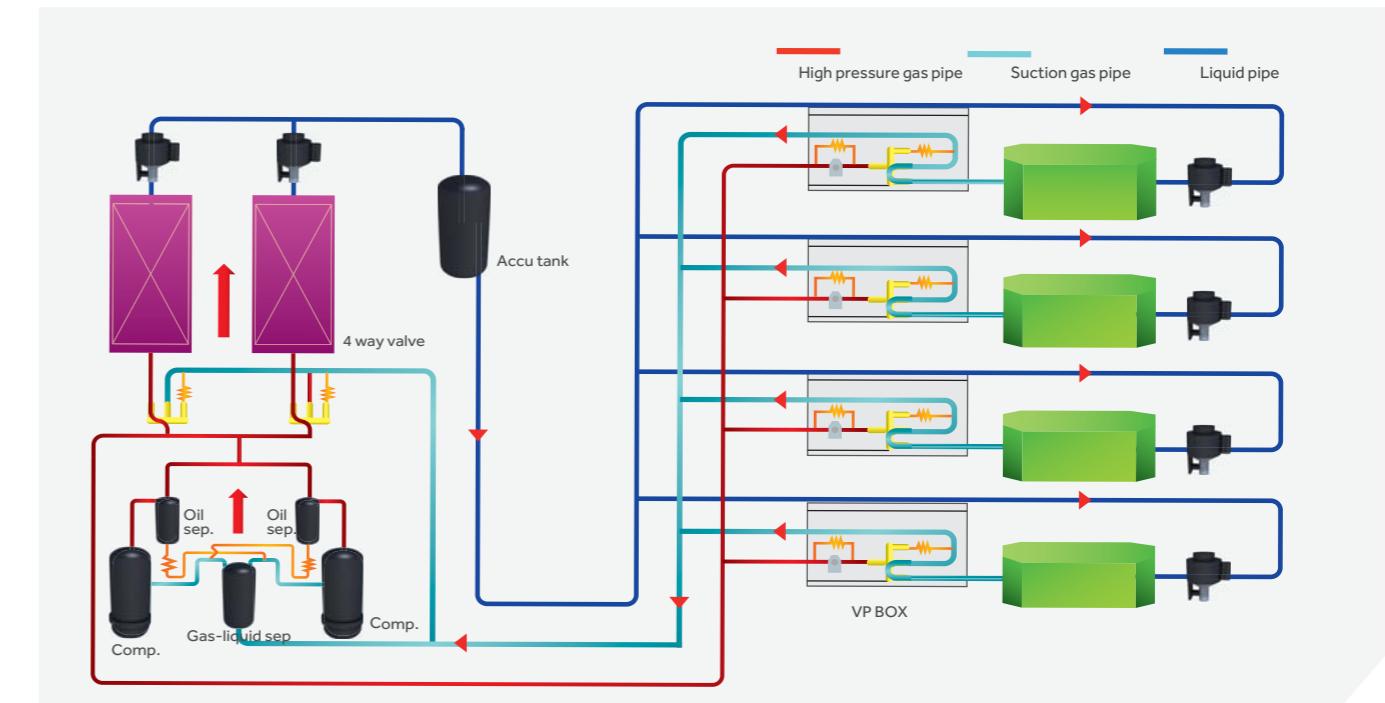
System Introduction

Typical 3 pipe system



All cooling circuit

- 12/14/16HP double compressor module for example



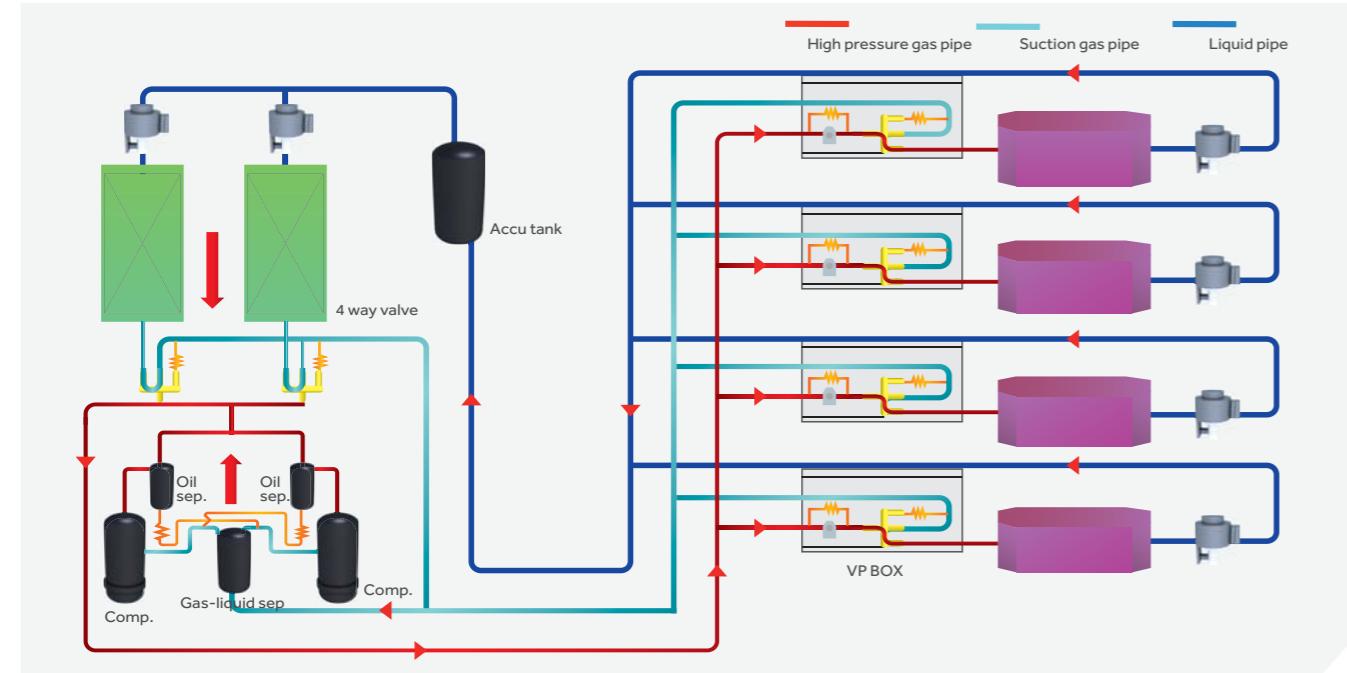
• 064 •

FEATURES & BENEFITS

System Introduction

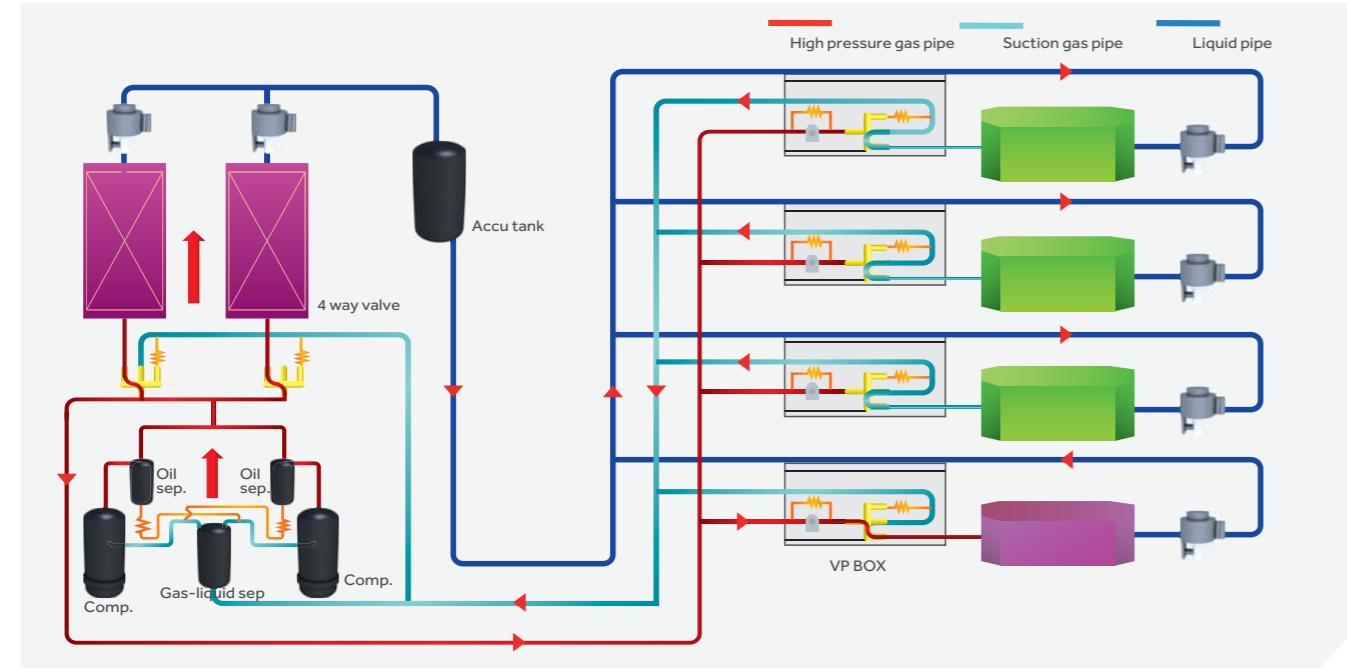
All heating circuit

- 12/14/16HP double compressor module for example



Cooling > heating circuit

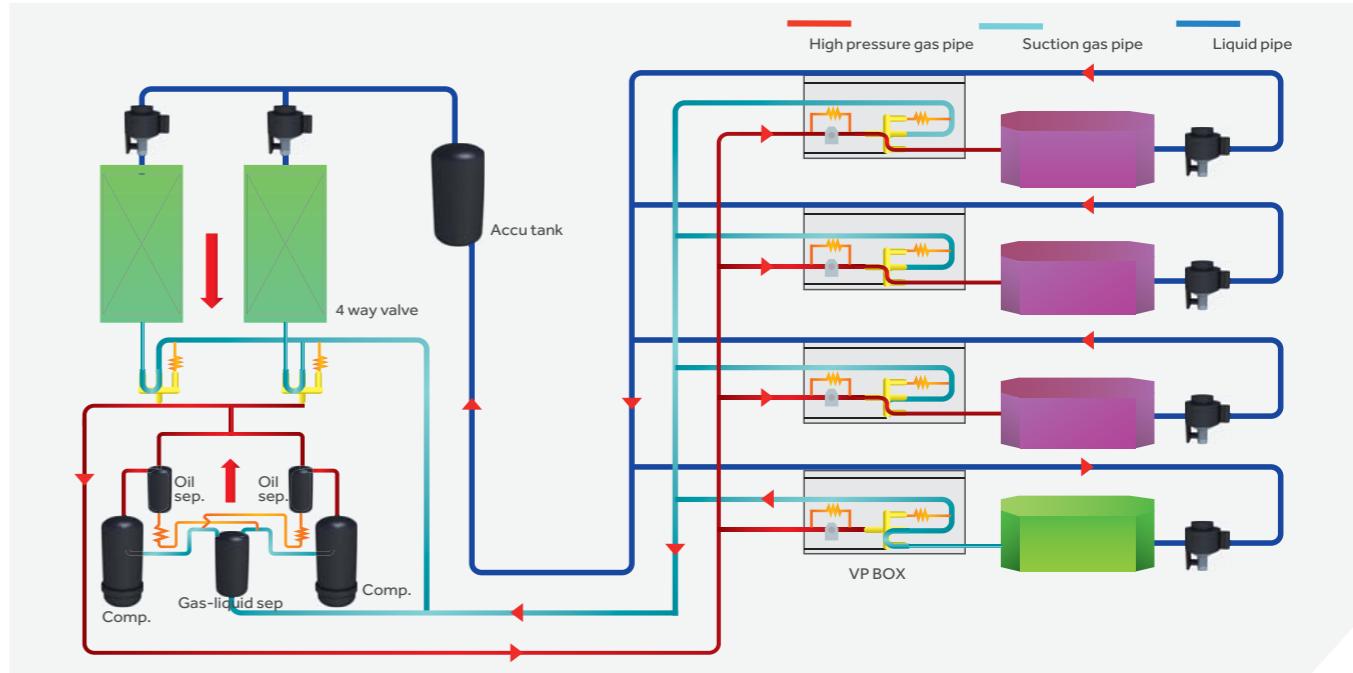
- 12/14/16HP double compressor module for example



System Introduction

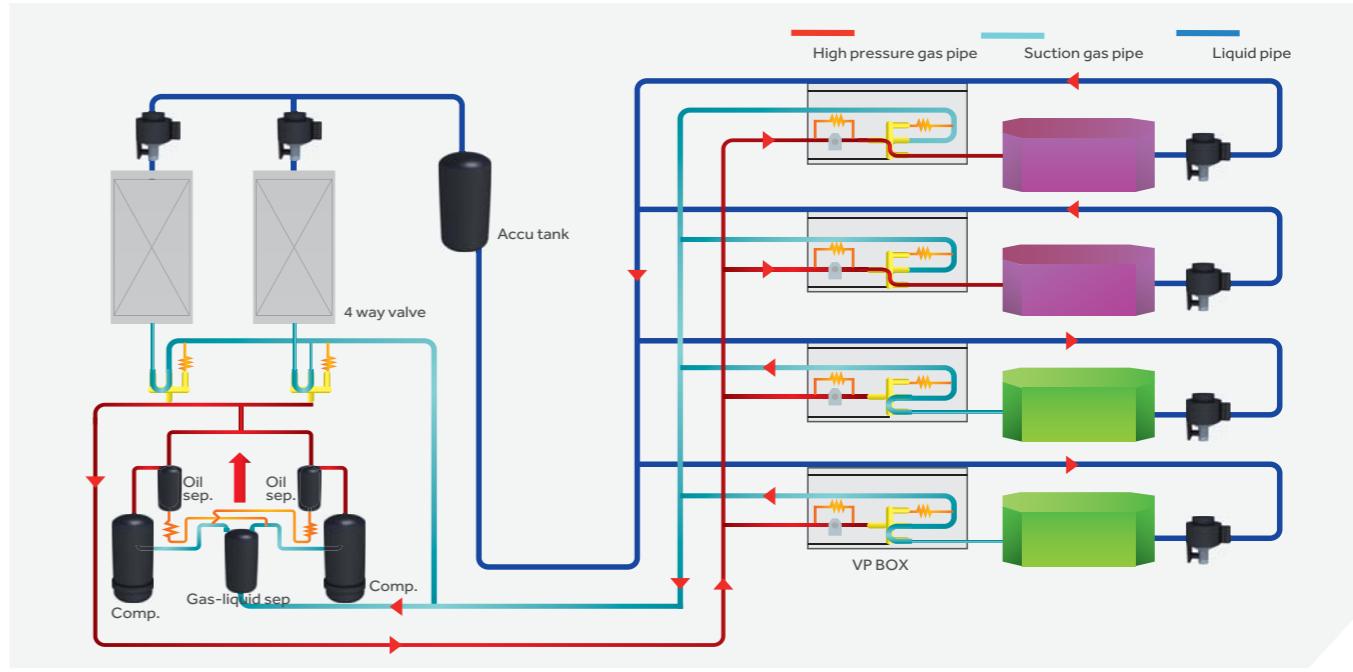
Cooling < heating circuit

- 12/14/16HP double compressor module for example



Cooling = heating circuit

- 12/14/16HP double compressor module for example

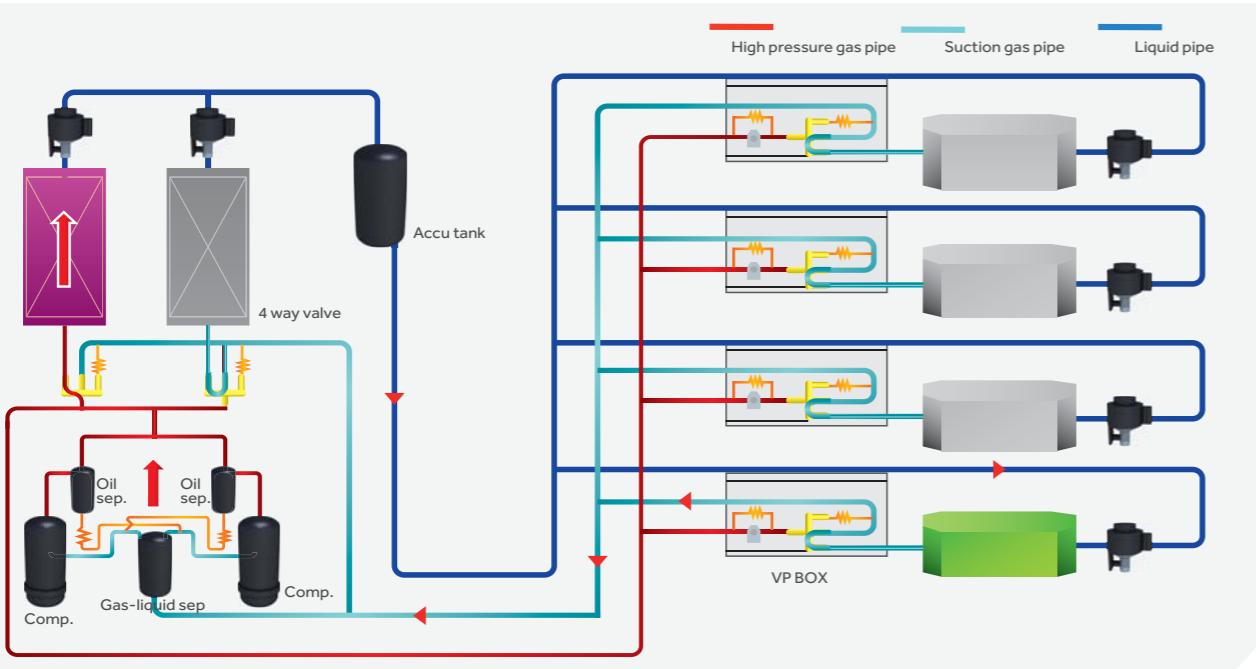


FEATURES & BENEFITS

System Introduction

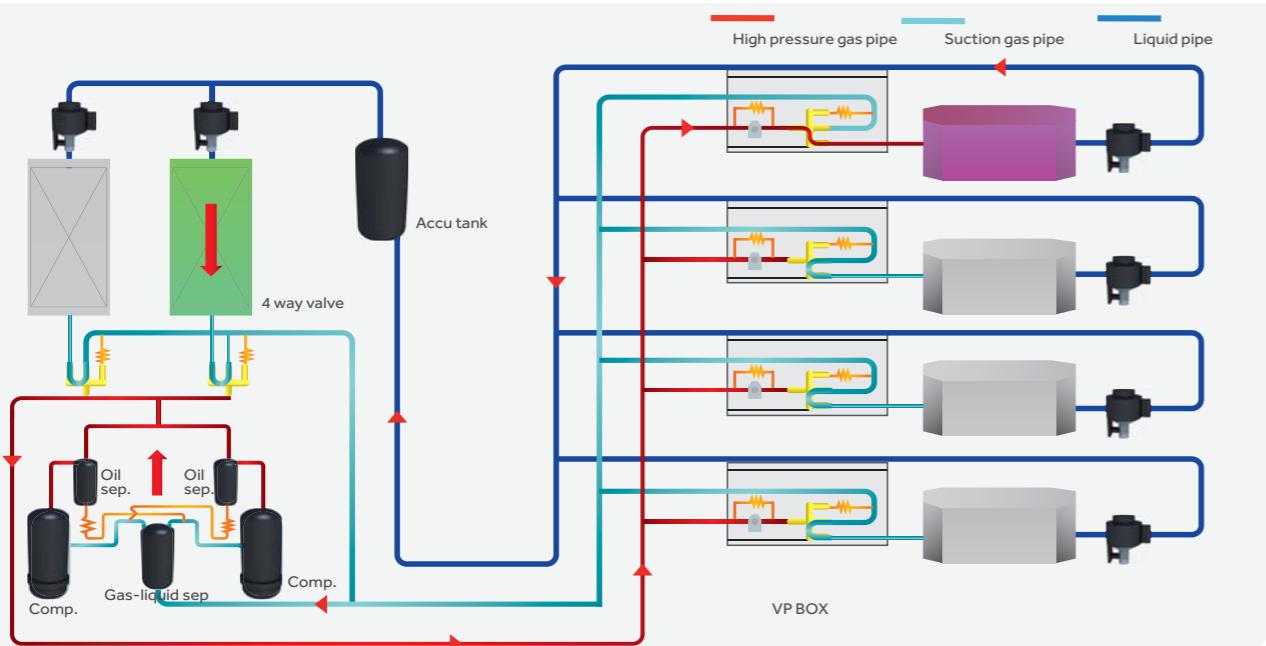
Light part load cooling

- 12/14/16HP double compressor module for example, little indoor heating, others off



Light part load heating

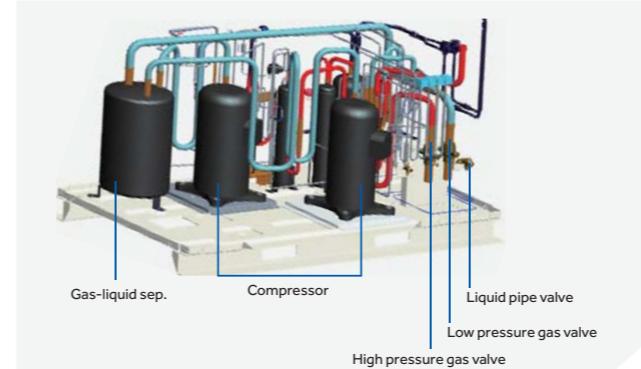
- 12/14/16HP double compressor module for example, little indoor heating, others off



Outdoor Structure

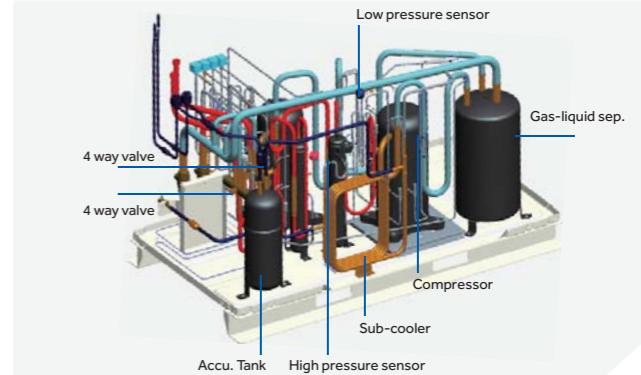
Inner system

Core Parts: For 12/14/16 Single Module



Inner system

Core Parts: For 12/14/16 Single Module



User friendly outdoor structure

Core Technologies and Parts

Patent fan design and DC fan motor

- Air flow improved by 17.5% with patent fan design
- Noise reduced 3 dB(A) with DC fan motor



4 way air return

Reduce the heat exchanger height(650mm), and the upper and lower wind speed uniform and high efficiency

2 stages heat exchanger

Separate control and heat exchanger size can be adjusted, effectively cope with small load operation, to ensure reliable operation

Forced heat dissipation fan

Forced heat dissipation fan inside the electric control box, to ensure the stable Internal temperature and stable system operation



Double EEV design

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

DC Inverter scroll Compressor

- DC inverter scroll compressor from Mitsubishi electric
- For big module, also with another fixed-speed compressor from mitsubishi electric

Vp (valve pipe) box structure

Overview

Individual Valve + Pipe Box for Heat Recovery

- High comfort: Individual control box and change over for one group indoor units
- Super slim built-in height: only 180mm
- Threaded joint connection, easy for installation



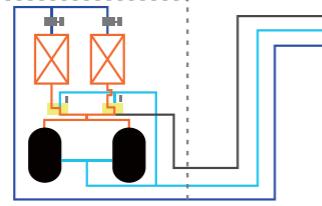
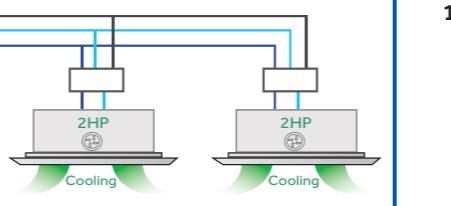
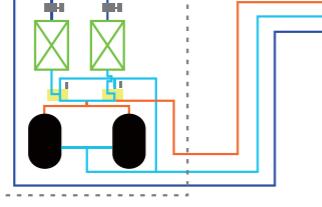
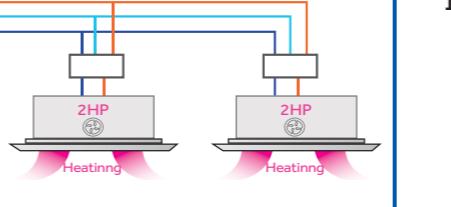
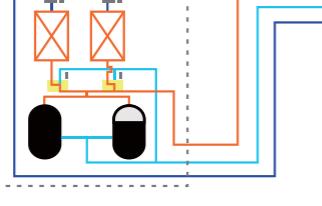
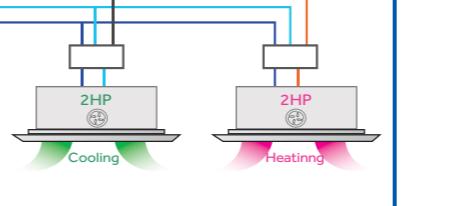
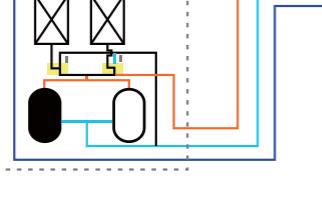
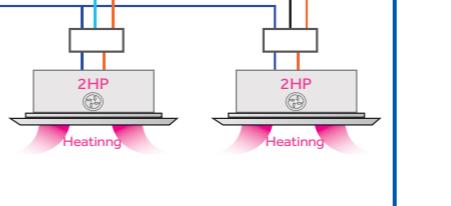
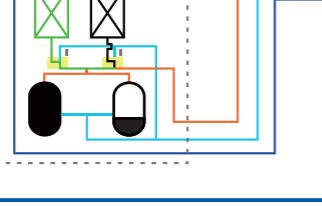
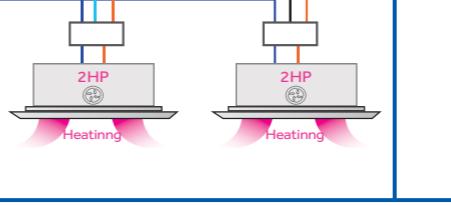
| Model name | Max. capacity of indoor(kw) | Power Supply | Max. indoor units | Dimension |
|------------|-----------------------------|-----------------|-------------------|--------------|
| VP1-112A | x≤11.2 | 1/220-240/50/60 | 5 | 400/365/180 |
| VP1-180A | 11.2<x≤18 | 1/220-240/50/60 | 8 | 400/365/180 |
| VP1-280A | 18<x≤28 | 1/220-240/50/60 | 8 | 400/365/180 |
| VP4-450A | ≤ 45 | 1/220-240/50/60 | 20 | 1188/597/182 |

FEATURES & BENEFITS

System Introduction

Typical 3 pipe system

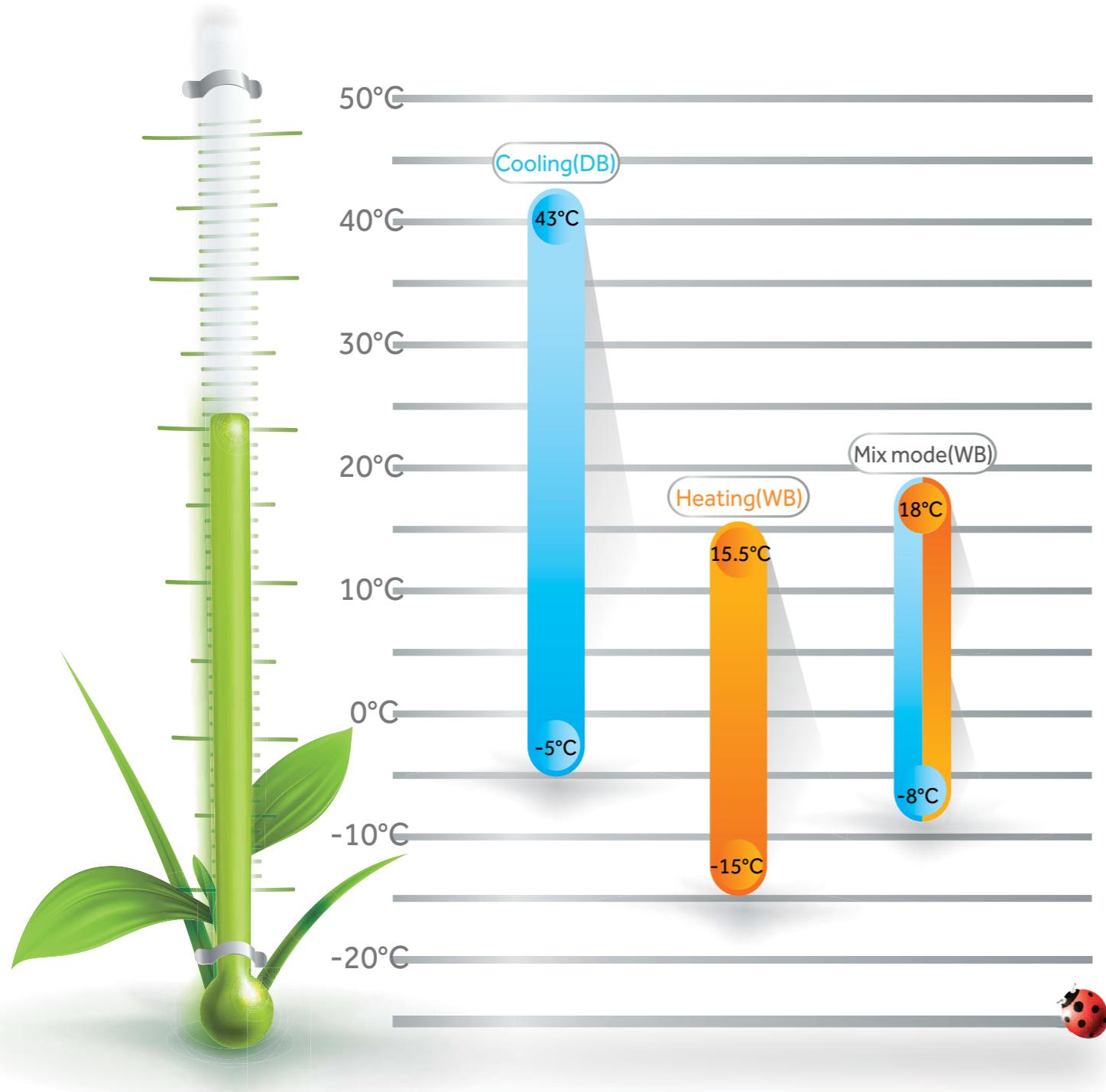
The heat discharged from outdoor unit can be used to cooling Indoor units. It can save energy above 30% averagely

| Mode | Heat Recovery system operation | Part Load | Energy Saving |
|---|---|---|---------------|
| Cooling only (10HP outdoor each indoor 2HP) |  |  | 0% |
| Heating only (10HP outdoor) |  |  | 0% |
| Cooling>Heatinng |  |  | 20% |
| Cooling=Heatinng |  |  | 50% |
| Cooling<Heatinng |  |  | 40% |

FEATURES & BENEFITS

System Introduction

Wide temperature operation range





MRV S

- | 079 Features & Benefits
- | 087 MRV S^{II} Outdoor
- | 092 MRV S^I Outdoor

Haier

MRV S^{II} (4/5/6HP)

New platform, new outlook

Spiral air outlet grille
Better outlook and lower noise

Built-in charge valve
Safer and easier maintenance

Round corner
Better outlook & safer



High energy efficiency

1 DC inverter compressor
Haier takes DC INV. compressor, 5% power input lower. (14kw)

2 DC fan motor and 550mm big fan
38% power input lower and 8% airflow higher

3 Larger heat exchanger
Heat exchange area rise 10 %. (14kw)

4 Charge Valve
Built-in charge valve enables safer and easier maintenance

5 Low standby power
New PCB programme , reduce 20% standby power consumption

Comfort

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

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

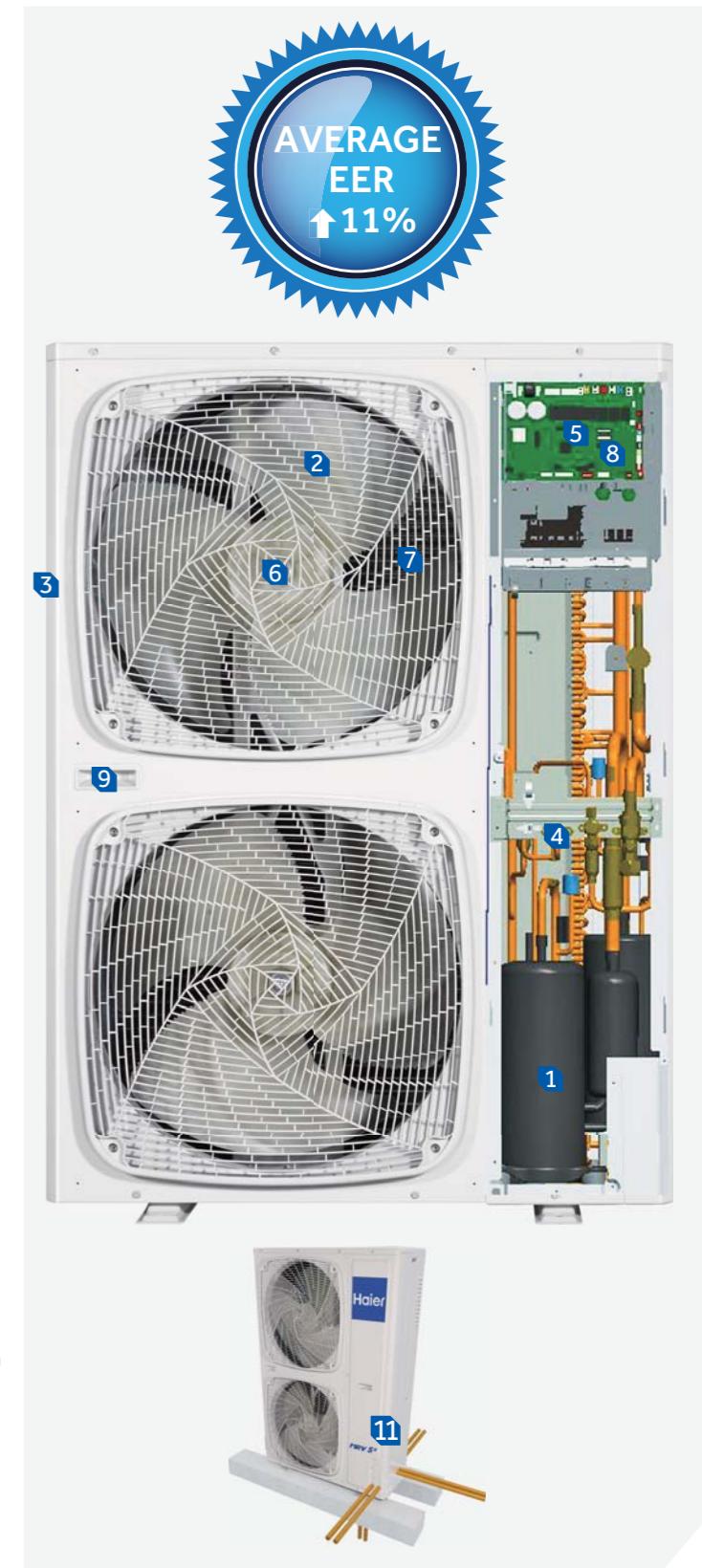
8 Automatic sound-lowering programme
Night mode set by PCB, 8dB(A) lower

Convenience

9 Double side "4 " handles
Easy to carry

10 "888" test panel
All running data & error code can be checked from "888" screen, which is easy for installers

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



Haier

MRV S^{II} (8/10/12HP)

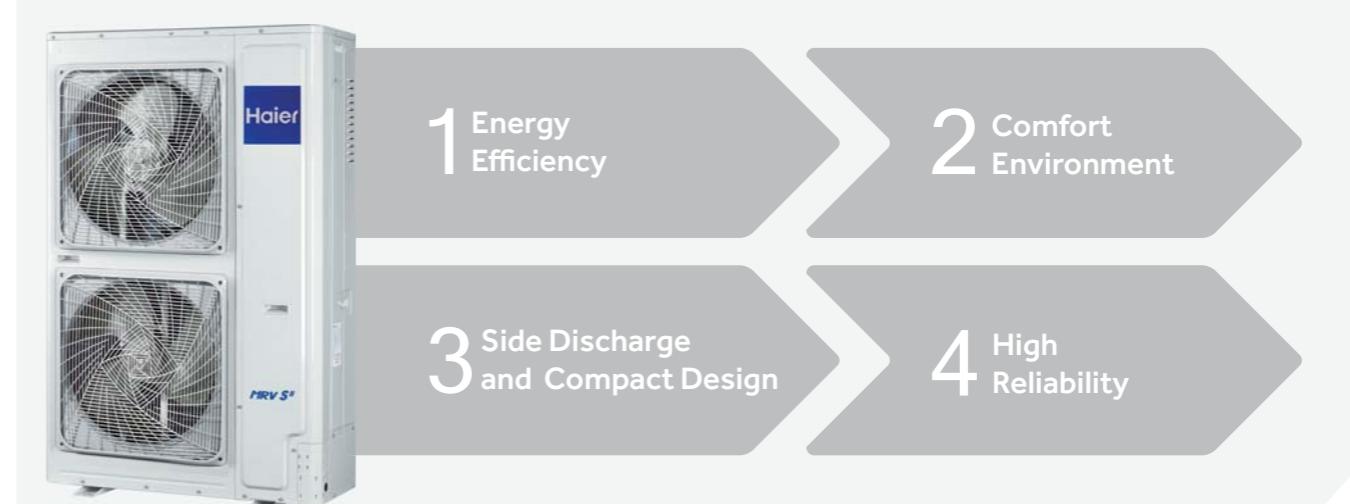


Outdoor Structure (8/10/12HP Side Discharge)

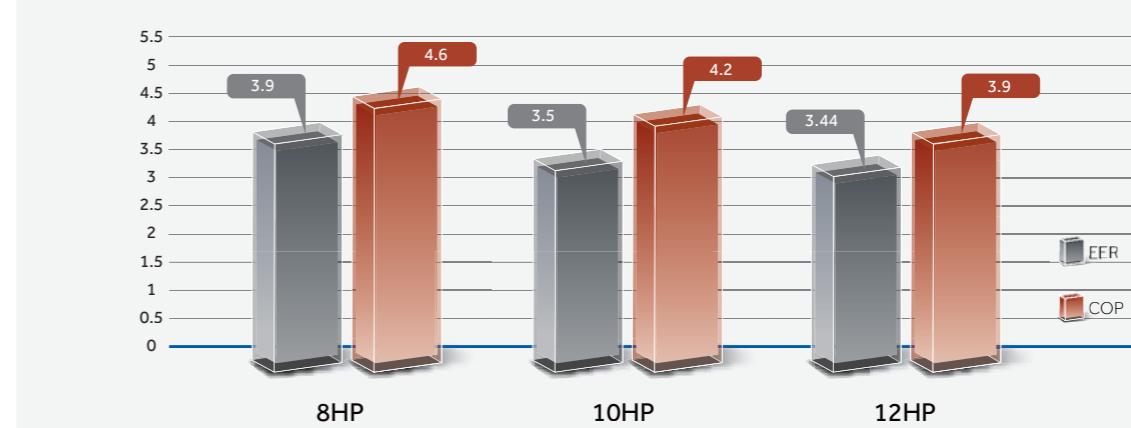
Bigger Outdoor Capacity, More Flexible Application



081



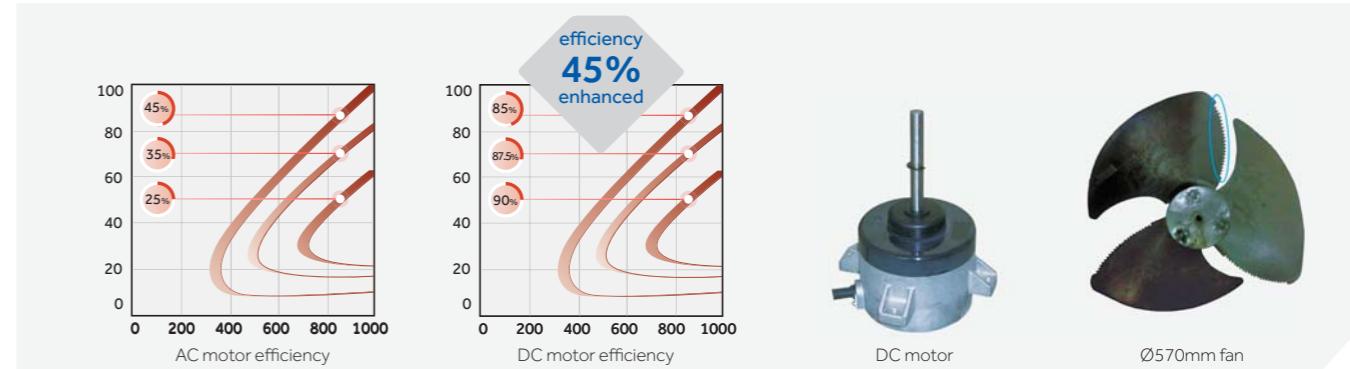
High EER and COP



DC Fan and Fan Motor

DC inverter fan motor more higher efficiency in part load running
•16-stage speed control; high efficiency running especially in low speed
•Efficiency increase 45% comparing with AC motor and power input largely decrease

Big diameter fan
•570mm big diameter fan, more big air flow and more higher efficiency



082

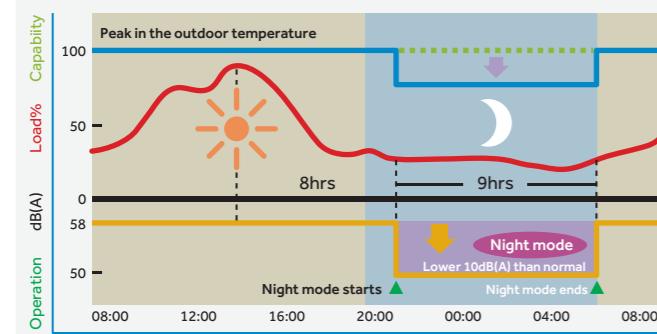
MRV S^{II} (8/10/12HP)

Energy Efficiency

Low noise level

Night Quiet Operation Function

Noise can be reduced to 45dB(A)



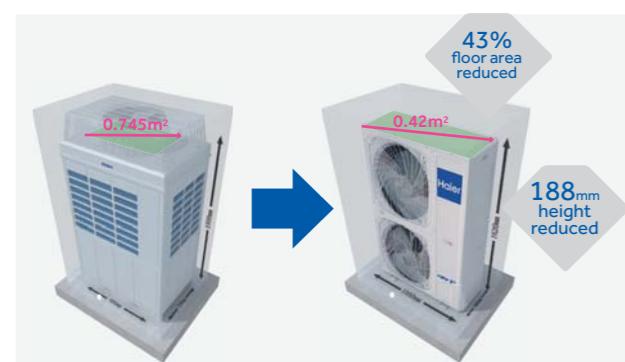
Low noise operation

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

Easy installation

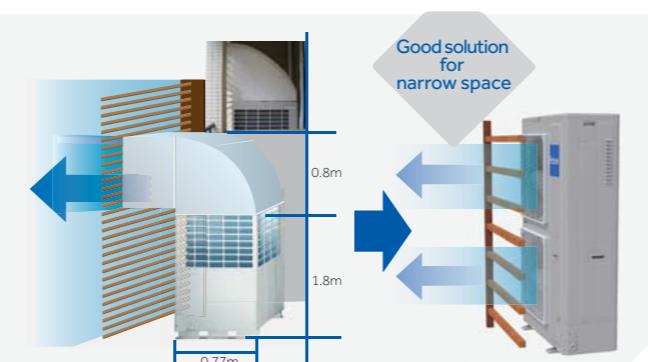
Compact Side Discharge Design, Big Capacity, Small Footprint

Small footprint, only 0.42m², 43% floor area can be reduced



Compact Side Discharge Design

No need additional ventilation hood comparing with top discharge unit



Easy installation

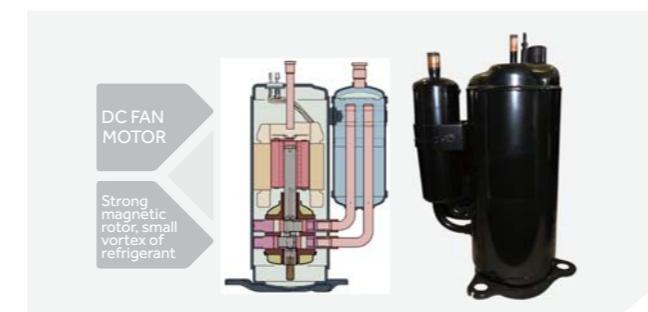
4 Way pipe connection

Front, rear, right, down 4 way pipe connection, flexible installation



New DC inverter twin rotary compressor

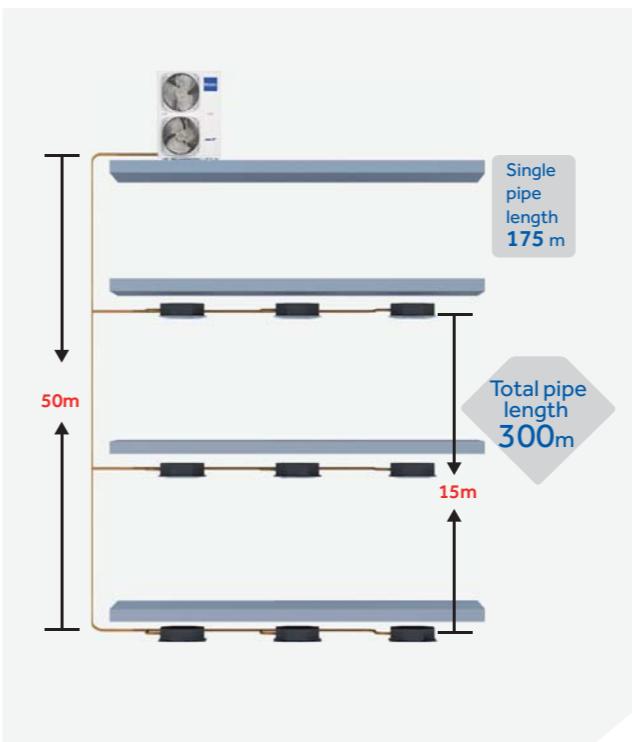
- Small torque change, good dynamic balance, the system runs stably, little vibration, low noise, high efficiency
- More higher efficiency in part load running



Easy Installation

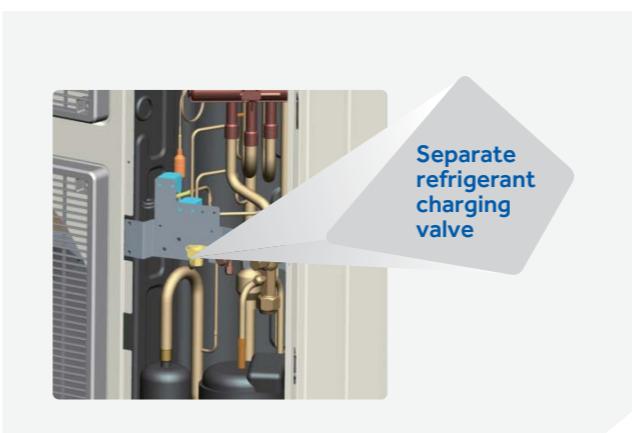
Long pipe length, high height drop

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



Separate refrigerant charging valve

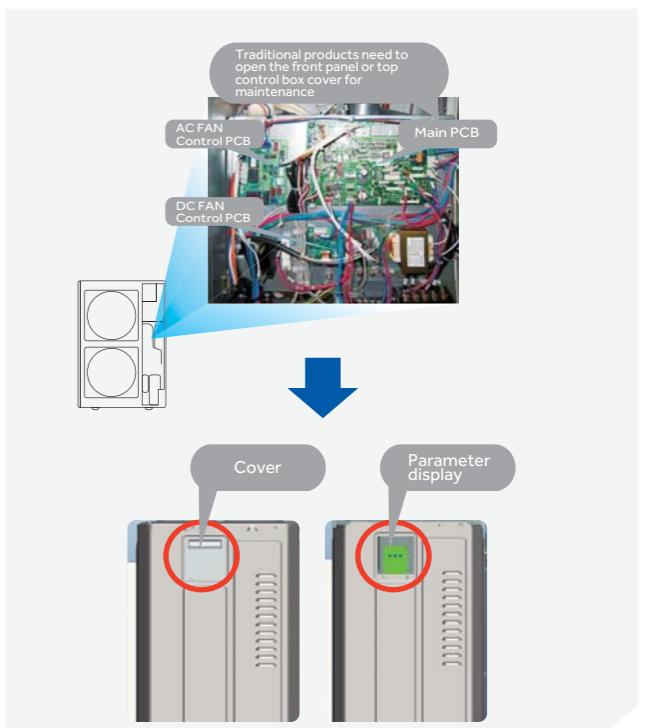
Easy for refrigerant charging



Easy Service

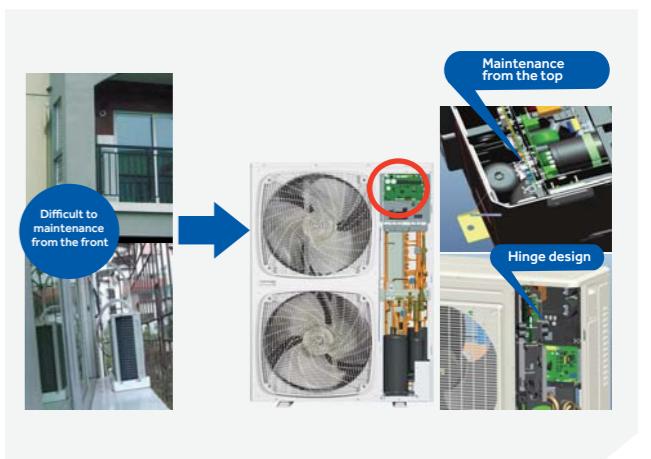
Parameter display panel

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



Easy maintenance for control

- The control box is in front, reserving space 108mm between control box and top panel, easy maintenance from the top
- Control box is with hinge design, easy to open for maintenance

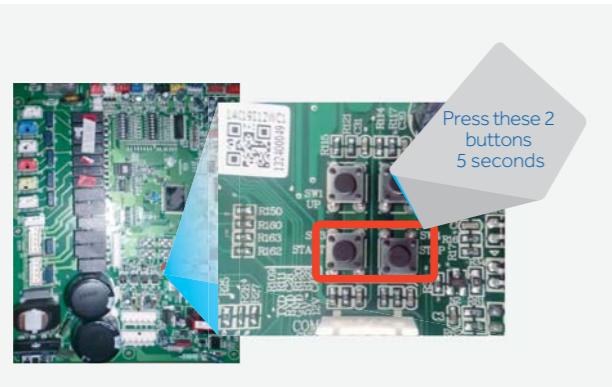


FEATURES & BENEFITS

High Reliability

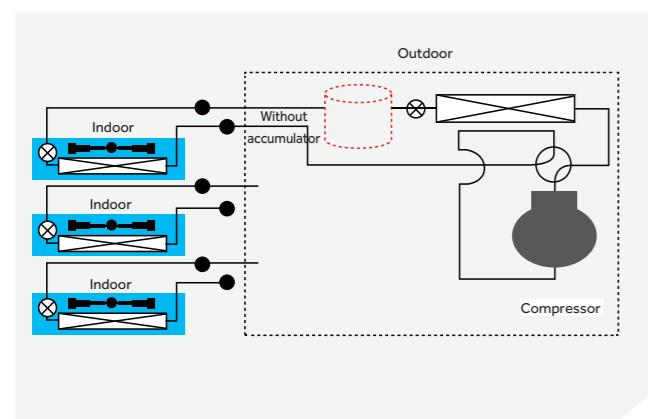
Refrigerant automatically reclaim Technology

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



Refrigerant control technology

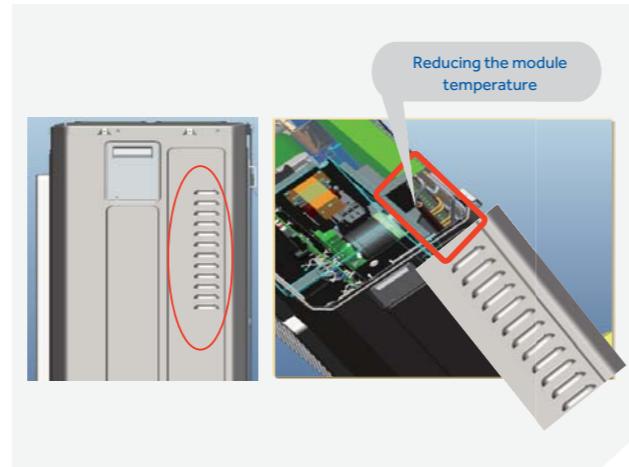
- Refrigerant control technology without high pressure accumulator, reducing the refrigerant volume and enhancing the running efficiency



High Reliability

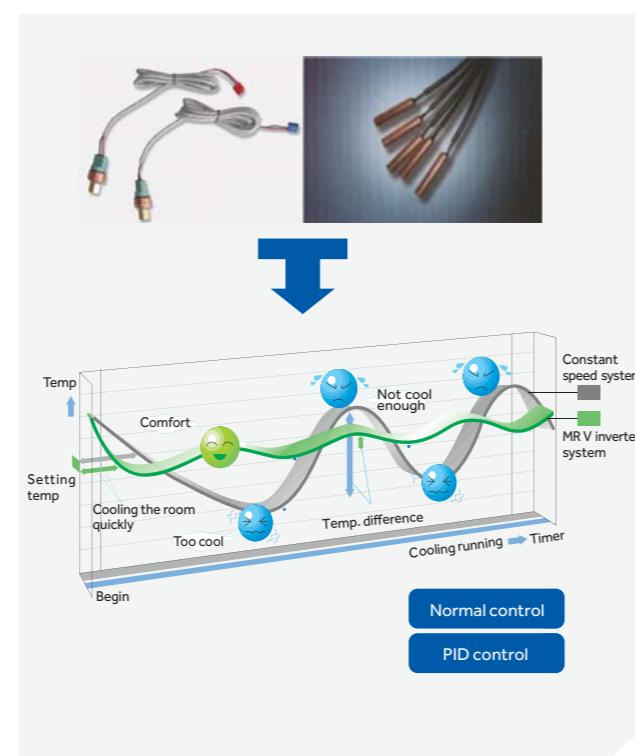
Air inlet grill design on right side panel

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



High and low double pressure sensor

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



MRV S^{II} OUTDOOR



- AU042FPERA
- AU052FPERA
- AU062FPERA
- AU04IFPERA
- AU05IFPERA
- AU06IFPERA

| Model | AU042FPERA | AU052FPERA | AU062FPERA | AU04IFPERA | AU05IFPERA | AU06IFPERA |
|-----------------------|------------------------------------|-------------------|---------------------|---------------------|---------------------|---------------------|
| Capacity | Capacity range | HP | 4 | 5 | 6 | 4 |
| | Cooling | kW | 12.6 | 14 | 15.5 | 12.6 |
| | Heating | kW | 14.2 | 16 | 18 | 14.2 |
| | 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 |
| | Power input(Cooling) | kW | 3.11 | 3.51 | 4.31 | 3.11 |
| Electrical parameters | Power input(Heating) | kW | 3.18 | 3.72 | 4.39 | 3.18 |
| | EER | / | 4.05 | 3.99 | 3.60 | 4.05 |
| | COP | / | 4.47 | 4.30 | 4.10 | 4.47 |
| | Airflow(H) | m ³ /h | 7200 | 7200 | 7200 | 7200 |
| Performance | Sound pressure level(H) | dB(A) | 50 | 51 | 53 | 50 |
| | Sound power level(H) | dB(A) | 66 | 67 | 69 | 66 |
| | External dimensions(W/D/H) | mm | 950/370/1340 | 950/370/1340 | 950/370/1340 | 950/370/1340 |
| Installation | Shipping dimensions(W/D/H) | mm | 1023/471/1420 | 1023/471/1420 | 1023/471/1420 | 1023/471/1420 |
| | Net/Shipping weight | kg | 115/123 | 115/123 | 115/123 | 115/123 |
| | Compressor type | / | Rotary | Rotary | Rotary | Rotary |
| | Compressor brand | / | MITSUBISHI ELECTRIC | MITSUBISHI ELECTRIC | MITSUBISHI ELECTRIC | MITSUBISHI ELECTRIC |
| | Compressor quantity | / | 1 | 1 | 1 | 1 |
| | Refrigerant type | / | R410A | R410A | R410A | R410A |
| | Refrigerant charge | kg | 4 | 4 | 4 | 4 |
| Connection ratio | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 | 15.88 | 15.88 |
| | Total pipe length | m | 300 | 300 | 300 | 300 |
| | Max pipe length(Equivalent/Actual) | m | 150 | 150 | 150 | 150 |
| | Max drop between I.U.&O.U | m | 50 | 50 | 50 | 50 |
| | Max drop between I.U.&L.U | m | 15 | 15 | 15 | 15 |
| | Connectable indoor unit ratio | % | 50-130 | 50-130 | 50-130 | 50-130 |
| Working temp. | Maximum number of indoor units/ | | 8 | 10 | 13 | 10 |
| | Cooling | °C | -15-48 | -15-48 | -15-48 | -15-48 |
| | Heating | °C | -20-27 | -20-27 | -20-27 | -20-27 |

* Models are under development, data is pending.

MRV S^{II} OUTDOOR

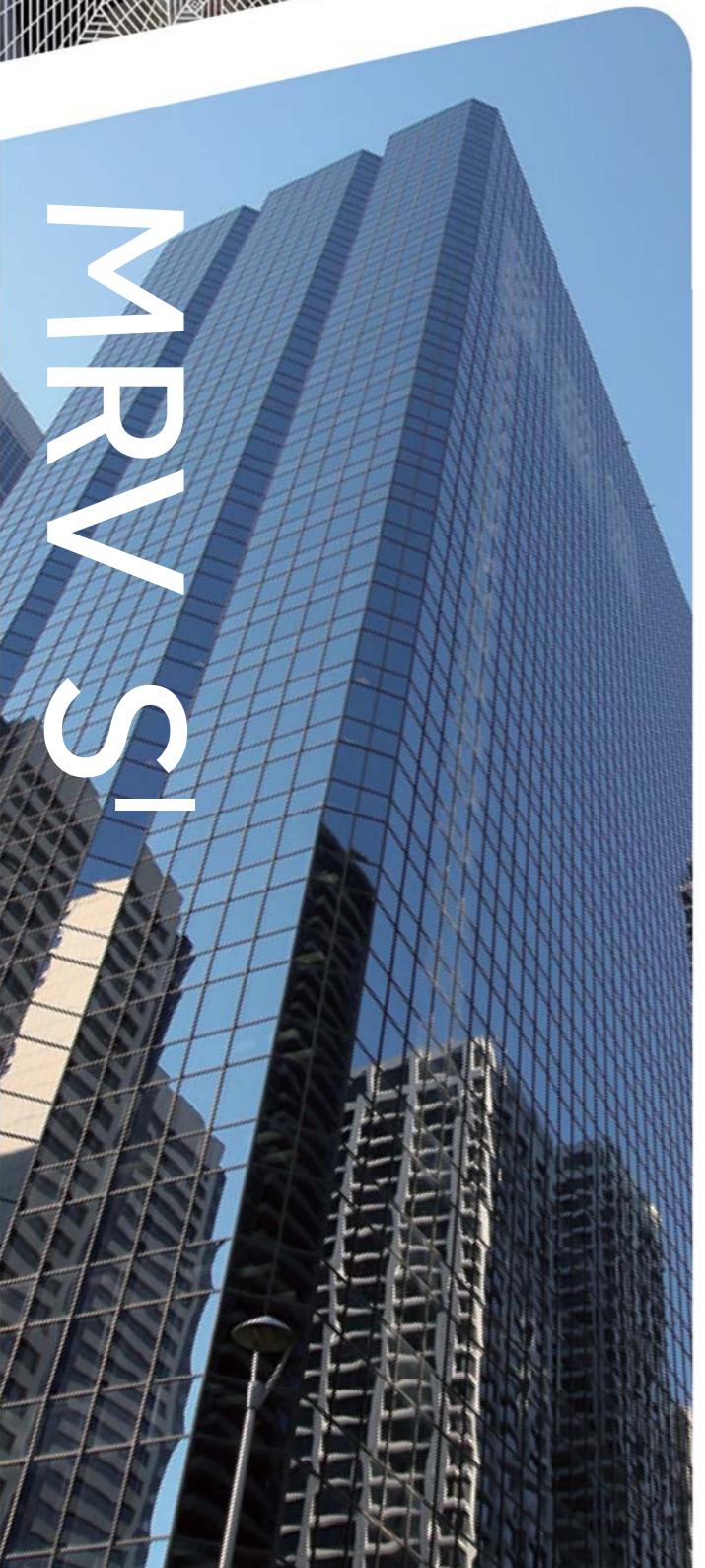


- AV08NMSETA
- AV10NMSETA
- AV12NMSETA



| Model | AV08NMSETA | AV10NMSETA | AV12NMSETA |
|-----------------------|------------------------------------|-------------------|---------------------|
| Capacity | Capacity range | HP | 8HP |
| | Cooling | kBtu/h | 77.1 |
| | | kW | 22.6 |
| | Heating | kBtu/h | 85.3 |
| | | kW | 25 |
| Electrical parameters | Power supply | Ph/V/Hz | 3/380-400/50/60 |
| | Power input(Cooling) | kW | 5.79 |
| | Power input(Heating) | kW | 5.43 |
| | EER/COP | | 3.9/4.6 |
| Performance | Airflow (H) | m ³ /h | 10000 |
| | Sound pressure level(H) | dB(A) | 55 |
| | Sound power level(H) | dB(A) | 66 |
| | External dimensions(W/D/H) | mm | 1050/400/1636 |
| Installation | Shipping dimensions(W/D/H) | mm | 1150/510/1795 |
| | Net/Shipping weight | kg | 168/183 |
| | Compressor type | | Rotary |
| | Compressor brand | | MITSUBISHI ELECTRIC |
| | Compressor quantity | | 1 INV |
| | Refrigerant type | | R410A |
| | Refrigerant charge | kg | 7.4 |
| Connection ratio | Refrigerant liquid pipe | mm | 9.52 |
| | Refrigerant gas pipe | mm | 19.05 |
| | Total pipe length | m | 300 |
| | Max pipe length(Equivalent/Actual) | m | 175/150 |
| | Max drop between I.U.&O.U | m | 50 |
| | Max drop between I.U.&L.U | m | 50 |
| | Connectable indoor unit ratio | % | 50-130 |
| Working temp. | Maximum number of indoor units/ | | 13 |
| | Cooling | °C | -5-43 |
| | Heating | °C | -15-21 |

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



MRV S' (3/5/7HP)

DC Inverter Twin Rotary Compressor

Realize high efficiency and compact designed compressor by joint wrap & earths metal magnet motor.

Wide range inverter compressors would satisfy the customer's innovative requirement and design.



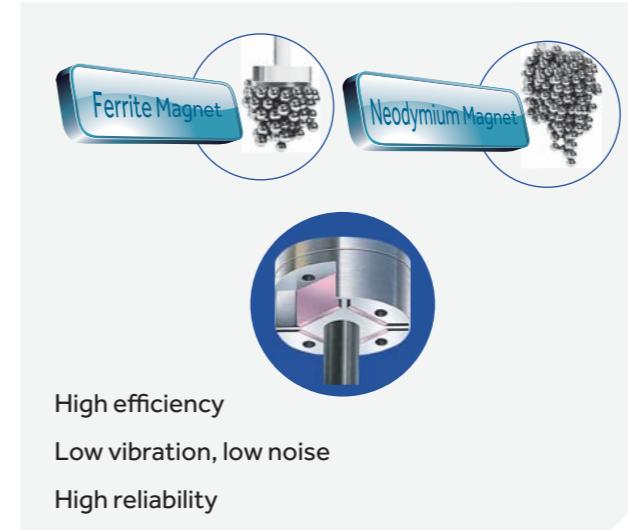
DC Inverter Twin Rotary Compressor



DC Inverter Technology

DC inverter motor

- DC fan motor speed can be adjusted from 0~1000 r/min, it can improve the unit efficiency, at the same time, the unit can realize low ambient cooling operation.



Operation Range

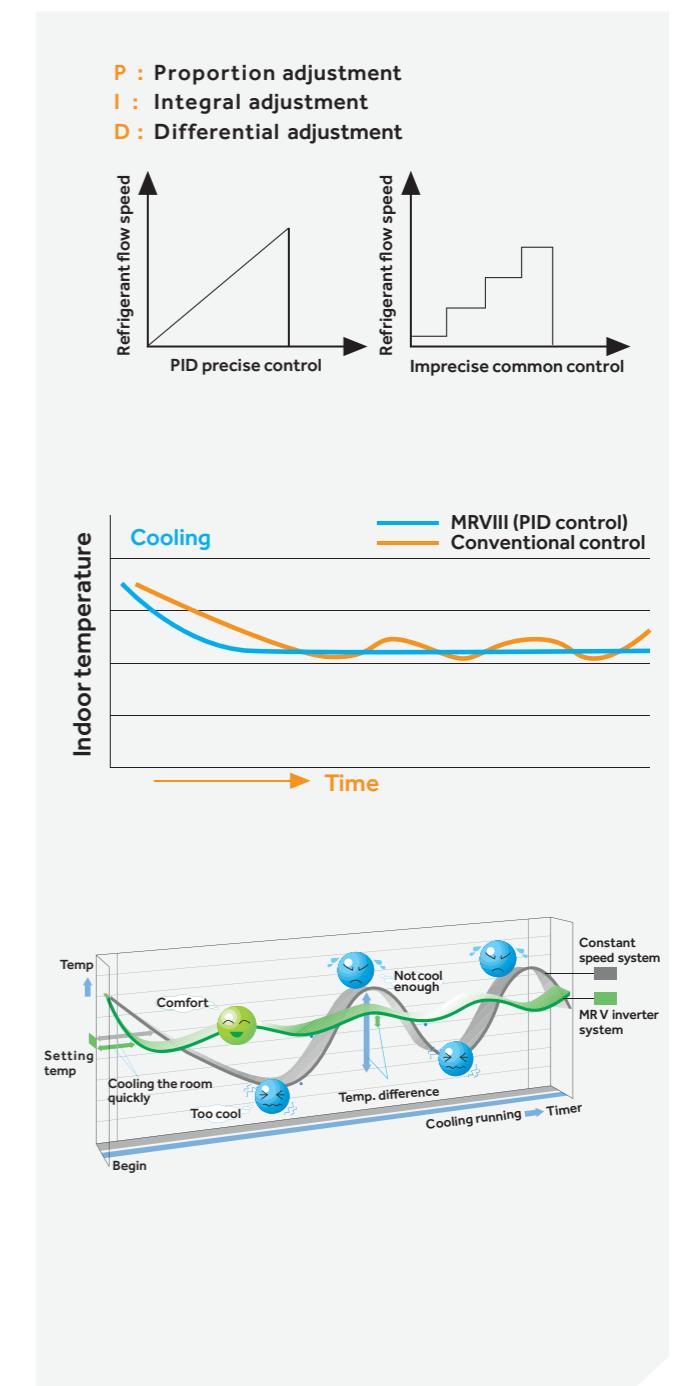
• MRV S' series permits a system design considering a heating range operation under a low temperature condition from -15°C of previous model and a cooling range operation -5°C.

• For the capacities under low temperature conditions, please see technical data sheets.



Precise Control

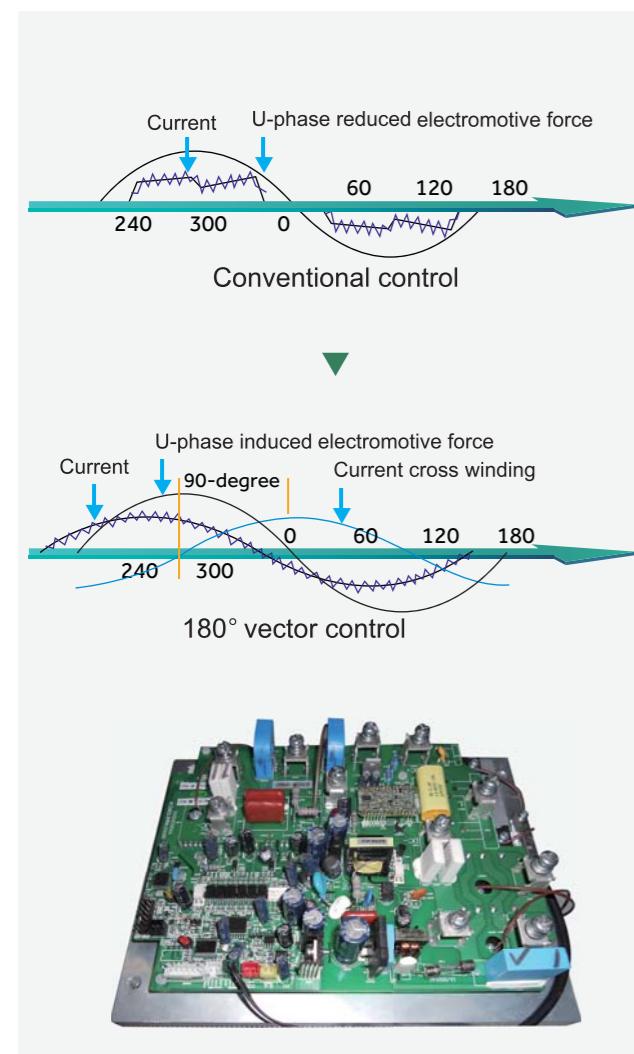
• PID control adjusts the output of compressor and the open degree of EEV, balances the indoor refrigerant flow, realizes the linear output, creates a comfortable environment. The temperature could be controlled precisely.



MRV S^I 3/5/7HP

180° Vector Control Technology

- Haier uses power resistance to detect the rotor position of the compressor, resulting in the consistency of the compressor working current and current sine waves, improving power efficiency by about 17%.



Side Discharge MRV S^I Outdoor Units

- Dual Frequency 50/60Hz
- DC Inverter TWIN Rotary Compressor
- BLDC Fan (Brushless DC motor)



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

MRV S^I OUTDOOR

AU282FHERA

- AU482FIERA(G)
- AU48NFIERA(G)
- AU60NFIERA(G)



| Model | AU282FHERA | AU482FIERA(G) | AU48NFIERA(G) | AU60NFIERA(G) |
|-----------------------|--|---------------------|---------------------|---------------------|
| Capacity | Capacity range HP | 3HP | 5HP | 5HP |
| | Cooling kBtu/h | 27.3 | 51.2 | 51.2 |
| | | 8 | 15 | 15 |
| | Heating kBtu/h | 32.4 | 58 | 58 |
| | | 9.5 | 17 | 17 |
| Electrical parameters | Power supply Ph/V/Hz | 1/220-230/50 | 1/220-230/50/60 | 3/380-400/50/60 |
| | Power input (Cooling) kW | 2.20 | 4.2 | 4.2 |
| | Power input (Heating) kW | 2.15 | 4 | 4 |
| | EER/COP | 3.64/4.42 | 3.57/4.25 | 3.57/4.25 |
| Performance | Air flow (H) m³/h | 3500 | 6500 | 6500 |
| | Sound pressure level (H) dB(A) | 55 | 59 | 59 |
| | Sound power level (H) dB(A) | 66 | 70 | 70 |
| | | | | 71 |
| Installation | External dimensions(W/D/H) mm | 960/340/830 | 960/340/1250 | 960/340/1250 |
| | Shipping dimensions(W/D/H) mm | 1095×410×945 | 1095×410×1400 | 1095×410×1400 |
| | Net/Shipping weight kg | 74/89 | 105/113 | 105/113 |
| | Compressor type | Rotary | Rotary | Rotary |
| | Compressor brand | MITSUBISHI ELECTRIC | MITSUBISHI ELECTRIC | MITSUBISHI ELECTRIC |
| | Compressor quantity | 1 INV | 1 INV | 1 INV |
| | Refrigerant type | R410A | R410A | R410A |
| | Refrigerant charge kg | 2.6 | 3.6 | 4 |
| | Refrigerant liquid pipe mm | 9.52 | 9.52 | 9.52 |
| | Refrigerant gas pipe mm | 15.88 | 19.05 | 19.05 |
| Connection ratio | Total pipe length m | 50 | 100 | 100 |
| | Max. pipe length(Equivalent/Actual) m | 35 | 70 | 70 |
| | Max drop between I.U.&O.U m | 30 | 30 | 30 |
| | Max drop between I.U.&I.U m | 10 | 10 | 10 |
| | | | | 10 |
| | | | | |
| Working temp. | Connectable indoor unit ratio % | 50~130 | 50~130 | 50~130 |
| | Maximum number of indoor units | 5 | 8 | 8 |
| Working temp. | Cooling °C | 10~43 | -5~43 | -5~43 |
| | Heating °C | -15~21 | -15~21 | -15~21 |

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



MRV W

| 095 Features & Benefits
| 109 MRV W Outdoor

MRV W

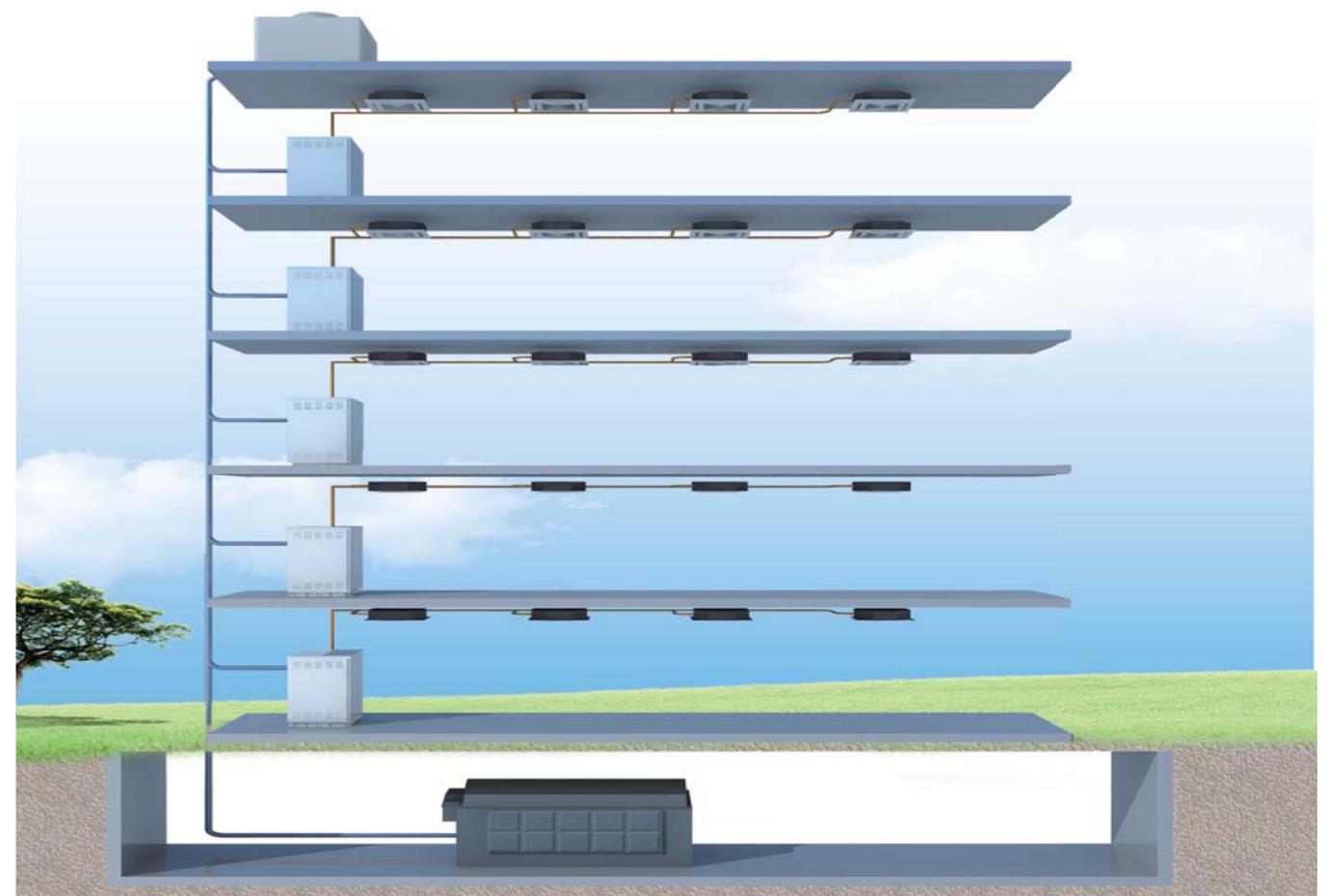
MRV W

HAIER

FEATURES & BENEFITS

Outdoor Structure (8/10/12hp Side Discharge)

Much Bigger Outdoor Capacity, More Flexible Application



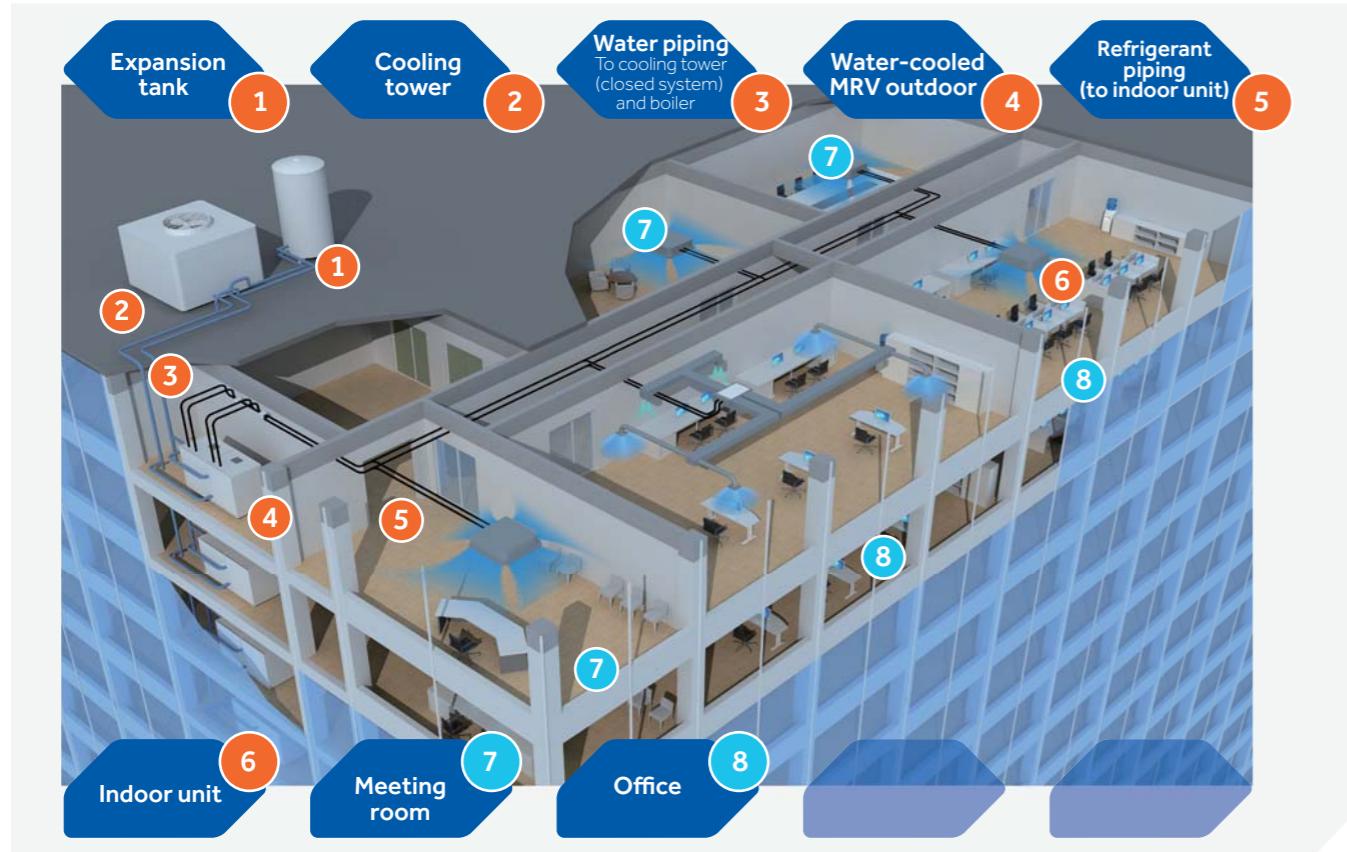
What is MRV W Series

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



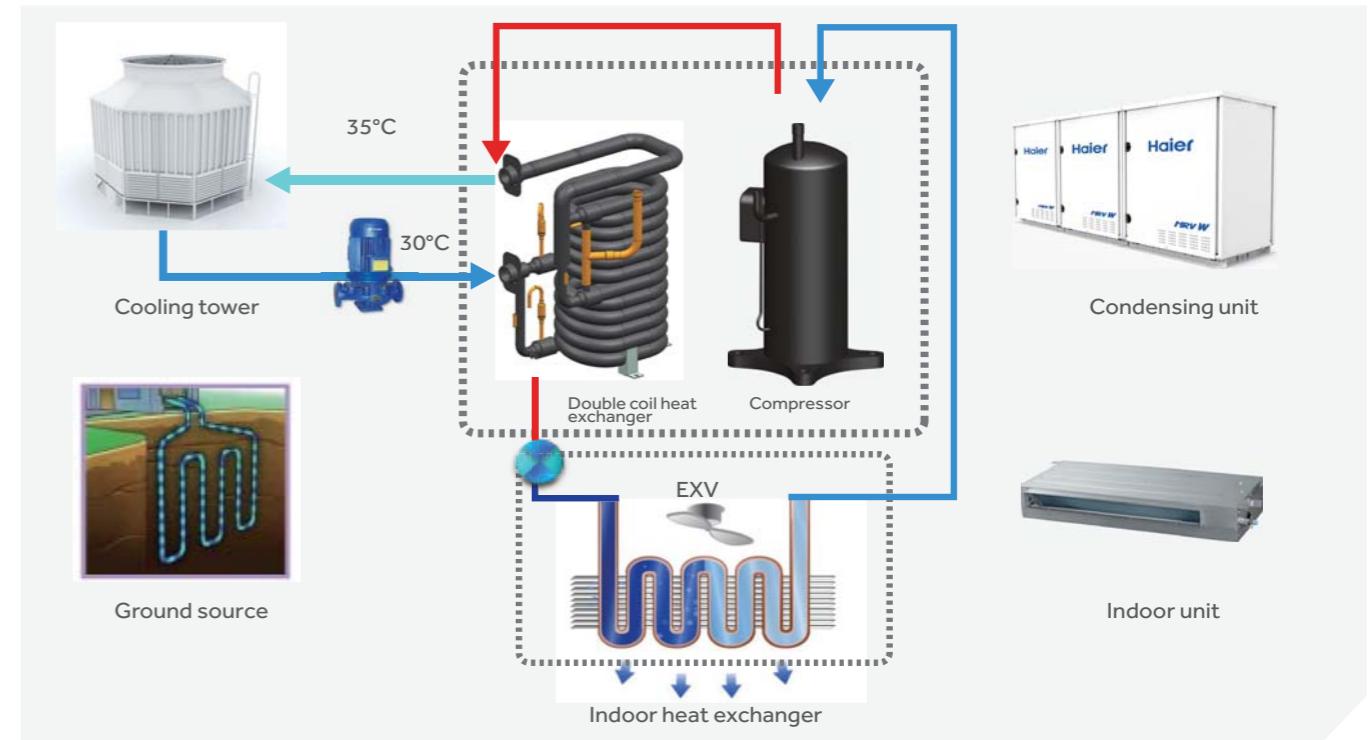
FEATURES & BENEFITS

System Introduction

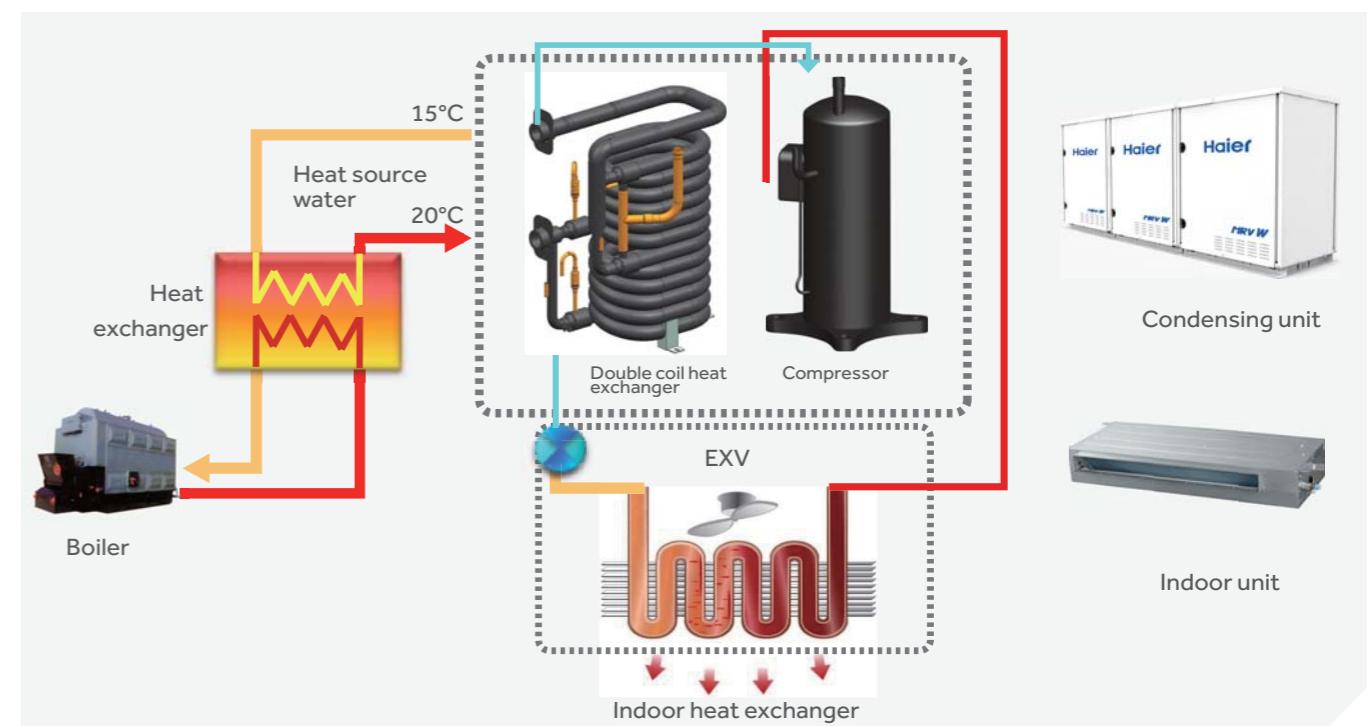


Working Principle

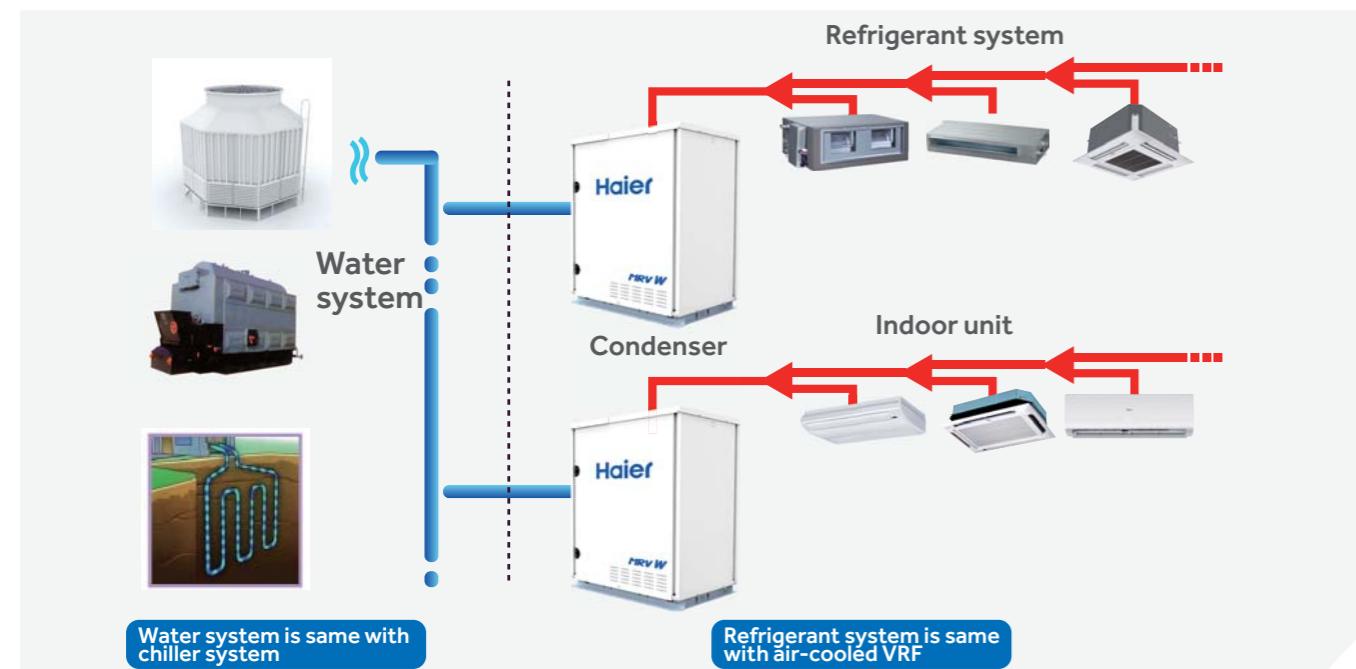
Working principle in cooling mode



Working principle in heating mode



Working Principle



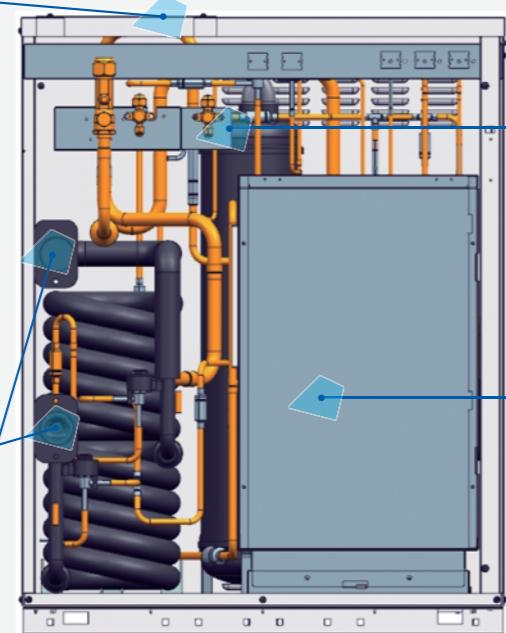
FEATURES & BENEFITS

Outdoor Structure

Core Technologies and Parts (Front Side)

Refrigerant pipe

Refrigerant pipe to connect the indoor units



Gas-liquid separator

Reduce the heat exchanger height(650mm), and the upper and lower wind speed uniform and high efficiency

Compact electrical control box

Compact electric control box, which can rotate up and down, easy for compressor service

Water outlet and inlet

Water outlet and inlet pipe to connect the double coil heat exchanger

Core Technologies and Parts(Back Side)

Compact electrical control box

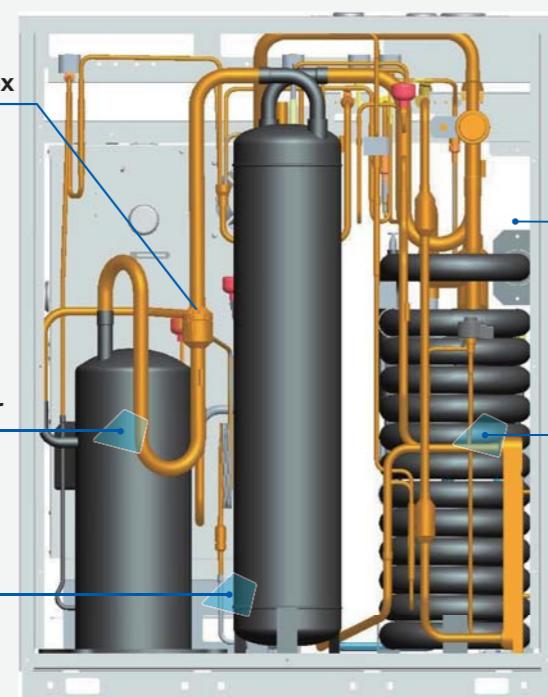
Compact electric control box, which can rotate up and down, easy for compressor service

Water switch

DC inverter scroll compressor

DC inverter scroll compressor, more higher energy efficiency

Oil separator



Double coil heat exchanger

- Double coil heat exchanger, more uniform Heat transfer effect
- Much higher double coil, saving more space, more compact design

MRV W Application Typical high-rise buildings

3 Types Typical High-rise Buildings

- Compact inner structure and core parts



Type 1
High rise building without podium



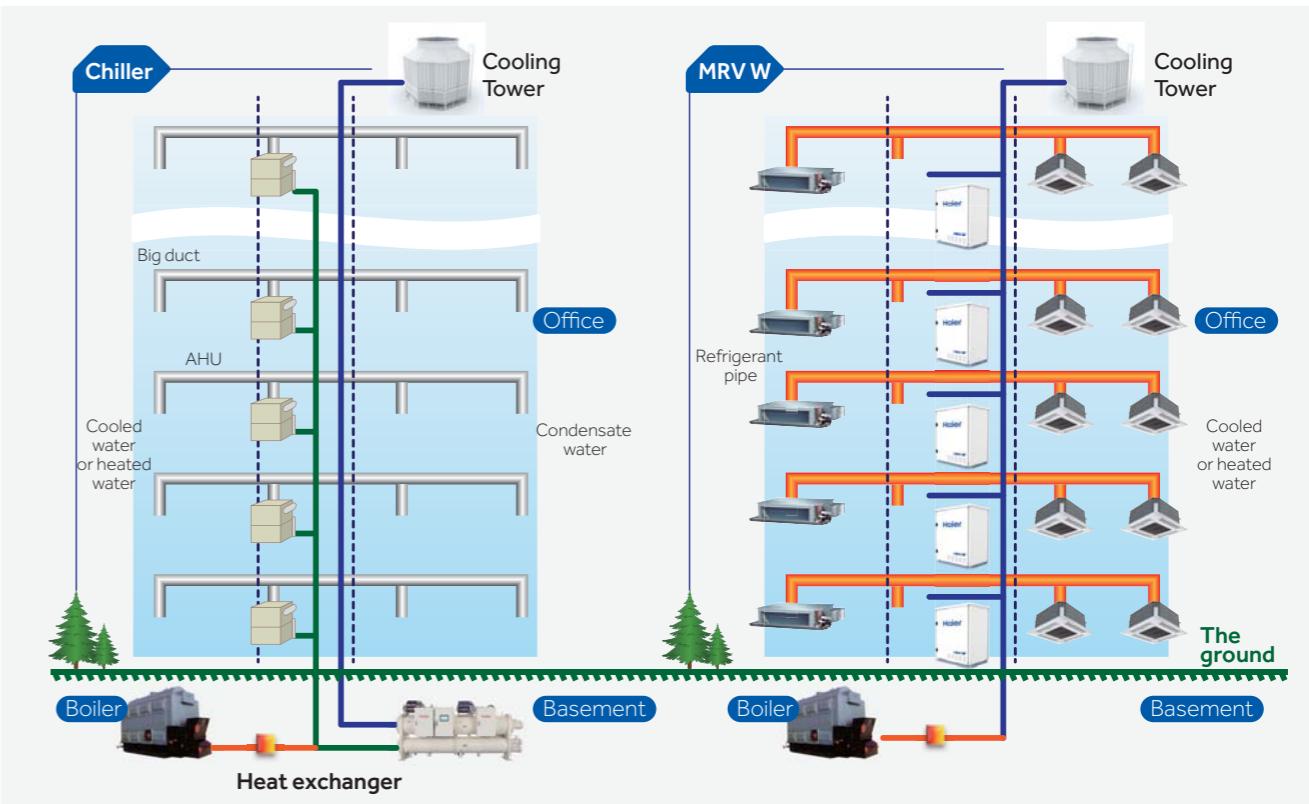
Type 2
High rise building with podium



Type 3
Single layer with a large area

Type 1 High-rise Building

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

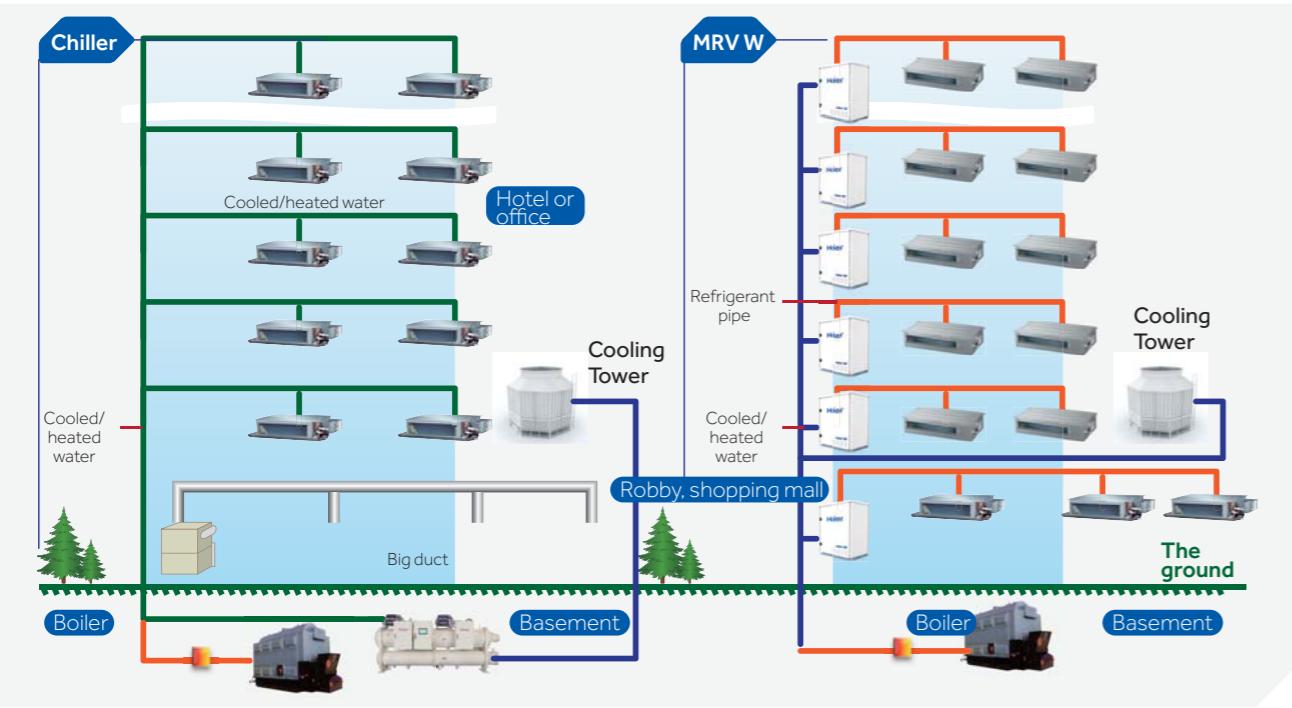


FEATURES & BENEFITS

MRV W Application

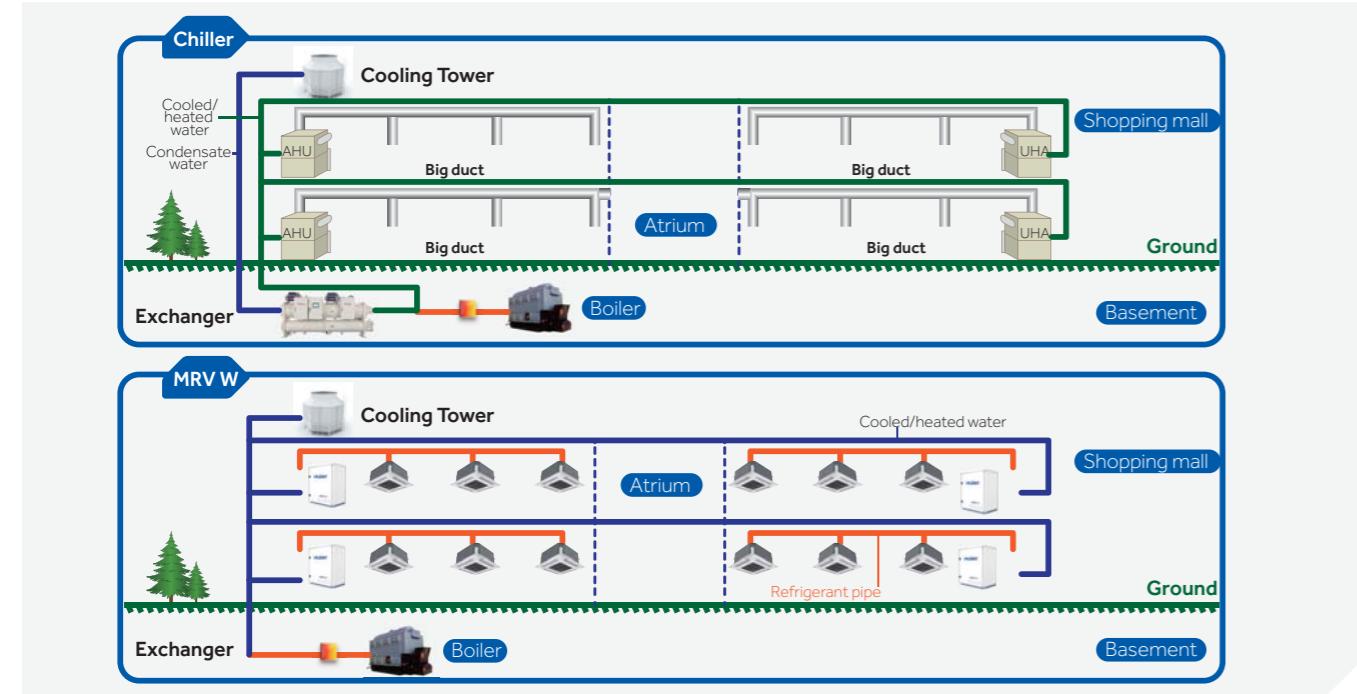
Type 2 High-rise Building

- Conventional chiller system, and water-cooled MRV solution



Type 3 High-rise Building

- Conventional chiller system, and water-cooled MRV solution



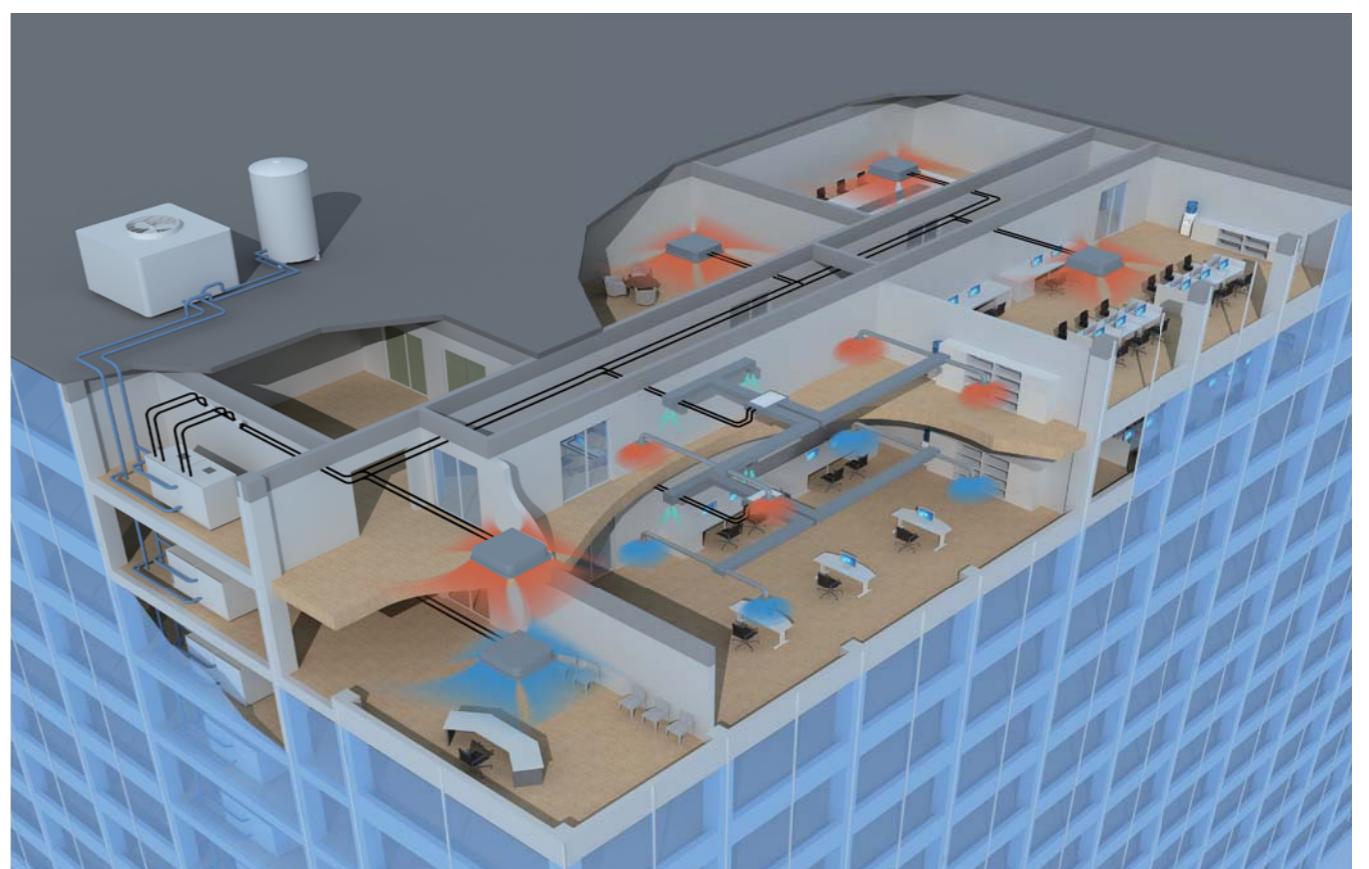
MRV W Application

Suitable Buildings

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

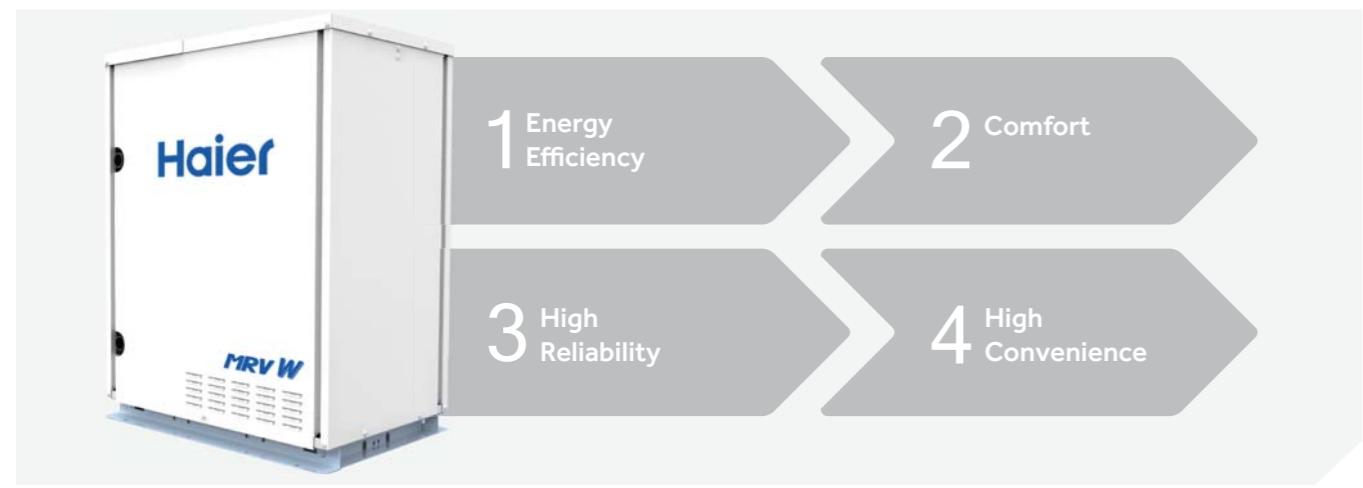
Benefit

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



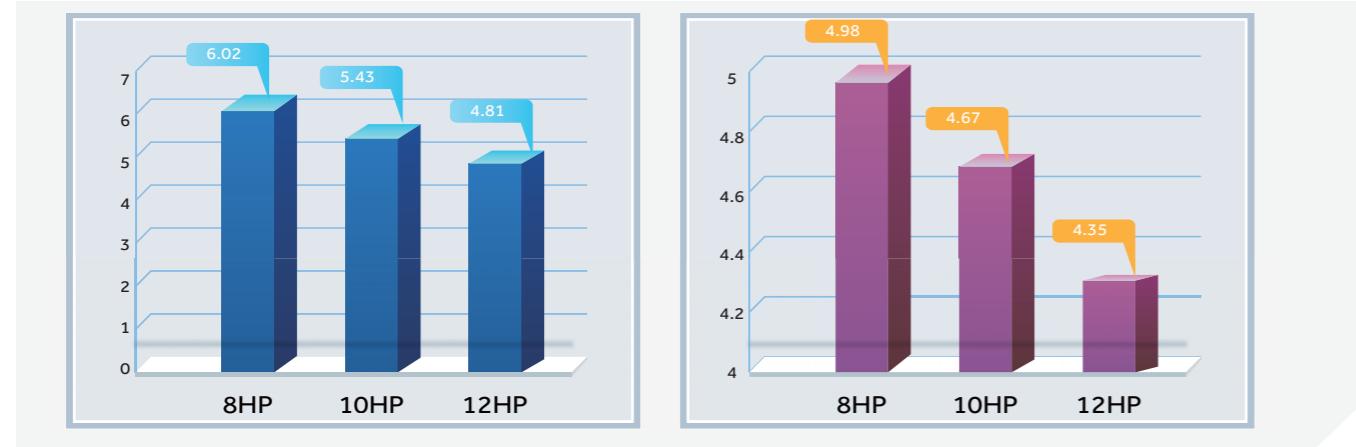
FEATURES & BENEFITS

Overview



Energy saving

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



Energy Saving

High efficiency dc inverter compressor

- High efficiency DC inverter compressor from mitsubishi electric



Energy Saving

High efficiency double coil heat exchanger

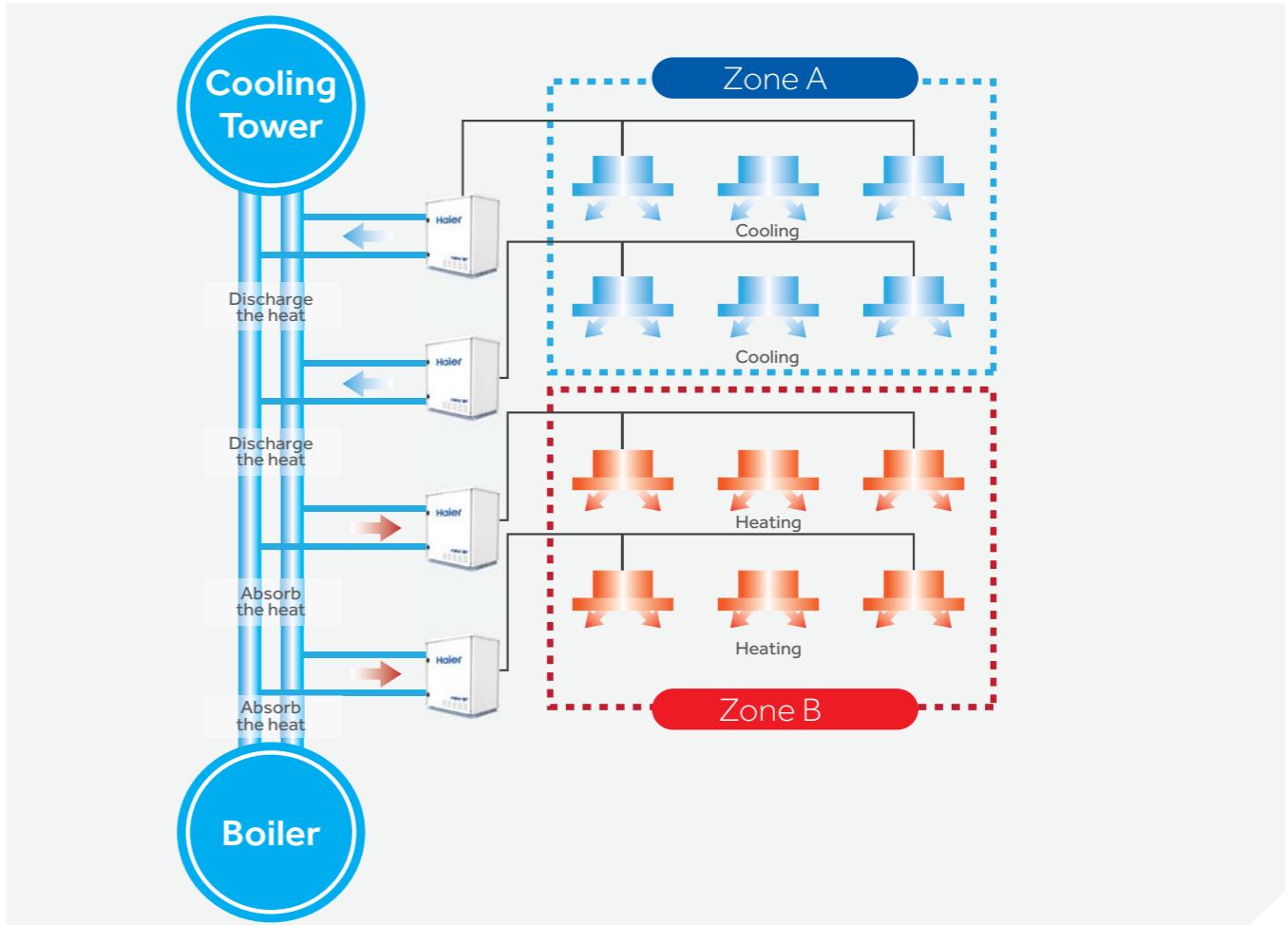
- Double coil heat-exchanger, more uniform heat transfer effect



Energy Saving

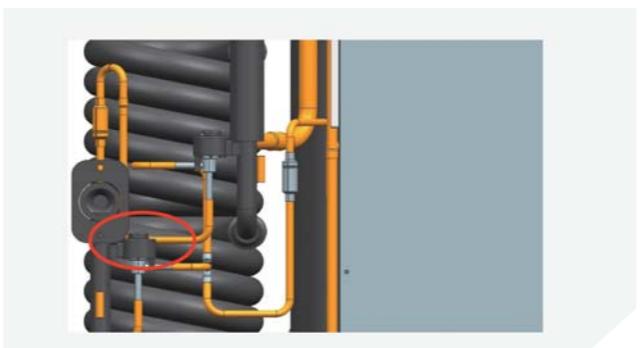
Heat recovery between different refrigerant systems

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



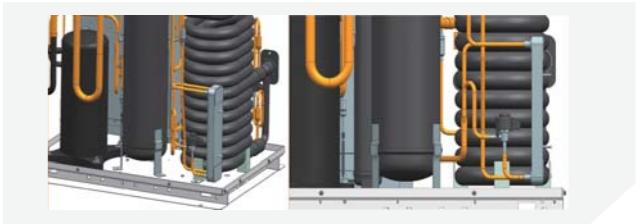
Double EEV Control

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



Two Stage Deep Sub Cooling Technology

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

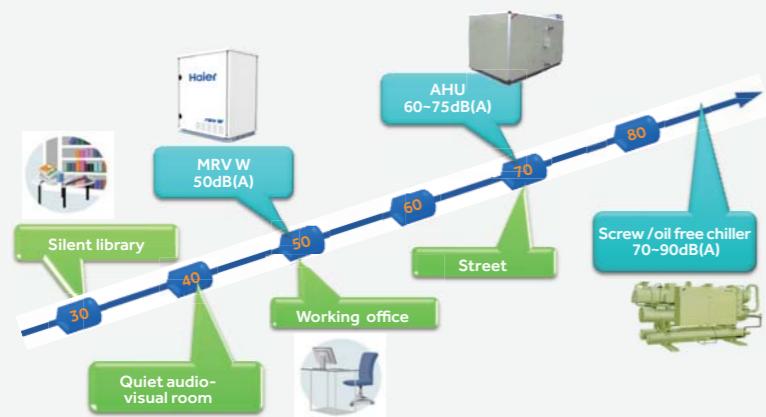


FEATURES & BENEFITS

Comfortable Environment

Low Noise Level

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



No Influence From Ambient Temperature

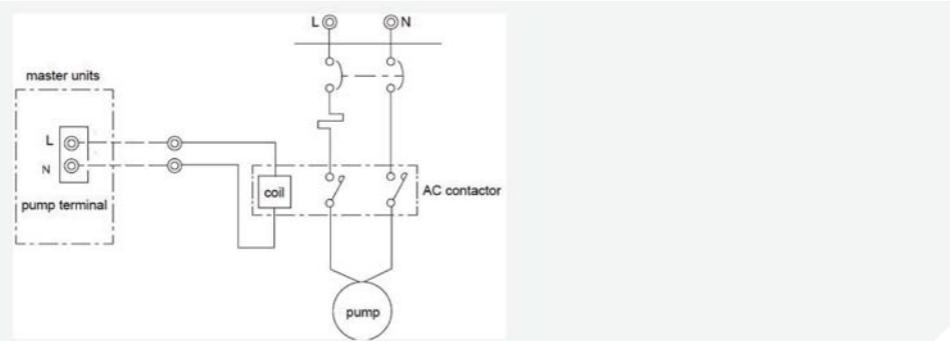
- Thanks to the stable water source, the capacity and efficiency will not reduce with extreme ambient conditions compare with air-cooled system
- Especially in heating mode, water cooling means no defrost operation is required, the resultant rapid start up time assures quick and comfortable heating,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



High Reliability

Water Pump Controlled Together with the Outdoor

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



High Convenience (Use/installation/service)

Compact and Lightweight Design

- The industry's most compact and lightweight design, installed in the narrow space.
- Comparing with the conventional top discharge air-cooled system, height 45% reduced, footprint 43% reduced



Stacked Installation

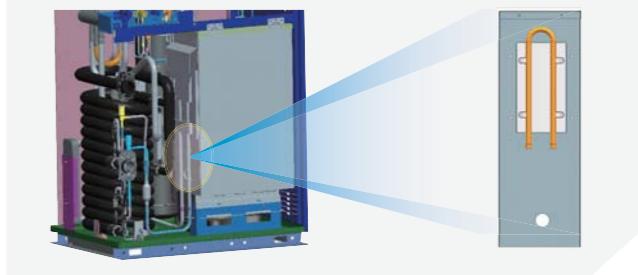
- The condensers are smaller and can be stacked, reducing the installation space and increasing the customers' usable square footage



High Reliability

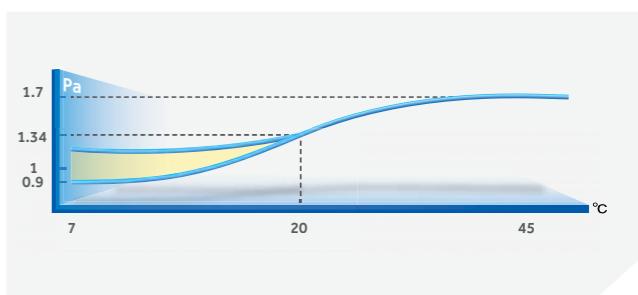
Chilled Electric Control Module

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

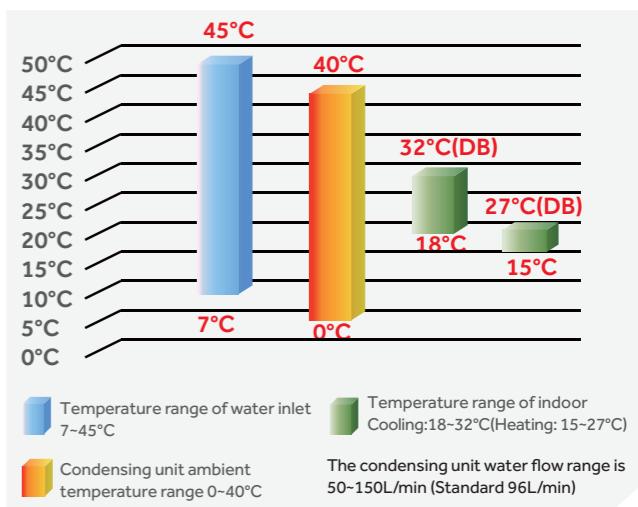


Stable Pressure Setting

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



Wide Operation Range



FEATURES & BENEFITS

Energy Efficiency

Long Pipe Length and High Height Drop

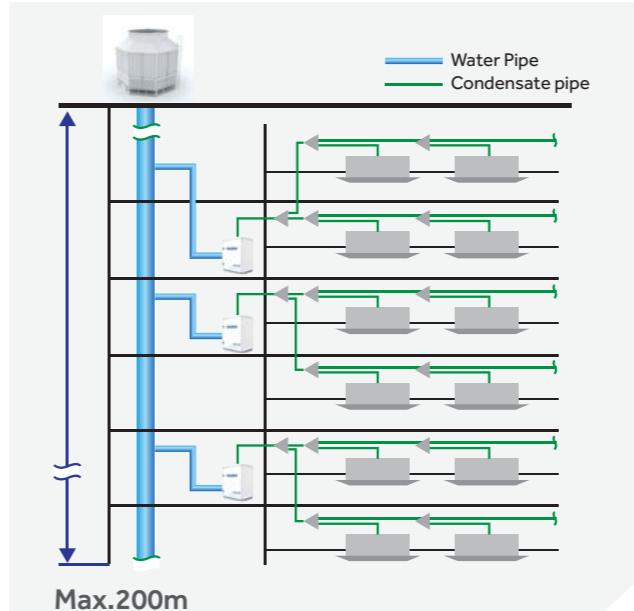
The condensers are smaller and can be stacked, reducing the installation space.



Energy Efficiency

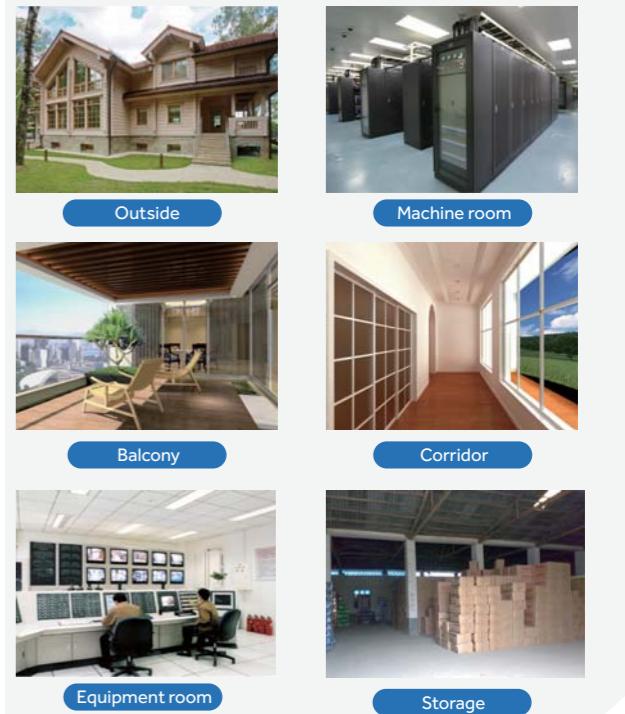
Flexible Water Pipe Design

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



Energy Efficiency

Flexible Installation Location



High Convenience (Use/installation/service)

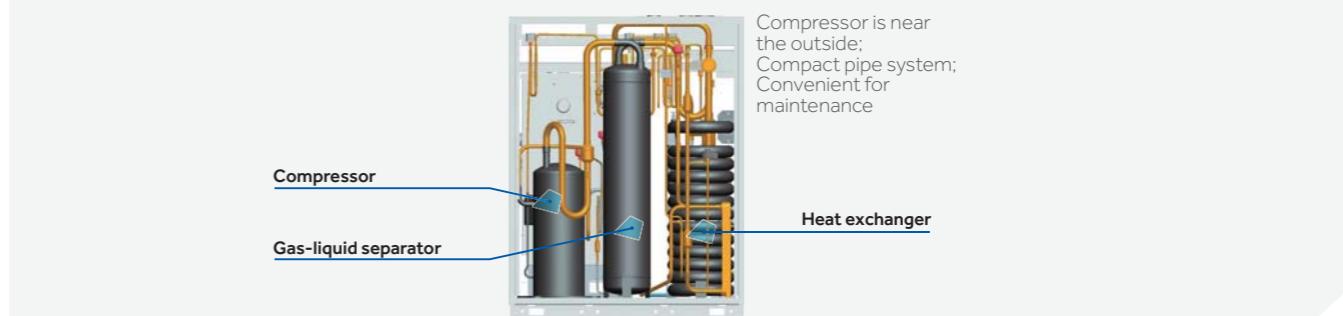
Various Mode and Priority Selection

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



Easy Maintenance

Compact outdoor structure design



MRV W OUTDOOR 3Ph/380-400V/50(60)Hz



8/10/12HP



Water Sourced MRV Outdoor Unit, Combine Water System and Refrigerant System in one System

3 Basic Single Module: 8/10/12HP, Max 3 Modules Combination up to 36HP

Most Compact Size Outdoor Design in the Industry

Total 300m Long Pipe Length, Easy for Installation

Double Coil Outdoor Heat Exchanger

Compatible with all the MRV Indoor Units



| Model | AV08IMWEWA | AV10IMWEWA | AV12IMWEWA | AV16IMWEWA | AV18IMWEWA | AV20IMWEWA | AV22IMWEWA | AV24IMWEWA | AV26IMWEWA | AV28IMWEWA | AV30IMWEWA | AV32IMWEWA | AV34IMWEWA | AV36IMWEWA |
|-----------------------|---|----------------------|-----------------|-----------------|-----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Combination model | / | / | / | AV08IMWEWA | AV08IMWEWA | AV10IMWEWA | AV10IMWEWA | AV12IMWEWA | AV08IMWEWA | AV08IMWEWA | AV10IMWEWA | AV10IMWEWA | AV12IMWEWA | AV12IMWEWA |
| | / | / | / | AV08IMWEWA | AV10IMWEWA | AV10IMWEWA | AV10IMWEWA | AV12IMWEWA | AV08IMWEWA | AV08IMWEWA | AV10IMWEWA | AV10IMWEWA | AV12IMWEWA | AV12IMWEWA |
| | / | / | / | / | / | / | / | / | AV10IMWEWA | AV10IMWEWA | AV10IMWEWA | AV10IMWEWA | AV12IMWEWA | AV12IMWEWA |
| Capacity | (Capacity range HP | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 30 | 32 | 34 | 36 |
| | Cooling capacity kW | 22.4 | 28 | 33.5 | 44.8 | 50.4 | 56 | 61.5 | 67.0 | 72.8 | 84.0 | 89.5 | 95.0 | 100.5 |
| | Heating capacity kW | 25 | 31.5 | 37.5 | 50.0 | 56.5 | 63 | 69.0 | 75.0 | 81.5 | 94.5 | 100.5 | 106.5 | 112.5 |
| | Power supply Ph/V/Hz | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 | 3/380-400/50/60 |
| Electrical parameters | Cooling | Rated power input kW | 4.50 | 6.00 | 7.70 | 9.00 | 10.50 | 12.00 | 13.70 | 15.40 | 15.00 | 16.50 | 18.00 | 19.70 |
| | | Max. power input kW | 13.00 | 15.00 | 17.00 | 26.00 | 28.00 | 30.00 | 32.00 | 34.00 | 41.00 | 43.00 | 45.00 | 47.00 |
| | | Rated current A | 7.20 | 9.60 | 12.32 | 14.39 | 16.79 | 19.19 | 21.91 | 24.63 | 23.99 | 26.39 | 28.79 | 31.51 |
| | | Max.current A | 20.79 | 23.99 | 27.19 | 41.58 | 44.78 | 47.98 | 51.18 | 54.38 | 65.57 | 68.77 | 71.97 | 75.17 |
| | Heating | Rated power input kW | 4.15 | 5.80 | 7.80 | 8.30 | 9.95 | 11.60 | 13.60 | 15.60 | 14.10 | 15.75 | 17.40 | 19.40 |
| | | Max. power input kW | 13.00 | 15.00 | 17.00 | 26.00 | 28.00 | 30.00 | 32.00 | 34.00 | 41.00 | 43.00 | 45.00 | 47.00 |
| | | Rated current A | 6.64 | 9.28 | 12.47 | 13.27 | 15.91 | 18.55 | 21.75 | 24.95 | 22.55 | 25.19 | 27.83 | 31.03 |
| | | Max.current A | 20.79 | 23.99 | 27.19 | 41.58 | 44.78 | 47.98 | 51.18 | 54.38 | 65.57 | 68.77 | 71.97 | 75.17 |
| | EER/COP | 4.98/6.02 | 4.67/5.43 | 4.35/4.81 | 4.98/6.02 | 4.80/5.68 | 4.67/5.43 | 4.49/5.07 | 4.35/4.81 | 4.85/5.78 | 4.75/5.59 | 4.67/5.43 | 4.54/5.18 | 4.44/4.98 |
| Performance | Water flow (H) | m³/h | 4.8 | 6 | 7.2 | 9.6 | 10.8 | 12 | 13.2 | 14.4 | 15.6 | 16.8 | 18.0 | 19.2 |
| | Sound pressure level (H) | dB(A) | 50 | 51 | 53 | 53 | 54 | 54 | 55 | 56 | 55 | 55 | 56 | 57 |
| | Sound power level (H) | dB(A) | 61 | 62 | 64 | 64 | 65 | 65 | 66 | 67 | 66 | 66 | 67 | 68 |
| | External dimensions(W/D/H) | mm | 775/545/995 | 775/545/995 | 775/545/995 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*3 | (775/545/995)*3 | (775/545/995)*3 | (775/545/995)*3 |
| | Shipping dimensions(W/D/H) | mm | 840/625/1150 | 840/625/1150 | 840/625/1150 | (840/625/1150)*2 | (840/625/1150)*2 | (840/625/1150)*2 | (840/625/1150)*2 | (840/625/1150)*2 | (840/625/1150)*3 | (840/625/1150)*3 | (840/625/1150)*3 | (840/625/1150)*3 |
| Installation | Net/Shipping weight | kg | 172/183 | 172/183 | 172/183 | 344/366 | 344/366 | 344/366 | 344/366 | 516/549 | 516/549 | 516/549 | 516/549 | 516/549 |
| | Compressor type | | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL |
| | Compressor quantity | | 1 INV | 1 INV | 1 INV | 2 INV | 2 INV | 2 INV | 2 INV | 3 INV |
| | Refrigerant type | | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A |
| | Refrigerant charge | kg | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 15.88 | 15.88 | 15.88 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 |
| | Refrigerant gas pipe | mm | 19.05 | 22.22 | 25.4 | 28.58 | 28.58 | 28.58 | 28.58 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 |
| | Oil equalization pipe | mm | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 |
| | Total pipe length | m | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| | Max. pipe length(Equivalent/Actual) | m | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 |
| | Max drop between I.U.&O.U | m | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 |
| Heat Exchanger | Type | | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil |
| | Material | | Copper | Copper | Copper | Copper | Copper | Copper | Copper | Copper | Copper | Copper | Copper | Copper |
| | Inlet water connection pipe | mm | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 |
| | Outlet water connection pipe | mm | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 |
| | pressure drop(inlet and outlet) | Kpa | 35 | 50 | 70 | 35+35 | 35+50 | 50+70 | 35+35+50 | 50+50+50 | 50+50+70 | 50+70+70 | 50+70+70 | 50+70+70 |
| | Connection type | | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved |
| | Max. system water pressure | Mpa | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| | Inlet water temperature range (Cooling & Heating) | °C | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 | 7-45 |
| Connection ratio | Connectable indoor unit ratio | % | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 |
| | Maximum number of indoor units | unit | 13 | 16 | 19 | 23 | 29 | 33 | 36 | 39 | 43 | 46 | 50 | 56 |

* 1 outdoor above 50m outdoor below 40m

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

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

MRV W OUTDOOR 3Ph/208-230V/60Hz



8/10/12HP



Water Sourced MRV Outdoor Unit, Combine Water System and Refrigerant System in one System

3 Basic Single Module:8/10/12HP, Max 3 Modules Combination up to 36HP

Most Compact Size Outdoor Design in the Industry

Total 300m Long Pipe Length, Easy for Installation

Double Coil Outdoor Heat Exchanger

Compatible with all the MRV Indoor Units



| Model | AV08CMWEWA | AV10CMWEWA | AV12CMWEWA | AV16CMWEWA | AV18CMWEWA | AV20CMWEWA | AV22CMWEWA | AV24CMWEWA | AV26CMWEWA | AV28CMWEWA | AV30CMWEWA | AV32CMWEWA | AV34CMWEWA | AV36CMWEWA | |
|-------------------------------------|--|----------------|----------------|----------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|
| Combination model | / | / | / | AV08CMWEWA | AV08CMWEWA | AV10CMWEWA | AV10CMWEWA | AV12CMWEWA | AV08CMWEWA | AV10CMWEWA | AV10CMWEWA | AV10CMWEWA | AV12CMWEWA | AV12CMWEWA | |
| | / | / | / | AV08CMWEWA | AV10CMWEWA | AV10CMWEWA | / | / | AV08CMWEWA | AV10CMWEWA | AV10CMWEWA | AV10CMWEWA | AV12CMWEWA | AV12CMWEWA | |
| | / | / | / | / | / | / | / | / | AV10CMWEWA | AV10CMWEWA | AV10CMWEWA | AV10CMWEWA | AV12CMWEWA | AV12CMWEWA | |
| Capacity | Capacity range HP | 8 | 10 | 12 | 16 | 18 | 20 | 22 | 24 | 26 | 28 | 30 | 32 | 34 | 36 |
| Cooling | Cooling capacity kW | 22.4 | 28 | 33.5 | 44.8 | 50.4 | 56 | 61.5 | 67.0 | 72.8 | 78.4 | 84.0 | 89.5 | 95.0 | 100.5 |
| Heating | Heating capacity kW | 25 | 31.5 | 37.5 | 50.0 | 56.5 | 63 | 69.0 | 75.0 | 81.5 | 88.0 | 94.5 | 100.5 | 106.5 | 112.5 |
| Electrical parameters | Power supply Ph/V/Hz | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 | 3/208-230/60 |
| Heating | Cooling Rated power input kW | 4.50 | 6.00 | 7.70 | 9.00 | 10.50 | 12.00 | 13.70 | 15.40 | 15.00 | 16.50 | 18.00 | 19.70 | 21.40 | 23.10 |
| | Max. power input kW | 13.00 | 15.00 | 17.00 | 26.00 | 28.00 | 30.00 | 32.00 | 34.00 | 41.00 | 43.00 | 45.00 | 47.00 | 49.00 | 51.00 |
| | Rated current A | 12.43 | 16.58 | 21.27 | 24.86 | 29.01 | 33.15 | 37.85 | 42.54 | 41.44 | 45.58 | 49.73 | 54.42 | 59.12 | 63.81 |
| | Max.current A | 35.91 | 41.44 | 46.96 | 71.83 | 77.35 | 82.88 | 88.40 | 93.93 | 113.26 | 118.79 | 124.31 | 129.84 | 135.36 | 140.89 |
| Performance | EER/COP | 4.98/6.02 | 4.67/5.43 | 4.35/4.81 | 4.98/6.02 | 4.8/5.68 | 4.67/5.43 | 4.49/5.07 | 4.35/4.81 | 4.85/5.78 | 4.75/5.59 | 4.67/5.43 | 4.54/5.18 | 4.44/4.98 | 4.35/4.81 |
| Water flow (H) | Water flow (H) m³/h | 4.8 | 6 | 7.2 | 9.6 | 10.8 | 12 | 13.2 | 14.4 | 15.6 | 16.8 | 18.0 | 19.2 | 20.4 | 21.6 |
| Sound pressure level (H) | Sound pressure level (H) dB(A) | 50 | 51 | 53 | 53 | 54 | 54 | 55 | 56 | 55 | 55 | 56 | 57 | 57 | 58 |
| External dimensions(W/D/H) | External dimensions(W/D/H) mm | 775/545/995 | 775/545/995 | 775/545/995 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*2 | (775/545/995)*3 | (775/545/995)*3 | (775/545/995)*3 | (775/545/995)*3 | (775/545/995)*3 |
| Shipping dimensions(W/D/H) | Shipping dimensions(W/D/H) mm | 875/655/1182 | 875/655/1182 | 875/655/1182 | (875/655/1182)*2 | (875/655/1182)*2 | (875/655/1182)*2 | (875/655/1182)*2 | (875/655/1182)*2 | (875/655/1182)*3 | (875/655/1182)*3 | (875/655/1182)*3 | (875/655/1182)*3 | (875/655/1182)*3 | (875/655/1182)*3 |
| Net/Shipping weight | Net/Shipping weight kg | 172/183 | 172/183 | 172/183 | 344/366 | 344/366 | 344/366 | 344/366 | 344/366 | 516/549 | 516/549 | 516/549 | 516/549 | 516/549 | 516/549 |
| Compressor type | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL | DC INV. SCROLL |
| Compressor quantity | 1 INV | 1 INV | 1 INV | 2 INV | 2 INV | 2 INV | 2 INV | 2 INV | 3 INV |
| Refrigerant type | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A | R410A |
| Installation | Refrigerant charge kg | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 6 | 6 | 6 | 6 | 6 | 6 |
| Refrigerant liquid pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 15.88 | 15.88 | 15.88 | 15.88 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 | 19.05 |
| Refrigerant gas pipe | mm | 19.05 | 22.22 | 25.4 | 28.58 | 28.58 | 28.58 | 28.58 | 28.58 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 | 31.8 |
| Oil equalization pipe | mm | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 |
| Total pipe length | m | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Max. pipe length(Equivalent/Actual) | m | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 | 150/120 |
| Max drop between I.U.&O.U | m | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 | 50/40 |
| Heat Exchanger | Type | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil | Double coil |
| | Material | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel | Copper&Steel |
| Water side | Inlet water connection pipe mm | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 |
| | Outlet water connection pipe mm | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 | DN32 |
| | pressure drop(inlet and outlet) Kpa | 35 | 50 | 70 | 35+35 | 35+50 | 50+70 | 35+35+50 | 35+50+50 | 50+50+70 | 50+50+70 | 50+50+70 | 50+50+70 | 50+50+70 | 50+50+70 |
| | Connection type | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved | inner grooved |
| | Max. system water pressure Mpa | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 | 1.6 |
| | Inlet water temperature range (Cooling & Heating) °C | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 | 7~45 |
| Connection ratio | Connectable indoor unit ratio % | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 | 50-130 |
| | Maximum number of indoor units unit | 13 | 16 | 19 | 23 | 29 | 33 | 36 | 39 | 43 | 46 | 50 | 53 | 56 | 59 |

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

MRV IV-C

MRV III-C

MRV VIII-RC

MRV S
MRV W
MRV/AHU
MRV/Indoor

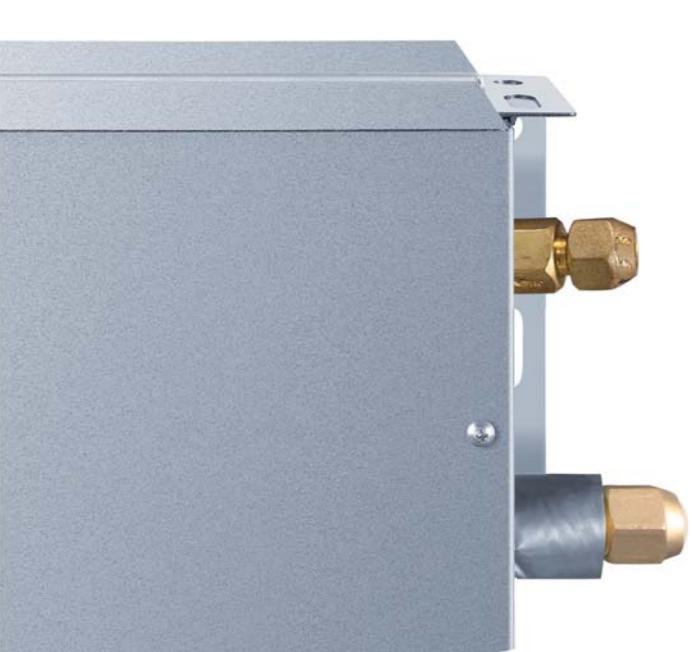
Control System
Reference Projects



EASY MRV KIT

| 115 Features & Benefits
| 119 Easy MRV Outdoor

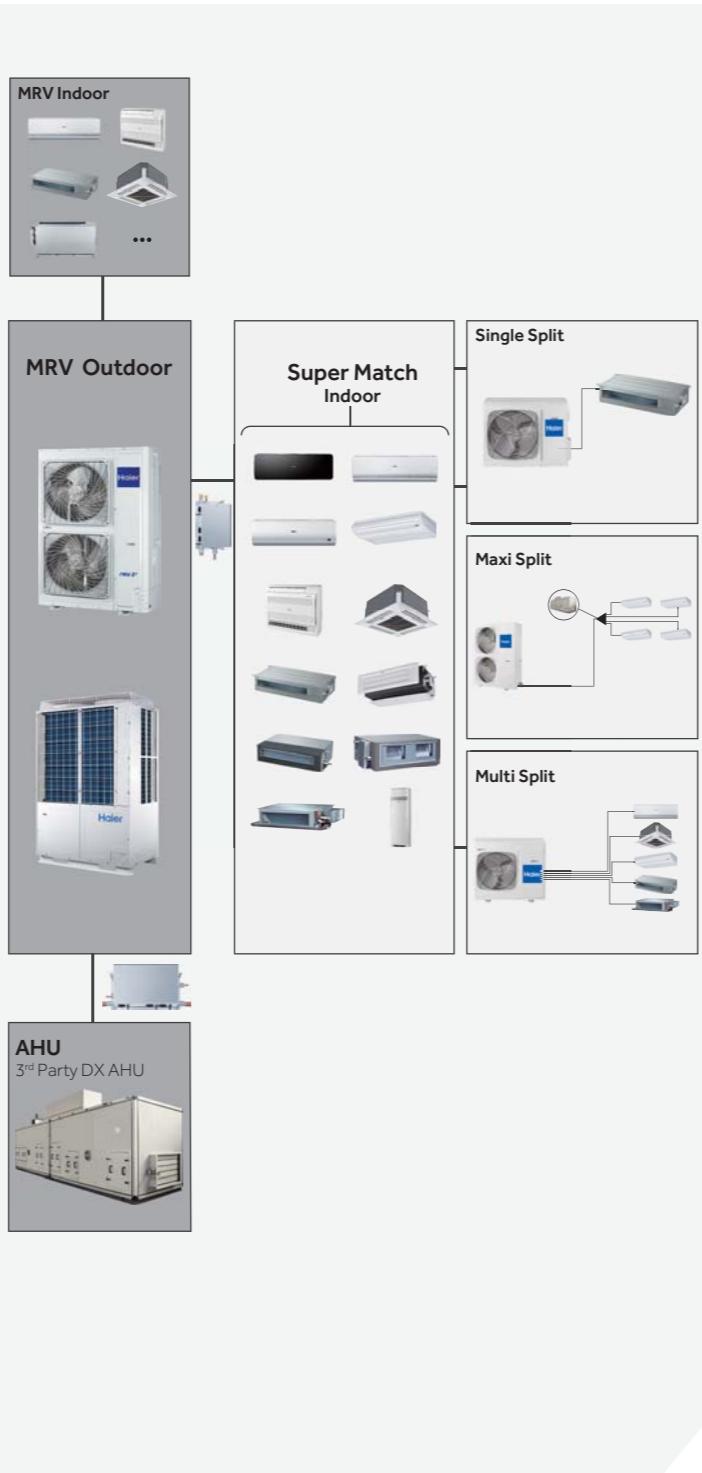
EASY MRV KIT



FEATURES & BENEFITS

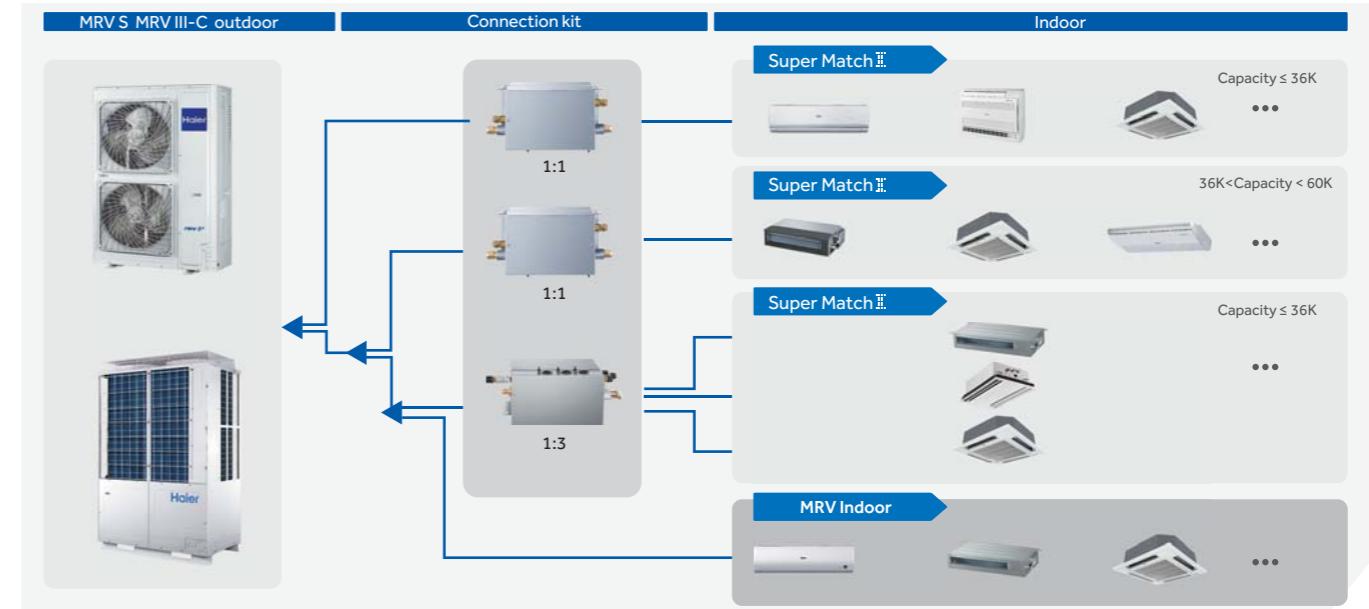
Intergrated System Solution

System Connection Kit to link the systems together.



Easy MRV System Introduction

Haier Easy MRV Connection Kit offers a range of expansion valve kits and control boxes to connect Haier SUPER MATCH indoor units.



Easy MRV Line up

Haier Easy MRV Provide a wide range of MRV outdoor, valve box and Super Match Indoor solution.

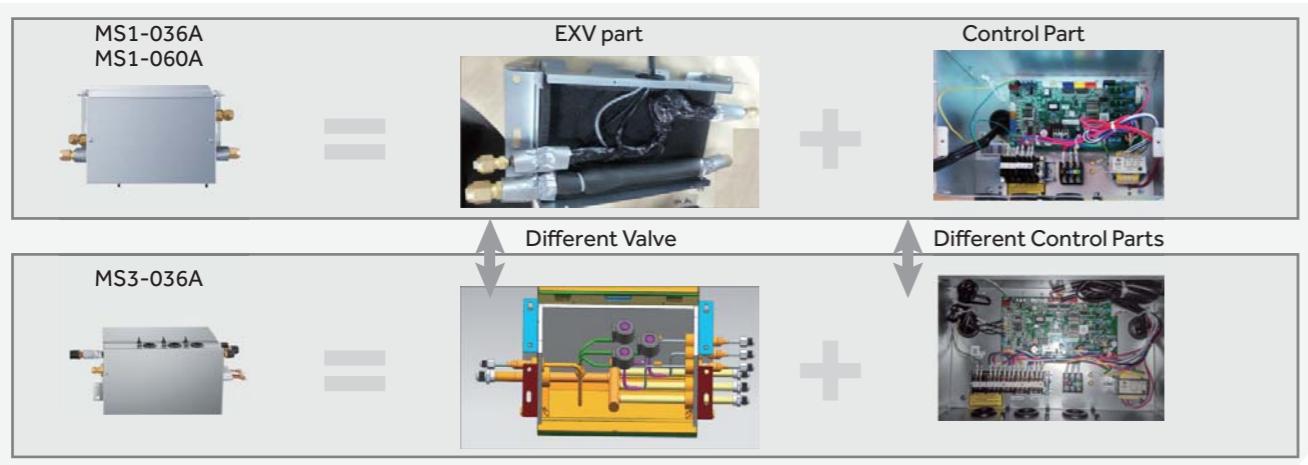
| OUTDOOR | MRV IV | MRV III-C ^{PLUS} / MRV III | | MRV S ^I | | | MRV S ^I |
|--------------|-----------------------|-------------------------------------|-------------------|--------------------|-----------------------|-----------------------|-----------------------|
| | 8-24 | 8 | 10 | 12 | 14 | 16 | |
| HP | 8-24 | 8 | 10 | 12 | 14 | 16 | |
| Power supply | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/208-230V/60Hz | 3Ph/460V/60Hz | 3Ph/380-415V/50(60)Hz | 3Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz |
| | | | | | | | 3Ph/220-240V/50(60)Hz |
| | | | | | | | 3Ph/380-400V/50(60)Hz |



FEATURES & BENEFITS

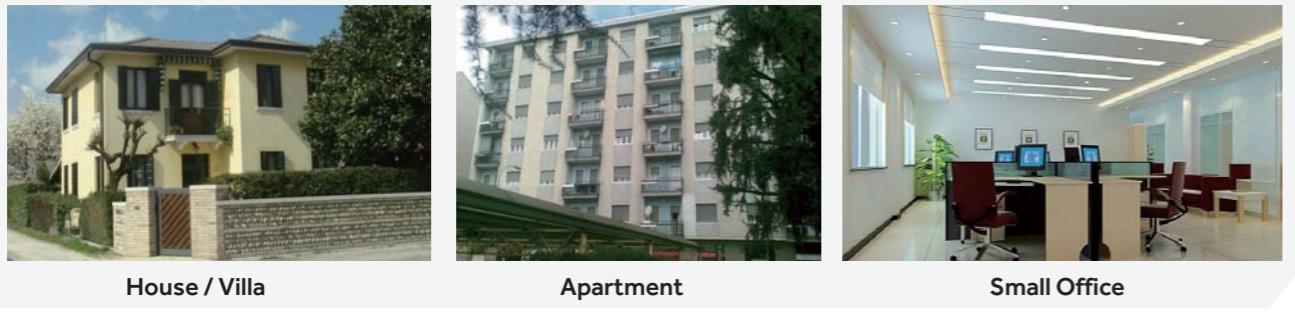
Valve Box Inner Structure

Haier Easy MRV Connection Kit consists the following 2 parts.



High Compatible

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



Easy Installation

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

Good performance

Largest Indoor Capacity

Largest Indoor Capacity can be up to 60K ,the largest indoor in the industry for this integrated system

Largest outdoor Capacity

Largest capacity of side discharge up to 12HP for EASY MRV system.
Largest capacity of top discharge up to 16HP for Easy MRV system.

Low noise

Outside EEV box, low noise

Good parts

FUJIKOKI EEV, good performance and high reliability

Specification



| Model | MS1-036A | MS1-060A | MS3-036A |
|---|--------------------------|---------------------|--|
| Connected indoor quantity | 1 | 1 | 3 |
| Connected indoor capacity(Btu/h) | X ≤36k | 36< X ≤60k | X ≤36k (each indoor) |
| Power Supply (Ph/V/Hz) | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Size(W/D/H) | 310/217/155 | 310/217/155 | 394/227/253 |
| Shipping dimensions | 509/285/209 | 509/285/209 | 687/295/303 |
| Material | Galvanized steel | Galvanized steel | Galvanized steel |
| Color | Grey | Grey | Grey |
| Weight/kg | 5 | 5 | 9 |
| Shipping Weight/kg | 7 | 7 | 12 |
| Liquid pipe (mm) | 9.52 (Main) /6.35 | 9.52 (Main) /12.7 | 6.35 (Main) /9.52 9.52 (Main) /12.7 |
| Gas pipe (mm) | 15.88 (Main) /12.7 /9.52 | 19.05 (Main) /15.88 | 19.05 (Main) /15.88 15.88 (Main) /12.7 /9.52 |
| Pipe connection method | Flare connection | Flare connection | Flare connection |
| Branch box-Indoor Max Single pipe length(m) | 15 | 15 | 15 |
| Branch box- indoor max drop(m) | 15 | 15 | 15 |
| Height Drop between branch box (m) | 15 | 15 | 15 |

PARAMETERS

Easy MRV Outdoor

| OUTDOOR | MRV IV | MRV III-C ^{PLUS} / MRV III | | | | MRV S ^{II} | | | | MRV S ^I | | |
|--------------|--|--|--|--|--|--|---|---|---|--------------------|----|----|
| | | | | | | | | | | | | |
| HP | 8-24 | 8 | 10 | 12 | 14 | 16 | 4 | 5 | 6 | 8 | 10 | 12 |
| Power supply | 3Ph/380-400V/50(60)Hz 3Ph/208-230V/60Hz 3Ph/460V/60Hz | 3Ph/380-415V/50(60)Hz 1Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz 1Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz 1Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz 1Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz 1Ph/220-240V/50(60)Hz | | | | | | |

Easy MRV Indoor

Easy MRV indoor is universal indoor unit with Super Match

| Super Match I INDOOR | PHOTO | 7K | 9K | 12K | 15K | 18K | 24K | 28K | 36K | 48K | 60K |
|-------------------------|-------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------|---------------|---------------|---------------|
| | | 2.2 | 2.8 | 3.6 | 4.4 | 5.5 | 7.1 | 8.0 | 10.0 | 14.0 | 16.0 |
| AQUA Hi-Wall | | AS07QS2HRA | AS09QS2HRA | AS12QS2HRA | | | | | | | |
| N F series | | AS07NS1HRA-WU AS07NS1HRA-GU | AS09NS1HRA-WU AS09NS1HRA-GU | AS12NS1HRA-WU AS12NS1HRA-GU | AS15NS1HRA-WU AS15NS1HRA-GU | AS18NS1HRA-WU AS18NS1HRA-GU | AS24NS1HRA-WU AS24NS1HRA-GU | | | | |
| N H series | | AS07BS4HRA | AS09BS4HRA | AS12BS4HRA | AS15BS4HRA | AS18BS4HRA | AS24BS4HRA | | | | |
| Console | | | AF09AS1ERA | AF12AS1ERA | | AF18AS1ERA | | | | | |
| Cassette | | | AB09CS2ERA(S) | AB12CS2ERA(S) | | AB18CS2ERA(S) | AB24ES1ERA(S) | AB28ES1ERA(S) | AB36ES1ERA(S) | AB48ES1ERA(S) | AB60ES2ERA(S) |
| Convertible | | | AC12CS1ERA(S) | AC18CS1ERA(S) | | AC24CS1ERA(S) | AC28ES1ERA(S) | AC36ES1ERA(S) | AC48FS1ERA(S) | AC60FS1ERA(S) | |
| Slim ESP | | | AD09SS1ERA(N) | AD12SS1ERA(N) | | AD18SS1ERA(N) | AD24SS1ERA(N) | | | | |
| Low ESP duct | | | AD09LS1ERA | AD12LS1ERA | | AD18LS1ERA | AD24LS1ERA | | | | |
| Medium ESP duct | | | | AD12MS1ERA | | AD18MS1ERA | AD24MS2ERA | AD28MS2ERA(S) | AD36NS1ERA(S) | AD48NS1ERA(S) | |
| High ESP duct | | | | | | | | | AD48HS1ERA(S) | AD60HS1ERA(S) | |

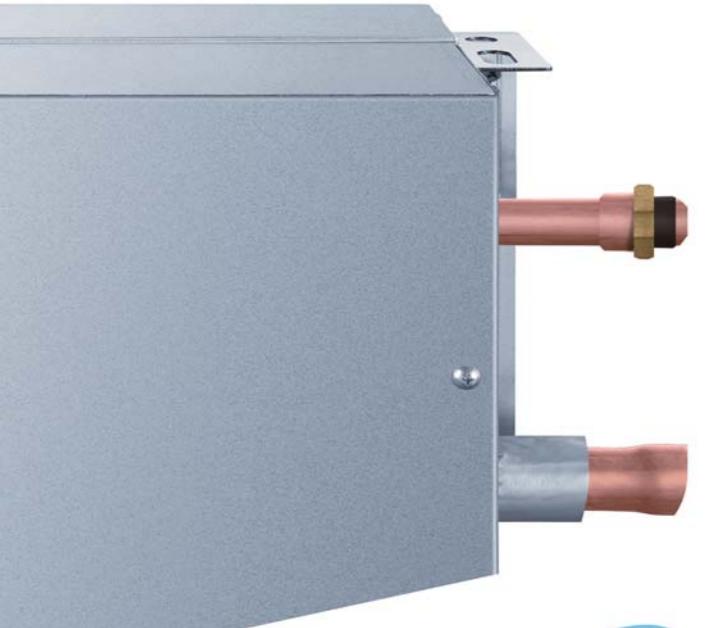




MRV AHU CONNECTION KIT

| 123 Features & Benefits
| 127 MRV Outdoor Line Up

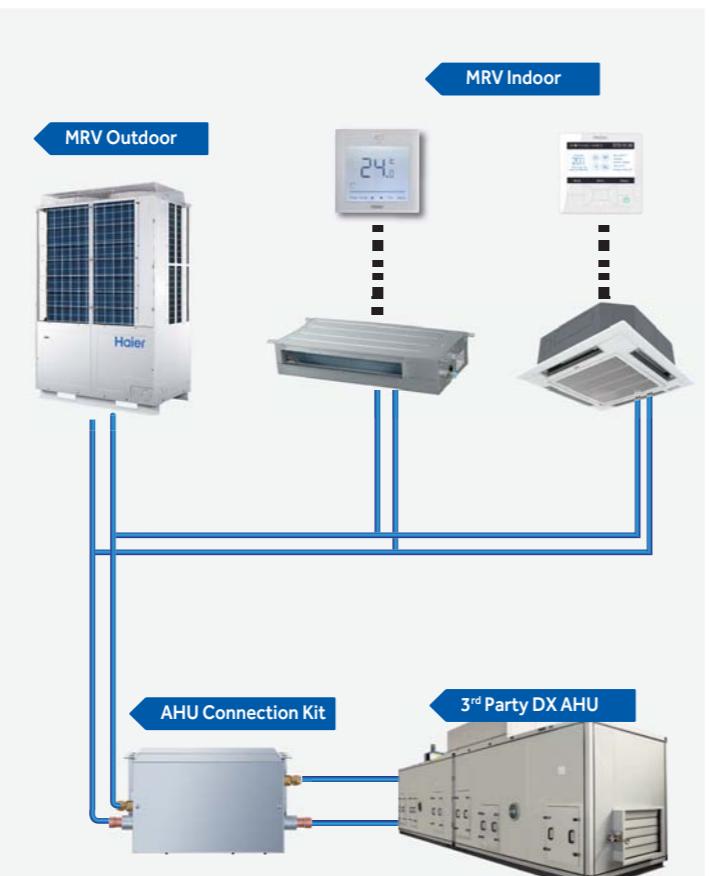
MRV/AHU



FEATURES & BENEFITS

System Introduction

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



System Application

- Provide a solution for big space to cool down the supply fresh air with MRV outdoor units to match the air handling units.
- Intergated the advantages of MRV and AHU units
- Meet the requirement of law in EU, that for every working place it have to supply at minimum 25 m³/h fresh air.so it means that every office, every shop and mostly every commercial building MUST have this solution.



System Line up

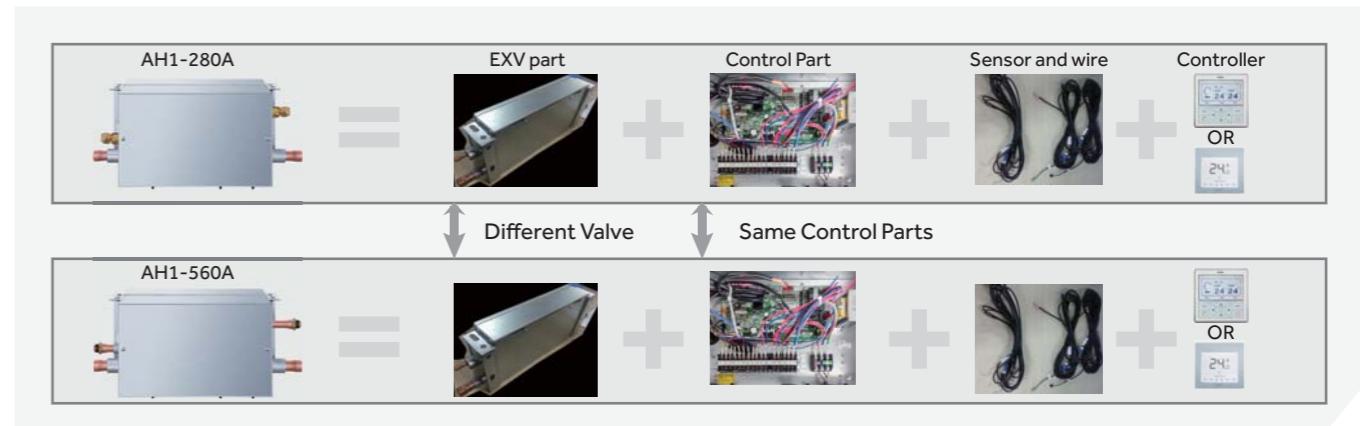
Haier Easy MRV Provide a wide range of MRV outdoor, valve box and Super Match Indoor solution.

| OUTDOOR | MRV IV | MRV III-C ^{PLUS} / MRV III(2-Pipe) | | | | | MRV S ^{II} | | | | | |
|--------------|-----------------------|---|-------------------|---------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----|
| HP | 8-24 | 8 | 10 | 12 | 14 | 16 | 4 | 5 | 6 | 8 | 10 | 12 |
| Power supply | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/208-230V/60Hz | 3Ph/460V/60Hz | 1Ph/220-240V/50(60)Hz | 1Ph/380-415V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | |



AHU Kit Configuration

Haier AHU Connection Kit consists the following 4 parts.

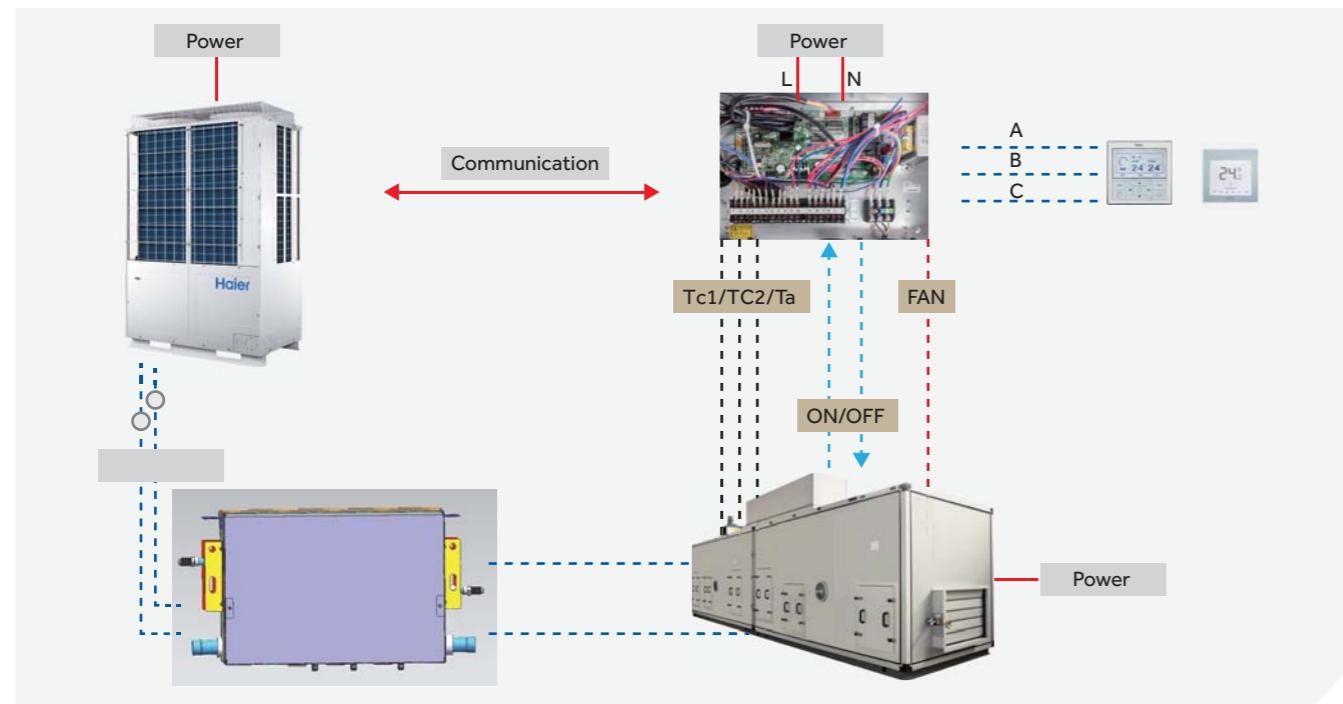


•EXV part, Control part, Sensor and wire are all integrated in one box. •Controller need to be purchased separately.

FEATURES & BENEFITS

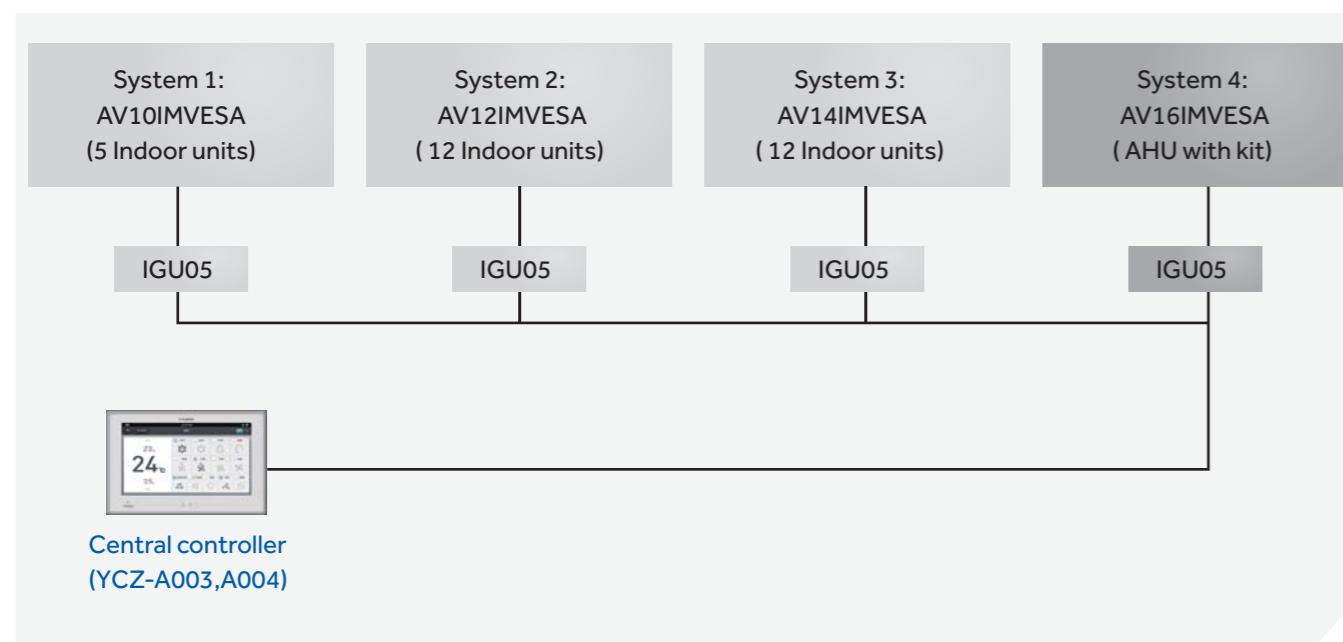
AHU Connection Kit Control

System Control



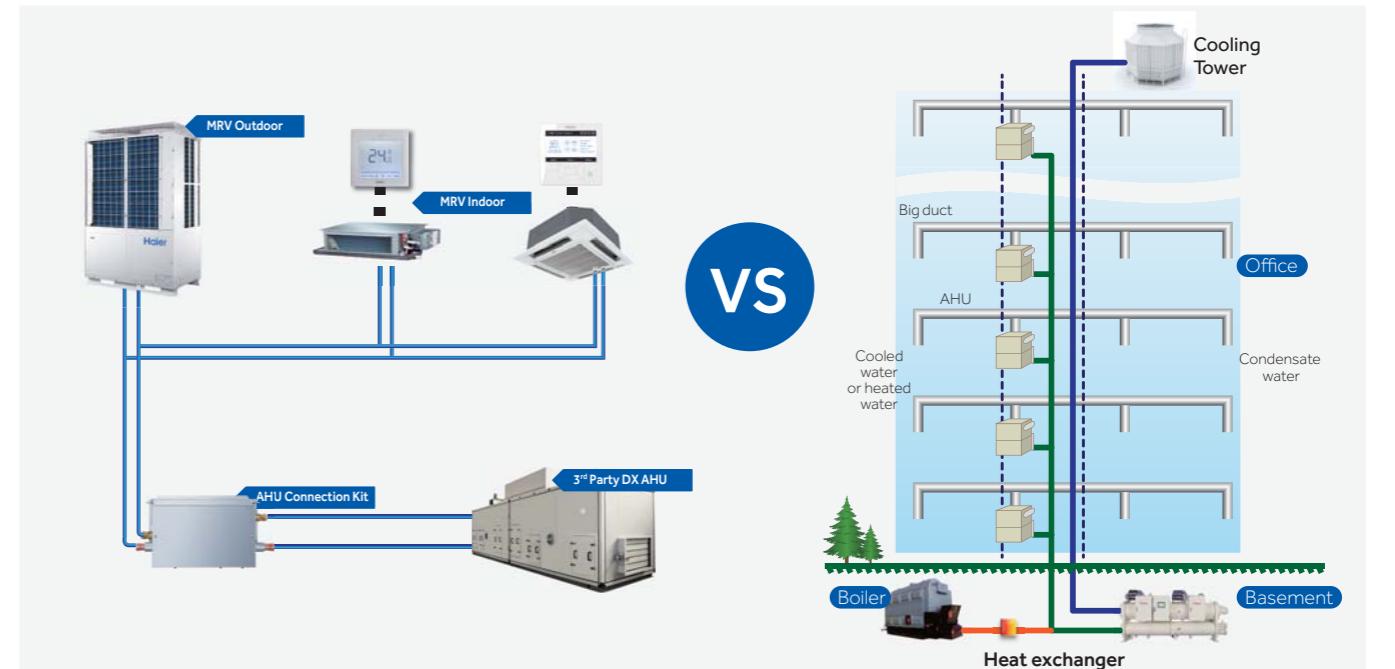
Connection Kit Control

Central Control: AHU control is same as MRV indoor unit control.



Easy Installation

- Adopting the MRV outdoor ,not the traditional chiller outdoor system, is easy to design and install since no additional water system such as boilers , gas connections, cooling tower etc. are required. This also reduces the total system cost.
- AHU can provide enough cooled fresh air to big space other than HRV and fresh air indoor units.
- All the control system for MRV outdoor is available:
- Wired control -Central control -Net work control -BMS control



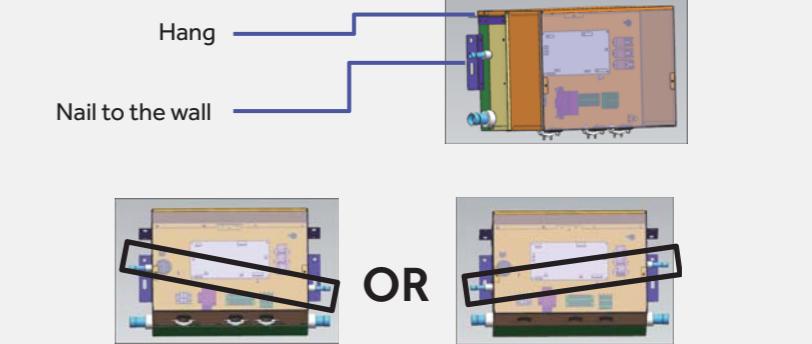
EXV part and Control part integration, easy for translation and installation. Gas pipe is integrated into the valve box.

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

Needn't bend and weld the gas pipe, easy installation

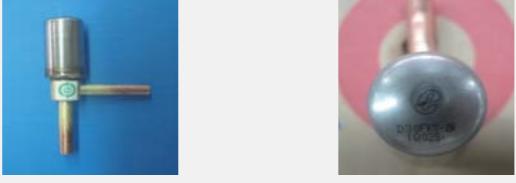


Installation can choose lifting or nailed to the wall



FEATURES & BENEFITS

Advantages

| | |
|-----------------|---|
| Wide capacity | Connected AHU capacity from 5HP to 20HP. |
| High Compatible | <p>1. Same PCB board with MRV indoor, easy operation and service.</p> <p>2. Same wired controller can be used with MRV indoor unit such as YR-E16, YR-E17 and YR-E14.</p> |
| Reliable EEV | <p>EEV is imported from Japan.</p>  |

Specification



| Model | AH1-280A | AH1-560A |
|---|------------------------------|------------------------------|
| Connected AHU capacity | 14≤x≤28kW(5-10HP) | 28<x≤56kW(10-20HP) |
| Power Supply (Ph/V/Hz) | 1/220-230/50/60 | 1/220-230/50/60 |
| Dimension(W/D/H) | 350/226/155 | 433/296/193 |
| Shipping dimensions | 606*295*209 | 667*365*249 |
| Material | Galvanized steel | Galvanized steel |
| Color | Grey | Grey |
| Weight/kg | 6 | 9 |
| Shipping Weight/kg | 8 | 12 |
| Liquid pipe (mm) | 9.52 (Main) /12.7 | 12.7 (Main) /15.88 |
| Gas pipe (mm) | 25.4 (Main) /22.2 /19.05 | 28.58 (Main) /25.4/22.2 |
| Pipe connection method | Flare connection and welding | Flare connection and welding |
| Brand box-Indoor Max Single pipe length/m | 5 | 5 |
| Branch box- indoor max drop/m | 5 | 5 |

MRV OUTDOOR LINE UP

| OUTDOOR | MRV IV | MRV III-C ^{PLUS} / MRV III(2-Pipe) | | | | | MRV S ^{II} | | |
|--------------|-----------------------|---|-------------------|---------------|--|-----------------------|-----------------------|-----------------------|-----------------------|
| HP | 8-24 | 8 | 10 | 12 | 14 | 16 | 4 | 5 | 6 |
| Power supply | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/208-230V/60Hz | 3Ph/460V/60Hz | 3Ph/380-415V/50(60)Hz 1Ph/220-240V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz | 3Ph/380-400V/50(60)Hz |



MRV INDOOR



- | | |
|---------------------------------------|---------------------------------------|
| 131 Round-way Smart Air Flow Cassette | 149 Duct Medium ESP (50/96Pa) |
| 133 MINI 4-Way Cassette | 151 Duct Medium ESP (80/120Pa) |
| 135 4-Way Cassette | 152 Duct High ESP (100/196Pa) |
| 138 2-Way Cassette | 155 Constant Air Volume Duct(0-200Pa) |
| 139 One-way Cassette | 157 Built-in Floor Standing |
| 141 Convertible Type | 158 Console |
| 143 Duct Slim Low ESP | 159 High Wall |
| 147 Duct Low ESP (0/20Pa) | |



Round-way Smart Air Flow Cassette

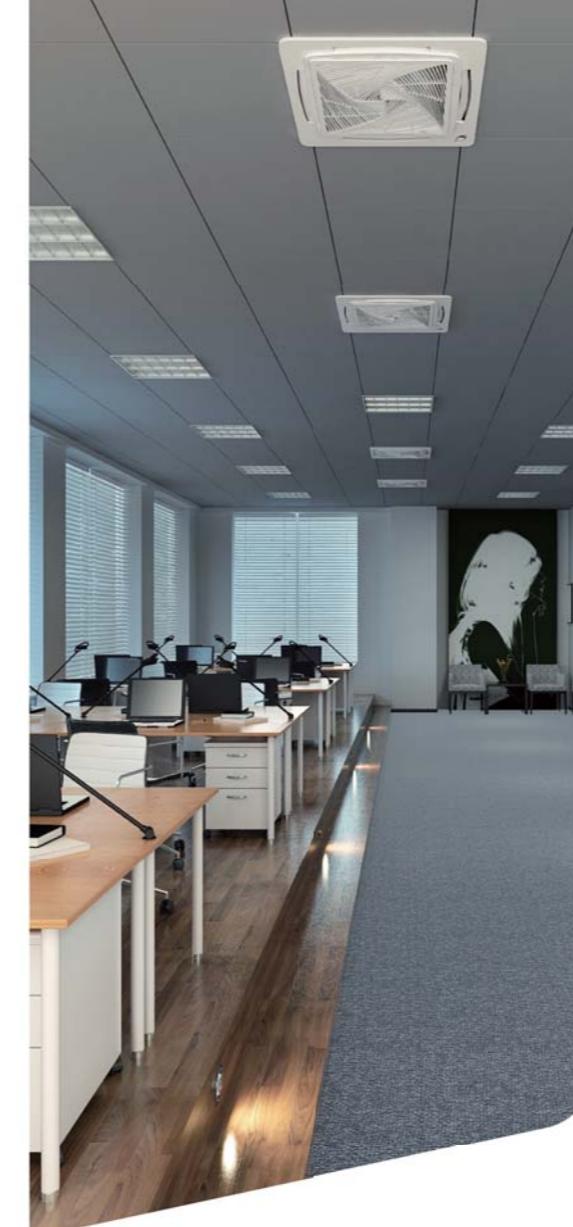
● AB072MRERA ● AB162MRERA
● AB092MRERA ● AB182MRERA
● AB122MRERA ● AB242MRERA



- Unique round-way air outlet, no blind spot
- Innovative 4 independent air flow control
- 6 adjustable louver positions, 1296 air flow combinations
- Move Eye intelligent system, intelligence all around(optional)



| Model/Indoor unit | | | AB072MRERA | AB092MRERA | AB122MRERA | AB162MRERA | AB182MRERA | AB242MRERA |
|-----------------------|-----------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 7.5 | 9.5 | 12.3 | 15.3 | 19.1 | 24.2 |
| | kW | | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Electrical Parameters | Heating | Btu/h | 8.5 | 10.9 | 13.6 | 17.1 | 21.5 | 27.3 |
| | kW | | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Performance | Power supply | Ph/V/Hz | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| Performance | Air flow (H) | m ³ /h | 1000/810/620 | 1000/810/620 | 1000/810/620 | 1000/810/620 | 1000/810/620 | 1380/1190/1000 |
| | Sound pressure level(H/M/L) | dB(A) | 30/27/25 | 30/27/25 | 30/27/25 | 32/29/27 | 33/30/29 | 35/34/31 |
| Installation | External dimensions(W/D/H) | mm | 840/840/183 | 840/840/183 | 840/840/183 | 840/840/183 | 840/840/183 | 840/840/204 |
| | Shipping dimensions(W/D/H) | mm | 983/983/268 | 983/983/268 | 983/983/268 | 983/983/268 | 983/983/268 | 983/983/290 |
| | Net/Shipping weight | kg | 28/31 | 28/31 | 28/31 | 28/31 | 28/31 | 29/32 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 9.52 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 12.7 | 15.88 |
| Panel | Model name | | PB-950KC | PB-950KC | PB-950KC | PB-950KC | PB-950KC | PB-950KC |
| | External dimensions(W/D/H) | mm | 950/950/50 | 950/950/50 | 950/950/50 | 950/950/50 | 950/950/50 | 950/950/50 |
| | Shipping dimensions(W/D/H) | mm | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 |
| | Net/Shipping weight | kg | 6.5/9 | 6.5/9 | 6.5/9 | 6.5/9 | 6.5/9 | 6.5/9 |
| Controller | Wired(Optional) | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | Infrared(Optional) | / | YR-HBS01 | YR-HBS01 | YR-HBS01 | YR-HBS01 | YR-HBS01 | YR-HBS01 |



Round-way Smart Air Flow Cassette

● AB282MRERA ● AB482MRERA
● AB302MRERA ● AB602MRERA
● AB382MRERA



- Unique round-way air outlet, no blind spot
- Innovative 4 independent air flow control
- 6 adjustable louver positions, 1296 air flow combinations
- Move Eye intelligent system, intelligence all around(optional)



| Model/Indoor unit | | | AB282MRERA | AB302MRERA | AB382MRERA | AB482MRERA | AB602MRERA |
|-----------------------|-----------------------------|-------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 27.3 | 30.7 | 38.2 | 47.7 | 54.6 |
| | kW | | 8.0 | 9.0 | 11.2 | 14.0 | 16.0 |
| Electrical Parameters | Heating | Btu/h | 30.7 | 34.1 | 42.6 | 54.6 | 61.2 |
| | kW | | 9.0 | 10.0 | 12.5 | 16.0 | 18.0 |
| Performance | Power supply | Ph/V/Hz | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| Performance | Air flow (H) | m ³ /h | 1380/1190/1000 | 2050/1860/1670 | 2050/1860/1670 | 2100/1910/1720 | 2100/1910/1720 |
| | Sound pressure level(H/M/L) | dB(A) | 37/35/31 | 37/35/31 | 37/35/31 | 44/40/36 | 44/40/36 |
| Installation | External dimensions(W/D/H) | mm | 840/840/204 | 840/840/246 | 840/840/246 | 840/840/288 | 840/840/288 |
| | Shipping dimensions(W/D/H) | mm | 983/983/290 | 983/983/331 | 983/983/331 | 983/983/373 | 983/983/373 |
| | Net/Shipping weight | kg | 29/32 | 34/37 | 34/37 | 35/38 | 35/38 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 | 15.88 | 15.88 | 15.88 |
| Panel | Model name | | PB-950KC | PB-950KC | PB-950KC | PB-950KC | PB-950KC |
| | External dimensions(W/D/H) | mm | 950/950/50 | 950/950/50 | 950/950/50 | 950/950/50 | 950/950/50 |
| | Shipping dimensions(W/D/H) | mm | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 | 1013/1025/123 |
| | Net/Shipping weight | kg | 6.5/9 | 6.5/9 | 6.5/9 | 6.5/9 | 6.5/9 |
| Controller | Wired(Optional) | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | Infrared(Optional) | / | YR-HBS01 | YR-HBS01 | YR-HBS01 | YR-HBS01 | YR-HBS01 |



MINI 4-WAY CASSETTE

NEW

- AB052MCERA(M)
- AB072MCERA(M)
- AB092MCERA(M)



- Compact design
- New panel design 620*620mm
- Fresh air outlet
- Low sound level



| Model/Indoor unit | | AB052MCERA(M) | AB072MCERA(M) | AB092MCERA(M) |
|-----------------------|-----------------------------|---------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 |
| | | kW | 1.5 | 2.2 |
| Electrical Parameters | Heating | kBtu/h | 5.8 | 8.5 |
| | | kW | 1.7 | 2.5 |
| Performance | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 |
| | Air flow(H/M/L) | m³/h | 650/540/430 | 700/590/480 |
| | Sound pressure level(H/M/L) | dB(A) | 31/29/28 | 32/30/29 |
| Installation | Sound power level(H/M/L) | dB(A) | 45/43/42 | 46/44/43 |
| | External dimensions(W/D/H) | mm | 570/570/260 | 570/570/260 |
| | Shipping dimensions(W/D/H) | mm | 718/680/380 | 718/680/380 |
| Panel | Net/Shipping weight | kg | 17/21 | 17/21 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 |
| Controller | Model Name | | PB-620KB | PB-620KB |
| | External dimensions(W/D/H) | mm | 620/620/60 | 620/620/60 |
| | Shipping dimensions(W/D/H) | mm | 660/660/115 | 660/660/115 |
| | Net/Shipping weight | kg | 3.1/4.8 | 3.1/4.8 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B |
| | | / | YR-E17 | YR-E17 |
| | Infrared (Optional) | / | YR-HBS01 | YR-HBS01 |

Models are under development, data is pending.



MINI 4-WAY CASSETTE

NEW

- AB122MCERA(M)
- AB162MCERA(M)
- AB182MCERA(M)



- Compact design
- New panel design 620*620mm
- Fresh air outlet
- Low sound level



| Model/Indoor unit | | AB122MCERA(M) | AB162MCERA(M) | AB182MCERA(M) |
|-----------------------|-----------------------------|---------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 12.3 | 15.3 |
| | | kW | 3.6 | 4.5 |
| Electrical Parameters | Heating | kBtu/h | 13.6 | 17.1 |
| | | kW | 4.0 | 5.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 |
| | Air flow(H/M/L) | m³/h | 700/590/480 | 700/590/480 |
| | Sound pressure level(H/M/L) | dB(A) | 32/30/29 | 33/30/29 |
| Installation | Sound power level(H/M/L) | dB(A) | 46/44/43 | 47/44/43 |
| | External dimensions(W/D/H) | mm | 570/570/260 | 570/570/260 |
| | Shipping dimensions(W/D/H) | mm | 718/680/380 | 718/680/380 |
| Panel | Net/Shipping weight | kg | 19/23 | 19/23 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 12.7 | 12.7 |
| Controller | Model Name | | PB-620KB | PB-620KB |
| | External dimensions(W/D/H) | mm | 620/620/60 | 620/620/60 |
| | Shipping dimensions(W/D/H) | mm | 660/660/115 | 660/660/115 |
| | Net/Shipping weight | kg | 3.1/4.8 | 3.1/4.8 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B |
| | | / | YR-E17 | YR-E17 |
| | Infrared (Optional) | / | YR-HBS01 | YR-HBS01 |

Models are under development, data is pending.



4-WAY CASSETTE

- AB052MCERA
- AB072MCERA
- AB092MCERA
- AB122MCERA
- AB162MCERA



- 700x700mm new panel design
- Pre-set fresh air inlet
- Built-in high head drain pump
- Quiet operation



| Model/Indoor unit | | AB052MCERA | AB072MCERA | AB092MCERA | AB122MCERA | AB162MCERA | AB182MCERA(C) | |
|-----------------------|-----------------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 | 9.5 | 12.3 | 15.3 | 19.1 |
| | | kW | 1.5 | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 |
| | Heating | Btu/h | 5.8 | 8.5 | 10.9 | 13.6 | 17.1 | 21.5 |
| | | kW | 1.7 | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Performance | Air flow (H) | m³/h | 650/540/430 | 700/590/480 | 700/590/480 | 700/590/480 | 700/590/480 | 700/590/480 |
| | Sound pressure level(H/M/L) | dB(A) | 31/29/28 | 32/30/29 | 32/30/29 | 32/30/29 | 33/30/29 | 33/30/29 |
| | Sound power level(H/M/L) | dB(A) | 45/43/42 | 46/44/43 | 46/44/43 | 46/44/43 | 47/44/43 | 47/44/43 |
| Installation | External dimensions(W/D/H) | mm | 570/570/260 | 570/570/260 | 570/570/260 | 570/570/260 | 570/570/260 | 570/570/260 |
| | Shipping dimensions(W/D/H) | mm | 718/680/380 | 718/680/380 | 718/680/380 | 718/680/380 | 718/680/380 | 718/680/380 |
| | Net/Shipping weight | kg | 17/21 | 17/21 | 17/21 | 19/23 | 19/23 | 19/23 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 |
| Panel | Refrigerant gas pipe | mm | 9.52 | 9.52 | 9.52 | 12.7 | 12.7 | 12.7 |
| | Model name | | PB-700IB | PB-700IB | PB-700IB | PB-700IB | PB-700IB | PB-700IB |
| | External dimensions(W/D/H) | mm | 700/700/60 | 700/700/60 | 700/700/60 | 700/700/60 | 700/700/60 | 700/700/60 |
| | Shipping dimensions(W/D/H) | mm | 740/740/115 | 740/740/115 | 740/740/115 | 740/740/115 | 740/740/115 | 740/740/115 |
| Controller | Net/Shipping weight | kg | 2.8/4.5 | 2.8/4.5 | 2.8/4.5 | 2.8/4.5 | 2.8/4.5 | 2.8/4.5 |
| | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | Infrared (Optional) | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |



4-WAY CASSETTE

- AB182MCERA
- AB242MCERA
- AB282MCERA



- Compact design
- Pre-set fresh air inlet
- Built-in high head drain pump
- Reserve branch outlet



| Model/Indoor unit | | AB182MCERA | AB242MCERA | AB282MCERA | |
|-----------------------|-----------------------------|------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 19.1 | 24.2 | 27.3 |
| | | kW | 5.6 | 7.1 | 8.0 |
| | Heating | Btu/h | 21.5 | 27.3 | 30.7 |
| | | kW | 6.3 | 8.0 | 9.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Performance | Air flow (H) | m³/h | 1200/1010/820 | 1200/1010/820 | 1200/1010/820 |
| | Sound pressure level(H/M/L) | dB(A) | 34/32/30 | 35/34/31 | 37/35/31 |
| | Sound power level(H/M/L) | dB(A) | 48/46/44 | 49/48/45 | 51/49/45 |
| Installation | External dimensions(W/D/H) | mm | 840/840/240 | 840/840/240 | 840/840/240 |
| | Shipping dimensions(W/D/H) | mm | 930/930/330 | 930/930/330 | 930/930/330 |
| | Net/Shipping weight | kg | 30/32.5 | 30/32.5 | 30/32.5 |
| | Refrigerant liquid pipe | mm | 6.35 | 9.52 | 9.52 |
| Panel | Refrigerant gas pipe | mm | 12.7 | 15.88 | 15.88 |
| | Model name | | PB-950JB | PB-950JB | PB-950JB |
| | External dimensions(W/D/H) | mm | 950/950/60 | 950/950/60 | 950/950/60 |
| | Shipping dimensions(W/D/H) | mm | 992/992/115 | 992/992/115 | 992/992/115 |
| Controller | Net/Shipping weight | kg | 6/7.5 | 6/7.5 | 6/7.5 |
| | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | Infrared (Optional) | / | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-HD | YR-HD | YR-HD |

4-WAY CASSETTE

-  AB302MCERA
-  AB382MCERA
-  AB482MCERA



HW-BA116ABK YR-E17 YR-E16A YR-E16B YR-HD

- Compact design
- Pre-set fresh air inlet
- Built-in high head drain pump
- Reserve branch outlet



| Model/Indoor unit | | AB302MCERA | AB382MCERA | AB482MCERA | |
|-------------------|-----------------------------|--------------|----------------------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h kW | 30.7 9.0 | 38.2 11.2 | 47.7 14.0 |
| | Heating | Btu/h kW | 34.1 10.0 | 42.6 12.5 | 54.6 16.0 |
| | Electrical Parameters | Power supply | Ph/V/Hz 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| | Air flow (H) | m³/h | 1800/1610/1420 | 1800/1610/1420 | 1800/1610/1420 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 37/35/31 | 37/35/31 | 42/39/35 |
| | Sound power level(H/M/L) | dB(A) | 51/49/45 | 51/49/45 | 56/53/49 |
| Installation | External dimensions(W/D/H) | mm | 840/840/295 | 840/840/295 | 840/840/295 |
| | Shipping dimensions(W/D/H) | mm | 930/930/390 | 930/930/390 | 930/930/390 |
| | Net/Shipping weight | kg | 38/40 | 38/40 | 38/40 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 | 15.88 |
| Panel | Model name | | PB-950JB | PB-950JB | PB-950JB |
| | External dimensions(W/D/H) | mm | 950/950/60 | 950/950/60 | 950/950/60 |
| | Shipping dimensions(W/D/H) | mm | 992/992/115 | 992/992/115 | 985/985/115 |
| | Net/Shipping weight | kg | 6/7.5 | 6/7.5 | 6/7.5 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD |

2-WAY CASSETTE

-  AB072MBERA
-  AB092MBERA
-  AB122MBERA
-  AB162MBERA
-  AB182MBERA



HW-BA116ABK YR-E17 YR-E16A YR-E16B YR-HD

- Compact design: only 220mm height
- Built in high head drain pump
- Ceiling antifouling design unique antifouling design
- Quiet operation



| Model/Indoor unit | | AB072MBERA | AB092MBERA | AB122MBERA | AB162MBERA | AB182MBERA |
|-------------------|-----------------------------|--------------|----------------------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h kW | 7.5 2.2 | 9.6 2.8 | 12.3 3.6 | 15.4 4.5 |
| | Heating | Btu/h kW | 8.5 2.5 | 10.9 3.2 | 13.7 4.0 | 17.1 5.0 |
| | Electrical Parameters | Power supply | Ph/V/Hz 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| | Air flow (H) | m³/h | 840/700/550 | 840/700/550 | 840/700/550 | 840/700/550 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 42/37/33 | 42/37/33 | 42/37/33 | 44/39/34 |
| | Sound power level(H/M/L) | dB(A) | 55/50/46 | 55/50/46 | 55/50/46 | 57/52/47 |
| Installation | External dimensions(W/D/H) | mm | 817/620/220 | 817/620/220 | 817/620/220 | 817/620/220 |
| | Shipping dimensions(W/D/H) | mm | 1022×682×247 | 1022×682×247 | 1022×682×247 | 1022×682×247 |
| | Net/Shipping weight | kg | 21/23 | 21/23 | 21/23 | 21/23 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 |
| Panel | Model name | | P2B-1055IB | P2B-1055IB | P2B-1055IB | P2B-1055IB |
| | External dimensions(W/D/H) | mm | 1055/680/68 | 1055/680/68 | 1055/680/68 | 1055/680/68 |
| | Shipping dimensions(W/D/H) | mm | 1097×707×136 | 1097×707×136 | 1097×707×136 | 1097×707×136 |
| | Net/Shipping weight | kg | 7/8 | 7/8 | 7/8 | 7/8 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD |



ONE WAY CASSETTE

NEW

AB052MAERA

AB072MAERA



- Ultra thin design
- Ultra low sound level
- Built-in high head drain pump



| Model/Indoor unit | | | AB052MAERA | AB072MAERA |
|-----------------------|-----------------------------|--------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h kW | 5.1 1.5 | 7.5 2.2 |
| | Heating | kBtu/h kW | 5.8 1.7 | 8.5 2.5 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 |
| | Air flow(H/M/L) | m³/h | 450/380/300 | 530/490/445 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 35/32/29 | 36/33/30 |
| | Sound power level(H/M/L) | dB(A) | 48/45/42 | 49/46/43 |
| Installation | External dimensions(W/D/H) | mm | 875/505/185 | 875/505/185 |
| | Shipping dimensions(W/D/H) | mm | 1028/581/270 | 1028/581/270 |
| | Net/Shipping weight | kg | 14.2/17.7 | 14.2/17.7 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 |
| | Model Name | | HMB-01A/T | HMB-01A/T |
| Panel | External dimensions(W/D/H) | mm | 1050/550/122 | 1050/550/122 |
| | Shipping dimensions(W/D/H) | mm | 1133/623/197 | 1133/623/197 |
| | Net/Shipping weight | kg | 5.7/9.3 | 5.7/9.3 |
| Controller | / | | YR-E16A | YR-E16A |
| | / | | YR-E16B | YR-E16B |
| | / | | YR-E17 | YR-E17 |
| | Infrared (Optional) | / | YR-HD | YR-HD |

Models are under development, data is pending.



ONE WAY CASSETTE

NEW

AB092MAERA

AB122MAERA



- Ultra thin design
- Ultra low sound level
- Built-in high head drain pump



| Model/Indoor unit | | | AB092MAERA | AB122MAERA |
|-----------------------|-----------------------------|--------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h kW | 9.6 2.8 | 12.3 3.6 |
| | Heating | kBtu/h kW | 10.9 3.2 | 13.6 4.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 |
| | Air flow(H/M/L) | m³/h | 530/490/445 | 550/530/490 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 37/34/31 | 38/35/32 |
| | Sound power level(H/M/L) | dB(A) | 50/47/44 | 51/48/45 |
| Installation | External dimensions(W/D/H) | mm | 875/505/185 | 875/505/185 |
| | Shipping dimensions(W/D/H) | mm | 1028/581/270 | 1028/581/270 |
| | Net/Shipping weight | kg | 14.2/17.7 | 14.2/17.7 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 12.7 |
| | Model Name | | HMB-01A/T | HMB-01A/T |
| Panel | External dimensions(W/D/H) | mm | 1050/550/122 | 1050/550/122 |
| | Shipping dimensions(W/D/H) | mm | 1133/623/197 | 1133/623/197 |
| | Net/Shipping weight | kg | 5.7/9.3 | 5.7/9.3 |
| Controller | / | | YR-E16A | YR-E16A |
| | / | | YR-E16B | YR-E16B |
| | / | | YR-E17 | YR-E17 |
| | Infrared (Optional) | / | YR-HD | YR-HD |

Models are under development, data is pending.

CONVERTIBLE

- AC092MCERA
- AC122MCERA
- AC162MCERA
- AC182MCERA
- AC242MCERA



- Flexible installation, on the floor or on the ceiling
- Ultra thin design, only 199mm thick
- Automatic horizontal and vertical swing
- Reserved fresh air inlet



| Model/Indoor unit | | AC092MCERA | AC122MCERA | AC162MCERA | AC182MCERA | AC242MCERA |
|-----------------------|-----------------------------|------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 9.5 | 12.3 | 15.4 | 19.1 |
| | | kW | 2.8 | 3.6 | 4.5 | 5.6 |
| Electrical Parameters | Heating | Btu/h | 10.9 | 13.6 | 17.1 | 21.5 |
| | | kW | 3.2 | 4.0 | 5.0 | 6.3 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Installation | Air flow (H) | m³/h | 800/710/580 | 800/710/580 | 800/710/580 | 800/710/580 |
| | Sound pressure level(H/M/L) | dB(A) | 38/35/33 | 38/35/33 | 40/37/35 | 40/37/35 |
| | Sound power level(H/M/L) | dB(A) | 51/48/46 | 51/48/46 | 53/50/48 | 53/50/48 |
| Controller | External dimensions(W/D/H) | mm | 990/655/199 | 990/655/199 | 990/655/199 | 990/655/199 |
| | Shipping dimensions(W/D/H) | mm | 1160/730/280 | 1160/730/280 | 1160/730/280 | 1160/730/280 |
| | Net/Shipping weight | kg | 28.3/34.3 | 28.3/36.4 | 28.3/36.4 | 28.3/36.4 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 12.7 | 12.7 | 15.88 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD |

CONVERTIBLE

- AC282MFERA
- AC302MFERA
- AC382MFERA
- AC482MFERA



- Flexible installation, on the floor or on the ceiling
- Automatic horizontal and vertical swing
- Reserved fresh air inlet
- Multiple direction for connection pipe setting
- Long-life and high efficiency air purify filter



| Model/Indoor unit | | AC282MFERA | AC302MFERA | AC382MFERA | AC482MFERA |
|-----------------------|-----------------------------|------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 27.3 | 30.7 | 38.2 |
| | | kW | 8.0 | 9.0 | 11.2 |
| Electrical Parameters | Heating | Btu/h | 30.7 | 34.1 | 42.6 |
| | | kW | 9.0 | 10.0 | 12.5 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Installation | Air flow (H) | m³/h | 2040/1820/1610 | 2040/1820/1610 | 2040/1820/1610 |
| | Sound pressure level(H/M/L) | dB(A) | 43/40/38 | 43/40/38 | 46/42/38 |
| | Sound power level(H/M/L) | dB(A) | 56/53/51 | 56/53/51 | 59/55/51 |
| Controller | External dimensions(W/D/H) | mm | 1580/700/240 | 1580/700/240 | 1580/700/240 |
| | Shipping dimensions(W/D/H) | mm | 1720/800/330 | 1720/800/330 | 1720/800/330 |
| | Net/Shipping weight | kg | 50/57 | 50/57 | 54/61 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 | 15.88 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD |

DUCT SLIM LOW ESP



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



- DC fan motor
- New design 3D airflow air grille(optional)
- Super slim design, only 185mm
- Reserved fresh air inlet
- Built-in high head drain pump
- Friendly design of rear or bottom air return
- Quiet operation
- Static pressure 0/15/30Pa



DUCT SLIM LOW ESP

- AD182MSERA(D)
- AD242MSERA(D)



- DC fan motor
- New design 3D airflow air grille(optional)
- Super slim design, only 185mm
- Reserved fresh air inlet
- Built-in high head drain pump
- Friendly design of rear or bottom air return
- Quiet operation
- Static pressure 0/15/30Pa



| Model/Indoor unit | | AD052MSERA(D) | AD072MSERA(D) | AD092MSERA(D) | AD122MSERA(D) | AD162MSERA(D) | |
|----------------------------|--------------------------------|--------------------------------|------------------------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h kW | 5.1 1.5 | 7.5 2.2 | 9.5 2.8 | 12.3 3.6 | 15.3 4.5 |
| | Heating | kBtu/h kW | 5.8 1.7 | 8.5 2.5 | 10.9 3.2 | 13.6 4.0 | 17.1 5.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H/M/L) | m³/h | 430/370/310 | 480/420/360 | 480/420/360 | 550/430/370 | 600/540/460 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 26/22/19 | 27/23/20 | 27/23/20 | 30/27/24 | 32/29/26 |
| | Sound power level(H/M/L) | dB(A) | 40/36/33 | 41/37/34 | 41/37/34 | 44/41/38 | 46/43/40 |
| Installation | External dimensions(W/D/H) | mm | 850/420/185 | 850/420/185 | 850/420/185 | 850/420/185 | 850/420/185 |
| | Shipping dimensions(W/D/H) | mm | 1045/540/270 | 1045/540/270 | 1045/540/270 | 1045/540/270 | 1045/540/270 |
| Net/Shipping weight | kg | 16.5/21.5 | 17.5/22.5 | 17.5/22.5 | 17.5/22.5 | 18.5/23.5 | |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 |
| Refrigerant gas pipe | mm | 9.52 | 9.52 | 9.52 | 12.7 | 12.7 | |
| | Static Pressure(Standard/Max.) | Pa | 0/15/30 | 0/15/30 | 0/15/30 | 0/15/30 | 0/15/30 |
| Panel | Panel model | / | P1B-890IC | | | | |
| | External dimensions(W/D/H) | mm | 890/190/100 (outlet panel) | | | | |
| External dimensions(W/D/H) | | | 890/290.5/32.4 (inlet panel) | | | | |
| | Shipping dimensions(W/D/H) | mm | 938/335/220 | | | | |
| Net/Shipping weight | Kg | 4/5 | | | | | |
| | Drain pump | O-optimal,S-standard,W-without | S | S | S | S | |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | |
| | Infrared (Optional) | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | |
| | | | YR-E17 | YR-E17 | YR-E17 | YR-E17 | |
| | | | YR-HD | YR-HD | YR-HD | YR-HD | |

| Model/Indoor unit | | AD182MSERA(D) | AD242MSERA(D) |
|----------------------------|--------------------------------|--------------------------------|-------------------------------|
| Capacity | Cooling | kBtu/h kW | 19.1 5.6 |
| | Heating | kBtu/h kW | 21.5 6.3 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-230/50/60 |
| | Air flow (H/M/L) | m³/h | 800/690/580 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 33/30/27 |
| | Sound power level(H/M/L) | dB(A) | 47/44/41 |
| Installation | External dimensions(W/D/H) | mm | 1170/420/185 |
| | Shipping dimensions(W/D/H) | mm | 1365/540/270 |
| Net/Shipping weight | kg | 22.2/28.2 | 24/30 |
| | Refrigerant liquid pipe | mm | 6.35 |
| Refrigerant gas pipe | mm | 12.7 | 15.88 |
| | Static Pressure(Standard/Max.) | Pa | 0/15/30 |
| Panel | Panel model | / | P1B-1210IC |
| | External dimensions(W/D/H) | mm | 1210/190/100 (outlet panel) |
| External dimensions(W/D/H) | | | 1210/290.5/32.4 (inlet panel) |
| | Shipping dimensions(W/D/H) | mm | 1258/335/220 |
| Net/Shipping weight | Kg | 5/6 | |
| | Drain pump | O-optimal,S-standard,W-without | S |
| Controller | Wired(Optional) | / | YR-E16A |
| | Infrared (Optional) | / | YR-E16B |
| | | | YR-E17 |
| | | | YR-HD |

DUCT SLIM LOW ESP



- AD052MSERA**
- AD072MSERA**
- AD092MSERA**
- AD122MSERA**
- AD162MSERA**



- Static pressure 0/30Pa
- Super slim design, only 185mm
- Reserved fresh air inlet
- Built-in high head drain pump
- Friendly design of rear or bottom air return
- Quiet operation



Model/Indoor unit

| | | AD052MSERA | AD072MSERA | AD092MSERA | AD122MSERA | AD162MSERA |
|------------------------------|---------------------------------|-------------------|------------------------------|-------------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 | 9.5 | 12.3 |
| | | kW | 1.5 | 2.2 | 2.8 | 3.6 |
| Electrical Parameters | Heating | kBtu/h | 5.8 | 8.5 | 10.9 | 13.6 |
| | | kW | 1.7 | 2.5 | 3.2 | 4.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H/M/L) | m³/h | 430/370/310 | 480/420/360 | 480/420/360 | 550/430/370 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 26/23/20 | 27/24/21 | 27/24/21 | 30/28/25 |
| | Sound power level(H/M/L) | dB(A) | 40/37/34 | 41/38/35 | 41/38/35 | 44/42/39 |
| Panel | External dimensions(W/D/H) | mm | 850/420/185 | 850/420/185 | 850/420/185 | 850/420/185 |
| | Shipping dimensions(W/D/H) | mm | 1045/540/270 | 1045/540/270 | 1045/540/270 | 1045/540/270 |
| Drain pump | Net/Shipping weight | kg | 16.5/21.5 | 17.5/22.5 | 17.5/22.5 | 18.5/23.5 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 |
| Controller | Refrigerant gas pipe | mm | 9.52 | 9.52 | 9.52 | 12.7 |
| | Static Pressure(Standard/Max.) | Pa | 0/30 | 0/30 | 0/30 | 0/30 |
| Panel | Panel model | / | P1B-890IC | | | |
| | External dimensions(W/D/H) | mm | 890/190/100 (outlet panel) | | | |
| Drain pump | External dimensions(W/D/H) | | 890/290.5/32.4 (inlet panel) | | | |
| | Shipping dimensions(W/D/H) | mm | 938/335/220 | | | |
| Controller | Net/Shipping weight | Kg | 4/5 | | | |
| | O-optional,S-standard,W-without | | S | S | S | S |
| Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| Infrared(Optional) | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |

DUCT SLIM LOW ESP

- AD182MSERA**
- AD242MSERA**



- Static pressure 0/30Pa
- Super slim design, only 185mm
- Reserved fresh air inlet
- Built-in high head drain pump
- Friendly design of rear or bottom air return
- Quiet operation



Model/Indoor unit

| | | AD182MSERA | AD242MSERA |
|------------------------------|---------------------------------|-------------------|------------------------------|
| Capacity | Cooling | kBtu/h | 19.1 |
| | | kW | 5.6 |
| Electrical Parameters | Heating | kBtu/h | 21.5 |
| | | kW | 6.3 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 |
| | Air flow (H/M/L) | m³/h | 800/690/580 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 33/30/28 |
| | Sound power level(H/M/L) | dB(A) | 47/44/42 |
| Panel | External dimensions(W/D/H) | mm | 1170/420/185 |
| | Shipping dimensions(W/D/H) | mm | 1365/540/270 |
| Drain pump | Net/Shipping weight | kg | 22.2/28.2 |
| | Refrigerant liquid pipe | mm | 6.35 |
| Controller | Refrigerant gas pipe | mm | 12.7 |
| | Static Pressure(Standard/Max.) | Pa | 0/30 |
| Panel | Panel model | / | P1B-890IC |
| | External dimensions(W/D/H) | mm | 890/190/100 (outlet panel) |
| Drain pump | External dimensions(W/D/H) | | 890/290.5/32.4 (inlet panel) |
| | Shipping dimensions(W/D/H) | mm | 938/335/220 |
| Controller | Net/Shipping weight | Kg | 4/5 |
| | O-optional,S-standard,W-without | | S |
| Wired(Optional) | / | YR-E16A | YR-E16A |
| | / | YR-E16B | YR-E16B |
| Infrared(Optional) | / | HW-BA116ABK | HW-BA116ABK |
| | / | YR-E17 | YR-E17 |
| | / | YR-HD | YR-HD |

DUCT LOW ESP

- AD072MLERA
- AD092MLERA
- AD122MLERA



- Ultra thin design, only 220mm
- Knock-down drain pan
- Two-way pipe connection
- Left or right side drain outlet
- Static pressure 0/20Pa



| Model/Indoor unit | | AD072MLERA | AD092MLERA | AD122MLERA |
|-----------------------|---------------------------------|------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 7.5 | 9.5 |
| | | kW | 2.2 | 2.8 |
| Electrical Parameters | Heating | Btu/h | 8.5 | 10.9 |
| | | kW | 2.5 | 3.2 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 400/364/324 | 400/364/324 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 35/32/30 | 35/32/30 |
| | Sound power level(H/M/L) | dB(A) | 49/46/44 | 49/46/44 |
| Installation | External dimensions(W/D/H) | mm | 610/500/220 | 610/500/220 |
| | Shipping dimensions(W/D/H) | mm | 710/549/280 | 710/549/280 |
| Installation | Net/Shipping weight | kg | 15/17 | 15/17 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| Installation | Refrigerant gas pipe | mm | 9.52 | 9.52 |
| | Static Pressure(Standard/Max.) | Pa | 0/20 | 0/20 |
| Drain pump | O-optional,S-standard,W-without | | KT-NP01(Optional) | KT-NP01(Optional) |
| Controller | / | | YR-E16A | YR-E16A |
| | / | | YR-E16B | YR-E16B |
| | / | | HW-BA116ABK | HW-BA116ABK |
| | / | | YR-E17 | YR-E17 |
| | Infrared(Optional) | | YR-HD | YR-HD |

DUCT LOW ESP

- AD162MLERA
- AD182MLERA
- AD242MLERA



- Ultra thin design, only 220mm
- Knock-down drain pan
- Two-way pipe connection
- Left or right side drain outlet
- Static pressure 0/20Pa



| Model/Indoor unit | | AD162MLERA | AD182MLERA | AD242MLERA |
|-----------------------|---------------------------------|------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 15.3 | 19.1 |
| | | kW | 4.5 | 5.6 |
| Electrical Parameters | Heating | Btu/h | 17.1 | 21.5 |
| | | kW | 5.0 | 6.3 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 850/780/700 | 1250/1122/988 |
| Performance | Sound pressure level(H/M/L) | dB(A) | 35/32/30 | 39/37/35 |
| | Sound power level(H/M/L) | dB(A) | 49/46/44 | 53/51/49 |
| Installation | External dimensions(W/D/H) | mm | 1105/500/220 | 1105/500/220 |
| | Shipping dimensions(W/D/H) | mm | 1174/549/294 | 1174/549/294 |
| Installation | Net/Shipping weight | kg | 25/27 | 28/30 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 |
| Installation | Refrigerant gas pipe | mm | 12.7 | 12.7 |
| | Static Pressure(Standard/Max.) | Pa | 0/20 | 0/20 |
| Drain pump | O-optional,S-standard,W-without | | KT-NP01(Optional) | KT-NP01(Optional) |
| Controller | / | | YR-E16A | YR-E16A |
| | / | | YR-E16B | YR-E16B |
| | / | | HW-BA116ABK | HW-BA116ABK |
| | / | | YR-E17 | YR-E17 |
| | Infrared(Optional) | | YR-HD | YR-HD |

DUCT MEDIUM ESP

-  AD182MMERA
-  AD242MMERA
-  AD282MMERA



- Flexible duct connection
- Built in drain pump
- Static pressure 50/96Pa



| Model/Indoor unit | | AD182MMERA | AD242MMERA | AD282MMERA |
|-----------------------|---------------------------------|-------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 19.1 | 24.2 |
| | | kW | 5.6 | 7.1 |
| Electrical Parameters | Heating | Btu/h | 21.5 | 27.3 |
| | | kW | 6.3 | 8.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 1200/1123/1072 | 1200/1123/1072 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 36/34/31 | 36/34/31 |
| | Sound power level(H/M/L) | dB(A) | 49/47/44 | 49/47/44 |
| Controller | External dimensions(W/D/H) | mm | 990/650/300 | 990/650/300 |
| | Shipping dimensions(W/D/H) | mm | 1170/860/340 | 1170/860/340 |
| Drain pump | Net/Shipping weight | kg | 39/45 | 39/45 |
| | Refrigerant liquid pipe | mm | 6.35 | 9.52 |
| Controller | Refrigerant gas pipe | mm | 12.7 | 15.88 |
| | Static Pressure(Standard/Max.) | Pa | 50/96 | 50/96 |
| Drain pump | O-optional,S-standard,W-without | | S | S |
| | | | | |
| Controller | / | YR-E16A | YR-E16A | YR-E16A |
| | / | YR-E16B | YR-E16B | YR-E16B |
| Controller | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | / | YR-E17 | YR-E17 | YR-E17 |
| Infrared(Optional) | / | YR-HD | YR-HD | YR-HD |

DUCT MEDIUM ESP

-  AD302MMERA
-  AD382MMERA
-  AD482MMERA



- Flexible duct connection
- Built in drain pump
- Static pressure 50/96Pa



| Model/Indoor unit | | AD302MMERA | AD382MMERA | AD482MMERA |
|-----------------------|---------------------------------|-------------|----------------|----------------|
| Capacity | Cooling | kBtu/h | 30.7 | 38.2 |
| | | kW | 9.0 | 11.2 |
| Electrical Parameters | Heating | Btu/h | 34.1 | 42.6 |
| | | kW | 10.0 | 12.5 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50 | 1/220-230/50 |
| | Air flow (H) | m³/h | 1900/1726/1538 | 1900/1726/1538 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 39/37/35 | 41/40/39 |
| | Sound power level(H/M/L) | dB(A) | 52/50/48 | 54/53/52 |
| Controller | External dimensions(W/D/H) | mm | 1418/655/350 | 1418/655/350 |
| | Shipping dimensions(W/D/H) | mm | 1570/813/383 | 1570/813/383 |
| Drain pump | Net/Shipping weight | kg | 64/66.7 | 64/66.7 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 |
| Controller | Refrigerant gas pipe | mm | 15.88 | 15.88 |
| | Static Pressure(Standard/Max.) | Pa | 50/96 | 50/96 |
| Drain pump | O-optional,S-standard,W-without | | S | S |
| | | | | |
| Controller | / | YR-E16A | YR-E16A | YR-E16A |
| | / | YR-E16B | YR-E16B | YR-E16B |
| Controller | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | / | YR-E17 | YR-E17 | YR-E17 |
| Infrared(Optional) | / | YR-HD | YR-HD | YR-HD |

MIDDLE ESP DUCT

NEW

- AD052MJERA
- AD072MJERA
- AD092MJERA
- AD122MJERA



- -5-28K
- Only 250mm thick
- Built-in drain pump
- 50/100Pa



MIDDLE ESP DUCT

NEW

- AD162MJERA
- AD182MJERA
- AD242MJERA
- AD282MJERA



- -5-28K
- Only 250mm thick
- Built-in drain pump
- 50/100Pa



| Model/Indoor unit | | AD052MJERA | AD072MJERA | AD092MJERA | AD122MJERA |
|-----------------------|--------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 | 9.5 |
| | | kW | 1.5 | 2.2 | 2.8 |
| Electrical Parameters | Heating | Btu/h | 5.8 | 8.5 | 10.9 |
| | | kW | 1.7 | 2.5 | 3.2 |
| Performance | Power supply | Ph/V/Hz | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| | Air flow (H) | m³/h | 585/495/408 | 585/495/408 | 585/495/408 |
| | Sound pressure level(H/M/L) | dB(A) | 35/33/31 | 35/33/31 | 35/33/31 |
| Installation | Sound power level(H/M/L) | dB(A) | 39/37/35 | 39/37/35 | 39/37/35 |
| | External dimensions(W/D/H) | mm | 750/720/250 | 750/720/250 | 750/720/250 |
| | Shipping dimensions(W/D/H) | mm | 920/820/340 | 920/820/340 | 920/820/340 |
| Drain pump | Net/Shipping weight | kg | 24.1/28.3 | 24.1/28.3 | 24.1/28.3 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 12.7 | 12.7 | 12.7 |
| Controller | Static Pressure(Standard/Max.) | Pa | 50/100 | 50/100 | 50/100 |
| | Drain pump | O-optional,S-standard,W-without | S | S | S |
| | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| Infrared(Optional) | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |

| Model/Indoor unit | | AD162MJERA | AD182MJERA | AD242MJERA | AD282MJERA |
|-----------------------|--------------------------------|---------------------------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 15.3 | 19.1 | 24.2 |
| | | kW | 4.5 | 5.6 | 7.1 |
| Electrical Parameters | Heating | Btu/h | 17.1 | 21.5 | 27.3 |
| | | kW | 5 | 6.3 | 8 |
| Performance | Power supply | Ph/V/Hz | 1/220~230/50/60 | 1/220~230/50/60 | 1/220~230/50/60 |
| | Air flow (H) | m³/h | 750/652/566 | 920/805/699 | 1230/1090/950 |
| | Sound pressure level(H/M/L) | dB(A) | 35/33/31 | 36/34/32 | 38/36/34 |
| Installation | Sound power level(H/M/L) | dB(A) | 39/37/35 | 40/38/36 | 42/40/38 |
| | External dimensions(W/D/H) | mm | 750/720/250 | 1050/720/250 | 1050/720/250 |
| | Shipping dimensions(W/D/H) | mm | 920/820/340 | 1170/860/340 | 1170/860/340 |
| Drain pump | Net/Shipping weight | kg | 25.9/30.1 | 30.5/38.0 | 33.1/40.6 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 9.52 |
| | Refrigerant gas pipe | mm | 12.7 | 12.7 | 15.88 |
| Controller | Static Pressure(Standard/Max.) | Pa | 50/100 | 50/100 | 50/100 |
| | Drain pump | O-optional,S-standard,W-without | S | S | S |
| | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| Infrared(Optional) | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |

DUCT MEDIUM ESP

-  AD302MNERA
-  AD382MNERA
-  AD482MNERA



- New compact design: 270mm height
- Optional external drain pump
- Flexible duct connection
- Static pressure 80/120Pa



| Model/Indoor unit | | AD302MNERA | AD382MNERA | AD482MNERA |
|-----------------------|--------------------------------|------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 30.0 | 38.0 |
| | | kW | 9.0 | 11.2 |
| Electrical Parameters | Heating | Btu/h | 34.0 | 43.0 |
| | | kW | 10.0 | 12.5 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 1600/1453/1295 | 1600/1453/1295 |
| | Sound pressure level(H/M/L) | dB(A) | 49/47/43 | 49/47/43 |
| Installation | Sound power level(H/M/L) | dB(A) | 62/60/56 | 62/60/56 |
| | External dimensions(W/D/H) | mm | 1135/742/270 | 1135/742/270 |
| | Shipping dimensions(W/D/H) | mm | 1355/856/380 | 1355/856/380 |
| Drain pump | Net/Shipping weight | kg | 50/56 | 50/56 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 |
| Controller | Static Pressure(Standard/Max.) | Pa | 80/120 | 80/120 |
| | O-optimal,S-standard,W-without | | KT-NP01(Optional) | KT-NP01(Optional) |
| | Wired(Optional) | / | YR-E16A | YR-E16A |
| Controller | | / | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK |
| | Infrared(Optional) | / | YR-E17 | YR-E17 |
| Controller | | / | YR-HD | YR-HD |

DUCT HIGH ESP

-  AD182MHERA
-  AD242MHERA
-  AD282MHERA



- Flexible duct connection
- Easy to maintain
- Variable static pressure 100/196Pa setting



| Model/Indoor unit | | AD182MHERA | AD242MHERA | AD282MHERA |
|-----------------------|--------------------------------|------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 19.1 | 24.2 |
| | | kW | 5.6 | 7.1 |
| Electrical Parameters | Heating | Btu/h | 21.5 | 27.3 |
| | | kW | 6.3 | 8.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 1500/1357/1089 | 1500/1357/1089 |
| | Sound pressure level(H/M/L) | dB(A) | 42/40/38 | 42/40/38 |
| Installation | Sound power level(H/M/L) | dB(A) | 55/53/51 | 55/53/51 |
| | External dimensions(W/D/H) | mm | 975/906/360 | 975/906/360 |
| | Shipping dimensions(W/D/H) | mm | 1048/943/413 | 1048/943/413 |
| Drain pump | Net/Shipping weight | kg | 48/58 | 48/58 |
| | Refrigerant liquid pipe | mm | 6.35 | 9.52 |
| | Refrigerant gas pipe | mm | 12.7 | 15.88 |
| Controller | Static Pressure(Standard/Max.) | Pa | 100/196 | 100/196 |
| | O-optimal,S-standard,W-without | | KT-NP01(Optional) | KT-NP01(Optional) |
| | Wired(Optional) | / | YR-E16A | YR-E16A |
| Controller | | / | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK |
| | Infrared(Optional) | / | YR-E17 | YR-E17 |
| Controller | | / | YR-HD | YR-HD |

DUCT HIGH ESP

- AD302MHERA
- AD382MHERA
- AD482MHERA



- Flexible duct connection
- Variable static pressure 100/196Pa setting



| Model/Indoor unit | | AD302MHERA | AD382MHERA | AD482MHERA |
|-----------------------|----------------------------------|------------|-------------------|-------------------|
| Capacity | Cooling | kBtu/h | 30.7 | 38.2 |
| | | kW | 9.0 | 11.2 |
| Electrical Parameters | Heating | Btu/h | 34.1 | 42.6 |
| | | kW | 10.0 | 12.5 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 1560/1412/1133 | 1600/1448/1162 |
| | Sound pressure level(H/M/L) | dB(A) | 45/43/40 | 45/43/40 |
| Installation | Sound power level(H/M/L) | dB(A) | 58/53/50 | 58/53/50 |
| | External dimensions(W/D/H) | mm | 1355/876/360 | 1355/876/360 |
| | Shipping dimensions(W/D/H) | mm | 1378/938/405 | 1378/938/405 |
| Drain pump | Net/Shipping weight | kg | 62/77 | 62/77 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 15.88 |
| Controller | Static Pressure(Standard/Max.) | Pa | 100/196 | 100/196 |
| | O-optionaL S-standard, W-without | | KT-NP01(Optional) | KT-NP01(Optional) |
| | Wired(Optional) | / | YR-E16A | YR-E16A |
| Infrared(Optional) | | / | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 |
| | | / | YR-HD | YR-HD |

DUCT HIGH ESP

- AD722MHERA
- AD962MHERA



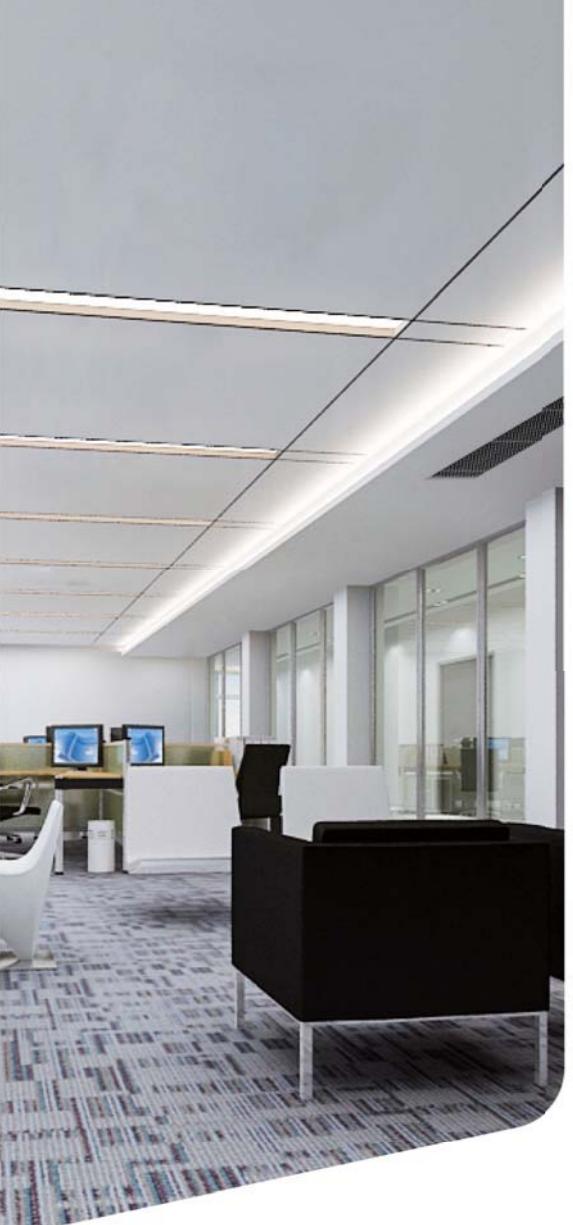
- Flexible duct connection
- Variable static pressure 100/196Pa setting



| Model/Indoor unit | | AD722MHERA | AD962MHERA |
|-----------------------|----------------------------------|------------|-------------------|
| Capacity | Cooling | kBtu/h | 77.1 |
| | | kW | 22.6 |
| Electrical Parameters | Heating | Btu/h | 85.3 |
| | | kW | 25.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 4050/3255/2612 |
| | Sound pressure level(H/M/L) | dB(A) | 54/51/49 |
| Installation | Sound power level(H/M/L) | dB(A) | 67/62/59 |
| | External dimensions(W/D/H) | mm | 1725/876/360 |
| | Shipping dimensions(W/D/H) | mm | 1830/990/530 |
| Drain pump | Net/Shipping weight | kg | 92/100 |
| | Refrigerant liquid pipe | mm | 9.52 |
| | Refrigerant gas pipe | mm | 25.4 |
| Controller | Static Pressure(Standard/Max.) | Pa | 100/196 |
| | O-optionaL S-standard, W-without | | KT-NP01(Optional) |
| | Wired (Optional) | / | YR-E16A |
| Infrared(Optional) | | / | YR-E16B |
| | | / | HW-BA116ABK |
| | | / | YR-E17 |
| | | / | YR-HD |

CONSTANT AIR VOLUME DUCT

NEW



- AD072MQERA
- AD092MQERA
- AD122MQERA
- AD152MQERA
- AD182MQERA
- AD242MQERA



- Auto adjusted ESP 0-200Pa
- Low sound level
- Built-in high head drain pump



CONSTANT AIR VOLUME DUCT

NEW



- AD302MQERA
- AD362MQERA
- AD422MQERA
- AD482MQERA
- AD542MQERA



- Auto adjusted ESP 0-200Pa
- Low sound level
- Built-in high head drain pump



| Model/Indoor unit | | AD072MQERA | AD092MQERA | AD122MQERA | AD152MQERA | AD182MQERA | AD242MQERA |
|-----------------------|---------------------------------|------------|------------------|------------------|------------------|------------------|------------------|
| Capacity | Cooling | kBtu/h | 7.6 | 9.6 | 12.1 | 15.1 | 18.2 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 |
| | Heating | kBtu/h | 8.6 | 10.6 | 13.6 | 17.0 | 20.0 |
| | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) |
| Performance | Air flow (H/M/L) | m³/h | 500/410/360 | 600/510/450 | 700/580/500 | 780/680/600 | 900/780/600 |
| | Sound pressure level(H/M/L) | dB(A) | 30/25/23 | 30/25/23 | 32/29/26 | 32/29/26 | 32/29/26 |
| Installation | External dimensions(W/D/H) | mm | 750/635/280 | 750/635/280 | 750/635/280 | 750/635/280 | 950/635/280 |
| | Shipping dimensions(W/D/H) | mm | 917/736/325 | 917/736/325 | 917/736/325 | 917/736/325 | 1117/736/325 |
| | Net/Shipping weight | kg | 29/34 | 29/34 | 29/34 | 29/34 | 34/39 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 9.52 |
| Drain pump | Refrigerant gas pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 15.88 |
| | Static Pressure(Standard/Max.) | Pa | 0-200 | 0-200 | 0-200 | 0-200 | 0-200 |
| | O-optional,S-standard,W-without | | S | S | S | S | S |
| | | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| Controller | Wired(Optional) | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |

Models are under development, data is pending.

| Model/Indoor unit | | AD282MQERA | AD302MQERA | AD362MQERA | AD422MQERA | AD482MQERA | AD542MQERA |
|-----------------------|---------------------------------|------------|------------------|------------------|------------------|------------------|------------------|
| Capacity | Cooling | kBtu/h | 27.3 | 30.0 | 36.0 | 42.0 | 48.0 |
| | | kW | 8 | 9.0 | 11.2 | 12.5 | 14.0 |
| | Heating | kBtu/h | 30.7 | 34.0 | 40.0 | 47.0 | 54.0 |
| | | kW | 9 | 10.0 | 12.5 | 14.0 | 16.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) | 1/220-240/50(60) |
| Performance | Air flow (H/M/L) | m³/h | 1100/1020/920 | 1500/1320/1220 | 1700/1510/1400 | 2000/1780/1620 | 2280/1920/1780 |
| | Sound pressure level(H/M/L) | dB(A) | 33/29/25 | 33/29/25 | 38/36/30 | 38/36/30 | 40/34/29 |
| Installation | External dimensions(W/D/H) | mm | 950/635/280 | 950/635/280 | 1370/740/280 | 1370/740/280 | 1370/740/280 |
| | Shipping dimensions(W/D/H) | mm | 1117/736/325 | 1117/736/325 | 1535/839/362 | 1535/839/362 | 1535/839/362 |
| | Net/Shipping weight | kg | 34/39 | 34/39 | 54/62 | 54/62 | 54/62 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 | 9.52 | 9.52 | 9.52 |
| Drain pump | Refrigerant gas pipe | mm | 15.88 | 15.88 | 15.88 | 15.88 | 15.88 |
| | Static Pressure(Standard/Max.) | Pa | 0-200 | 0-200 | 0-200 | 0-200 | 0-200 |
| | O-optional,S-standard,W-without | | S | S | S | S | S |
| | | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| Controller | Wired(Optional) | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |

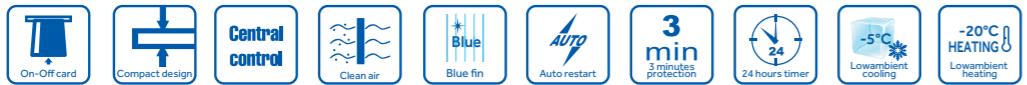
Models are under development, data is pending.

BUILT-IN FLOOR STANDING

- AE072MLERA
- AE092MLERA
- AE122MLERA
- AE162MLERA
- AE182MLERA
- AE242MLERA



- Require very little installation space: only 220mm
- Good solution for installation beneath a window
- High efficiency filter fitted as standard



| Model/Indoor unit | | AE072MLERA | AE092MLERA | AE122MLERA | AE162MLERA | AE182MLERA | AE242MLERA | |
|-----------------------|-----------------------------|-------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------|
| Capacity | Cooling | kBtu/h | 7.5 | 9.5 | 12.3 | 15.3 | 19.1 | 24.2 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Electrical Parameters | Heating | Btu/h | 8.5 | 10.9 | 13.6 | 17.1 | 21.5 | 27.3 |
| | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | |
| | Air flow (H) | m³/h | 750/650/550 | 750/650/550 | 750/650/550 | 950/830/720 | 950/830/720 | 950/830/720 |
| | Sound pressure level(H/M/L) | dB(A) | 38/35/33 | 38/35/33 | 40/37/35 | 40/37/35 | 42/39/36 | 42/39/36 |
| Installation | Sound power level(H/M/L) | dB(A) | 51/48/46 | 51/48/46 | 53/50/48 | 53/50/48 | 55/52/49 | 55/52/49 |
| | External dimensions(W/D/H) | mm | 1116/221/624 | 1116/221/624 | 1116/221/624 | 1116/221/624 | 1116/221/624 | 1116/221/624 |
| | Shipping dimensions(W/D/H) | mm | 1198/295/707 | 1198/295/707 | 1198/295/707 | 1198/295/707 | 1198/295/707 | 1198/295/707 |
| Controller | Net/Shipping weight | kg | 29/37 | 29/37 | 29/37 | 31/39 | 31/39 | 31/39 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 | 9.52 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 | 12.7 | 12.7 | 12.7 | 15.88 |
| Infrared (Optional) | Static Pressure | Pa | 0/30 | 0/30 | 0/30 | 0/30 | 0/30 | 0/30 |
| | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A | |
| | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B | |
| | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | |
| | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 | |
| | Infrared (Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD | |



CONSOLE TYPE

- AF052MAERA
- AF072MAERA
- AF092MAERA
- AF122MAERA
- AF182MAERA



YR-HD

- Air discharge through top and bottom
- Compact design & small space occupation
- Quiet operation



| Model/Indoor unit | | AF052MAERA | AF072MAERA | AF092MAERA | AF122MAERA | AF182MAERA | |
|-----------------------|-----------------------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 | 9.5 | 12.3 | 17.0 |
| | | kW | 1.5 | 2.2 | 2.8 | 3.6 | 5.0 |
| Electrical Parameters | Heating | Btu/h | 5.8 | 8.5 | 10.9 | 13.6 | 20.5 |
| | | kW | 1.7 | 2.5 | 3.2 | 4.0 | 6.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 420/330/240 | 460/370/280 | 460/370/280 | 520/430/340 | 580/490/400 |
| | Sound pressure level(H/M/L) | dB(A) | 42/38/35 | 43/39/36 | 43/39/36 | 43/39/36 | 48/46/42 |
| Installation | Sound power level(H/M/L) | dB(A) | 55/52/48 | 56/53/49 | 56/53/49 | 56/53/49 | 61/59/55 |
| | External dimensions(W/D/H) | mm | 720/255/640 | 720/255/640 | 720/255/640 | 720/255/640 | 720/255/640 |
| | Shipping dimensions(W/D/H) | mm | 784/305/720 | 784/305/720 | 784/305/720 | 784/305/720 | 784/305/720 |
| Controller | Net/Shipping weight | kg | 18/20 | 18/20 | 18/20 | 18/20 | 18/20 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 |
| Infrared (Optional) | Wired (Optional) | / | / | / | / | / | |
| | Infrared (Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |

EK HIGH WALL



- AS072MGERA
- AS092MGERA
- AS122MGERA
- AS162MGERA
- AS182MGERA
- AS242MGERA



- Stylish design & LED display
- Built in EEV, easy to installation
- Negative ion, vitamin C, and ESF filter optional



| Model/Indoor unit | | | AS072MGERA | AS092MGERA | AS122MGERA | AS162MGERA | AS182MGERA | AS242MGERA |
|-----------------------|-----------------------------|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 7.5 | 9.5 | 12.3 | 15.3 | 19.1 | 24.2 |
| | | kW | 2.2 | 2.8 | 3.6 | 4.5 | 5.6 | 7.1 |
| Performance | Heating | Btu/h | 8.5 | 10.9 | 13.6 | 17.1 | 21.5 | 27.3 |
| | | kW | 2.5 | 3.2 | 4.0 | 5.0 | 6.3 | 8.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 | 1/220-230/50/60 |
| Performance | Air flow (H) | m³/h | 600/462/415 | 600/462/415 | 600/462/415 | 600/462/415 | 800/640/576 | 800/640/576 |
| | Sound pressure level(H/M/L) | dB(A) | 37/33/31 | 37/34/31 | 41/36/33 | 41/36/33 | 43/39/34 | 48/39/37 |
| | Sound power level(H/M/L) | dB(A) | 48/44/42 | 48/45/42 | 52/47/44 | 52/47/44 | 54/50/45 | 59/50/48 |
| Installation | External dimensions(W/D/H) | mm | 938/187/265 | 938/187/265 | 938/187/265 | 938/187/265 | 1046/239/299 | 1046/239/299 |
| | Shipping dimensions(W/D/H) | mm | 1016/304/360 | 1016/304/360 | 1016/304/360 | 1016/304/360 | 1111/329/373 | 1111/329/373 |
| | Net/Shipping weight | kg | 10.9/13.1 | 10.9/13.1 | 10.9/13.1 | 10.9/13.1 | 13/16.5 | 13/16.5 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 12.7 | 12.7 | 12.7 | 12.7 | 15.88 | 15.88 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |



NEW



- Stylish design & LED display
- Built in EEV, easy to installation
- Negative ion, vitamin C, and ESF filter optional



| Model/Indoor unit | | | AS052MNERA AS052MFERA | AS072MNERA AS072MFERA | AS092MNERA AS092MFERA | AS122MNERA AS122MFERA | AS162MNERA AS162MFERA |
|-----------------------|-----------------------------|---------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Capacity | Cooling | kBtu/h | 5.1 | 7.5 | 9.5 | 12.3 | 15.3 |
| | | kW | 1.5 | 2.2 | 2.8 | 3.6 | 4.5 |
| Performance | Heating | Btu/h | 5.8 | 8.5 | 10.9 | 13.6 | 17.1 |
| | | kW | 1.7 | 2.5 | 3.2 | 4.0 | 5.0 |
| Electrical Parameters | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 | 1/220-240/50/60 | 1/220-240/50/60 | 1/220-240/50/60 |
| Performance | Air flow (H) | m³/h | 500/430/370 | 550/480/420 | 600/530/470 | 630/560/500 | 800/720/650 |
| | Sound pressure level(H/M/L) | dB(A) | 33/31/29 | 35/31/29 | 36/31/29 | 37/33/29 | 39/36/34 |
| | Sound power level(H/M/L) | dB(A) | 49/46/41 | 50/47/42 | 52/48/44 | 54/51/50 | 56/53/51 |
| Installation | External dimensions(W/D/H) | mm | 855/200/280 | 855/200/280 | 855/200/280 | 855/200/280 | 1115/243/336 |
| | Shipping dimensions(W/D/H) | mm | 954/279/355 | 954/279/355 | 954/279/355 | 954/279/355 | 1206/342/418 |
| | Net/Shipping weight | kg | 10.5/12.7 | 10.5/12.7 | 10.5/12.7 | 10.5/12.7 | 16.5/20.1 |
| | Refrigerant liquid pipe | mm | 6.35 | 6.35 | 6.35 | 6.35 | 6.35 |
| | Refrigerant gas pipe | mm | 9.52 | 9.52 | 9.52 | 12.7 | 12.7 |
| Controller | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B | YR-E16B | YR-E16B |
| | | / | YR-E17 | YR-E17 | YR-E17 | YR-E17 | YR-E17 |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | Infrared(Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD | YR-HD |

N HIGH WALL

NEW



- Stylish design & LED display
- Built in EEV, easy to installation
- Negative ion, vitamin C, and ESF filter optional



| Model/Indoor unit | | AS182MNERA AS182MFERA | AS242MNERA AS242MFERA | AS282MNERA | AS302MNERA |
|-----------------------|-----------------------------|--------------------------|--------------------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 19.1 | 24.2 | 27.3 |
| | | kW | 5.6 | 7.1 | 8.0 |
| Electrical Parameters | Heating | Btu/h | 21.5 | 27.3 | 30.7 |
| | | kW | 6.3 | 8.0 | 9.0 |
| Performance | Power supply | Ph/V/Hz | 1/220-240/50/60 | 1/220-240/50/60 | 1/220-240/50/60 |
| | Air flow (H) | m³/h | 920/800/720 | 1010/920/800 | 1500/1400/1300 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 40/39/35 | 44/40/36 | 48/43/40 |
| | Sound power level(H/M/L) | dB(A) | 57/54/52 | 58/56/54 | 60/57/53 |
| | External dimensions(W/D/H) | mm | 1115/243/336 | 1115/243/336 | 1316/270/365 |
| | Shipping dimensions(W/D/H) | mm | 1206/342/418 | 1206/342/418 | 1403/384/463 |
| Controller | Net/Shipping weight | kg | 16.5/20.1 | 16.5/20.1 | 21.5/26.0 |
| | Refrigerant liquid pipe | mm | 6.35 | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 12.7 | 15.88 | 15.88 |
| | Wired(Optional) | / | YR-E16A | YR-E16A | YR-E16A |
| | | / | YR-E16B | YR-E16B | YR-E16B |
| | | / | YR-E17 | YR-E17 | YR-E17 |
| | | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| Infrared(Optional) | / | YR-HD | YR-HD | YR-HD | YR-HD |





MRV INDOOR Ventilation

165 VENTILATION
Duct Fresh Air
HRV



DUCT FRESH AIR

AD482MPERA
AD722MPERA
AD962MPERA



- Variable static pressure 100~200Pa setting
- Install with other indoor units together, and introduce the outdoor fresh air into indoor



| Model/Indoor unit | | AD482MPERA | AD722MPERA | AD962MPERA |
|-----------------------|--------------------------------|-------------|-----------------|-----------------|
| Capacity | Cooling | kBtu/h | 47.7 | 77.1 |
| | | kW | 14 | 22.6 |
| Electrical Parameters | Heating | Btu/h | 30.4 | 51.8 |
| | | kW | 8.9 | 15.2 |
| Performance | Power supply | Ph/V/Hz | 1/220-230/50/60 | 1/220-230/50/60 |
| | Air flow (H) | m³/h | 1600/1460/1070 | 2300/1900/1320 |
| Installation | Sound pressure level(H/M/L) | dB(A) | 48/47/42 | 55/53/50 |
| | Sound power level(H/M/L) | dB(A) | 61/60/56 | 68/65/60 |
| | External dimensions(W/D/H) | mm | 1355/876/360 | 1725/876/360 |
| | Shipping dimensions(W/D/H) | mm | 1386/966/418 | 1830/990/530 |
| | Net/Shipping weight | kg | 62/77 | 92/100 |
| | Refrigerant liquid pipe | mm | 9.52 | 9.52 |
| | Refrigerant gas pipe | mm | 15.88 | 25.4 |
| | Static Pressure(Standard/Max.) | Pa | 100/185 | 100/200 |
| Controller | / | YR-E16A | YR-E16A | YR-E16A |
| | / | YR-E16B | YR-E16B | YR-E16B |
| | / | HW-BA116ABK | HW-BA116ABK | HW-BA116ABK |
| | / | YR-E17 | YR-E17 | YR-E17 |



- Be controlled with other indoor units together
- Efficient heat recovery air processing
- Heat recovery media element



| Model/Indoor unit | | ERV0150ANN | ERV0260ANN | ERV0500ANN | ERV0800ANN | ERV1000ANN |
|-------------------|----------------------------|------------|-----------------|-----------------|-----------------|-----------------|
| Electrical | 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 |
| | Rated power input | kW | 0.1 | 0.12 | 0.36 | 0.36 |
| | Rated current | A | 0.55 | 0.55 | 1.65 | 1.65 |
| Performance | Air flow (H) | m³/h | 150 | 260 | 500 | 800 |
| | Sound pressure level(H/L) | dB(A) | 44/43 | 44/43 | 57/55 | 57/55 |
| | Sound power level(H/L) | dB(A) | 55/54 | 55/54 | 68/66 | 68/66 |
| Installation | External dimensions(W/D/H) | mm | 940/685/276 | 940/685/276 | 1227/1115/387 | 1227/1115/387 |
| | Shipping dimensions(W/D/H) | mm | 1013/773/345 | 1013/773/345 | 1465/1213/430 | 1465/1213/430 |
| | Net/Shipping weight | kg | 28.7/31.2 | 28.7/31.2 | 85.5/90.6 | 85.5/90.6 |
| Controller | Static Pressure | Pa | 80 | 60 | 150 | 120 |
| | Wired (Standard) | / | YR-N07 | YR-N07 | YR-N07 | YR-N07 |



CONTROL SYSTEM

- | 171 Advanced Products
- | 177 Individual Controller
- | 181 Centralized Controller
- | 193 BMS

CONTROL SYSTEM STRUCTURE



CONTROL SYSTEM

User Friendly Management Control Solution

Integrated Management

Convenient and efficient, Haier controllers realize the co-management of Super match and MRV in one system, providing you more combination choices for better managing large or middle-sized buildings.

Building Management

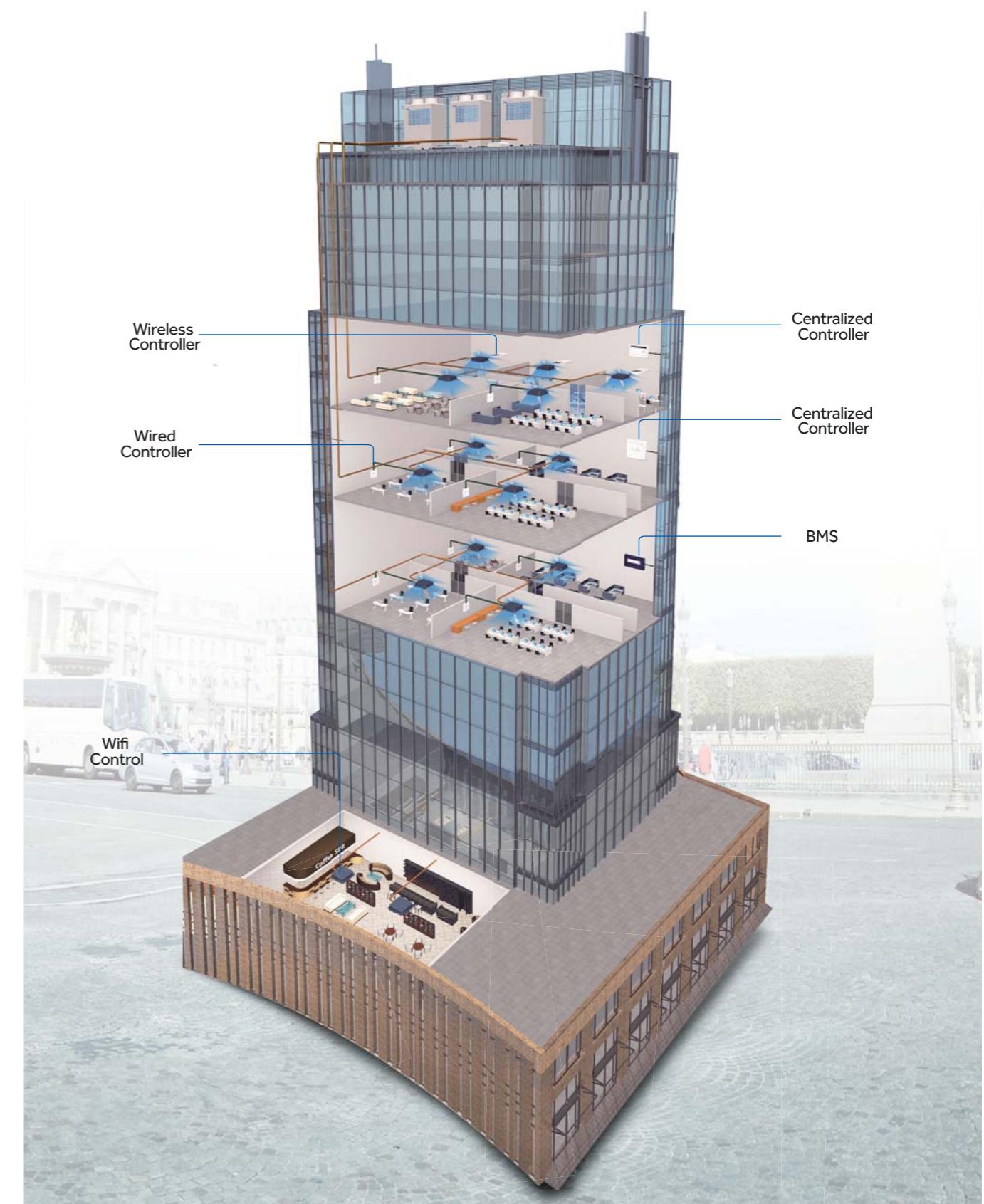
The excellent building management system provides a professional and reliable service for a better management of your air conditioning units.

Intelligent Management

"Haier Smart AC" provides an intelligent and personalized experience for your smart life.

Applications

Haier control products are designed to provide you a perfect solution for the small, medium or large commercial projects.



CONTROL SYSTEM

Advanced Products

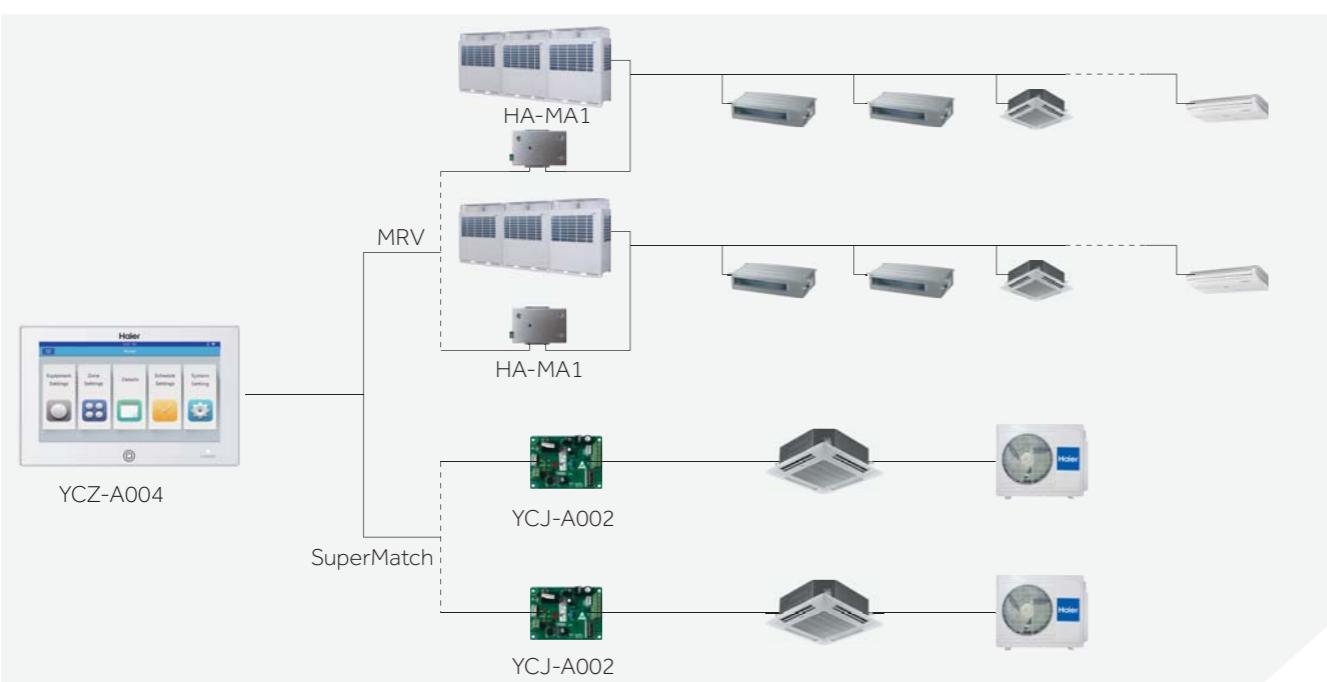
YCZ-A004 is a smart touch screen controller enabling remote management of up to 256 indoor units.

YCZ-A004

- Individual control, Group control & Central control (Max 256 indoor units)
- 7-inch TFT LCD touch screen with back light
- Schedule control
- Daylight saving
- Control mode setting (LIFO, Central, Lock)
- User editable control logic
- Indoor units' information edit
- Error display
- Fire alarm terminal
- HRV linkage control



YCZ-A004 System



Control and Monitoring

- Control and monitoring up to 256 indoor units.
- Operation control: mode, temperature, fan, swing.
- All ON/OFF
- Icon based indoor units display

Zone Management

- Zoning control the indoor units according to user's demands.
- Zone control: zone creation, edition, deletion

Cycle Monitoring

- Monitoring indoor unit running status

Energy Saving Function

- Operation mode lock
- Upper/lower temperature limit setting for different zones/ groups

Schedule Control

- Weekly/ Daily schedule control without setting number limitation.
- Free combination
- Schedule edit (add, edit, delete)
- Detailed operation setting

CONTROL SYSTEM

Advanced Products

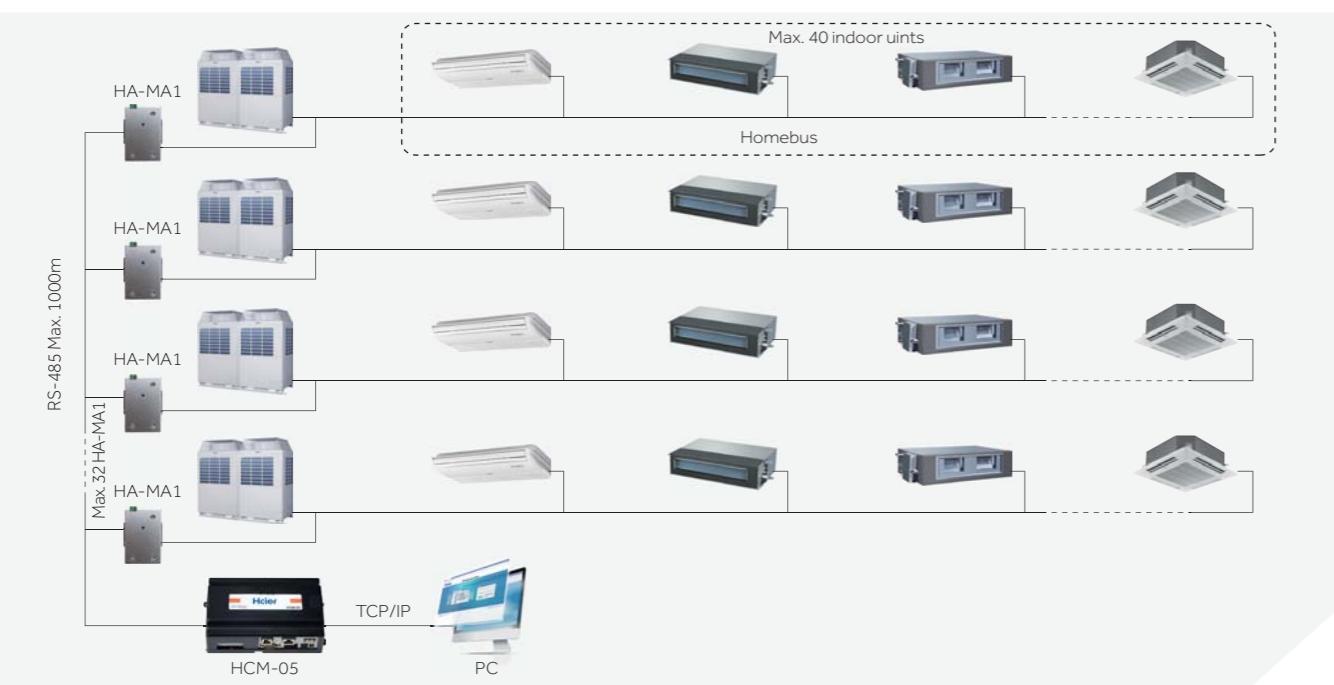
Powerful and integrated solution for medium or large commercial projects, enabling control of 250/500 indoor units.

HCM-05/HCM-05A

- Remote monitoring version
- Third party interface: BACnet ip
- Max. 250 indoor units can be controlled for HCM-05; and 500 indoor units for HCM-05A
- Max. 32 systems. Each system requires one HA-MA1
- Operation status setting & monitoring
- Schedule setting
- Multi user management with different authorized levels
- Power consumption report (must connect with IGU02)
- Operation and Error history log

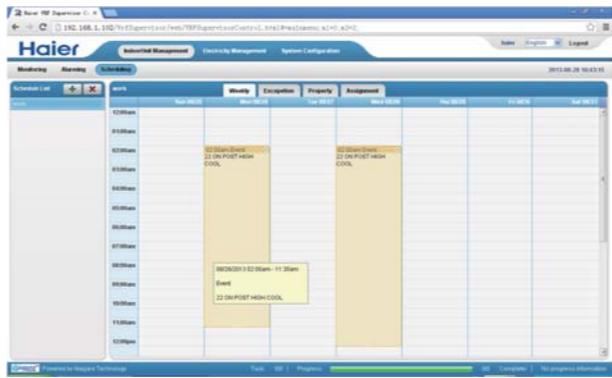


HCM-05 System



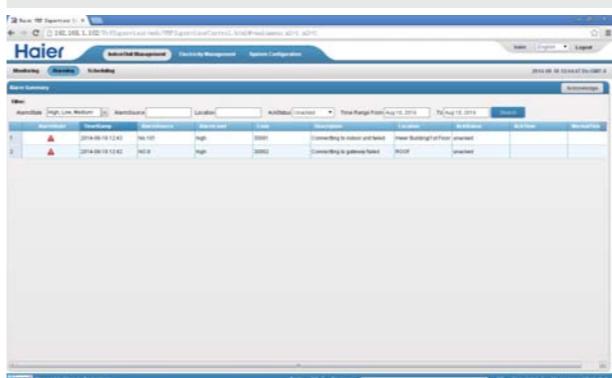
Control and Monitoring

- Control and monitoring up to 250/500 indoor units.
- Operation control: mode, temperature, fan, swing.
- Operation mode lock
- Control mode lock
- Icon based indoor units display



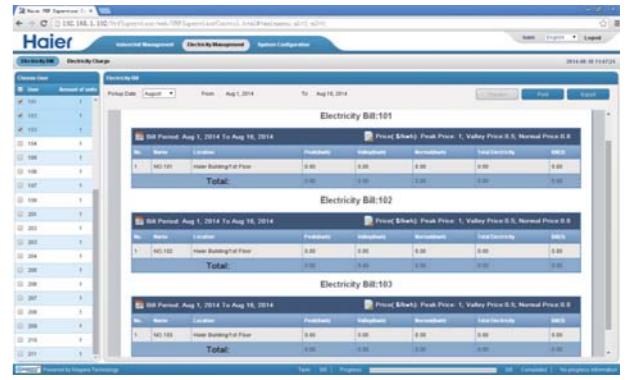
Schedule Control

- Graphical schedule setting
- Free combination
- Schedule edit (add, edit, delete)
- Exception day setting



Error Management

- Error history management
- Detailed error information query



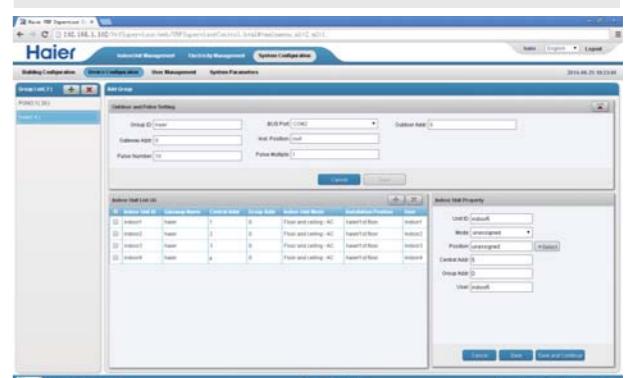
Power Distribution & Report

- Data query
- Electricity price setting for different time sections
- Electricity report preview, print and transmit
- Electricity charges prepaid & comparison



Zone Management

- Zoning control the indoor units according to user's demands
- Zone control: creation, edition, deletion



System Configuration

- Building configuration
- Device configuration
- User management
- System parameters

CONTROL SYSTEM

Individual Controller

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



YR-HBS01

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control
- Five grades fan speed reserved
- Individual blade control for Round-way Cassette
- Clock & Timer



YR-HD

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control
- Timer
- Clock



YL-HE

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control
- Cooling only



YR-E17

- On/Off, Mode, Fan speed, Temperature setting, Swing.
- Individual & Group control (Max 16 indoor units)
- Simple and Smart design, 86*86*13.05mm
- Touch button with back light
- Timer / Clock
- Individual blade control for Round-way Cassette
- Easy installation, user friendly



YR-E16A

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual & Group control (Max 16 indoor units)
- Large touch button
- Fahrenheit/ Celsius selectable; Sensitivity $\pm 0.5^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$)
- Individual blade control for Round-way Cassette
- Static pressure setting
- Error display in sequence of date



CONTROL SYSTEM

Individual Controller

YR-E16B

- Color screen
- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual & Group control (Max 16 indoor units)
- Fahrenheit/ Celsius selectable; Sensitivity $\pm 0.5^{\circ}\text{C}$ ($\pm 1^{\circ}\text{F}$)



HW-BA116ABK

- On/Off, Mode, Fan speed, Temperature setting, Swing
- Individual control
- Group control, Max. 16 units



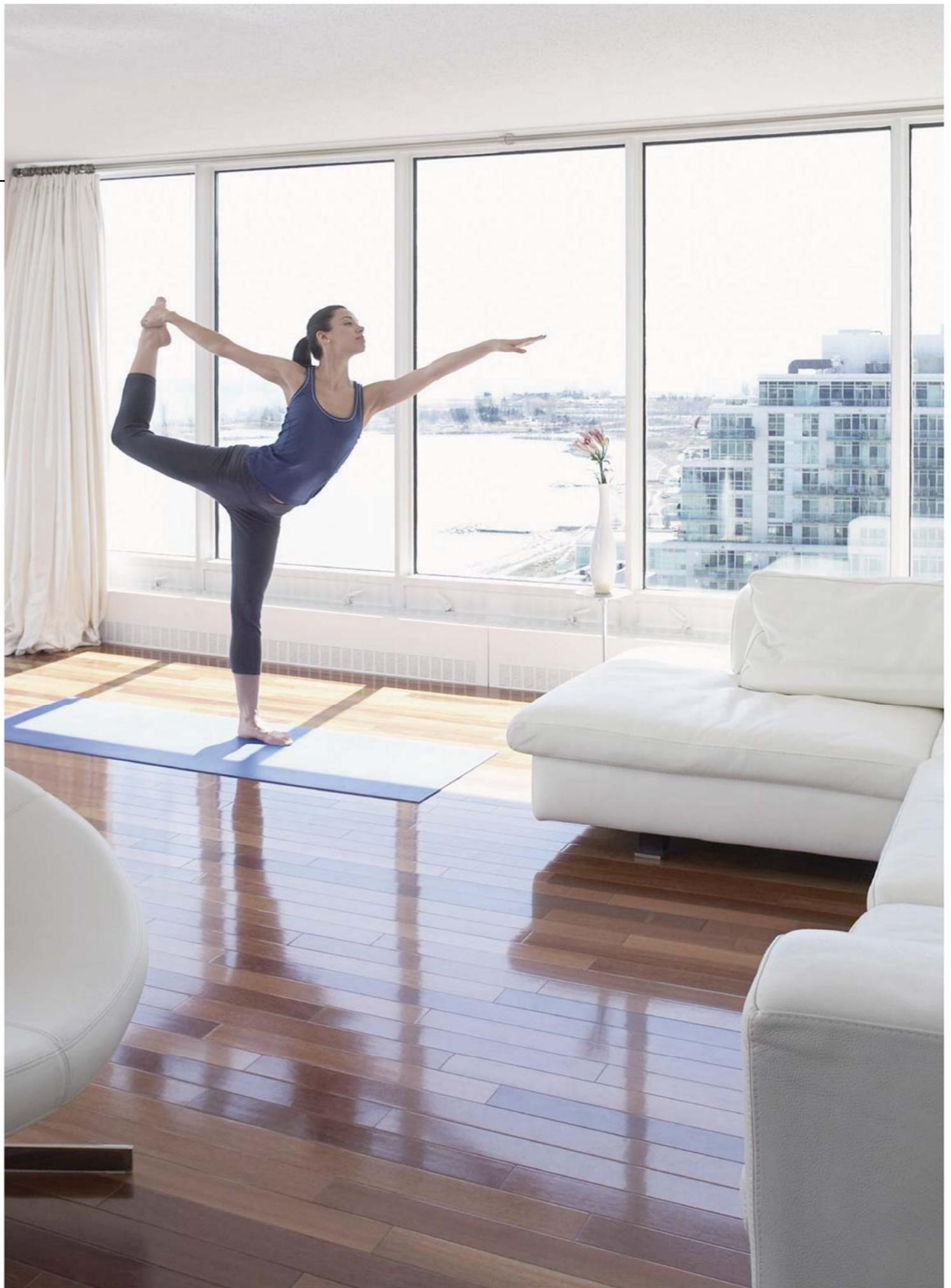
WIFI Module (KZW-W001)

- Remote control: On/Off, Mode, Fan speed, Temperature setting, Swing.
- Individual & Group control
- Cloud adaptation
- Weekly timer
- * A YCJ-A002 is required on some certain indoor units. Please check the user manual.
- Appliance on Smart Power and Super Match series
- Applied on MRV indoor unit series (under test)



RE-01/02

- Infrared signal receiver
- Realize the remote control of Duct type indoor unit and two-way cassette



CONTROL SYSTEM

Centralized Controller

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



YCZ-G001

YCZ-G001

- Individual control, Group control & Central control (Max 32 indoor units)
- Large touch key
- Weekly timer
- Unit name & Group name free setting. Four background available (mall, hotel, office, home)
- Error display
- * Must be used in combination with a HA-MA1 for each MRV system.
(Max. 16 sets)



YCZ-A004

YCZ-A004

- Individual control, Group control & Central control (Max 256 indoor units)
- 7-inch TFT LCD touch screen with back light
- Schedule control
- Indoor units' information edit
- * Must be used in combination with a HA-MA1 for each MRV system.
(Max. 32 sets)



CONTROL SYSTEM

BMS

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

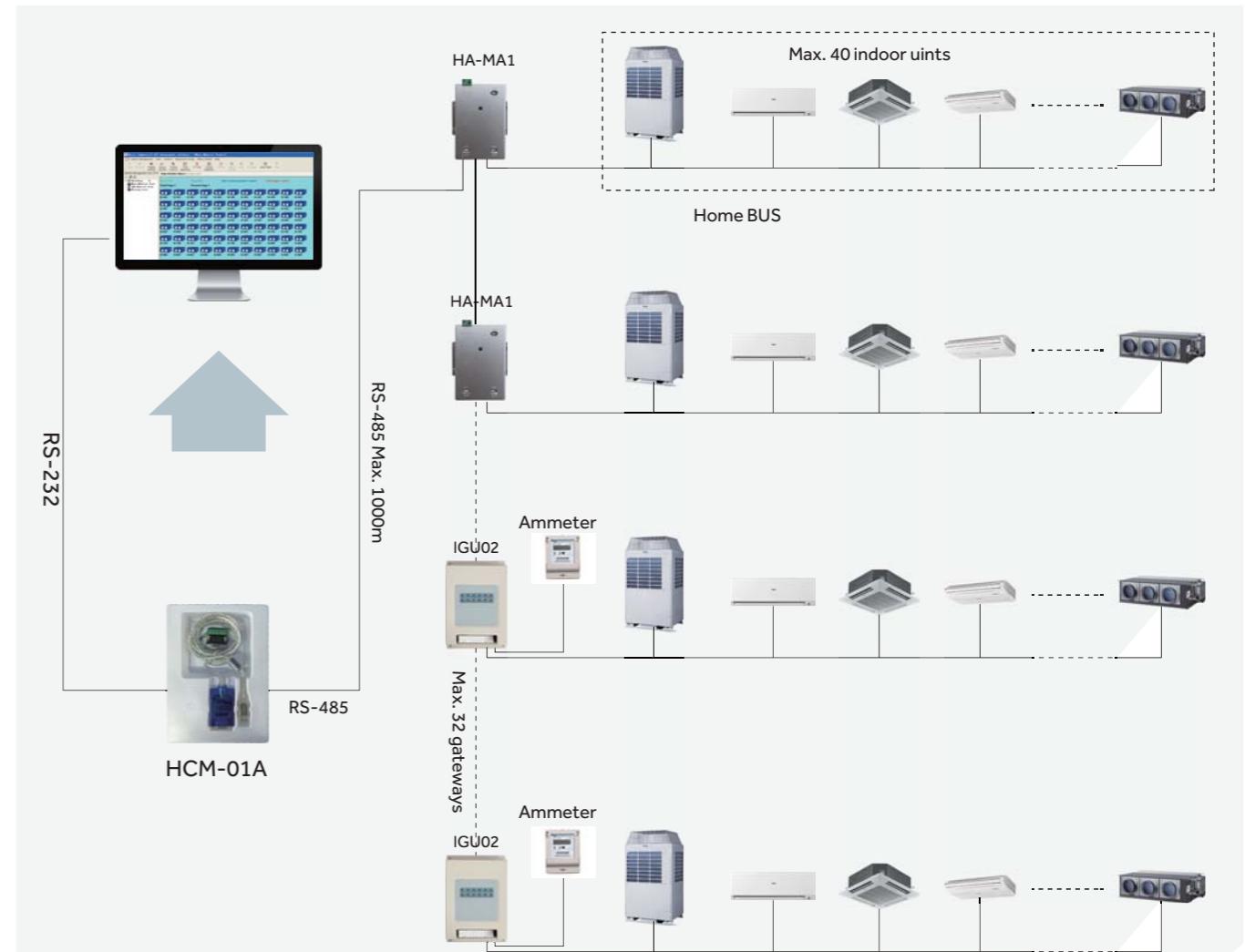


HCM-01A

- New interface
- Local control version; Convert RS-485 to USB
- Max. 512 indoor units can be controlled
- Max 32 systems/ outdoor units, each system/unit requires one adapter HA-MA1. If power consumption function is required, the adapter should be IGU02
- Operation status setting & monitoring.
- Schedule setting
- Operation and Error history log



HCM-01A System



*Each outdoor system requires one HA-MA1; For power consumption function, users should connect IGU02 and Ammeter.

CONTROL SYSTEM

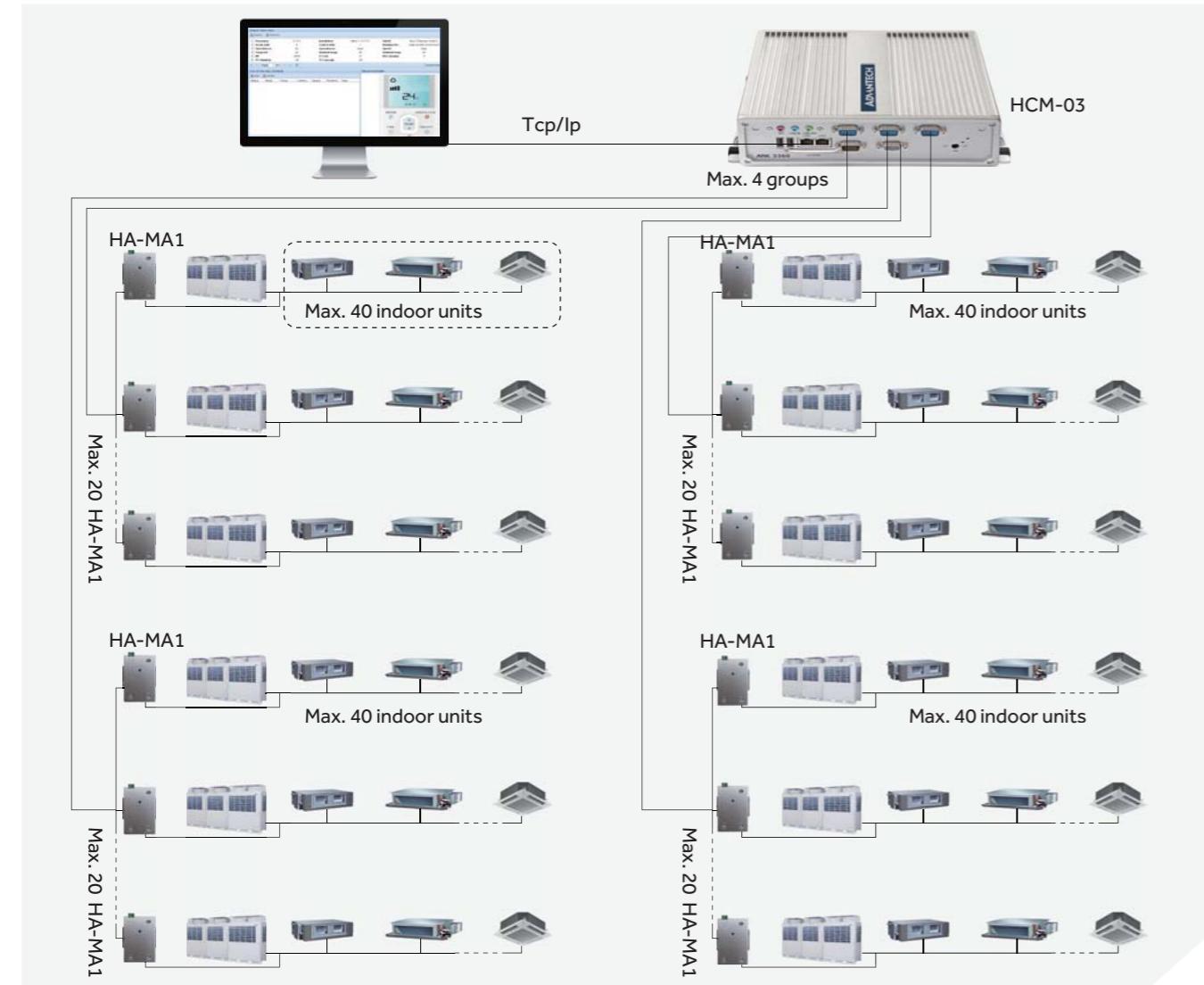
BMS

HCM-03

- Remote monitoring version; Third party interface: BACnet ip/ Modbus ip/ Modbus rtu
- Max. 1000 indoor units can be controlled
- Max. 4 groups. Each group can connect 20 systems. Each system requires one HA-MA1.
- Operation status setting & monitoring.
- Schedule setting (weekly, monthly)
- Multi user management with different authorized levels
- Operation and Error history log



HCM-03 System



HCM-05/HCM-05A

- Third party interface: BACnet ip
- Max. 250 indoor units can be controlled for HCM-05; and 500 indoor units for HCM-05A
- Max. 32 systems. Each system requires one HA-MA1.
- Multi user management with different authorized levels



CONTROL SYSTEM

Adapter

The adapters offer you an easy and convenient way to integrate air conditioners into various Building Management System; perfect for large commercial projects.



HA-MA164AD

- Modbus gateway
- Convert Homebus to Modbus rtu
- Max. 64 indoor units can be controlled by one gateway
- Each MRV system requires one HA-MA164AD when connecting with centralized controller or BMS system.

| Modbus model No. | No. of I.U. controllable | Installation Method | Compatible O.U. Type |
|------------------|--------------------------|---------------------|-----------------------------|
| HA-MA164AD | 64 | Outside the O.U. | Side and Top discharge O.U. |
| HA-MB164AD | 64 | Inside the O.U. | Top discharge O.U. |

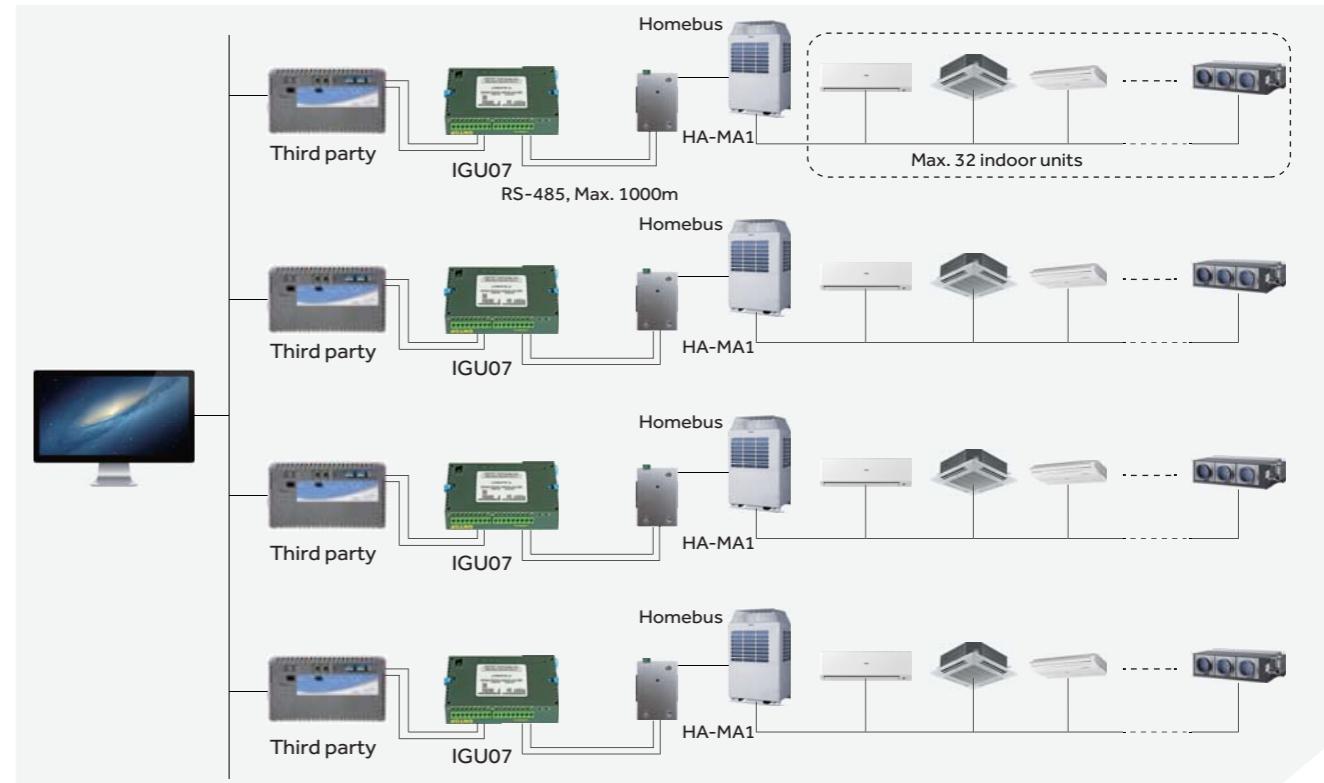


IGU07

- Lonworks gateway
- Convert Modbus to Lonworks
- Each system requires one IGU07 + HA-MA
- Max. 32 indoor units can be connected in one system
- External 24V DC power supply is needed by IGU07



LonWorks System



CONTROL SYSTEM

Adapter

HCM-04

- BACnet gateway, convert Modbus rtu to BACnet ip
- Max. 64 indoor units/ 2 systems can be controlled
- IGU02 is required for each outdoor system



HA-AC-KNX-8/16/64

- KNX gateway
- Convert Modbus to KNX
- Each system requires one KNX gateway + HA-MA1
- Max. 8/ 16/ 64 indoor units can be connected in one system



IGU02

- Power counting function. Electricity data collection, calculation, allocation and storage.
- Convert Homebus to RS-485
- Match with BMS (HCM-01A, HCM-03, HCM-05/05A). Each system requires one IGU02
- Match with BACnet gateway. Each system requires one IGU02
- Max. 40 indoor units can be connected by one gateway



YCJ-A002

- RS-485 protocol
- Double switch function
- Communicate with centralized controller or BMS
- Communicate with remote devices



YCJ-A003

- Error alarm module
- Applied to split series: Smart Power, Super Match, R410A ON/OFF, R22 ON/OFF



Controllers Match Table for MRV Indoor Units

| Outlook | Series | Model | YR-HD | YR-HBS01 | HW-BA116ABK | YR-E17 | YR-E16A | YR-E16B |
|---------|-------------------------------------|---------------|-------|----------|---------------------|---------------------|---------------------|---------------------|
| | | | | | | | | |
| | Round-way Cassette | AB**2MRERA | | ▲ | | ▲ | ▲ | ▲ |
| | Four-way Cassette | AB**2MCERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Mini Four-way Cassette | AB**2MCERA(M) | | ▲ | | ▲ | ▲ | ▲ |
| | Two-way Cassette | AB**2MBERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | One-way Cassette | AB**2MAERA | ▲ | | (under development) | (under development) | (under development) | (under development) |
| | Convertible | AC**2MCERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Convertible | AC**2MFERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct Slim Low ESP (DC) | AD**2MSERA(D) | ▲ | | | ▲ | ▲ | ▲ |
| | Duct Slim Low ESP (AC) | AD**2MSERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct Low ESP (0/20 Pa) | AD**2MLERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct Medium ESP (50/96 Pa) | AD**2MMERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct Medium ESP (80/120 Pa) | AD**2MNERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct High ESP (100/196 Pa) | AD**2MHERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct High ESP (Constant Air Volume) | AD**2MQERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | High Wall (EK platform) | AS**2MGERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | High Wall (N platform) | AS**2MNERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | High Wall (N platform) | AS**2MFERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Console | AF**2MAERA | ▲ | | | | | |
| | Built-in Floor Standing | AE**2MLERA | ▲ | | ▲ | ▲ | ▲ | ▲ |
| | Duct Fresh Air | AD**2MPERA | | | ▲ | ▲ | ▲ | ▲ |
| | HRV | ERV****ANN | | | ▲ | Linkage control | Linkage control | Linkage control |

▲ Controllers can match with the indoor unit

ACCESSORIES

| Name | Design | Model | Functions | For what units |
|---------------|---|------------|--|--|
| Gather pipe |  | HZG-20A | Refrigerant gathering | 2 outdoor units |
| Gather pipe |  | HZG-30A | Refrigerant gathering | 3 outdoor units |
| Gather pipe |  | HZG-20B | Refrigerant gathering | MRV IV-C, 2 outdoor units |
| Gather pipe |  | HZG-30B | Refrigerant gathering | MRV IV-C, 3 outdoor units |
| Gather pipe |  | HZG-R20A | Refrigerant gathering for heat recovery MRV | 2 outdoor units |
| Gather pipe |  | HZG-R30A | Refrigerant gathering for heat recovery MRV | 3 outdoor units |
| Manifold pipe |  | FQG-B335A | Refrigerant distribution for heat pump MRV | Total indoor units capacity less than 33,500W |
| Manifold pipe |  | FQG-B506A | Refrigerant distribution for heat pump MRV | Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W |
| Manifold pipe |  | FQG-B730A | Refrigerant distribution for heat pump MRV | Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W |
| Manifold pipe |  | FQG-B1350A | Refrigerant distribution for heat pump MRV | Total indoor units capacity bigger than 73,000W |
| Manifold pipe |  | FQG-R335A | Refrigerant distribution for heat recovery MRV | Total indoor units capacity less than 33,500W |
| Manifold pipe |  | FQG-R506A | Refrigerant distribution for heat recovery MRV | Total indoor units capacity less than 50,600W, but equal or bigger than 33,500W |
| Manifold pipe |  | FQG-R730A | Refrigerant distribution for heat recovery MRV | Total indoor units capacity less than 73,000W, but equal or bigger than 50,600W |
| Manifold pipe |  | FQG-R1350A | Refrigerant distribution for heat recovery MRV | Total indoor units capacity less than 135,000W, but equal or bigger than 73,000W |
| Manifold pipe |  | FQG-B2040A | Refrigerant distribution for MRV IV-C | Total indoor capacity >135,000 W |
| VP box |  | VP1-112A | Vavle pipe box | MRV III-RC(heat recovery) |
| VP box |  | VP1-180A | Vavle pipe box | MRV III-RC(heat recovery) |
| VP box |  | VP1-280A | Vavle pipe box | MRV III-RC(heat recovery) |

REFERENCE PROJECTS

| 191 Reference Projects

REFERENCE PROJECTS

Country: Algeria

Project Name: Hotel-amillia bab ezzouar
Product Series: MRVII-C



Country: Algeria

Project Name: Hotel-Akbou Bedjaia
Product Series: MRVII-C&MRVIII-C



Country: Algeria

Project Name: AGB Bank
Product Series: MRVII-C



Country: Algeria

Project Name: Al Qods
Product Series: MRVII



Country: Algeria

Project Name: Invest Inox Office
Product Series: MRVII



REFERENCE PROJECTS

Country: Algeria

Project Name: Mole Fix Office
Product Series: MRVII-C



Country: Algeria

Project Name: PPT Tipaza Office
Product Series: MRVII-C



Country: Algeria

Project Name: Ofarco Office
Product Series: MRVII-S



Country: Algeria

Project Name: Telecom Com Office
Product Series: MRVII-C



REFERENCE PROJECTS

Country: Algeria

Project Name: Mobil Art

Product Series: MRV-S&MRVIII



Country: Algeria

Project Name: Tapis office and showroom

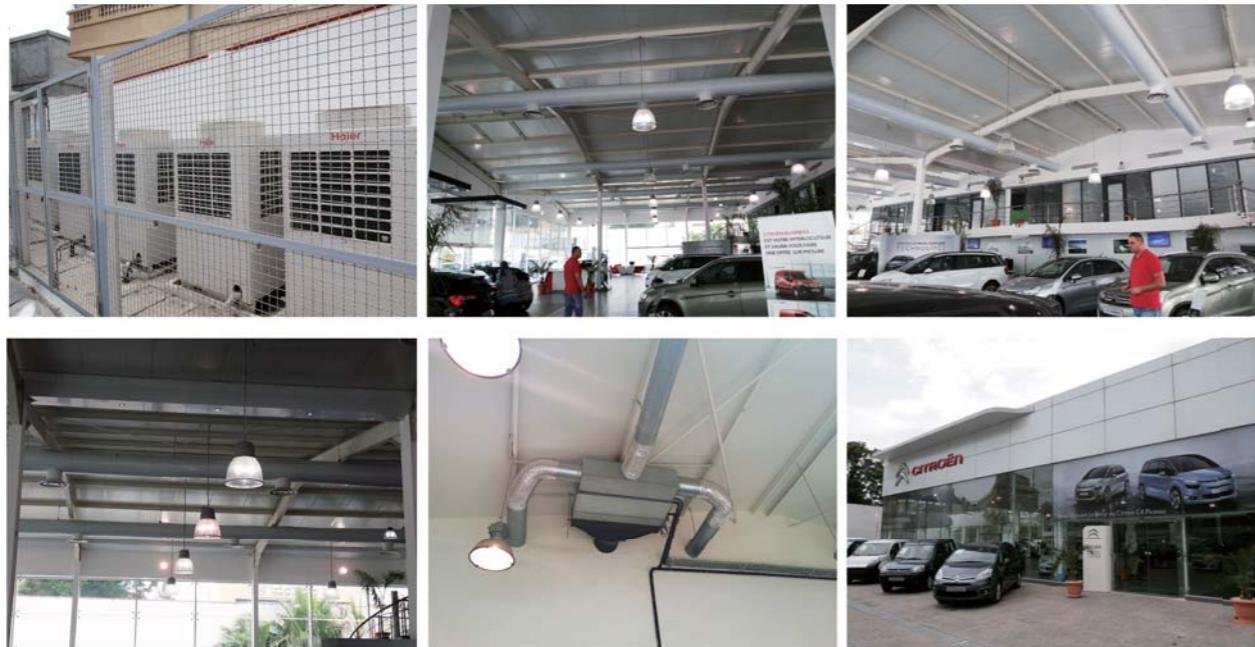
Product Series: MRVII-C



REFERENCE PROJECTS

Country: Algeria

Project Name: Tapis office and showroom
Product Series: MRV-C



Country: Angola

Project Name: Cabinda Stadium
Product Series: MRVII-C



Country: Bulgaria

Project Name: Varna Tower
Product Series: MRVII-C



REFERENCE PROJECTS

Country: Czech Republic

Project name: Geosan Group
Product series: MRVIII-C



Country: Czech Republic

Project name: National digital archiv
Product series: MRVII-C



Country: Czech Republic

Project name: ZZN Polabi
Product series: MRVIII-C



Country: Cyprus

Project Name: Avlogyros
Product Series: MRVII-C2



Project Name: Church at Ayios Theodoros
Product Series: MRVII-C2



Project Name: Coop Kato Varosion
Product Series: MRV-C



REFERENCE PROJECTS

Country: Cyprus

Project Name: House at Pyla Near CTO
Product Series: MRVII-C2



Project Name: Viva Souvenir Shop Ayia Napa
Product Series: MRVII-C2



Project Name: Ydroyios Insurance
Product Series: MRV-C



Country: Hungary

Project Name: National Institute
Product Series: MRVII-C



Project Name: Cordia City Garden Budapest
Product Series: MRVII-C



Project Name: DEC Oncology Medical Center, Debrecen
Product Series: MRVII-C



REFERENCE PROJECTS

Country: Indonesia

Project Name: Swiss-bel Hotel In Jambi
Product Series: MRVIII-C+Light commercial



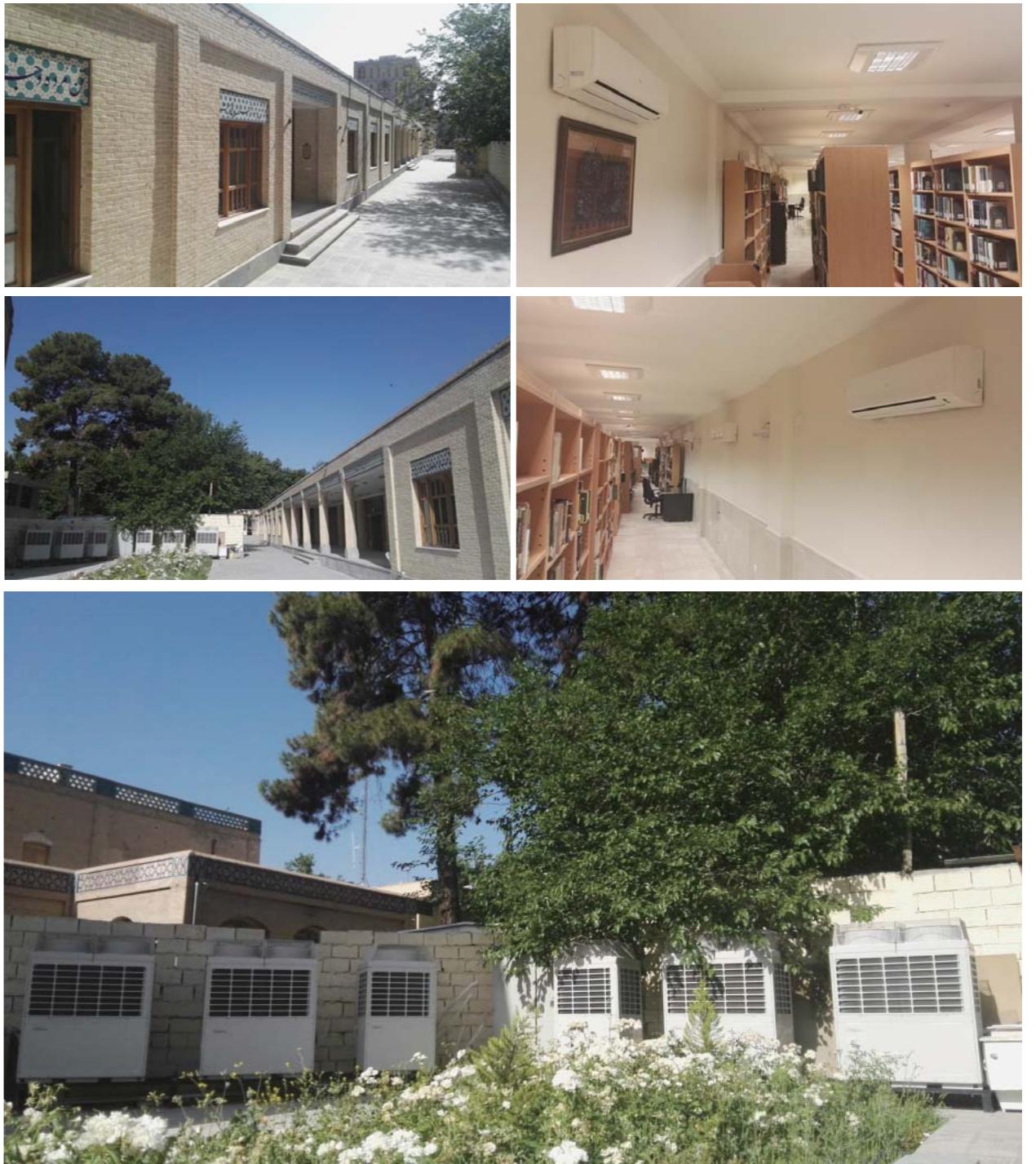
Country: Indonesia

Project Name: Swiss-bel Hotel In Bali
Product Series: MRVIII-C+Light commercial+ RAC



Country: Iran

Project Name: Isfahan library
Product Series: MRVIII-C



REFERENCE PROJECTS

Country: Italy

Project Name: Venpa, Brescia
Product Series: MRVII-C



Project Name: Restaurant Hotel Costrz
Product Series: MRVII-C



Project Name: Autosalone(BS)
Product Series: MRVII-C



Country: Iran

Project Name: Jewelry Factory, Mr. Anaraki
Product Series: MRV-III



Country: Iran

Project Name: Ebraimi's Carpet gallery
Product Series: MRV-III



Country: Iran

Project Name: Takbiri's House
Product Series: MRVII-C2



REFERENCE PROJECTS

Country: Laos

Project Name: Lao President Palace
Product Series: MRVII-C



Country: Mauritius

Project Name: Eben Skies
Product Series: MRVII-C



Country: Mauritius

Project Name: Precigraph
Product Series: MRVII-C



Country: Mauritius

Project Name: EBENE SKIES-port Louis
Product Series: MRVII-C



Country: Mauritius

Project Name: Mr. Bricolage
Product Series: MRVIII-C & HCM-03



REFERENCE PROJECTS

Country: Myanmar

Project Name: City Hospital
Product Series: MRV III



Country: Nigeria

Project Name: Takyi Plaza
Product Series: MRVII-C



Country: Pakistan

Project Name: BNU University
Product Series: MRVIII



Country: Pakistan

Project Name: Barat Ghar
Product Series: MRVII-C



REFERENCE PROJECTS

Country: Pakistan

Project Name: Shapes Health club
Product Series: MRVIII



Country: Pakistan

Project Name: Such TV
Product Series: MRVIII



Country: Pakistan

Project Name: CNS Head Office
Product Series: MRVIII-C



Country: Pakistan

Project Name: Interloop
Product Series: MRVIII-C



Country: Pakistan

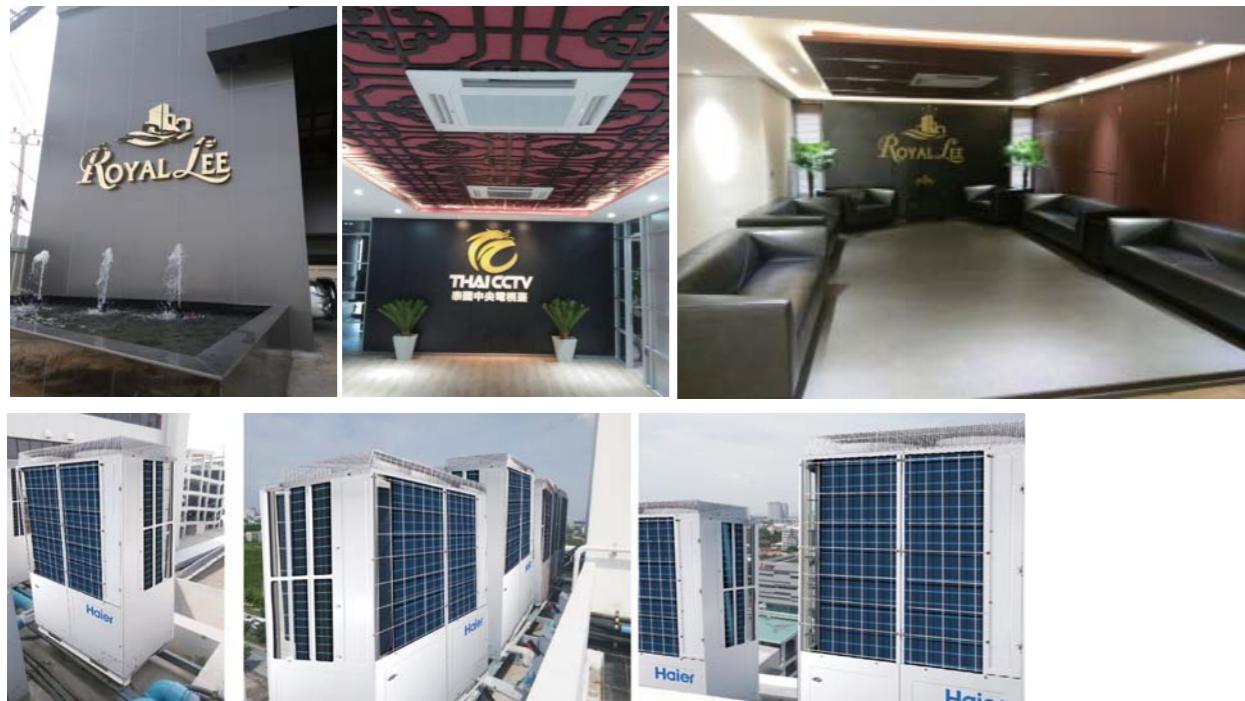
Project Name: Centaurus
Product Series: MRVIII-C



REFERENCE PROJECTS

Country: Thailand

Project Name: Royal Lee Dimension
Product Series:MRV IV



Country: Thailand

Project Name: Wandee Culinary Cook School
Product Series:MRV III-C PLUS



Country: Vietnam

Project Name: Nissan Centre
Product Series:MRVII-C



Haier Commercial Air Conditioning

Haier