Branch offices

Branches	Contact Number
Gurgaon	0124-4881234
Chandigarh	0172-4938888
Jaipur	0141-4048800
Lucknow	0522-278 9009
Kolkata	033-33206213
Mumbai	022-66772000
Bengaluru	080-66595124
Chennai	044-30308282
Cochin	0484 - 4477123
Indore	0731-402 8282
Guwahati	0361-711 1234
Pune	020- 6605 1500
Ahmedabad	079-67779999
Hyderabad	040-3030 8282

Contact us

WhatsApp

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20th-24th Floor, Two Horizon Center, Golf Course Road, Sector - 43,
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Visit: **www.samsung.com/in/business/air-conditioners/**
Email: **sales.enquiry@samsung.com**

Samsung Service Centre:
Call Centre Number: **1800 30 7267864; 1800 5 7267864**
Email: **b2b.care@samsung.com**

Samsung System Air Conditioner

SAMSUNG

DVM S2 | WindFree™

Digital variable multi

Compatible

Artificial Intelligence Enabled VRF System

About Samsung

Contents

Interbrand Best Global Brands 2022

5th

The Best Global Brands

Interbrand is a global brand consultancy and publisher of the highly influential annual Best Global Brands.

The FutureBrand Index 2020

3rd

The 100 Largest Global Market Value Companies

The FutureBrand Index is a global brand perception study of the 'Global Top 100 Companies by market value' according to PricewaterhouseCoopers (PwC), a global accounting consulting firm.

Forbes

8th

The World's Most Valuable Brands 2020

Every year, Forbes announces its top 100 global brands based on the profits and industry status of more than 200 companies worldwide.

We create new possibilities to fulfill the needs of people across the globe.

We are proud to say that Samsung is recognised as one of the world's leading intuitive product design companies, and one of the world's top electronics producer. Samsung system air conditioners have been designed with the same passion for innovation and quality that has helped make Samsung one of Interbrand's 2022 Best Global Brands.

As such, Samsung system air conditioners are held in high esteem around the world and have been selected for a multitude of applications, including shopping centres, airports, stadiums and hotels. And in constant pursuit of excellence, we continue to invest heavily in research and development, performance testing and quality control to deliver superior air conditioning systems.

309,630
Employees

7
Design centres

74
Countries

37
Production sites

216
Global bases

15
Regional offices

37
R&D centres

52
Sales offices

Why Samsung

We've been expanding our cutting-edge product domain.

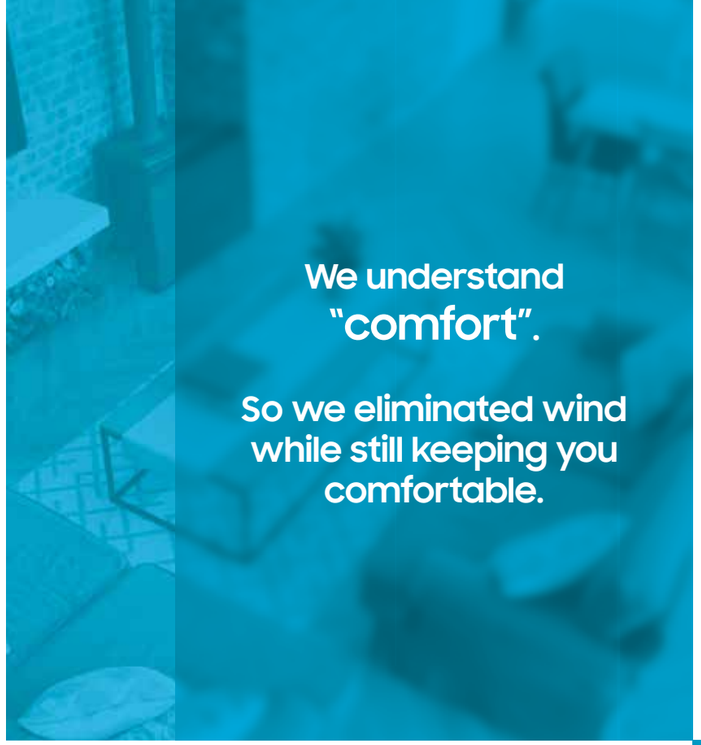
Samsung is synonymous with pushing back boundaries, and we are revolutionising the world of air care. Our award-winning air conditioning systems are recognised worldwide for their stunning designs, advanced performance and outstanding efficiency.

Using groundbreaking technology, we have developed an extensive range of innovative climate systems. So, we can provide the best solution to fit your needs, whether it is for your home or for a business.

Our **Wind**Free™ technology spreads fresh air uniformly without unpleasant cold drafts. To ensure maximum comfort throughout an entire room, the bladeless 360 Cassette features booster fan technology and a cutting-edge circular design. And Samsung's highly efficient Digital Inverter technology cools you quickly without wasting energy. You can even stay comfortably warm when it's freezing outside, as our Flash Injection technology maintains a reliable performance even at temperatures as low as -25°C.

However, all of this advanced technology doesn't make them hard to use. In fact, it is the complete opposite. You can control your air conditioner really easily, even when you're on the go. As well as offering standard remote controls with a bright colour display and intuitive interface, you can also control the air conditioner anytime and anywhere using an App on your smartphone.

As a result, Samsung has received a host of prestigious industry awards. The 360 Cassette was selected as a finalist in the iF Product Design Award 2016 and the International Design Excellence Awards (IDEA) 2016. In addition, Samsung's Digital Inverter 8-Pole was recognised for its product excellence in the 40th Mostra Convegno Expocomfort's "Beyond Class A" initiative. And our Wallmount climate system received the "Eco-design and Sustainable Technologies" CES award in 2015.



We understand
"comfort".

So we eliminated wind while still keeping you comfortable.

Tens of thousands of micro holes that disperse air gently

WindFree™ **Air Conditioners**

- 1 way, 4 way and High Wall

A bladeless circular design that distributes air farther and evenly

360 Cassette

- Innovative Circular Design
- Omni-directional Outlet
- Bladeless Design with a Booster Fan

The DVM S2. Built on revolution.

DVM S2

- Artificial Intelligence Enabled.
- 34HP Large Capacity in a Single Unit
- Larger Heat Exchanger Area#

Compact design with exceptional performance

DVM S Eco

- Compact Size
- Up to 14HP Large Capacity
- Flexible Installation with 4-way Piping

Modular flexibility to expand on demand

DVM Chiller

- Modular Design with a Small Footprint
- Flash Injection Technology
- Expandable to up to 320ton

We understand
"business".

So we provide
the **ultimate flexibility**
to exquisitely meet
every need.

Based on Samsung's measurements, comparing 33.6kW models of a DVM S2 and a conventional outdoor unit.

Continuous innovation

Samsung has been manufacturing air conditioners and challenging the status quo of the industry for over 40 years. Thanks to cutting-edge innovations in design and technology, we will continue to aspire to be a leader in the cooling and heating industry in the years to come.

1974
Began WAC Production

1975
Began RAC Production

1985
Began Inverter RAC / FAC / PAC Production

1992
Began SAC Production

2000
Launched DVM Water

2007
Launched DVM+4 (22HP, Max 88HP)

2012
Launched Wi-Fi Control RAC (Jungfrau)

2013
Launched Triangle Design RAC (A3050)

2015
Introduced innovative 360 Cassette 30HP DVM

2017
Launched **Wind**Free™

2018
Extended **Wind**Free™ With Cassette Range

2020
WindFree™ technology with PM 1.0 filter

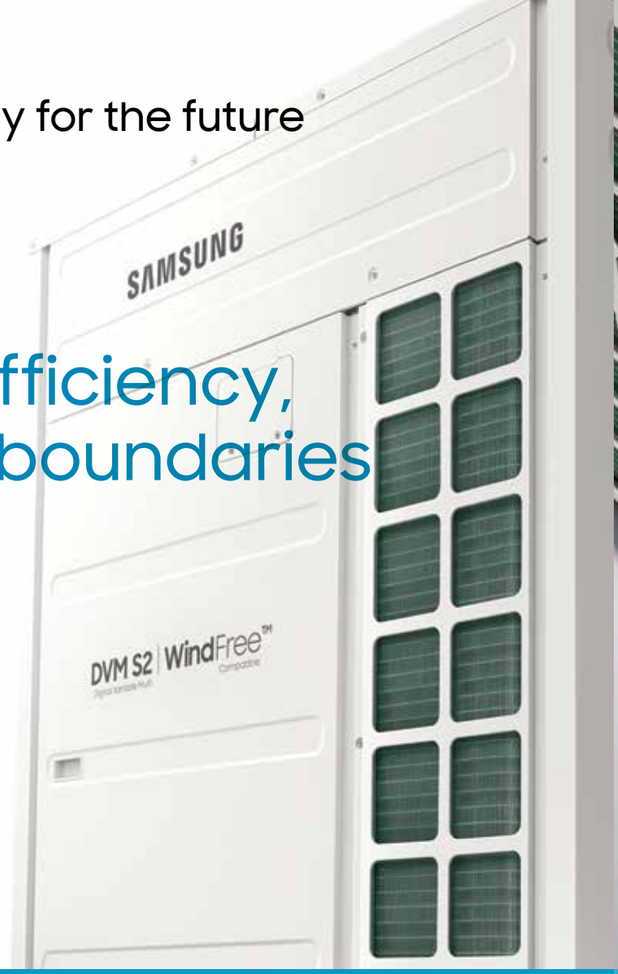
2022
Artificial Intelligence Enabled. Large capacity up to 34HP (Single ODU unit.)

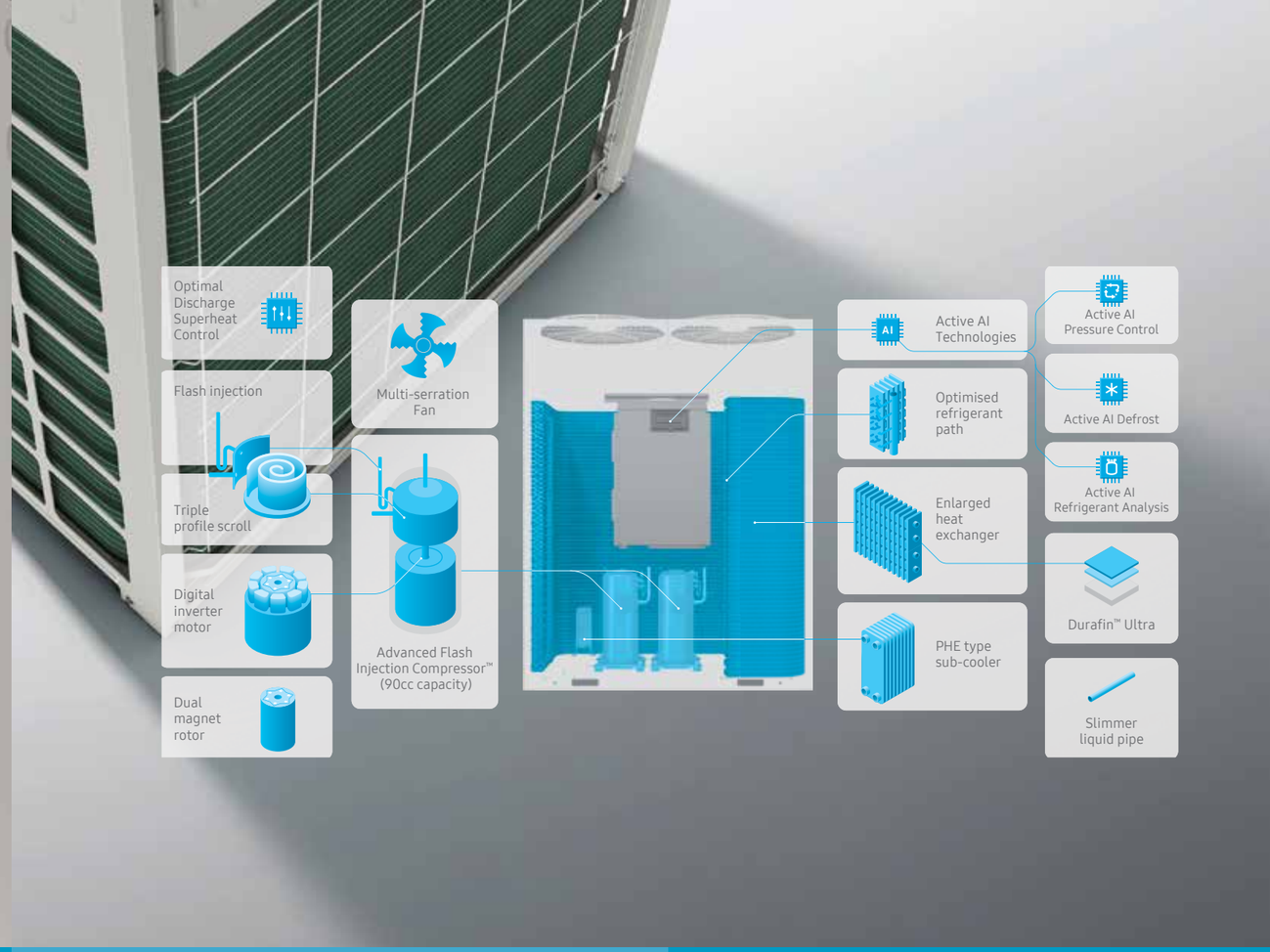
Image simulated for representational purposes only.

Image simulated for representational purposes only.

The pinnacle of efficiency, pushes back the boundaries

In line with Samsung's unwavering commitment to being an organisation focussed on sustainability, the DVM S2's radical new design incorporates a range of technologies that minimise its impact on the environment (as explained in the subsequent pages). As well as transferring heat much more efficiently, so it consumes much less energy, it also intelligently optimises its cooling performance to reduce any waste. In addition, its improved sub-cooling rate and Advanced Flash Injection significantly reduce the amount of refrigerant required, making it much more environmentally friendly and reducing harmful CO_2 emissions.





Maximised efficiency

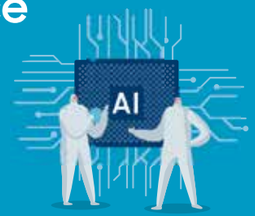
minimises waste of energy

The DVM S2 has been redesigned to cut the cost of cooling with energy-efficient technologies. The enlarged Heat Exchanger has a much greater transfer area to exchange heat faster. An optimised refrigerant path also matches the air flow speed to improve the transfer of heat. An aerodynamic Multi-serration Fan generates more air flow while consuming less electricity as it minimises air turbulence. And a 7th generation insulated gate bipolar transistor (IGBT), which switches current and frequency to suit the system, reduces the loss of conducted electricity.

Image simulated, for representational purposes only.

Artificial intelligence

controls more efficiently



The DVM S2 optimises its cooling performance automatically, based on a learning and optimising algorithm about the installation conditions and usage patterns. Active AI Pressure Control intelligently adjusts the refrigerant condensing pressure and evaporating pressure, so it cools faster and reduces energy usage. Active AI Defrost ensures it defrosts more precisely, so it increases the continuous heating time significantly. And Active AI Refrigerant Analysis proactively monitors and helps maintain the optimum level of refrigerant.

Less refrigerant

reduces environmental risks

The DVM S2 saves money and helps protect the environment with its efficient and flexible piping system. It is equipped with a high-performance sub-cooler that improves the sub-cooling rate of refrigerant. Its slimmer liquid pipe also means it requires 25% less refrigerant compared to a normal pipe, on average. So it reduces the costs of installation and maintenance and also provides added flexibility in designing the entire system. In addition, by using less refrigerant, it is much more environmentally friendly.

Image simulated for representational purposes only.

Superior heating performance

replaces fossil fuel

The DVM S2 introduces a new era of eco-friendly performance and efficiency. It features Advanced Flash Injection technology with a new Triple Profile Wrap and Optimal Discharge Superheat (DSH) Control. The improved strength of its Flash Injection, which delivers superior heating in frozen conditions, means that the capacity is now much larger (90cc). So it is powerful enough to replace conventional heating methods that use fossil fuel. And its highly efficient Optimal DSH Control saves even more energy, which helps to reduce CO_2 emission.

Rebuilt on all-new innovations. The ultimate in efficiency and reliability.

True innovation is a rare thing - so the multiple new technologies in the Samsung DVM S2 outdoor air conditioning unit make it truly unique. It has been totally redesigned to deliver outstandingly consistent comfort in a wide range of locations, as well exceptional energy efficiency. Its flexibility is equally matched by its reliability, as it can operate effectively in diverse environmental conditions, including the most extreme temperatures. It also includes a host of new and intelligent management features that make its installation and maintenance much simpler and more cost-effective. Quite simply it redefines the art of comfort.

Image simulated, for representational purposes only.

Cost saving

- Enlarged heat exchanger
- 90cc chamber with triple profile scroll
- Optimised refrigerant path
- 9 release valves
- High-efficiency IGBT
- Active AI Pressure Control

Reliability

- Dual heat sink
- Kammtail motor bracket
- Upgraded base design
- Durafin™ Ultra
- Robust frame
- Galvanized iron steel plate (GI)

Comfort

- Advanced Flash Injection Compressor™
- Active AI Pressure Control
- Flash injection
- Multi-serration fan
- Optimised DSH control
- Quiet operation
- Triple profile scroll
- Diffuser type discharge plenum
- Active AI Defrost
- Kammtail motor bracket
- Rotational defrost operation
- Enlarged heat exchanger

Flexibility

- Wider operating temp. range
- High elevation with long piping
- Active frequency drive 10Hz
- Optimised ref. distribution control
- Compact design
- Up to 110Pa external static pressure

Convenience

- Slimmer liquid pipe
- Emergency operation
- On-Device Inverter Check™
- Center point indicator of weight
- Active AI Refrigerant Analysis
- Simplified cover with handle

Cost saving

Relentless innovation for the ultimate in energy efficiency

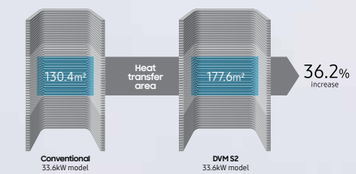
Air conditioning systems are a major consumer of energy, and account for about 30%* of the total energy used in a building. So, energy efficiency is usually the most important factor that consultants and designers consider when deciding which air conditioning system to purchase and install in a building.

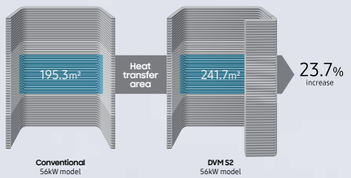
The Samsung VRF systems are best known for its energy efficiency. And now the new DVM S2 outdoor unit is pushing the boundaries even further. It incorporates many new and unique technologies that deliver the next level of energy efficiency, along with a superior performance.

Transfers more energy with an enlarged contact area

Enlarged heat exchanger

The Samsung DVM S2 has an enlarged heat exchanger that is capable of transferring much more heat at once. Its heat transfer area is up to 36.2% larger# to quickly exchange heat. As a result, it consumes less energy to achieve the same cooling and heating performance.





* Varies by building, location, operating patterns and various other factors.

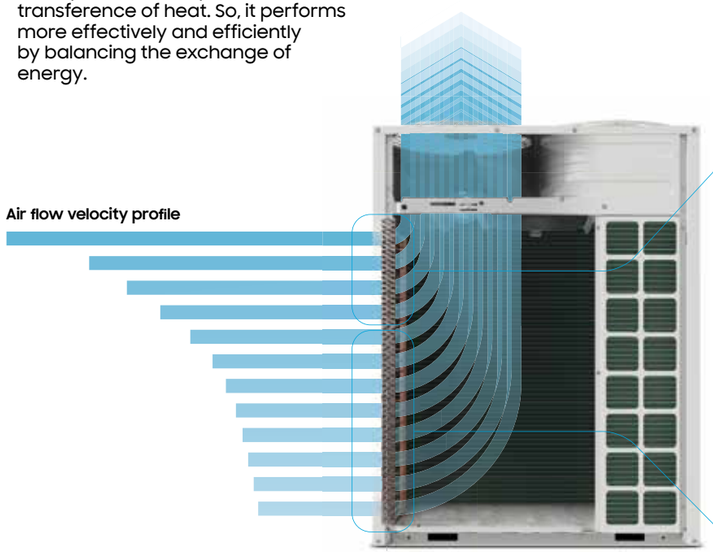
#Based on Samsung's measurements, comparing 33.6kW models of a DVM S2 and a conventional outdoor unit.
Image simulated for representational purposes only.

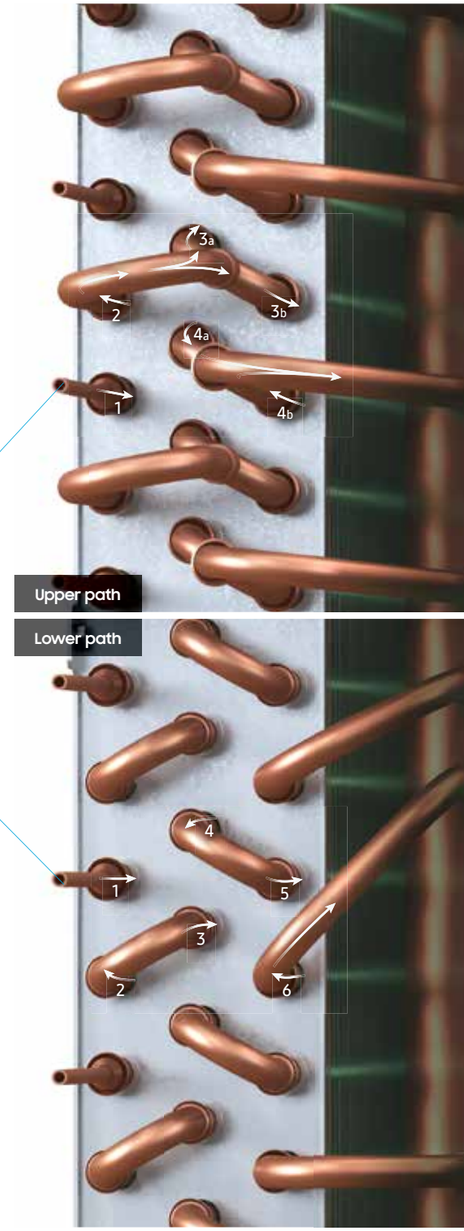
Cost saving

Optimised refrigerant flow matches the air flow velocity

Optimised refrigerant path

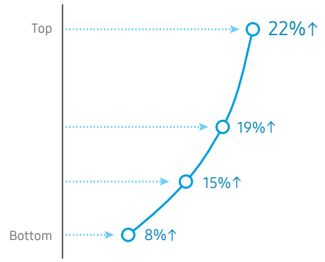
The air flow speed inside the outdoor unit varies depending on how far it is from the top fan - the closer the faster and the farther the slower - which normally results in the uneven exchange of heat from top to bottom. The Samsung DVM S2 has an optimised refrigerant path* that ensures that the flow of the refrigerant matches the air flow speed, which optimises the transference of heat. So, it performs more effectively and efficiently by balancing the exchange of energy.





Rate of improvement in pressure loss reduction**

The refrigerant flow rate is adjusted by increasing the mass flow rate in order to increase the amount of heat exchanged in the upper part.



* The shape of the refrigerant path differs by model.
** Based on an internal module evaluation. Results may vary depending on the individual test or usage conditions.

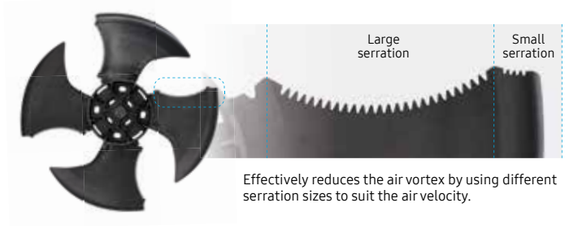
Image simulated, for representational purposes only.

Cost saving

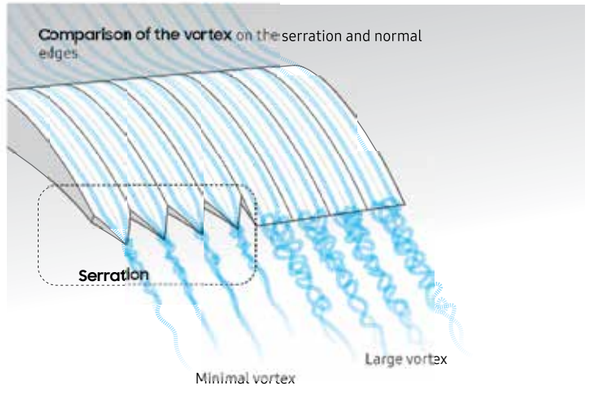
Efficiently increases the air flow

Multi-serration fan*

The DVM S2 has a brand-new, aerodynamic Multi-serration fan* that creates more air flow while consuming less energy. Its multi-serration wing tip design, inspired by an eagle owl's wing, minimises the turbulence of the air vortex, which reduces the air resistance and ensures more stable fan movement.



Effectively reduces the air vortex by using different serration sizes to suit the air velocity.

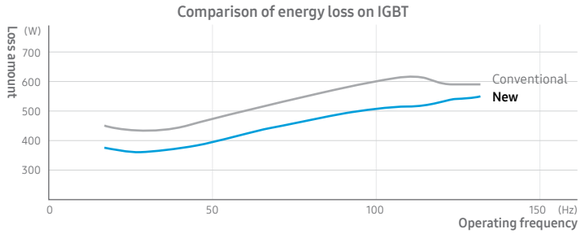


* Only available in certain models that have one fan. The shape of the fan may vary by model and region.

Reduces the loss of conducted electricity

High-efficiency IGBT (Insulated gate bipolar transistor)

An IGBT has a key role in inverter systems. It switches direct current (DC) to alternating current (AC) and maintains a frequency (Hz) that is suited to the system. So, the efficiency of an IGBT affects the efficiency of the whole air conditioning system. The Samsung DVM S2 uses the 7th generation of IGBT, which reduces the loss of conducted electricity by 20%*, while being 36% smaller in size. As a result, the Inverter Controller's energy efficiency is improved by up to 3.6%*, depending on the operating frequency (Hz).



* Based on internal testing of the DVM S2 33.6kW model compared to a conventional outdoor unit, combined with 6 GD2 5.6kW indoor units. Results may vary depending on the individual test or usage conditions.

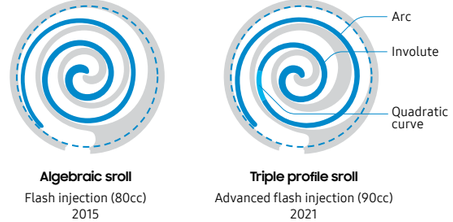
Image simulated, for representational purposes only.

Cost saving

Circulates more refrigerant while using less energy

90cc chamber with new triple profile scroll

The Samsung 90cc inverter scroll compressor used in the Samsung DVM S2 circulates more refrigerant. Its new triple profile scroll combines arc, involute and quadratic curves and also has a thicker profile towards the middle to reinforce the strength of the center part. So, it creates a larger chamber and rotates reliably at high speed. By delivering a higher level of performance at a lower frequency, it consumes less electricity and improves overall energy efficiency, especially in a high frequency domain.



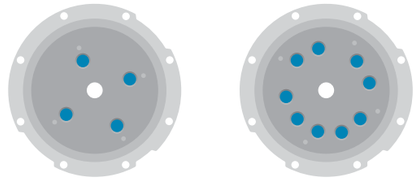
Algebraic sroll
Flash injection (80cc)
2015

Triple profile sroll
Advanced flash injection (90cc)
2021

Reduced losses at partial loads

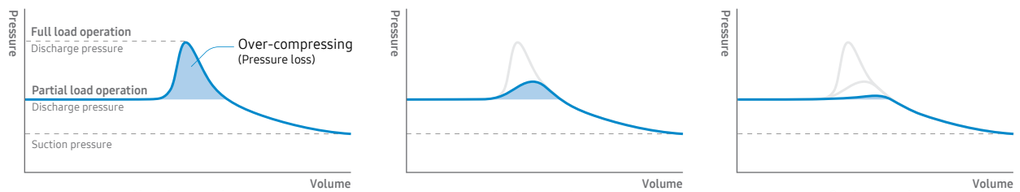
9 release valves

Compressors always draw in the maximum amount of refrigerant to generate the 100% pressure needed to operate at full load, as their chamber size is not variable. And, to compress more refrigerant, more electricity is required. So, it's crucial to release any excessive refrigerant pressure in order to save energy when there's only a small load that doesn't need a high discharge pressure. The new Samsung 90cc scroll compressor has 9 release valves, so it accurately and immediately releases refrigerant to prevent the over-compressing that wastes electricity.



Conventional scroll compressor (80cc)
4 release valves

New Samsung scroll compressor (90cc)
9 release valves



Cost saving

Automatically optimises to save energy

Active AI pressure control*

The optimal refrigerant condensing pressure is crucial to ensure a stable cooling and heating performance. A much higher pressure is to be maintaining if the piping length is long or if there is a large difference in elevation. More than 90% of outdoor units are installed in a situation where the elevation is 30m or lower and the pipe length is 100m or shorter** (Figure 1). Using active AI pressure control*, the DVM S2 recognises both the piping length and the difference in elevation and learns the usage pattern and external temperature in real-time. It then automatically adjusts the refrigerant condensing pressure accordingly, by up to 32% (Figure 2). As a result, it reduces the energy consumption by 15%*** when the condensing pressure is reduced by 12% (Figure 3).

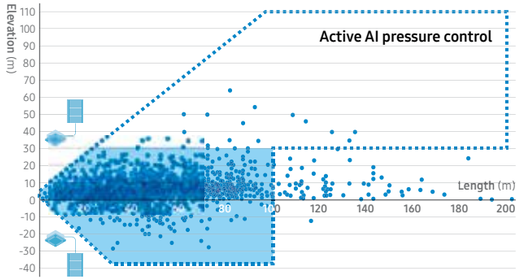


Figure 1. Installation sites by piping length and elevation*

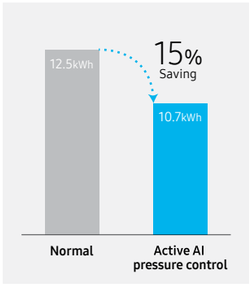


Figure 3. Cumulative energy consumption over 4 hours

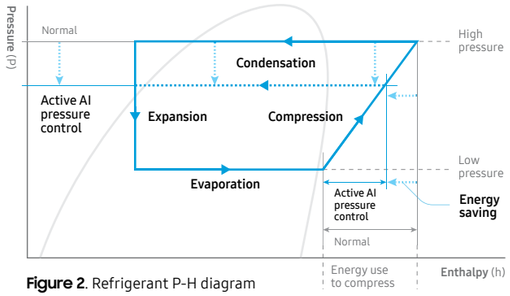
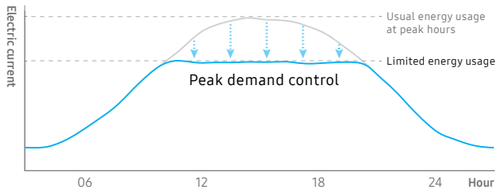


Figure 2. Refrigerant P-H diagram

Simply limits power consumption

Peak demand control

To help businesses manage their power consumption and related costs better, the DVM S2 offers power-demand control for peak hours and seasons. This is especially useful when the electricity supply is insufficient or when businesses want to block excessive and wasteful energy usage.



* Optionally available depending on the installation conditions. For detailed information, please refer to the installation manual.

** Based on internal analysis.

*** Based on internal testing with an AM080AXVGGH/EU outdoor unit connected to AM083NN4DBH1 and AM145NN4DBH1 indoor units with 25m of piping, using the cooling operation in Auto mode for 4 hours, with an external temperature of 30°C and a set temperature of 22°C. Results may vary depending on the actual installation and usage conditions, such as the piping length, elevation and external temperature.

Reliability

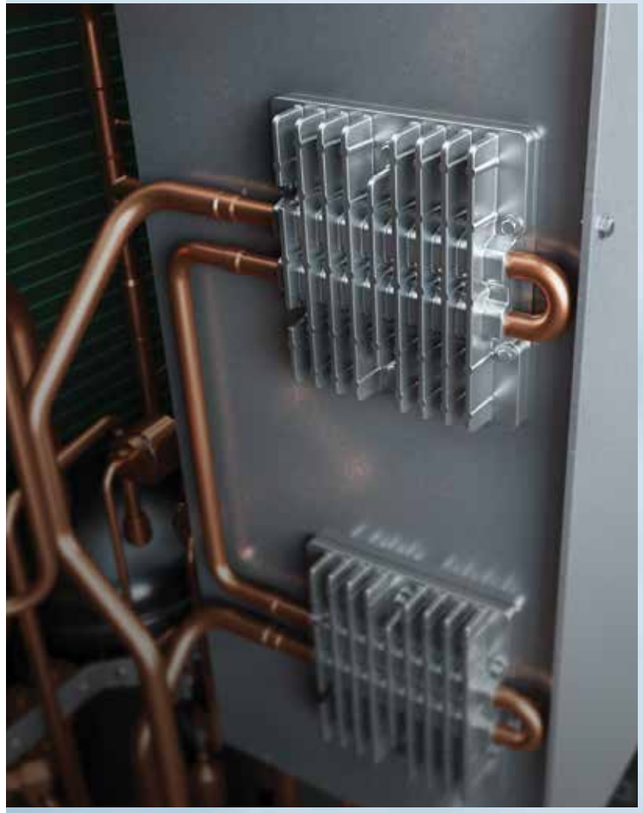
Reliable performance in the toughest environments*

Some environments present a real challenge to the effective operation of an air conditioning system. Extreme temperatures, persistently wet conditions and even earthquakes will not only impact the performance, but can also drastically shorten its working life.

The Samsung DVM S2 outdoor unit's robust design is capable of coping with the most challenging forces of nature. It continuously fine-tunes the flow of refrigerant using a new 90cc scroll compressor, and its unique dual heat sink that radiates heat effectively from the inverter circuit. So, it delivers an extremely reliable performance across a wide range of temperatures.

It is also built to withstand severe physical shocks, including sizeable earthquakes, and has significantly improved anti-corrosion capabilities to ensure maximum durability.

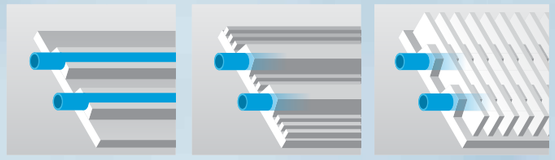
*DVM S2 has an ambient operating temperature of up to 53ºC compared to 48ºC of the conventional models.



Ensures reliable inverter control

Dual heat sink

The inverter circuit of VRF systems generates a lot of heat, which affects the entire system performance. The Samsung DVM S2 has a Dual heat sink that uses both air and refrigerant. Its unique Insert diecasting heat sink design minimises the thermal loss between the pipe and heat sink by increasing their contact area. By radiating heat from the inverter circuit more effectively, it helps extend the maximum operating temperature from 48°C to 53°C, and delivers a reliable performance regardless of the external conditions.



1st generation
insert

2nd generation
insert diecasting

3rd generation
insert diecasting heat sink*

* The shape of the heat sink may vary by model.

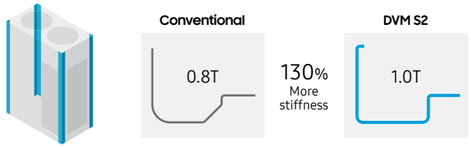
Reliability

Less damage from physical shocks and swaying

The Samsung DVM S2 is equipped with new and innovative design features that significantly enhance its durability.
So, it is proven to continue working effectively, without any problems in its main unit or piping, in an earthquake of up to magnitude 9.0*.

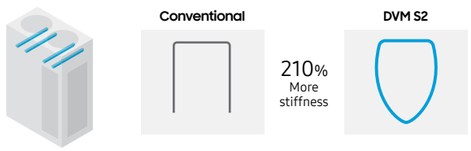
Robust frame

The corners of the cabinet's sides are reinforced. The thickness has been increased by 25%** and its shape has also been refined, so its stiffness has increased by 130%**. As a result, the DVM S2 provides incredible durability across its entire body without bending.



Kammtail motor bracket

Instead of a traditional open-type squared bracket, the DVM S2 has a pipe-shaped Kammtail bracket that firmly supports the motor with 210% more stiffness**.



Improved structure of legs

The DVM S2 has a patented support design*** to improve stability. The shape of the legs was redesigned to disperse weight effectively, and its stiffness has been increased by 9%**. So, they support the body more effectively and suppress any sway, even during an earthquake.

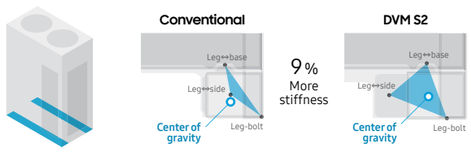


Image simulated, for representational purposes only.

* Based on a test in accordance with ICC ES AC156 : 2010 (SDS=2.5g, z/h=1), conducted by SGS Korea Co., Ltd. Result report No.: SGS-R20-1599-KR00.
** Based on internal testing using Siemens NX nastran 1867 simulation.
*** Patent No.: P2020-0099857

DVM S2 I Key features

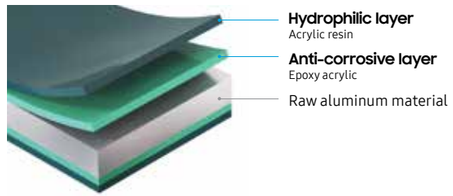
Reliability

Lasting performance with enhanced resistance to corrosion

Corrosion-resistance is a crucial factor in outdoor units, as they need to withstand a range of climate conditions. The Samsung DVM S2 features improved anti-corrosion capabilities on the heat exchanger and chassis to ensure maximum durability in harsh environments.

Durafin™ ultra

The Samsung DVM S2 outdoor unit's Durafin™ Ultra has an anti-corrosive layer of epoxy acrylic and a hydrophilic layer of acrylic resin that disperses water and reinforces its corrosion-resistance. Its superb quality was proven using the Salt Spray Test (SST) over a period of 2,280 hours* with no leakage of refrigerant**.



Galvanized iron steel plate (GI)

The Samsung DVM S2 uses galvanized iron steel plate as its external material, with a PE powder coating of up to 100μm thickness. This powerful combination is proven to improve corrosion-resistance by 43%, based on the Complex Cycle Test (CCT)***. So, it protects the cabinet from rusting and ensures it can endure harsh conditions.

* Based on testing by a third party lab in accordance with ASTM B117, an official test method. For more details, please contact Samsung's technical professionals.
** Based on testing by a third party lab, applying the actual pressure of refrigerant for 1 minute, after a Salt Spray Test (SST) of over 2,280 hours.
*** Based on internal testing using corrosion chambers, Q-FOG and CCT-1100. The Complex Cycle Test (CCT) includes cycles of spray (for 2 hours at 35°C), dry (for 4 hours at 60°C with 30% Relative Humidity) and damp (for 2 hours at 50°C with 95% Relative Humidity) conditions. As a result, the Galvanized Iron Steel Plate (GI) formed red rust after 240 hours, which is 43% slower than general Electro-Galvanized Steel Plate (EGI) which forms red rust after 168 hours.

Image simulated, for representational purposes only.

Comfort

Uncompromising innovation delivers the next level of comfort

The one purpose of air conditioning is to ensure people feel comfortable. Now the Samsung DVM S2 outdoor unit is taking comfort to the next level. It combines an incredible 90cc compression chamber and a superfast 160rps (revolutions per second) motor. So, it can keep every room, in every corner of a building pleasantly cool or warm - in every season.

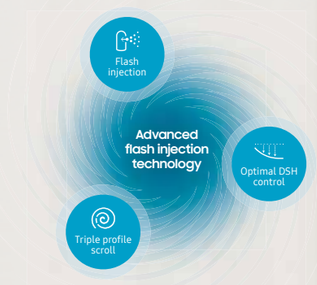
In addition, its Advanced Flash Injection Technology increases the flow of refrigerant in extremely cold conditions. It also intelligently manages the defrost operation, so it works more efficiently, and analyses users' behaviour to ensure it creates the optimal environment as quickly as possible.

And, to minimise any disturbance, it features a radical new fan design, inspired by nature, and a noise control system for use at night.

Better heating performance with advanced flash injection technology

Advanced Flash Injection Compressor™

The compressor is the engine that makes a major contribution to the overall performance of an air conditioning system. Samsung has been developing core technologies to reinforce the power of its compressor. The result is the Samsung Advanced Flash Injection Compressor™, which includes a host of brand-new innovations created by Samsung. By combining flash injection technology with a strengthened triple profile wrap and optimal discharge superheat (DSH) control technology, the Samsung DVM S2 delivers a new level of comfort by maintaining pleasantly cool or warm conditions in every corner of a building all year round.

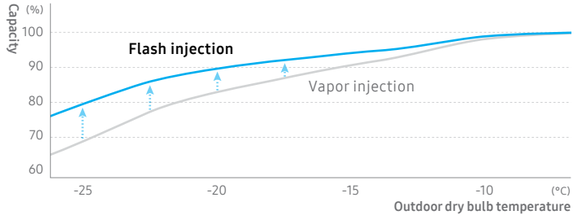


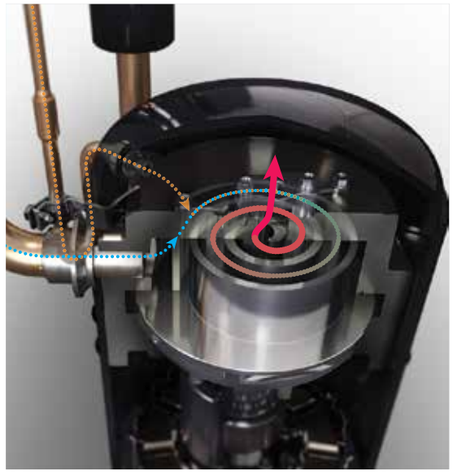
Comfort

Keeps on working well in freezing temperatures

Flash injection

Stay comfortably warm when it's freezing outside. The performance of a general heat pump worsens in low temperatures as the refrigerant pressure decreases. The Samsung DVM S2 outdoor unit's flash injection technology increases the flow of refrigerant, so the compressor continues working reliably. It also performs well at even lower temperatures, providing non-stop comfort in the coldest conditions (-25°C).

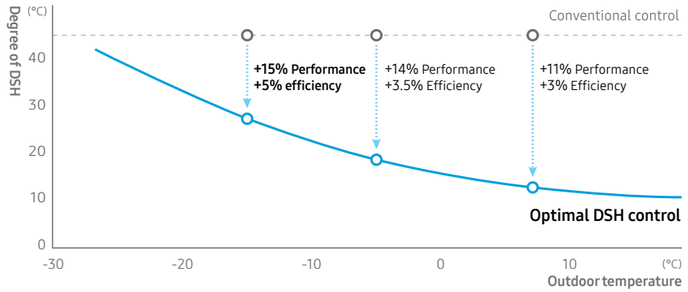


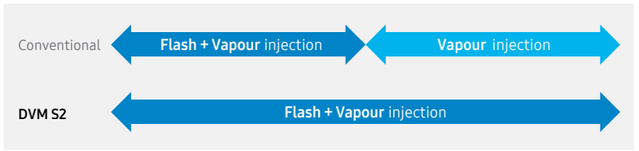


Optimally controls the degree of discharge superheat to improve both performance and efficiency

Optimal Discharge Superheat (DSH) control

The heating load and external temperature are the two most influential factors on an outdoor unit's heating performance. So, the Samsung DVM S2 automatically adjusts the degree of discharge superheat to reflect any changes in them and heat more efficiently and effectively. This new method of control improves the heating performance by up to 15% and increases operational efficiency by 5% at -15°C*.





* Based on internal testing. Results may vary depending on environmental factors and individual use.

Image simulated, for representational purposes only.

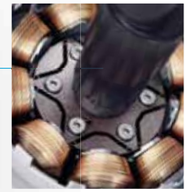
Comfort

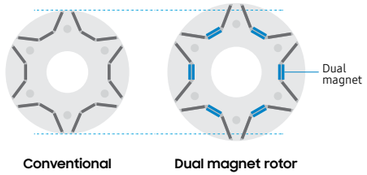
Super durability and speed create an unrivaled capacity

Triple profile scroll and dual magnet rotor

In order to compress flash type refrigerant and increase the total amount of compression, the compressor needs to have much better durability and rotary power. The DVM S2 has a triple profile scroll that combines arc, involute and quadratic curves to create a much larger chamber, and the strength of the centre part is significantly reinforced with a thicker profile towards the middle.

And, its new motor also has a 11.4% enlarged rotor with many more magnets, which increases the rotary power by 10.8%*.





As a result, it has an incredible 90cc compression chamber and operates at a superfast 160rps (revolutions per second), So, it provides the exceptional reliability needed to keep rooms warm in severely cold weather.

* Based on internal testing, compared to a Samsung's conventional motor.

Proven reliability of Samsung Advanced Flash Injection Compressor™

Samsung Advanced Flash Injection Compressor™ of the DVM S2 has been certified with a reliability mark (R-Mark), organised by the Korea reliability certification center, Korean reliability society.

[No. R-KORAS-2018-012] Inverter type (Variable speed) scroll compressor


Certificate of Reliability

Product : inverter type(Variable Speed) scroll compressor

Company : Samsung Electronics Co., LTD.

Representative : Oh-Hyun Kwon

Korean Reliability Society

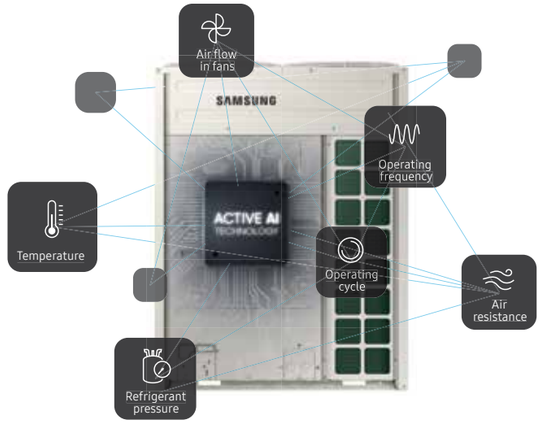
Image simulated, for representational purposes only.

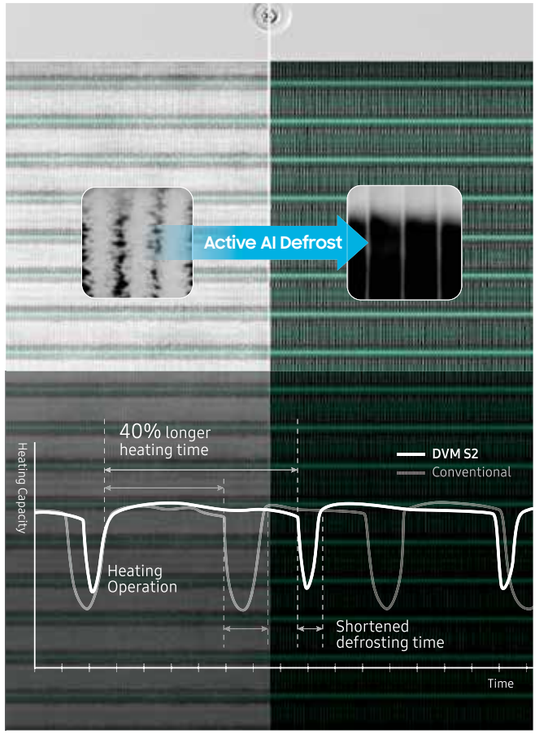
Comfort

Heats for longer with less defrosting

Active AI defrost

The heating operation generally causes ice to build up on outdoor units, which may interfere with the heat exchange process. To remove any ice, air conditioning systems normally pause the heating and run a defrost operation, so the indoor environment feels less comfortable. Samsung's Active AI defrost technology analyses various operating data, including the system's air resistance, operating frequency and cycle, so it defrosts more precisely. As a result, it reduces wasted energy and increases the continuous heating time by up to 40%*.

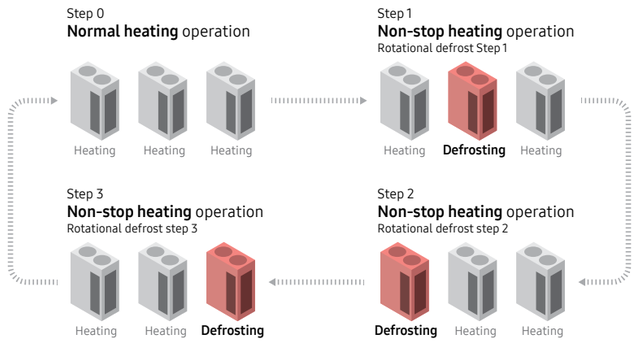




Rotational defrost operation**

The DVM S2 HR module's Rotational defrost operation ensures a continuous heating performance for reliable warmth and comfort.

After initially running all of a building's outdoor units in heating mode, it automatically switches each unit over to defrosting mode in strict rotation. Because the heating mode runs for a longer period of time, users can enjoy a more pleasant, warm environment.



* Based on internal testing. Heating time at -10°C over a period of 6 hours: Samsung DVM S2 (AM240AXVAGH/EU) = 180 minutes vs. conventional outdoor unit = 110 minutes. Results may vary depending on environmental factors and individual use.

** Available only on the DVM S2 HR (Heat Recovery) models.

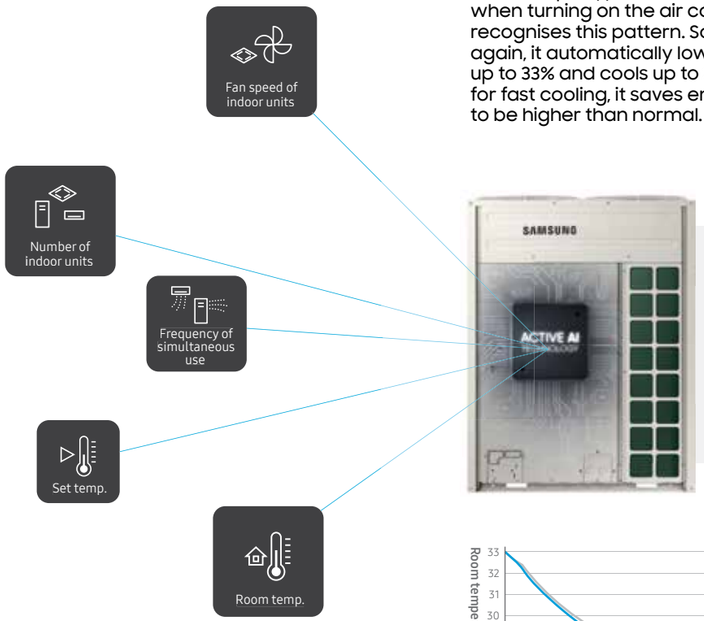
Comfort

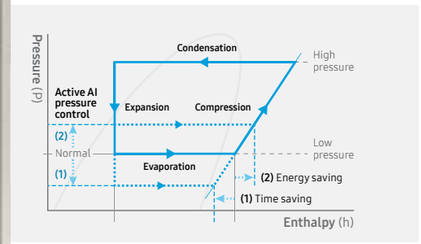
Optimal cooling by learning usage patterns

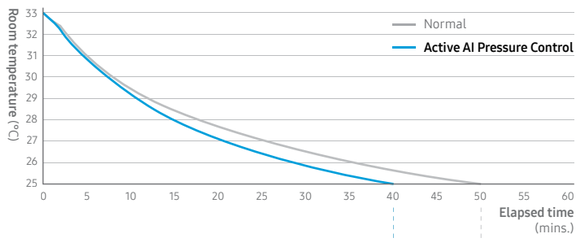
Active AI pressure control

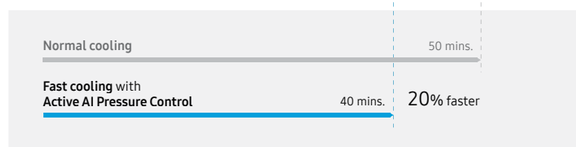
By learning usage patterns from recent cooling operations and the surrounding conditions, the DVM S2 proactively creates the optimal cooling environment to suit users' general requirements.

For example: (1) If a user frequently lowers the room temperature when turning on the air conditioner, the Active AI Pressure Control recognises this pattern. So, when the air conditioner is turned on again, it automatically lowers the pressure of the inflow refrigerant by up to 33% and cools up to 20% faster*. (2) However, if there's no need for fast cooling, it saves energy by adjusting the refrigerant pressure to be higher than normal.









* Based on internal testing of the cooling operation, with the temperature set at 22°C and using Auto mode for 4 hours, at a room temperature of 33°C and an external temperature of 35°C. The tested model was an AM080AXVGGH/EU connected to AM083NN4DBH1 and AM145NN4DBH1 indoor units with 25m of piping. The elapsed times were measured when the room temperature reached 25°C.

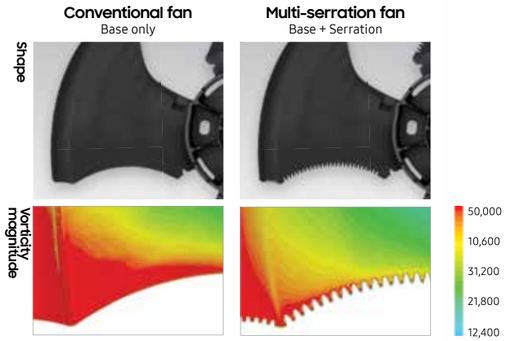
DVM S2 I Key features

Comfort

Reduces fan noise by minimising the air vortex

Multi-serration fan*

Eagle owls fly silently at night. Inspired by their wings, a new multi-serration fan* has two types of serration on its wing tip. It has a large serration on the inner part and a small serration on the outer part, which are designed to suit the different wind speeds around them. This combination minimises the air vortex around the wing tip and significantly reduces the noise generated by the movement of the fan.



Comparison of vorticity based on the design of the edge**.

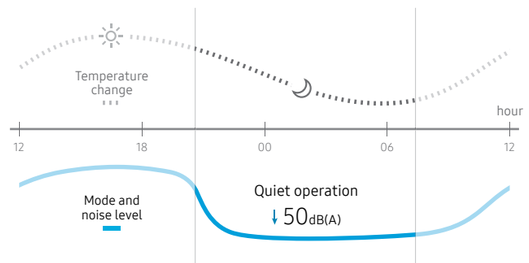
* Only available on models of 33.6kW or less. The shape of the fan may vary by model and region.

** Based on internal testing and simulation using a CAE software, Simcenter STAR-CCM+ (v.13.06).

Works quietly and efficiently at night

Quiet operation

A noise control system lowers the level of noise to below 50dB(A)*, which is as quiet as a normal conversation. It has a timer and can be set to operate for up to 12 hours.



* Based on internal testing. Results may vary depending on environmental factors and individual use.

Image simulated, for representational purposes only.

Comfort

Optimises the air flow - less friction, less noise

Along with a multi-serration fan, the Samsung DVM S2 has various new technologies that optimise the air flow inside the unit. So, the air moves smoothly and quickly with less of a vortex or turbulence that creates noise*.

Diffuser type discharge plenum

The edgeless, curved design of the discharge plenum enables the fan to pull air steadily from inside and gently diffuse it outside without creating a vortex*.

Conventional

Samsung DVM S2

Kammtail motor bracket

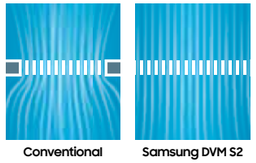
Instead of a traditional squared bracket, it has a streamlined Kammtail bracket that minimises noise.

Conventional

Samsung DVM S2

Enlarged heat exchanger

As the heat transfer area has been increased**, the wind speed and friction have been reduced accordingly, while still delivering the same level of performance*.



Conventional

Samsung DVM S2

* Based on internal testing and simulation using a fluid dynamics software, Ansys CFX. Results may vary depending on the actual usage conditions.

** 36.2% increase in a 28kW model and 23.7% increase in a 56kW model.

Image simulated, for representational purposes only.

Flexibility

More flexibility with fewer limits to meet your every need

The location of an air conditioning system can have a significant impact on its performance. So, the DVM S2 outdoor unit is designed to give you maximum flexibility, as it will operate effectively in a wide range of locations and climates.

Its compact design ensures that you can select the optimum installation location, including inside a building. In fact, its long piping, optimised refrigerant distribution and high external static pressure make it the ideal choice for use in high-rise buildings.

Even the harshest weather conditions are no problem. It can cool in heat of up to 53°C and provide warmth in freezing cold conditions of -25°C, while also optimising its performance to minimise energy use and deliver a consistently comfortable environment.

Top-class performance in extreme conditions

Wider operating temperature range

No matter how extreme the temperature, the high-performance DVM S2 can handle the conditions. Operating across a wide temperature spectrum, it can cool in heat of up to 53°C and provide warmth in freezing cold conditions of -25°C to ensure a constant and comfortable environment.

When it's installed on the rooftop of a building, the actual temperature around the outdoor units may become much higher due to the effects of direct sunlight, the radiant heat of the rooftop and the discharged air of other outdoor units. So, delivery of a stable performance in hot environments, is vital.

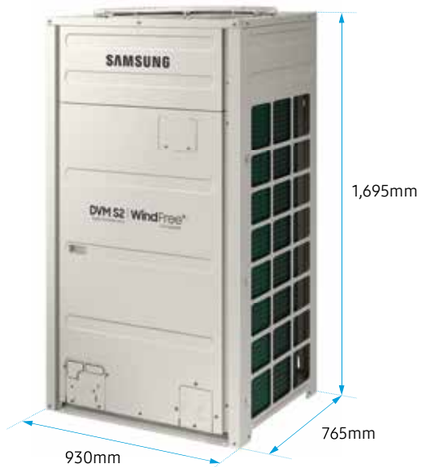
Image simulated, for representational purposes only.

Flexibility

Smaller^ footprint, saving valuable space and costs

Compact design

The Samsung DVM S2 has a small footprint, so it creates more space, which can be used for other purposes, without compromising on performance. As it is possible to install outdoor units inside buildings, especially high-rise buildings, its compact size means that you can maximise the area that is available to sell or lease, which directly increases revenue.



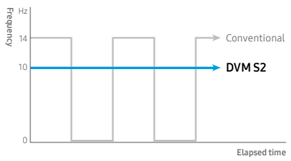
^Compared to conventional DVM S models (AM***MXVAGC)

Ideal for continuous cooling even in cold weather

Active frequency drive 10Hz

The need for air conditioning tends to rise not only in summer but also in spring and autumn. In particular, in rooms that require a constant temperature, like a server room, air conditioners are installed to ensure a stable cooling operation.

In cool weather, air conditioners can quickly reach the desired temperature, but then repeatedly turn themselves off and on to maintain the temperature. Not only does this consume much more electricity than continuous cooling, it also reduces the lifespan of the products and causes discomfort for any occupants due to the fluctuation in temperature.



The Active Frequency Drive of the Samsung DVM S2 enables the compressor to operate at the lowest revolution of 10Hz, which prevents the operation from frequently turning on and off, so it maintains the indoor temperature more precisely to ensure continuous comfort.

* Only available on the DVM S2 HR (Heat recovery) models.
** Optional.

Image simulated, for representational purposes only.

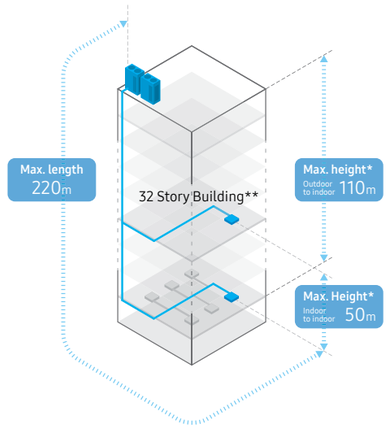
DVM S2 I Key features

Flexibility

Install in the optimum location, regardless of distance and height

High elevation with long piping

Enjoy more choices when selecting the optimum installation location. The DVM S2's long piping length provides the flexibility for the outdoor unit to be installed almost anywhere, regardless of its height or distance from the building. It has a maximum length that is equivalent to 220 metres between the outdoor and indoor units. It can also work efficiently and reliably at an elevation of up to 110 metres*, which is the equivalent of 32 stories**.



Optimised refrigerant distribution control

The DVM S2 compensates for the long piping distance between the outdoor and indoor units by providing balanced refrigerant distribution. All the individual indoor units deliver capacity connection control and automatic refrigerant balancing to ensure a consistent performance in each unit.

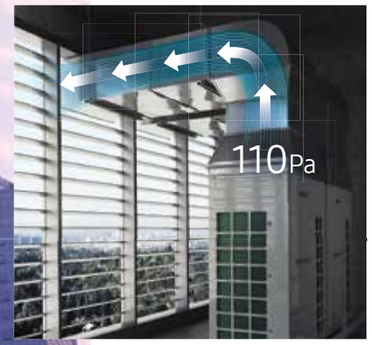
* When the piping height is over 50m, a PDM (Pressure Drop Modulation) Kit may be required depending on the conditions at the installation location.
** Based on the assumption that the height of a story is 3.5m. May vary depending on the location of indoor units.

Image simulated, for representational purposes only.

More flexibility to install between floors in a high-rise building

Up to 110pa external static pressure

High-rise buildings are usually designed to have outdoor units installed inside them using ductwork, because the height difference to the rooftop is too big. The DVM S2 has up to 110Pa external static pressure*, which ensures that it can discharge air effectively through a much longer duct. So, it gives you an even greater choice when selecting an installation location inside the building.



* May vary by model and depending on the actual condition of the ductwork and installation location. For more detailed information, please contact Samsung's technical professionals.

Convenience

Effortlessly install and maintain, saving time, cost and worry

Installing and managing an air conditioning system can be extremely complex and time-consuming. So, Samsung's DVM S2 outdoor unit includes a range of innovative technologies that make it easier and more cost-effective to move, operate and maintain in a wide range of locations.

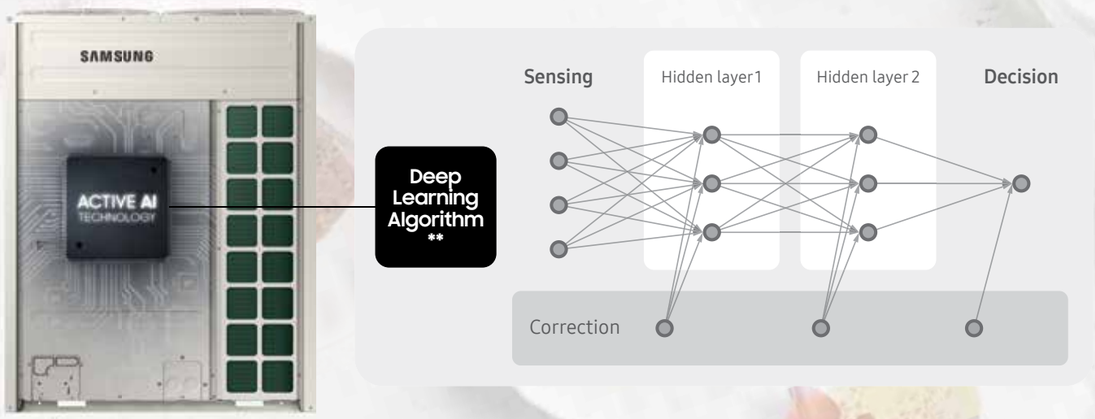
Its modular design minimises the number of parts, while its improved sub-cooling rate means it uses less refrigerant and slimmer piping. It is also easy to check errors through a small opening in the display window.

And, for complete peace of mind, it includes a range of powerful self-management and automatic recovery technologies.

Maintains the optimal amount of refrigerant to ensure the best performance

Active AI refrigerant analysis

Shortage of refrigerant hinders the outdoor unit's cooling and heating performance as well as its energy efficiency. And, if refrigerant leaks out, due to any error in installation, operation or maintenance, it also impacts global warming and may even cause the system to stop working. Using Deep Learning technology*, the Active AI refrigerant analysis of the DVM S2 collects and analyses various operational data in real time, and proactively alerts you with an error message if the amount of refrigerant is too low. So, an installer or a service engineer can maintain the optimal level of refrigerant.



* A Machine Learning technology that uses an Artificial Neural Network (ANN) to learn like a human using various data.
** Based on a research thesis, "A novel hybrid deep neural network model to predict the refrigerant charge amount of heat pumps".

DVM S2 I Key features

Convenience

Greater design flexibility and lower costs

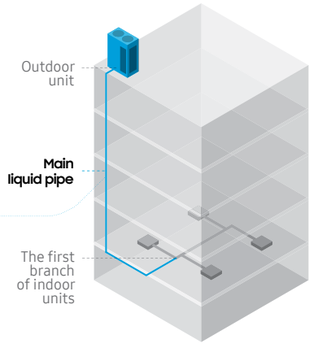
Slimmer liquid pipe (optional diameter reduction)*

The Samsung DVM S2 is equipped with a high-performance sub-cooler to improve the sub-cooling rate of refrigerant. It requires 28% less refrigerant on average** as it uses a slimmer liquid pipe*. So, it provides added flexibility in designing the entire system, while saving costs on the installation and maintenance of refrigerant and piping materials.

Pipe diameter (mm)		Refrigerant to supplement (g)		Refrigerant reduction ratio	
Normal	**Slimmer**	Normal	**Slimmer**		Average
9.52	N/A	60	N/A	-	-
12.71	**9.52**	125	**80**	36%	28%
15.88	**12.71**	180	**130**	28%	
19.05	**15.88**	270	**195**	28%	
22.22	**19.05**	350	**280**	20%	

Normal pipe

Slimmer pipe



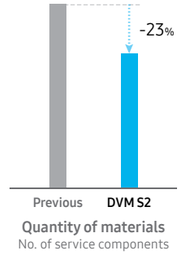
* Optional. A slimmer pipe can be used for the main liquid pipe, between an outdoor unit and the first branch of indoor units. The diameter of the slimmer pipe will vary depending on the diameter of the pipe that is normally used, which is defined in the table above. Not available on the 22.4kW and 28kW models. It may not be available in certain installation conditions, and is not compatible with the AI functions of outdoor units. Please contact Samsung's technical professionals regarding its availability and for more detailed information.

** When a slimmer pipe, instead of a normal pipe, is used for the main liquid pipe on the same capacity of air conditioning system, the amount of refrigerant to be charged can be reduced by 28% on average.

Less parts. Less effort and cost for servicing.

Quality-based modular design (QMD)

The Samsung DVM S2 consists of optimised modular components, which have fewer parts. In particular, based on its Quality-based modular design (QMD), the DVM S2 is built with high-quality modules that have been preselected and preconfigured. So, it delivers both superior performance and reliability, while also significantly reducing the number of parts that need servicing.



This modular design simplifies the entire process of maintenance and service, as less time and effort is required to check and fix any issues. And, from the viewpoint of warehousing, it also saves space as there is no need to store a lot of parts.

Convenience

Simply and quickly check errors without extra tools

On-Device inverter check™

The DVM S2 has an Inverter PBA (Printed Board Assembly) with a one-touch button to simply check errors on the device. Without having to remove the entire front cover, it's easy to access this button through a small opening in the display window. So, it reduces the service time and effort as it eliminates the need for extra tools and simplifies the service process.

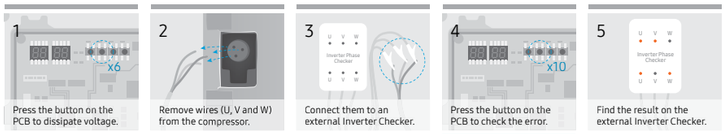
Examples of messages

OK
No error on PBA.

NG
Errors on PBA.

CHECK
Need to check manually.

Conventional process using an external inverter checker - 5 steps



New process using on-device inverter check™ - 1 step

Remotely monitor and solve issues

S-converter

With the S-converter, you can access the system using a PC or laptop* whenever and wherever you like. Its self-diagnosis function automatically monitors its performance and displays an error code if it detects anything abnormal. So, you can then check and address the issue promptly.

* Windows operating system. A smartphone or tablet PC can also be used in certain regions.

Simply restore data for repair and recovery

Automatic data backup

If a malfunction occurs, the DVM S2 automatically backs up the last 30 minutes of operational data to make the repair and recovery process easier.

Image simulated, for representational purposes only.

Convenience

Quick access and ease of service

Simplified cover with handle

The front cover of conventional outdoor units consists of multiple pieces, which means it can require a lot of work to open them fully. The Samsung DVM S2's front cover is a single piece, so it's simple to open and access every part inside the outdoor unit, which reduces the time and effort for servicing.

Conventional
4 pieces with no handle

DVM S2
1 piece with a handle

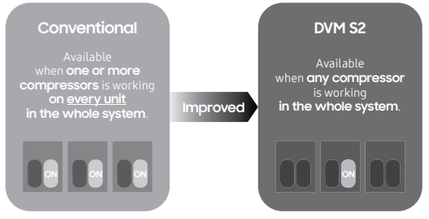
In addition, the cover has a handle that provides added safety and convenience when handling.

Image simulated, for representational purposes only.

Keeps you comfortable, even if there's a malfunction

Emergency operation

When the air conditioning system consists of multiple Samsung DVM S2 outdoor units, its refrigerant regulating control technology ensures that you can continue working using only one compressor in an emergency. So, if every unit except one is not working or getting serviced and any compressor on the remaining one is working properly, it will keep cooling or heating for up to 8 hours. It ensures that you can maintain a comfortable indoor environment until the whole system is functioning properly again.



Example cases of malfunction		Emergency operation	
		Conventional	DVM S2
	When there are 2 or more units in a system, and one of the two compressors on a unit is not working.	Yes	Yes
	When there are 2 or more units in a system, and one of the two compressors on each unit is not working.	Yes	Yes
	When there are 2 or more units in a system, and all of the compressors on a unit are not working.	Not available	Yes
	When there are 2 or more units in a system, and a compressor on a low capacity unit is not working.	Not available	Yes
	When there are 2 or more units in a system, and a compressor on a low capacity unit and one of the two compressors on another unit is not working.	Not available	Yes
	When there is 1 unit in a system, and one of the two compressors on it is not working.	Not available	Yes

Convenience

Conveniently and safely handle with less effort

The Samsung DVM S2 has various convenient features that help installers and service providers to lift and move, and disassemble and assemble it with added safety and less effort.

Centre point indicator of weight

VRF outdoor units usually weigh a lot and can sometimes be over 300kg. It is obviously very difficult and dangerous to handle such heavy machines, so the Samsung DVM S2 has a removable indicator to show its centre of weight. It makes it much safer to lift and move with a crane or a forklift as it helps to prevent the unit from becoming unbalanced and tilting or toppling over.

A sticker type indicator shows the centre of weight. After moving, it can be simply removed.

Image simulated, for representational purposes only.

DVM Chiller

Best of VRF and chiller

Expand capacity on demand

A modular design provides a wide choice of configurations. You can simply and flexibly combine modules and expand capacity from 12 to 320 tonne in various ways to optimise energy, or save space, or attain a balance of both.

Easy to move and install modular design

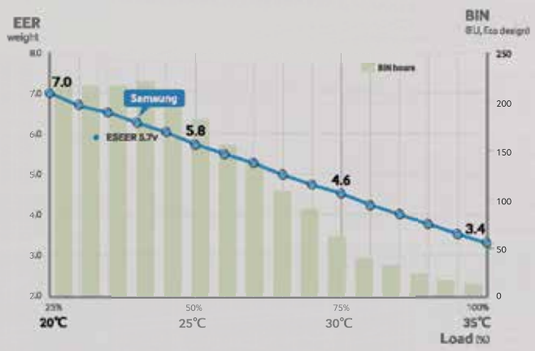
Its modular design and compact size reduces time, cost, and effort to transport, and install it on site. With a small footprint, it's easy to fit and combine multiple units even when there's limited space.

Advanced performance and energy efficiency

Its advanced technology delivers a consistently higher performance and reduces energy wastage. It has a highly efficient BLDC inverter compressor with flash injection technology and evaporative condenser.

Centrally control all systems

To maximise operational convenience and the value of your existing units, an integrated control system lets you centrally manage both outdoor and indoor units, such as the DVM chiller, VRF, and air side equipment.



Easily increase performance and save space

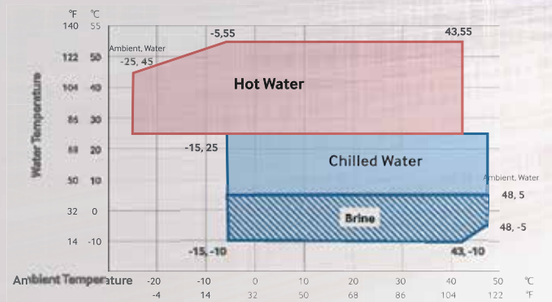
Its compatibility, large capacity, and high space efficiency make it perfect for replacing chillers as it cuts down maintenance costs and frees up valuable space, while expanding overall capacity.

Works silently at night

A Night Silent Mode means it operates at 3 different levels and works silently at night. It adjusts the speed of the compressors and fans, so they supply the required cooling, and a better sound performance.

Wide operating range

It can be used for office, retail, hotels, hospitals, educational institutions, and industrial processes.



-Based on internal lab test

DVM S - Heat Recovery
Simultaneous cooling and heating

Heat environments effortlessly and continuously for ultimate comfort

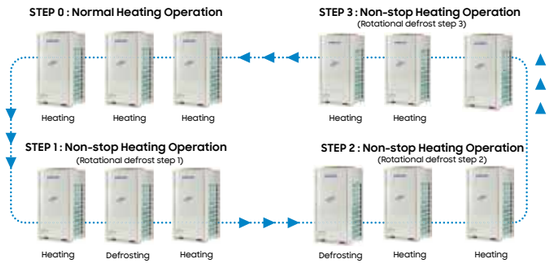
The DVM S HR (Heat Recovery) model delivers continuous heating performance using innovative rotational defrost for reliable warmth and comfort. In addition, it supports more agile operation through simultaneous cooling and heating.

Non-stop heating

DVM S can operate continuously in heating mode with rotational defrost operation. Because the heating mode runs for a longer period of time, users can enjoy a more pleasant environment.

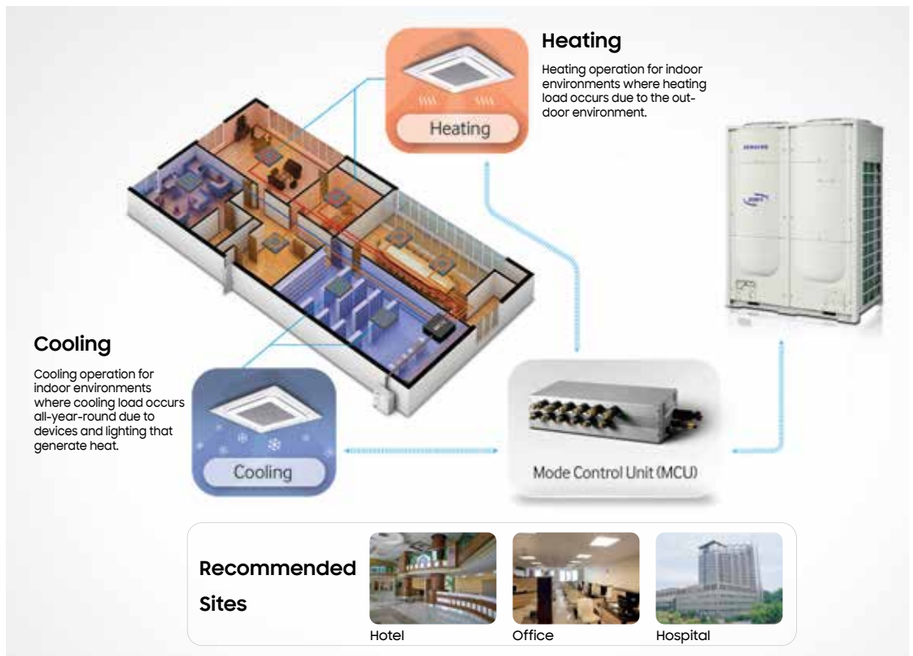
Simultaneous cooling and heating

Single outdoor units can operate all indoor units in both cooling and heating mode. They can also simultaneously operate in cooling and heating mode when necessary, providing more operational freedom.



Fine-tuned control

The Mode Change Unit (MCU) has an internal on/off valve that enables fine-tuned control via an electronic expansion valve (EEV) and sub-cooler. Improved performance and reduced noise create a pleasant temperature-controlled environment.



DVM S Water
Increased energy savings

Temper the indoor environment with innovative technology using water source for heating and cooling

DVM S Water is a high-capacity outdoor cooling and heating system, ideal for large buildings. Unique to other DVM S models, the DVM S Water air conditioning system uses water as its heat source, which connects to a cooling tower and boiler. Using a highly efficient compressor and heat exchanger, DVM S Water provides effective and reliable performance despite changes in the surrounding environment. Its long piping and lightweight design also make it easy and economical to install almost anywhere.

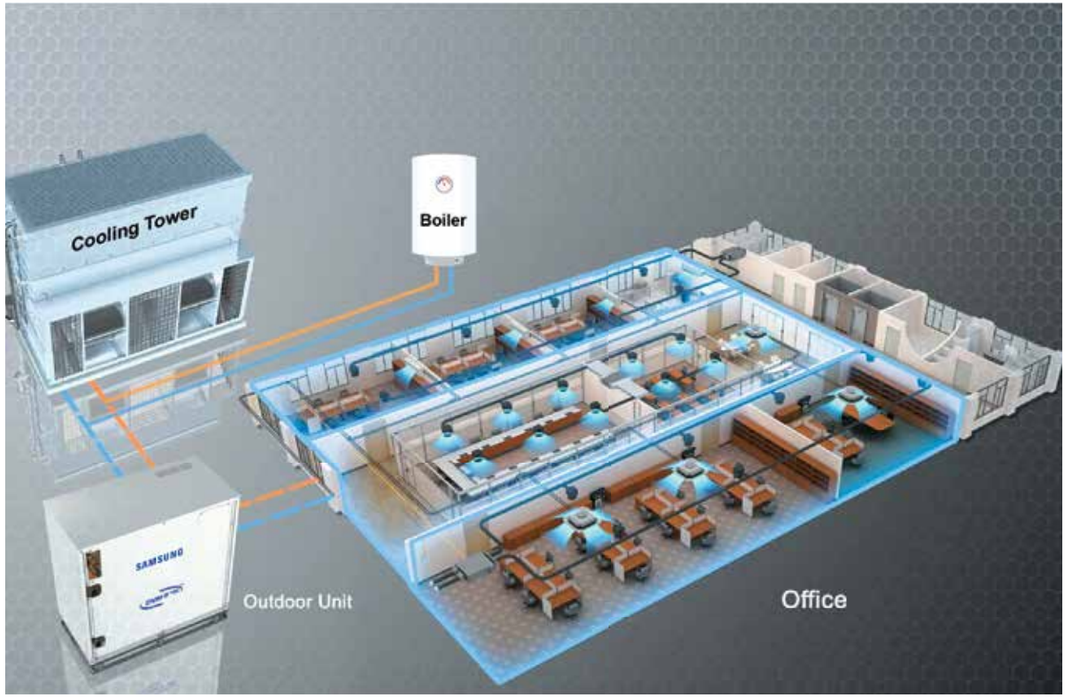
Samsung DVM S Water Air Conditioner System delivers optimal comfort, efficiency, and performance with benefits such as:

Increased energy savings: Save on energy consumption and costs with a Dual Inverter system and high-performance compressors.

Easy, flexible installation: Ease of installation minimises effort with a lightweight design, extended piping length, and elevation support.

Convenient management: Monitor system performance effectively with convenient web-based data access and management from anywhere.

Premium comfort: Support comfortable living and working environments based on the combined strengths of various technologies.



DVM S Water
Increased energy savings

Enhance the atmosphere and control costs with high- energy efficiency

Samsung DVM S Water features several smart technologies that combine to deliver world-class energy efficiency for today's economical and budget-conscious businesses. With these technologies, DVM S Water boasts up to 8 percent* higher EER than conventional models.

Energy-efficient rapid heating and cooling

The third-generation innovative system, DDI, adopts a Dual Inverter compressor system. Both inverter compressors operate simultaneously, providing compressor longevity and balanced oil distribution for quick cooling and heating to save energy and the environment.

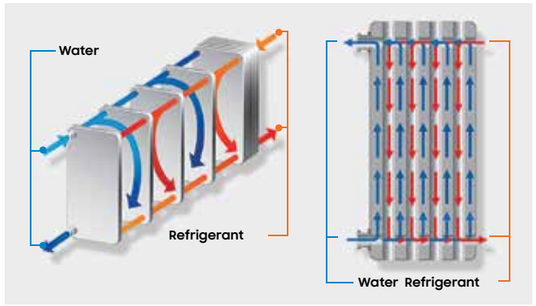
Independent cooling and heating

With the DVM S Water air conditioning system's optional Mode Control Unit (MCU), users can independently switch mode of each indoor unit. This means users can set different temperatures for various spaces at the same time, heating some rooms or areas of the building, while cooling others.

*Based on Samsung Internal Lab Analysis.

Decreased maintenance and energy costs

DVM S Water features advanced PHE technology, which improves heat exchange between refrigerant and water, thus improving the efficiency, lowering foot print and benefiting the environment.



Renewable energy source

Eco-friendly DVM S Water uses geothermal energy as a renewable heat source instead of a cooling tower and boiler, effectively supporting businesses' environmental and cost reduction initiatives.

DVM S Water
Easy, flexible installation

Simplify installation with a cost-saving, adaptable design

The simplified yet powerful design of the DVM S Water unit eases the installation process. Non-polar communication between indoor and outdoor units promotes easier, safer wiring work.

Economical design and setup

At 30 HP, the large-unit capacity of DVM S Water facilitates economical installation with a smaller footprint and lighter weight–an ideal solution for large buildings.

- Based on Internal Analysis

Broad installation options

DVM S Water provides extended piping length of up to 170m and installation height of up to 50m, offering businesses more installation options. The piping distance is far between outdoor and indoor units, so individual indoor units perform capacity connection control and automatic refrigerant equalisation for more balanced performance between units.

- Based on RandD Analysis

Louver-less installation

The DVM S Water air conditioning system's louver-less installation ensures that the outside of the building remains neat and tidy. Because the system cools with water, it eliminates the need to install an unsightly louver to allow air to circulate and to remove excess heat. Its streamlined operation supports easy installation inside a building, without impacting the integrity of its architectural design.

Easy moving

- Use elevator for moving

DVM S Water
Convenient management

Discover and resolve issues from anywhere with a smart management system

DVM S Water features a smart management system for ultimate convenience. The advanced system facilitates round-the-clock system monitoring, along with self-regulating water flow control to ensure peak operation at all times.

24-hour performance monitoring

A smart Auto Commissioning Management (ACM) function continually monitors operational performance and proactively signals any abnormal operation, so users can quickly address potential problems. And if a malfunction occurs, the last 30 minutes of operational data are stored for automatic backup. This lowers the maintenance cost of periodic inspections and ensures that the system is always operating. DVM S Water also features an application with built-in signal contacts to support BACnet, and LonWorks - two popular building management systems (BMS).

Cost-effective water flow control

DVM S Water's built-in water flow controller helps regulate the amount of water used to cool and heat the outdoor unit. It determines the optimum flow of water based on the internal temperature of the space, economising both the circulation pump's energy usage and costs. And because it's a standard option, businesses can eliminate the expense of purchasing a separate water flow control kit.

Ensure continuous comfort with reliable performance

Samsung DVM S Water is dedicated to supporting comfortable living and working environments based on the combined strengths of various technologies. Featuring central HVAC technology, DVM S Water delivers stable performance, unaffected by the surrounding environment. And VRF technology optimises comfort with individual zone control with on/off temperature setting, custom air flow rates, and scheduling.

Minimal noise level

Because of its low noise level, DVM S Water won't disturb business or residential environments. Its water-cooled Plate Heat Exchanger eliminates the noise caused by an outdoor unit fan. In addition, the hermetically sealed compressor reduces any other noise produced.

DVM S Eco

Experience ultimate comfort at home or work with powerful yet economical performance

The VRF-based Samsung DVM S Eco System Air Conditioner combines world-class energy efficiency and economy to deliver outstanding performance in a space-saving design. Supporting up to sixteen indoor units, DVM S Eco is a perfectly optimised cooling system for residences and small buildings. Its lightweight, small-scale build enables easy, low-cost installation, while its uniquely quiet design ensures soothing comfort and maximum efficiency. Plus, the DVM S Eco line offers a wide range of capacities to suit every need.

The Samsung DVM S Eco System Air Conditioner delivers optimal comfort, efficiency, and performance with features such as:

High-rate energy efficiency: Save on energy consumption and operational costs with high-performance compressor technology.

Low noise level: Enjoy a more peaceful home or work environment with quiet operation, thanks to a streamlined fan design.

Various installation options: Ease of installation minimises effort with a small footprint, and comes in a variety of size options.

DVM S Eco

Big capacity. Big choice.

DVM S Eco is compact side-discharge outdoor unit, which also offers a high level of energy efficiency. It's ideal for homes or businesses that need plenty of coverage, but have limited space.

Best-in-class capacity

DVM S Eco provides more coverage, while taking up less space. Enabling you to create a small footprint VRF Solution with maximum capacity of 14 HP. So it's ideal for installation in places with limited space.

Compact design for extra flexibility

DVM S Eco is one of the most compact air conditioners in its class, making it very easy and economical to install and operate without compromising on performance. It also leaves plenty of space that can be used for other purposes.

DVM S Eco

Advanced performance and energy efficiency

Its advanced technology radically improves performance and reduces energy wastage. It includes an innovative Digital Inverter Compressor, an optimised heat exchanger with corrugated fins, and highly efficient fans.

Improved reliability in cold conditions

Featuring advanced refrigerant control technology, DVM S Eco's flash injection provides improved heating performance at -25°C. It continues to perform even at lower temperatures, providing reliable comfort even when it's freezing.

Install it almost anywhere

DVM S Eco provides the flexibility to be installed almost anywhere, regardless of its location or distance from the building. It has a piping length of up to 160m and can reach up to a height of 50m.

DVM outdoor line up

Top Discharge

Heat Pump

8HP | 10HP | 12HP | 14HP

16HP | 18HP | 20HP
22HP | 24HP | 26HP | 28HP

30HP | 32HP | 34HP

Cooling only

8HP | 10HP | 12HP | 14HP

16HP | 18HP | 20HP
22HP | 24HP | 26HP | 28HP | 30HP

32HP | 34HP

Heat Recovery

8HP | 10HP | 12HP

14HP | 16HP | 18HP
20HP | 22HP

Side Discharge

Cooling only

4HP | 5HP

Heat Pump/cooling only

6HP

8HP

10HP | 12HP | 14HP

DVM S Water

8HP | 10HP 12HP |
20HP | 30HP

DVM Chiller

12HP | 16HP | 20HP

Specification

DVM ECO Cooling only

4 ~ 5HP

6 ~ 14HP

- Top-class energy efficiency
- Small footprint and volume
- Flexible piping design
- Low noise level
- Reliable operation

Attribute/Model code		AM040KXMDEC/TL	AM050KXMDEC/TL	AM060TXMDEC/TL	AM080MXMDGC/TL	AM100TXMDNC/TL	AM120TXMDNC/TL	AM140TXMDNC/TL
Power supply (Outdoor unit) [Φ, #, V, Hz]		1, 2, 220-240, 50/60	1, 2, 220-240, 50/60	1, 2, 220-240, 50/60	3,4,380-415,50	3, 4, 380-415, 50/60	3, 4, 380-415, 50/60	3, 4, 380-415, 50/60
System	Mode	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only
Performance (Nominal) [HP]		4	5	6	8	10	12	14
Capacity	Cooling [kW]	12.1	14	16	22.4	29	33.6	40
	Cooling [Btu/h]	54,600	54,600	54,600	76400	99,000	1,14,600	1,36,500
Power input (Nominal)	Cooling 1) [kW]	3.6	4	4.2	6.90	7.3	8.77	10.59
Current input (Nominal)	Cooling 1) [A]	17.5	19.5	20.2	18.4	11.7	13.74	16.48
Energy efficiency	EER (Nominal cooling)	3.36	3.5	3.81	3.25	3.97	3.83	3.78
Compressor	Type	Twin BLDC rotary	Twin BLDC rotary	Twin BLDC rotary	Twin BLDC rotary	Scroll inverter	Scroll inverter	Scroll inverter
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	9.52	9.52	9.52	12.7	12.7
	Gas pipe (Φ, mm)	15.88	15.88	19.05	19.05	22.22	28.58	28.58
	Installation max. length [m]	70	70	150	100	160	160	160
	Installation max. height [m]	30	30	50	30	50	50	50
Field wiring	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Factory charging (kg)	2	2	2.8	3.7	3.7	4.3	4.8
Sound	Sound pressure (dBA)	52	55	53	59	58	61	62
External dimension (Outdoor unit)	Net weight (kg)	76	76	97	115	143	153	160
	Shipping weight (kg)	79	79	107	125	156	166	173
	Net dimensions (WxHxD) (cm)	94 x 99.8 x 33	94 x 99.8 x 33	94 x 121 x 33	94 x 142 x 33	94 x 163 x 46	94 x 163 x 46	94 x 163 x 46
	Shipping dimensions (WxHxD) (cm)	99.5 x 113.6 x 42.6	99.5 x 113.6 x 42.6	99.5 x 113.6 x 42.6	99.5 x 157.8 x 42.6	102 x 182 x 57.5	102 x 182 x 57.5	102 x 182 x 57.5
Operating temp. Range	Cooling (°C)	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0

Note:

1) 1) Nominal cooling capacities are based on indoor temperature : 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
2) Nominal heating capacities are based on indoor temperature : 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Specification

DVM ECO Heat pump

4 ~ 5HP

6 ~ 14HP

- Top-class energy efficiency
- Small footprint and volume
- Flexible piping design
- Low noise level
- Reliable operation

Attribute/Model code		AM060TXMDEH/TL	AM080MXMDGH/TL	AM100KXMDGH/TL	AM120KXMDGH/TL	AM140KXMDGH/TL
Power supply (Outdoor unit) [Φ, #, V, Hz]		1, 2, 220-240, 50	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50	3,4,380-415,50
System	Mode	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump
Performance (nominal)		6	8	10	12	14
Capacity	Cooling [kW]	15.5	22.4	28	33.5	40
	Cooling [Btu/h]	52,900	76,400	95,500	114,300	136,500
	Heating [kW]	18	22.4	31.5	37.5	45.0
	Heating [Btu/h]	61,400	76,600	1,07,500	128,000	153,500
Power input (Nominal)	Cooling 1) [kW]	4.31	6.9	7	8.38	10.00
	Heating 2) [kW]	4.39	5.8	6.17	7.50	9.57
Current input (Nominal)	Cooling 1) [A]	21	11.7	11.51	13.74	16.48
	Heating 2) [A]	20.2	9.5	10.38	12.23	15.55
Energy efficiency	EER (Nominal cooling)	3.6	3.25	4	4	4
	COP (Nominal heating)	4.1	3.86	5.1	5	4.7
Compressor	Type	Twin BLDC rotary	Twin BLDC rotary	Scroll inverter	Scroll inverter	Scroll inverter
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	9.52	12.7	12.7
	Gas pipe (Φ, mm)	19.05	19.05	22.22	28.58	28.58
	Installation max. length [m]	150 m	100	160	160	160
	Installation max. height [m]	50 m	30	50	50	50
Field wiring	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A	R410	R410
	Factory charging (kg)	3.3	3.7	3.7	4.3	4.8
Sound	Sound pressure (dBA)	55	59	58	59	62
External dimension (Outdoor unit)	Net weight(kg)	101	115	145	155	162
	Shipping weight (kg)	110	125	158	168	175
	Net dimensions (WxHxD) (cm)	94 x 121 x 33	94 x 142 x 33	94 x 163 x 46	94 x 163 x 46	94 x 163 x 46
	Shipping dimensions (WxHxD) (cm)	99.5 x 138.8 x 42.6	99.5 x 157.8 x 42.6	102 x 182 x 57.5	102 x 182 x 57.5	102 x 182 x 57.5
Operating temp. range	Cooling (°C)	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0	-5.0 ~ 52.0
	Heating (°C)	-20.0 ~ 24.0	-20.0 ~ 24.0	-25 ~ 24 °C	-25 ~ 24 °C	-25 ~ 24 °C

Note:

1) Nominal cooling capacities are based on indoor temperature : 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
2) Nominal heating capacities are based on indoor temperature : 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Specification

DVM S2 Heat pump

- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/Model code		AM080AXVANH/TL	AM100AXVANH/TL	AM120AXVANH/TL	AM140AXVANH/TL	AM160AXVANH/TL	AM180AXVANH/TL	AM200AXVANH/TL	AM220AXVANH/TL	AM240AXVANH/TL
Power supply (outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump
		8	10	12	14	16	18	20	22	24
Capacity	Cooling 1) [kW]	22.4	28.0	33.6	40.0	45.0	50.4	56.0	61.6	67.2
	Cooling 1) [BTU/h]	76384.0	95480.0	114576.0	136400.0	153450.0	171864.0	190960.0	210056.0	229152.0
	Heating 1) [kW]	25.2	31.5	37.8	45.0	50.4	56.7	63.0	69.3	75.6
	Heating 1) [BTU/h]	85932.0	107415.0	128898.0	153450.0	171864.0	193347.0	214830.0	236313.0	257796.0
Power input (nominal)	Cooling 1) [kW]	4.84	6.29	8.77	10.68	11.5	13.94	12.18	16.2	16.8
	Heating 1) [kW]	4.8	6.3	8.9	11.08	11.58	13.5	13.55	15.06	16.61
Current input (nominal)	Cooling 1) [A]	7.6	9.9	13.8	16.8	18	21.7	19.6	26.2	26.4
	Heating 1) [A]	7.5	9.9	14.1	16.9	18.2	21.2	21.3	23.7	26.1
Energy efficiency	EER (nominal cooling)	4.63	4.45	3.83	3.75	3.91	3.62	4.60	3.80	4.00
	COP (nominal heating)	5.25	5.00	4.25	4.06	4.35	4.20	4.65	4.60	4.55
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80	110	80	110	110	110	110	80
Piping connections	Liquid pipe, [Φ, mm]	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Gas pipe [Φ, mm]	19.05	22.22	28.58	28.58	28.58	28.58	28.58	28.58	34.92
	Installation max length [m]	220	220	220	220	220	220	220	220	220
	Installation max height [m]	110	110	110	110	110	110	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Factory charging [kg]	5.5	5.5	6.2	7	8	8	10.5	10.5	14
Sound	Sound pressure [db(a)] 2)	55	56	60	63	59	59	61	64	65
External dimensions (outdoor unit)	Net weight [kg]	171	183	187.2	199.9	234	234	259.1	292.1	317
	Shipping weight [kg]	185	197	201.2	213.9	251	251	276.1	309.1	334
	Net dimensions (WXHXD) [cm]	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WXHXD) [cm]	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
Operating temp. range	Cooling [°C]	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [°C]	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

- Specification may be subject to change without prior notice.

1) Performances are based on the following test conditions.
   - Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
   - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
   - Equivalent refrigerant pipe length 5m, Level differences 0m

2) Sound pressure level is obtained in an anechoic room.
   - Sound pressure level is a relative value, depending on the distance and acoustic environment.
   - Sound pressure level may differ depending on operation condition.
   - dBA = A-weighted sound pressure level
   - Reference acoustic pressure 0 dB = 20uPa

Specification

DVM S2 Heat pump

- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/Model code		AM260AXVANH/TL	AM280AXVANH/TL	AM300AXVANH/TL	AM320AXVANH/TL	AM340AXVANH/TL
Power supply (outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump
		26	28	30	32	34
Capacity	Cooling 1) [kW]	72.8	78.6	84.0	89.6	95.2
	Cooling 1) [BTU/h]	248248.0	268026.0	286440.0	305536.0	324632.0
	Heating 1) [kW]	78.4	78.4	94.5	95.2	95.2
	Heating 1) [BTU/h]	267344.0	267344.0	322245.0	324632.0	324632.0
Power input (nominal)	Cooling 1) [kW]	18.86	23.93	22.7	27.57	31.73
	Heating 1) [kW]	17.19	17.61	20.54	21.15	21.63
Current input (nominal)	Cooling 1) [A]	30	38	35.5	43.4	49.9
	Heating 1) [A]	27	27.7	32.3	33.3	34
Energy efficiency	EER (nominal cooling)	3.86	3.28	3.70	3.25	3.00
	COP (nominal heating)	4.56	4.45	4.60	4.50	4.40
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80	80	80	80
Piping connections	Liquid pipe, [Φ, mm]	19.05	19.05	19.05	19.05	19.05
	Gas pipe [Φ, mm]	34.92	34.92	34.92	34.92	34.92
	Installation max length [m]	220	220	220	220	220
	Installation max height [m]	110	110	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A
	Factory charging [kg]	14	14	15.5	15.5	15.5
Sound	Sound pressure [DB(a)] 2)	65	65	65	65	66
External dimensions (outdoor unit)	Net weight [kg]	317	317	390	390	390
	Shipping weight [kg]	334	334	416.2	416.2	416.2
	Net dimensions (WXHXD) [cm]	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	186 x 169.5 x 76.5	186 x 169.5 x 76.5	186 x 169.5 x 76.5
	Shipping dimensions (WXHXD) [cm]	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9
Operating temp. range	Cooling [℃]	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [℃]	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

- Specification may be subject to change without prior notice.

1) Performances are based on the following test conditions.
   - Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
   - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
   - Equivalent refrigerant pipe length 5m, Level differences 0m

2) Sound pressure level is obtained in an anechoic room.
   - Sound pressure level is a relative value, depending on the distance and acoustic environment.
   - Sound pressure level may differ depending on operation condition.
   - dBA = A-weighted sound pressure level
   - Reference acoustic pressure 0 dB = 20uPa

Combination table (Heat pump)

Capacity (HP)	System model		Capacity of single unit HP													
	Code	No of modules	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP
8HP	AM080AXVANH/TL	1	1													
10HP	AM100AXVANH/TL	1		1												
12HP	AM120AXVANH/TL	1			1											
14HP	AM140AXVANH/TL	1				1										
16HP	AM160AXVANH/TL	1					1									
18HP	AM180AXVANH/TL	1						1								
20HP	AM200AXVANH/TL	1							1							
22HP	AM220AXVANH/TL	1								1						
24HP	AM240AXVANH/TL	1									1					
26HP	AM260AXVANH/TL	1										1				
28HP	AM280AXVANH/TL	1											1			
30HP	AM300AXVANH/TL	1												1		
32HP	AM320AXVANH/TL	1													1	
34HP	AM340AXVANH/TL	1														1
36HP	AM360AXVANH/TL	2		1								1				
38HP	AM380AXVANH/TL	2			1							1				
40HP	AM400AXVANH/TL	2				1						1				
42HP	AM420AXVANH/TL	2							1	1						
44HP	AM440AXVANH/TL	2								2						
46HP	AM460AXVANH/TL	2								1	1					
48HP	AM480AXVANH/TL	2								1		1				
50HP	AM500AXVANH/TL	2									1	1				
52HP	AM520AXVANH/TL	2										2				
54HP	AM540AXVANH/TL	2										1	1			
56HP	AM560AXVANH/TL	2								1						1
58HP	AM580AXVANH/TL	2										1			1	
60HP	AM600AXVANH/TL	2										1				1
62HP	AM620AXVANH/TL	2											1			1
64HP	AM640AXVANH/TL	2													2	
66HP	AM660AXVANH/TL	2													1	1
68HP	AM680AXVANH/TL	2														2
70HP	AM700AXVANH/TL	3						1				2				
72HP	AM720AXVANH/TL	3								1	1	1				
74HP	AM740AXVANH/TL	3									2	1				
76HP	AM760AXVANH/TL	3									1	2				
78HP	AM780AXVANH/TL	3										3				
80HP	AM800AXVANH/TL	3										2	1			
82HP	AM820AXVANH/TL	3										1	2			
84HP	AM840AXVANH/TL	3											3			
86HP	AM860AXVANH/TL	3										2				1
88HP	AM880AXVANH/TL	3										1	1			1
90HP	AM900AXVANH/TL	3								1						2
92HP	AM920AXVANH/TL	3										1			1	1
94HP	AM940AXVANH/TL	3										1				2
96HP	AM960AXVANH/TL	3											1			2
98HP	AM980AXVANH/TL	3													2	1

Specification

DVM S2 Cooling only

- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/ Model code		AM080AXVANC/TL	AM100AXVANC/TL	AM120AXVANC/TL	AM140AXVANC/TL	AM160AXVANC/TL	AM180AXVANC/TL	AM200AXVANC/TL	AM220AXVANC/TL	AM240AXVANC/TL
Power supply (Outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only
		8	10	12	14	16	18	20	22	24
Capacity	Cooling 1) [kW]	22.4	28.0	33.6	40.0	45.0	50.4	56.0	61.6	67.2
	Cooling 1) [Btu/h]	76384.0	95480.0	114576.0	136400.0	153450.0	171864.0	190960.0	210056.0	229152.0
	Heating 1) [kW]	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Heating 1) [Btu/h]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Power input (nominal)	Cooling 1) [kW]	4.84	6.29	8.77	10.68	11.5	13.94	12.18	16.2	16.8
	Heating 1) [kW]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Current input (nominal)	Cooling 1) [A]	7.6	9.9	13.8	16.8	18	21.7	19.6	26.2	26.4
	Heating 1) [A]	NA	NA	NA	NA	NA	NA	NA	NA	NA
Energy efficiency	EER (nominal cooling)	4.63	4.45	3.83	3.75	3.91	3.62	4.60	3.80	4.00
	COP (nominal heating)	NA	NA	NA	NA	NA	NA	NA	NA	NA
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	110	110	80	80	110	110	110	110	80
Piping connections	Liquid pipe, [Φ, mm]	9.52	9.52	12.7	12.7	12.7	15.88	15.88	15.88	15.88
	Gas pipe [Φ, mm]	19.05	22.22	28.58	28.58	28.58	28.58	28.58	28.58	34.92
	Installation max length [m]	220	220	220	220	220	220	220	220	220
	Installation max length [m]	110	110	110	110	110	110	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Factory charging [kg]	5.5	5.5	6.2	7	8	8	10.5	10.5	11
Sound	Sound pressure [dB(A)] 2)	55	56	60	63	59	59	61	64	65
External dimensions (outdoor unit)	Net weight [kg]	171	183	187	200	234	234	259	292	317
	Shipping weight [kg]	185	197	201	214	251	251	276	309	334
	Net dimensions (WxHxD) [cm]	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5	93 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WxHxD) [cm]	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	99.8 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9
Operating temp. range	Cooling [℃]	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [℃]	NA	NA	NA	NA	NA	NA	NA	NA	NA

- Specification may be subject to change without prior notice.

1) Performances are based on the following test conditions.
   - Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
   - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
   - Equivalent refrigerant pipe length 5m, Level differences 0m

2) Sound pressure level is obtained in an anechoic room.
   - Sound pressure level is a relative value, depending on the distance and acoustic environment.
   - Sound pressure level may differ depending on operation condition.
   - dBA = A-weighted sound pressure level
   - Reference acoustic pressure 0 dB = 20uPa

Specification

DVM S2 Cooling only

- Maximised efficiency
- Artificial Intelligence
- Less refrigerent
- High Performance

Attribute/ Model code		AM260AXVANC/TL	AM280AXVANC/TL	AM300AXVANC/TL	AM320AXVANC/TL	AM340AXVANC/TL
Power supply (Outdoor unit) [Ø, #, V, Hz]		3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60	3,4,380~415,50/60
System	Mode	Cooling only	Cooling only	Cooling only	Cooling only	Cooling only
		26	28	30	32	34
Capacity	Cooling 1) [kW]	72.8	78.6	84.0	89.6	95.2
	Cooling 1) [Btu/h]	248248.0	268026.0	286440.0	305536.0	324632.0
	Heating 1) [kW]	NA	NA	NA	NA	NA
	Heating 1) [Btu/h]	NA	NA	NA	NA	NA
Power input (nominal)	Cooling 1) [kW]	18.86	23.93	26.84	27.57	31.73
	Heating 1) [kW]	NA	NA	NA	NA	NA
Current input (nominal)	Cooling 1) [A]	30	38	42.1	43.4	49.9
	Heating 1) [A]	NA	NA	NA	NA	NA
Energy efficiency	EER (nominal cooling)	3.86	3.28	3.13	3.25	3.00
	COP (nominal heating)	NA	NA	NA	NA	NA
Compressor	Type	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll	Inverter scroll
Fan	External static pressure [Pa]	80	80	80	80	80
Piping connections	Liquid pipe, [Φ, mm]	19.05	19.05	19.05	19.05	19.05
	Gas pipe [Φ, mm]	34.92	34.92	34.92	34.92	34.92
	Installation max length [m]	220	220	220	220	220
	Installation max length [m]	110	110	110	110	110
Field wiring	Transmission cable [mm]	0.75	0.75	0.75	0.75	0.75
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A
	Factory charging [kg]	11	11	11	12.5	12.5
Sound	Sound pressure [dB(A)] 2)	65	65	65	65	66
External dimensions (outdoor unit)	Net weight [kg]	317	317	317	390	390
	Shipping weight [kg]	334	334	334	416	416
	Net dimensions (WxHxD) [cm]	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	186 x 169.5 x 76.5	186 x 169.5 x 76.5
	Shipping dimensions (WxHxD) [cm]	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	136.3 x 188.7 x 82.9	192.8 x 188.7 x 82.9	192.8 x 188.7 x 82.9
Operating temp. range	Cooling [℃]	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53	-5 ~ 53
	Heating [℃]	NA	NA	NA	NA	NA

- Specification may be subject to change without prior notice.

1) Performances are based on the following test conditions.
   - Cooling: Indoor temperature 27°CDB, 19°CWB, Outdoor temperature 35°CDB, 24°CWB
   - Heating: Indoor temperature 20°CDB, 15°CWB, Outdoor temperature 7°CDB, 6°CWB
   - Equivalent refrigerant pipe length 5m, Level differences 0m

2) Sound pressure level is obtained in an anechoic room.
   - Sound pressure level is a relative value, depending on the distance and acoustic environment.
   - Sound pressure level may differ depending on operation condition.
   - dBA = A-weighted sound pressure level
   - Reference acoustic pressure 0 dB = 20uPa

Combination table (Cooling only)

Capacity (HP)	System model		Capacity of single unit HP													
	Code	No. of modules	8HP	10HP	12HP	14HP	16HP	18HP	20HP	22HP	24HP	26HP	28HP	30HP	32HP	34HP
8HP	AM080AXVANC/TL	1	1													
10HP	AM100AXVANC/TL	1		1												
12HP	AM120AXVANC/TL	1			1											
14HP	AM140AXVANC/TL	1				1										
16HP	AM160AXVANC/TL	1					1									
18HP	AM180AXVANC/TL	1						1								
20HP	AM200AXVANC/TL	1							1							
22HP	AM220AXVANC/TL	1								1						
24HP	AM240AXVANC/TL	1									1					
26HP	AM260AXVANC/TL	1										1				
28HP	AM280AXVANC/TL	1											1			
30HP	AM300AXVANC/TL	1												1		
32HP	AM320AXVANC/TL	1													1	
34HP	AM340AXVANC/TL	1														1
36HP	AM360AXVANC/TL	2				1				1						
38HP	AM380AXVANC/TL	2			1							1				
40HP	AM400AXVANC/TL	2							2							
42HP	AM420AXVANC/TL	2							1	1						
44HP	AM440AXVANC/TL	2								2						
46HP	AM460AXVANC/TL	2								1	1					
48HP	AM480AXVANC/TL	2								1		1				
50HP	AM500AXVANC/TL	2									1	1				
52HP	AM520AXVANC/TL	2								1				1		
54HP	AM540AXVANC/TL	2									1			1		
56HP	AM560AXVANC/TL	2										1		1		
58HP	AM580AXVANC/TL	2											1	1		
60HP	AM600AXVANC/TL	2												2		
62HP	AM620AXVANC/TL	2												1	1	
64HP	AM640AXVANC/TL	2													2	
66HP	AM660AXVANC/TL	2													1	1
68HP	AM680AXVANC/TL	2														2
70HP	AM700AXVANC/TL	3								2		1				
72HP	AM720AXVANC/TL	3								1	1	1				
74HP	AM740AXVANC/TL	3								2				1		
76HP	AM760AXVANC/TL	3								1	1			1		
78HP	AM780AXVANC/TL	3								1		1		1		
80HP	AM800AXVANC/TL	3									1	1		1		
82HP	AM820AXVANC/TL	3								1				2		
84HP	AM840AXVANC/TL	3									1			2		
86HP	AM860AXVANC/TL	3										1		2		
88HP	AM880AXVANC/TL	3											1	2		
90HP	AM900AXVANC/TL	3												3		
92HP	AM920AXVANC/TL	3												2	1	
94HP	AM940AXVANC/TL	3												2		1
96HP	AM960AXVANC/TL	3												1	1	1
98HP	AM980AXVANC/TL	3												1		2

Specification
DVM heat recovery

- DSI (Dual Smart Inverter) system
- High efficiency
- Smart management
- Flexible installation
- Comfortable and reliable operation

Attribute/Model code		AM080FXVAGR	AM100FXVAGR	AM120FXVAGR	AM140FXVAGR	AM160FXVAGR	AM180FXVAGR	AM200FXVAGR	AM220FXVAGR
Power supply (Outdoor unit) [Φ, #, V, Hz]		3,4,380-415,50							
System	Mode	Heat recovery							
Performance (Nominal) [HP]		8	10	12	14	16	18	20	22
Capacity	Cooling [kW]	22.4	28	33.6	40	45	50.4	56	61.6
	Cooling [Btu/h]	76,400	95,500	114,600	136,500	153,500	172,000	191,100	210,200
	Heating [kW]	25.2	31.5	37.8	45	50.4	56.7	63	69.3
	Heating [Bty/h]	86,000	107,500	129,000	153,500	170,600	193,500	215,000	236,500
Power input (Nominal)	Cooling 1) [kW]	5.0	6.8	8.4	8.9	11.0	12.88	15.19	17.35
	Heating 2) [kW]	5.1	6.7	8.7	9.5	11.5	11.9	13.9	16.7
Current input (Nominal)	Cooling 1) [A]	8	10.9	13.5	14.3	17.6	20.7	24.4	27.8
	Heating 2) [A]	8.2	10.7	14	15.2	18.4	19.1	22.3	26.8
Energy efficiency	EER (Nominal cooling)	4.48	4.12	4	4.49	4.09	3.91	3.69	3.55
	COP (Nominal heating)	4.94	4.7	4.34	4.74	4.38	4.76	4.53	4.15
Compressor	Type	Scroll inverter							
Fan	External static pressure (Min / Std / Max) [Pa]	78.45 Pa							
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	12.70	12.70	12.70	15.88	15.88	15.88
	Gas pipe (Φ, mm)	19.05	22.22	28.58	28.58	28.58	28.58	28.58	28.58
	Installation max. length [m]	200(220)	200(220)	200(220)	200(220)	200(220)	200(220)	200(220)	200(220)
	Installation max. height [m]	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)	110.0(40.0)
Field wiring	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A	R-410A
	Factory charging (kg)	5.50	5.20	5.50	7.70	7.40	8.70	8.40	8.40
Sound	Sound pressure (dBA)	57	58	62	61	63	64	65	67
External dimension (Outdoor unit)	Net weight (kg)	189.5	189.5	189.5	239.0	282.0	304.0	304.0	304.0
	Shipping weight (kg)	205.5	205.5	205.5	258.0	301.0	323.0	323.0	323.0
	Net dimensions (WxHxD) (cm)	880 x 169.5 x 76.5	880 x 169.5 x 76.5	880 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5	129.5 x 169.5 x 76.5
	Shipping dimensions (WxHxD) (cm)	94.8 x 188.7 x 83.2	94.8 x 188.7 x 83.2	94.8 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2	136.3 x 188.7 x 83.2
Operating temp. range	Cooling (°C)	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48	-15 ~ 48
	Heating (°C)	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24	-25 ~ 24

Note:

1) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
2) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Specification
DVM chiller

- High Efficiency
- Smaller footprint
- Wide operating range
- Integrated control
- Provides Cold / Hot Water

Model Name				AG042KSVANH/EU	AG056KSVANH/EU	AG070KSVANH/EU
Power Supply			Φ,V,Hz	3,380-415,50	3,380-415,50	3,380-415,50
Mode			-	Heat pump	Heat pump	Heat pump
Performance	Hp		Hp	25	20	15
	Ton		Usrt	18.5	16	12
	Capacity (Nominal)	Cooling	kW	65.0	56.0	42.0
		Heating	kW	69.5	56.0	42.0
Power	Power Input (Nominal)	Cooling	kW	26.00	18.67	12.35
		Heating		24.39	17.50	11.83
	Current Input (Nominal)	Cooling	A	41.2	29.6	19.6
		Heating		38.7	27.8	18.8
	Current	Mca	A	58.0	46.0	32.0
		Mfa	A	75.0	60.0	40.0
COP	Nominal Cooling		W/W	2.50	3.00	3.40
	Nominal Heating		W/W	2.85	3.20	3.55
	Eseer (Pump Input is included based on En 14511)		W/W	5	5.4	5.7
Compressor	Type		-	Inverter Scroll	Inverter Scroll	Inverter Scroll
Water Side Heat Exchanger	Type		-	Brazing Plate	Brazing Plate	Brazing Plate
	Water flow rate (Cooling/Heating)		Lpm	186/200	160/160	120/120
	Pressure drop (Set Nominal)		Kpa	120	100	60
	Max operating Pressure		Mpa	1.0	1.0	1.0
	Connection Type		-	Flange	Flange	Flange
	Pipe connection (Inlet/Outlet)		Φ,mm	50	40	40
	Qty		-	2	2	2
Refrigerant	Type		-	R410A	R410A	R410A
Sound	Sound Pressure Type	Cooling	dB(A)	63	62	60
		Heating		64	59	57
	Sound Power			85	83	80
External Dimension	Net Weight		kg	465	446	446
	Shipping Weight		kg	487	468	468
	Net dimension (Wxhxd)		mm	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)	(1,795 x 1,695 x 765)
	Shipping Dimension		mm	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)	(1,900 x 1,887 x 919)
Operating water temp. range	Cooling		℃	5~25	5~25	5~25
	Cooling (if using brine)		℃	-10~25	-10~25	-10~25
	Heating		℃	25~55	25~55	25~55
Operating water flow range	Water flow rate		Lpm	60~240	60~240	60~240
	Minimum water storage in the system		L	490	392	294
Operating amb. Temp. range	Cooling		℃	-15~48	-15~48	-15~48
	Heating		℃	-25~43	-25~43	-25~43

Note:

1) Specification comply with EN14511.
2) Nominal cooling capacities are based on; Chilled water inlet / outlet temperature : 12 / 7°C, outdoor temperature : 35°C DB, 24°C WB.
3) Nominal heating capacities are based on; Heating water inlet / outlet temperature : 40 / 45°C, outdoor temperature : 7°C DB, 6°C WB.
4) Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
5) All Models are without pump.

Specification
DVM water

- High efficiency
- Reliable operation
- Small footprint
- Minimum noise level
- Heat Recovery System (3 pipe)

Model name				AM080FXWANR/EU	AM100FXWANR/EU	AM120FXWANR/EU	AM200FXWANR/EU	AM300KXWANR/EU
Power supply			Φ, V, Hz	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50	3,380-415,50
Mode			-	Heat pump	Heat pump	Heat pump	Heat pump	Heat pump
Performance	HP		HP	8.00	10.00	12.00	20	30
	Capacity (Nominal)	Cooling	kW	22.40	28.00	33.60	56.00	84
			Btu/h	76,400	95,500	114,600	191,100	286,600
		Heating	kW	25.20	31.50	37.80	63.00	94.5
			Btu/h	86,000	107,500	129,000	215,000	322,400
Power	Power input (Nominal)	Cooling	kW	3.84	5.05	6.46	10.77	16.80
		Heating		4.12	5.25	6.51	10.86	16.88
	Current input (Nominal)	Cooling	A	6.20	8.10	10.30	17.30	26.4
		Heating		6.60	8.40	10.40	17.40	26.5
	MCA			16.30	20.00	25.00	39.80	48
	MFA		A	20.00	20.00	30.00	40.00	63
COP	Cooling		kW	5.83	5.54	5.2	5.3	5.0
	Heating		kW	6.12	6.0	5.81	5.8	5.6
Compressor	Type		-	SSC Scroll x 1	SSC Scroll x 1	SSC Scroll x 1	SSC Scroll x 2	Inverter Scroll
Condenser	Type		-	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Stainless Steel Plate)	PHE(Plate Heat Exchanger)
	Lost head		kPa	22	30	43	54	50
	Water flow rate		LPM	80.0	96.0	114.0	190.0	285
	Max. pressure		Mpa	1.96	1.96	1.96	1.96	1.96
Piping connections	Liquid pipe		Φ, mm	9.52	9.52	12.70	15.88	19.05
	Gas pipe		Φ, mm	19.05	22.22	28.58	28.58	34.92
	Discharge gas pipe		Φ, mm	15.88	19.05	19.05	28.58	28.58
	Installation limitation	Max. Length	m	170(190)	170	170	170	170(190)
		Max. Height	m	50.0(40.0)	50.0	50.0	50.0	50.0
Field wiring	Power source wire		mm^2	2.5	2.5	4	4	.75
	Transmission cable		mm^2	0.75 ~ 1.25	0.75 ~ 1.25	0.75 ~ 1.25	0.75 ~ 1.25	
Refrigerant	Type		-	R410A	R410A	R410A	R410A	R410A
Sound	Sound pressure		dB(A)	48.0	48.0	50.0	51.0	56
	Sound power			70.0	70.0	70.0	73.0	
External dimension	Net weight		kg	160.0	160.0	160.0	240.0	282
	Shipping weight		kg	167.0	167.0	167.0	250.0	292
	Net dimensions (WxHxD)		mm	(770 x 1,000 x 545)	(770 x 1,000 x 545)	(770 x 1,000 x 545)	(1,100 x 1,000 x 545)	(1,100 x 1,000 x 545)
	Shipping dimensions (WxHxD)		mm	(840 x 1,200 x 620)	(840 x 1,200 x 620)	(840 x 1,200 x 620)	(1,170 x 1,200 x 620)	(1,170 x 1,200 x 620)
Operating temp. range	Cooling		℃	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45
	Heating		℃	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45	10 ~ 45

Note:

1) Nominal cooling capacities are based on;
   -- Indoor temperature : 27°C DB, 19°C WB, Inlet water temperature : 30°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m
2) Nominal heating capacities are based on;
   -- Indoor temperature : 20°C DB, 15°C WB, Inlet water temperature : 20°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m
3) Sound power level is an absolute value that a sound source generates.
   -- Sound pressure level is a relative value, depending on the distance and acoustic environment.
   -- Sound values are obtained in an anechoic room.
   -- Sound values of multi comvination are theoretical values based on sound results of individual installed units.
4) Nominal heating capacityes are based on Eurovent test conditions:
   -- Indoor temperature : 20°C DB, 15°C WB, Inlet water temperature : 10°C, Outlet water temperature : 7°C, Equivalent refrigerant piping : 7.5m, Level differences : 0m

Indoor line up

Powerful and gentle cooling

Product images shown are for representational purpose only, actual product may vary.

Samsung Air Conditioner

360 Cassette
Circular design

Design and control - Fits in beautifully, use intuitively

Combining an elegantly modern look with a powerful performance and effortless control, the Samsung 360 Cassette indoor unit can provide exceptional comfort and style in many locations.

A circular design that fits in everywhere

Innovative circular design

The 360 Cassette has an innovative circular design that enables it to match a multitude of interior designs, so it fits in perfectly everywhere. Its minimalist and elegant styling can help to create a sophisticated and distinctive look in many different sites. And its circular shape stands out beautifully when it's installed in an exposed ceiling, which is the most trendy of modern architectural designs.

Easy to use and see the air flow

Circular LED display + Wireless remote controller

Using the 360 Cassette is a real pleasure as you can intuitively control its performance and see where the air is going. The Circular LED Display on the air conditioner also shows the actual direction that the air is flowing - vertically and horizontally. So with just one glance you can quickly tell where the air is going. And, its Wireless remote controller* features a Jog shuttle (wheel controller) and a dedicated button that provide an easy and fun way to adjust the strength of the air flow.

*Optional.

Toptani Shopping Mall
Albania

Novotel Itu Golf and Resort
Brazil

Icon Siam
Thailand

V-House
Brazil

Mr. Brown Restaurant
Italy

Dongsim
Korea

The Coffee Bean and Tea Leaf
Philippines

Lego Korea
Korea

Café Amazon
Thailand

Noah's Roasting
Korea

Greenwood Fish Market
Singapore

Skava Minas
Brazil

A perfect circle ensures perfect harmony with your own style

The pleasing aesthetic of the 360 Cassette's circular design is the perfect way to enhance your interior surroundings. It also directs air uniformly in all directions, ensuring a fresh, natural and pleasant breeze that completely eliminates cold drafts. This unique combination of its visually stunning, yet extremely practical design led to the 360 Cassette winning the prestigious iF Award (International Forum Design Award) 2016.

360 Cassette
Bladeless discharge

Comfortably cool, not cold

A bladeless design softly disperses cool air across the room, making you comfortably cool without feeling a cold draft**. With no blades to block the airflow, it also expels up to 25 percent more air* and spreads it farther.

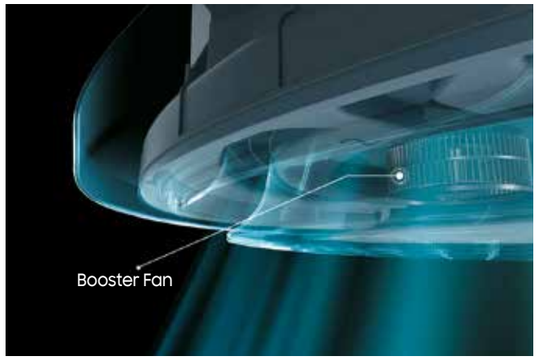
Spreads more air in more ways

An innovative booster fan enables cool air to be expelled at much lower angles. It creates a low pressure area around the outlet, so that cool air comes out parallel to the ceiling and disperses across a wider area.

Within a 5m radius, no cold draft between 0~1.5m in height (with 14.0 kW).

*Samsung testing compared to a general 4Way cassette type air conditioner.

**Within a 9.3m radius the temperature difference is less than 0.6°C.



Circular design to perfectly fit anywhere

Its innovative circular design can match a multitude of interior designs, so it perfectly fits in anywhere. Its minimalist modern styling creates a sophisticated look and its circular shape stands out beautifully.

Simple and intuitive all-round control

Intuitively control its performance and see where the air is going. The Wireless Remote Controller's* Jog shuttle and button offer a fun way to adjust the airflow and a circular LED display shows its direction.

*Optional.

360 Cassette
Bladeless discharge

Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung 360 Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

An air conditioner and an air purifier rolled into just one unit

Purification System (Optional)*

The Samsung 360 Cassette offers an optional Purifying Panel that keeps the indoor air fresh and clean. It consists of 2 types of filter – a Pre-Filter and a PM1.0 Filter. This 2-step filtration system ensures that you can breathe in pure, fresh air all day long. And its Air Purity Level Display clearly shows the pollution level.

PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3μm in size, a positive charge, so it becomes strongly attached to the ground plates.

PM1.0 Ultrafine particles		PM2.5 Fine particles		PM10 Coarse particles	
Virus	0.005 ~ 0.3μm	Powder	0.1 ~ 30μm	Red blood cells	5 ~ 10μm
Bacteria	0.3 ~ 60μm	Printer toner	0.5 ~ 15μm	Car emissions	1 ~ 150μm
Cigarette smoke	0.001 ~ 4μm	Atmospheric	0.001 ~ 40μm	Pollen	6 ~ 100μm
		House dust	0.05 ~ 100μm	Hair	5 ~ 200μm
		Cobweb width	2 ~ 3μm	Human hair	40 ~ 300μm
				Sand	62 ~ 500μm
				Fog	70 ~ 350μm
				Glass wool	1000μm

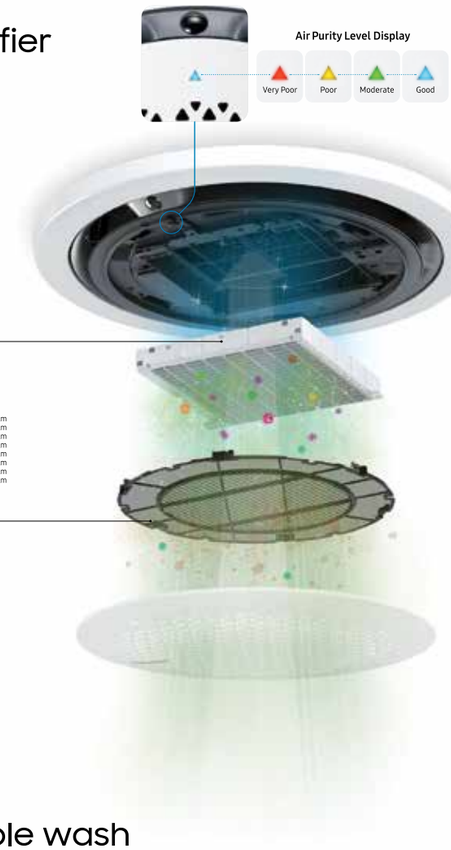
Pre-Filter

Blocks large particles, such as household dust, fibers, etc.

Korea Air Cleaning Association

The filtration system of Samsung 360 Cassette has been certified by Korea Air Cleaning Association, based on testing using the standard KACA-CAC-2011.

*This function is optional. The number and shape of filters may vary by model.



Keep using for longer with a simple wash

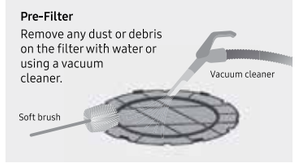
Washable Filters

The semi-permanent PM1.0 Filter and Pre-Filter are washable and reusable. It means you can continue enjoying clean, fresh air, while also saving on maintenance costs as you don't need to buy new filters.

STEP 01/ Wash

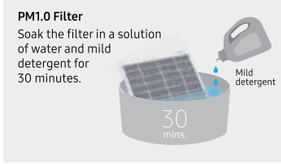
Pre-Filter

Remove any dust or debris on the filter with water or using a vacuum cleaner.



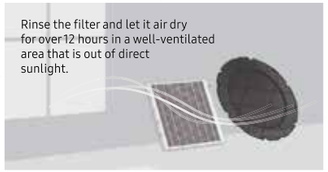
PM1.0 Filter

Soak the filter in a solution of water and mild detergent for 30 minutes.



STEP 02/ Rinse and Air Dry

Rinse the filter and let it air dry for over 12 hours in a well-ventilated area that is out of direct sunlight.

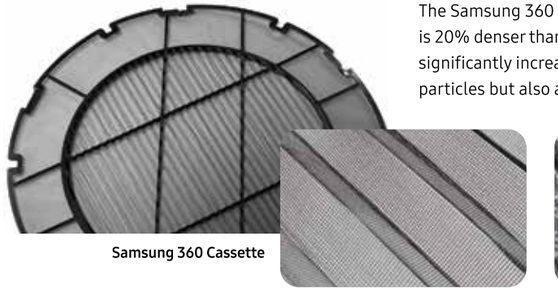


360 Cassette
Bladeless discharge

Keeps your air hygienic by capturing dust, airborne contaminants and allergens

Pre-Filter

The Samsung 360 Cassette has a superior filter mesh with 0.5mm holes, which is 20% denser than a vinyl chloride type filter. And it has a ridged surface that significantly increases the contact area. So it effectively captures not only dust particles but also airborne contaminants and even certain allergens.



Samsung 360 Cassette

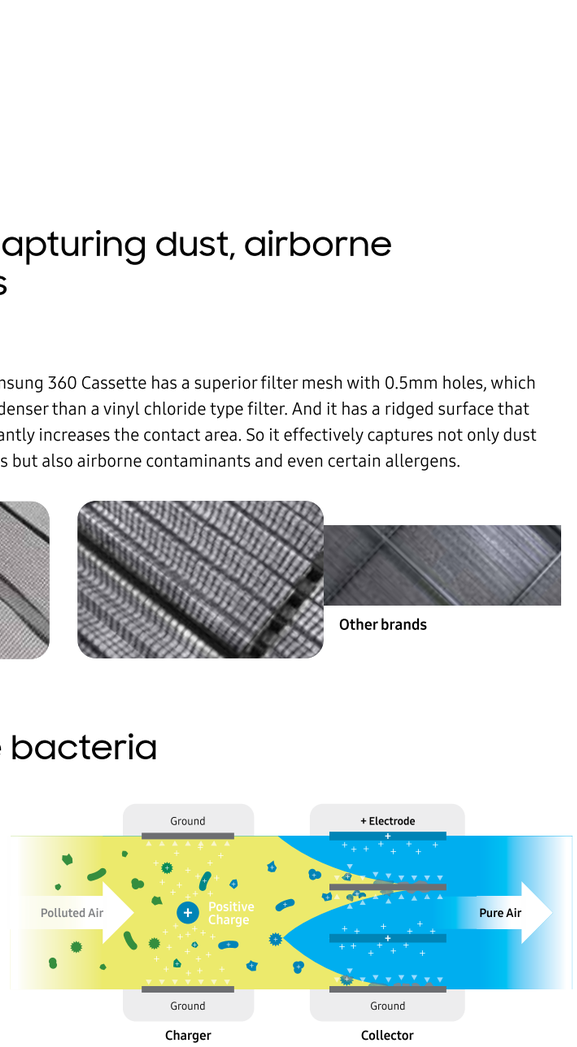
Other brands

Proven capability to sterilize bacteria

PM1.0 Filter

The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3μm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. Its effectiveness in sterilizing bacteria has been verified by Intertek*.

*Based on the Intertek test report. (No.: RT20E-S0010-R)
*Test bacteria: Escherichia coli, Staphylococcus aureus.



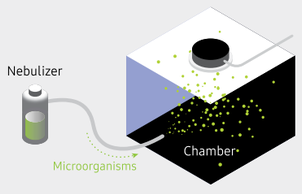
intertek
Total Quality. Assured.

Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.

"The PM 1.0 filter of Samsung Electronics can sterilize up to 99% of the microorganisms that are collected on the filter."

Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



Conclusion

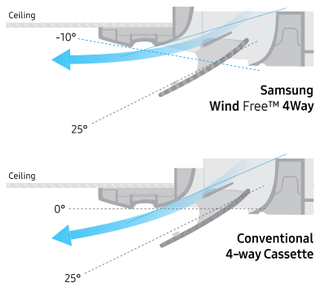
More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.

WindFree™ 4Way

Faster and wider cooling with long wind

Big Blade and Slanted Outlet Design

4-way cassette air conditioners are generally installed in much larger spaces, such as commercial sites and offices. So the coverage of their air conditioning is one of the important factors in ensuring the comfort and productivity of everyone in the room.
As a result, the Samsung **Wind** Free™ 4Way Cassette is designed to deliver not only the ultimate comfort in **Wind** Free™ mode but also a superior cooling performance with its Normal cooling mode. It has an 84mm big blade that is 31% larger than normal*, which helps prevent air from dispersing, so it sends much more air directly to the chosen spots. And the outlet is designed with a slant that opens blades at an angle of between -10° and 25° relative to the ceiling. This creates an almost horizontal air flow that can be sent further along the ceiling. So it can deliver cool air over a long distance, reaching up to 5m, which means it will quickly cover a 10m wide space without leaving dead zones.



*Based on internal standard testing conditions in individual results may vary. Image simulated for representational purposes only.
*Based on the **Wind** Free™ 4Way Cassette, compared to a conventional 4-way cassette air conditioner which has a 64mm blade. The **Wind** Free™ 4Way 600x600 has a 66mm blade.

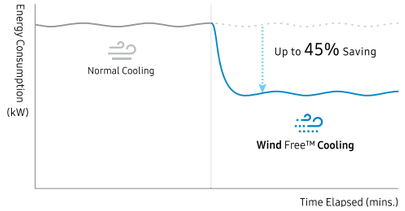
Cost Saving - Maintain comfort with minimum cost

The Samsung **Wind** Free™ 4Way Casstte creates the ultimately comfortable environment and keeps it for longer with minimal energy. The highly energy-efficient **Wind** Free™ Cooling is also proven as it effectively maintains cool air over 8 hours.

Reduces energy use by 45%*, while still keeping you comfortable**

Low Energy Consumption

Save money every day by optimizing your power usage with the 4Way Cassette's highly energy-efficient **Wind** Free™ Cooling. When operating in **Wind** Free™ mode, the outdoor unit consumes only minimal power – using up to 45% less electricity compared to the Normal cooling mode*. But it still keeps the room comfortably cool**, so you feel like you've entered a cave on a hot summer's day.



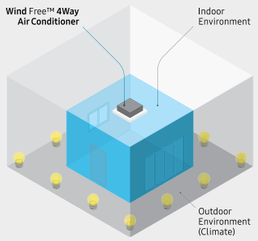
*Only applicable on the **Wind** Free™ models. Based on internal testing of the AC140RN4DKG/EU working at 14.0kW. Operating conditions: Outdoor 35°C DB / 24°C WB, Indoor 27°C DB / 19°C WB. Results may vary depending on environmental factors and individual use.

Based on internal testing on a **Wind Free™ 4Way 14.0kW model (AC140RN4DKG/EU) in a Test Lab, following the experimentation method described below.

HOW TO TEST

Proven to keep you cool indoors with Wind Free™ Cooling

In order to stringently test the air conditioning systems in various climate conditions, Samsung runs a Test Lab that has a house inside it and can create and maintain simulated outdoor conditions. With the indoor and outdoor temperatures both being 35°C, a **Wind** Free™ air conditioner installed in the house began cooling using the Normal mode. After reaching the set temperature of 25°C, it changed mode to **Wind** Free™ and maintained a stable indoor temperature (25°C±0.5°C) for over 8 hours.



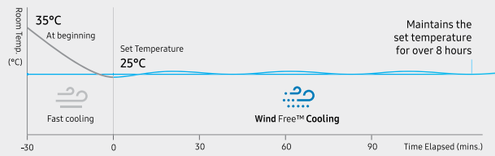
Test Condition

- Temperature: Outdoor 35°C (Sustained), Indoor 35°C (At beginning)
- Indoor Area: 40m²
- Product: **Wind** Free™ 4Way 7.1kW model
- Measurement: Temperature distribution and consumed energy using Normal cooling and then **Wind** Free™ Cooling

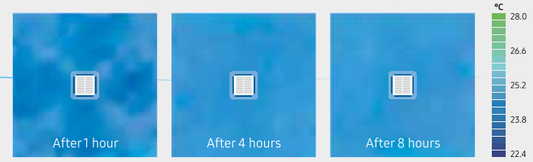
Test Result

- Using fast cooling, the room temperature reached the set temperature after 30 minutes.
- Mode changed to **Wind** Free™, which maintained the indoor temperature (25°C±0.5°C) while the outdoor temperature remained constant.

Indoor Temperature Change



Indoor Temperature Distribution in **Wind** Free™ Cooling



WindFree™ 4Way

Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung **Wind** Free™ 4Way Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

An air conditioner and an air purifier rolled into one unit

Purification System (Optional)*

The Samsung **Wind**Free™ 4Way Cassette not ony has a general panel but can also include an optional Purifying Panel that keeps the indoor air fresh and clean. It consists of 2 types of filter – a Pre-Filter and a PM1.0 Filter, and this 2-step filtration system ensures that you can breathe in pure, fresh air all day long.

PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3μm in size, a negative charge, so it becomes strongly attached to the ground plates.

PM1.0 Ultrafine particles		PM2.5 Fine particles		PM10 Coarse particles	
Virus	0.005 ~ 0.3μm	Powder	0.1 ~ 30μm	Red blood cells	5 ~ 10μm
Bacteria	0.3 ~ 60μm	Printer toner	0.5 ~ 15μm	Car emissions	1 ~ 150μm
Cigarette smoke	0.001 ~ 4μm	Atmospheric	0.001 ~ 40μm	Pollen	6 ~ 100μm
		House dust	0.05 ~ 100μm	Hair	5 ~ 200μm
		Cobweb width	2 ~ 3μm	Human hair	40 ~ 300μm
				Sand	62 ~ 500μm
				Fog	70 ~ 350μm
				Glass wool	1000μm

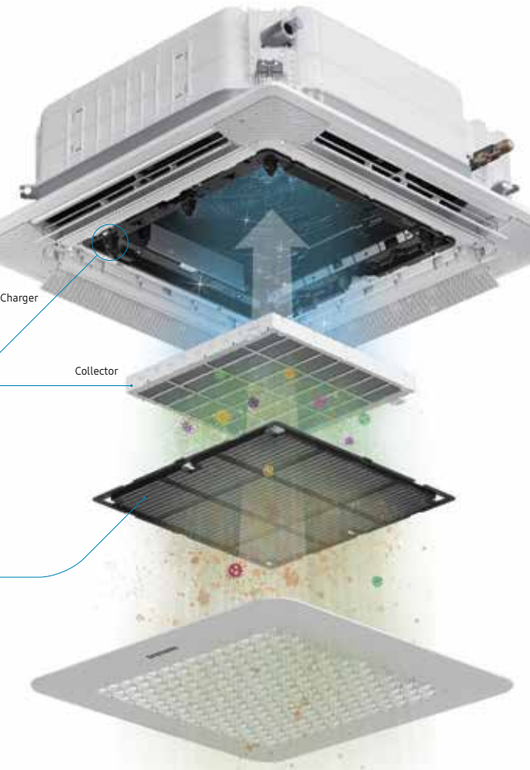
Pre-Filter

Blocks large particles, such as household dust, fibers, etc.

Korea Air Cleaning Association

The filtration system of the **Wind** Free™ 4Way Cassette has been certified by the Korea Air Cleaning Association. Based on testing using the standard KACA-CAC-2011.

*This function is optional. The number and shape of filters may vary by model.



Keep using for longer with a simple wash

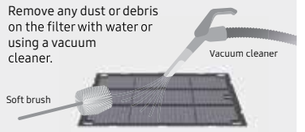
Washable Filters

The semi-permanent PM1.0 Filter and Pre-Filter are washable and reusable. It means you can continue enjoying clean, fresh air, while also saving on maintenance costs as you don't need to buy new filters.

STEP 01/ Wash

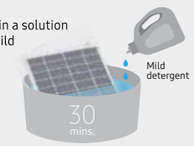
Pre-Filter

Remove any dust or debris on the filter with water or using a vacuum cleaner.



PM1.0 Filter

Soak the filter in a solution of water and mild detergent for 30 minutes.

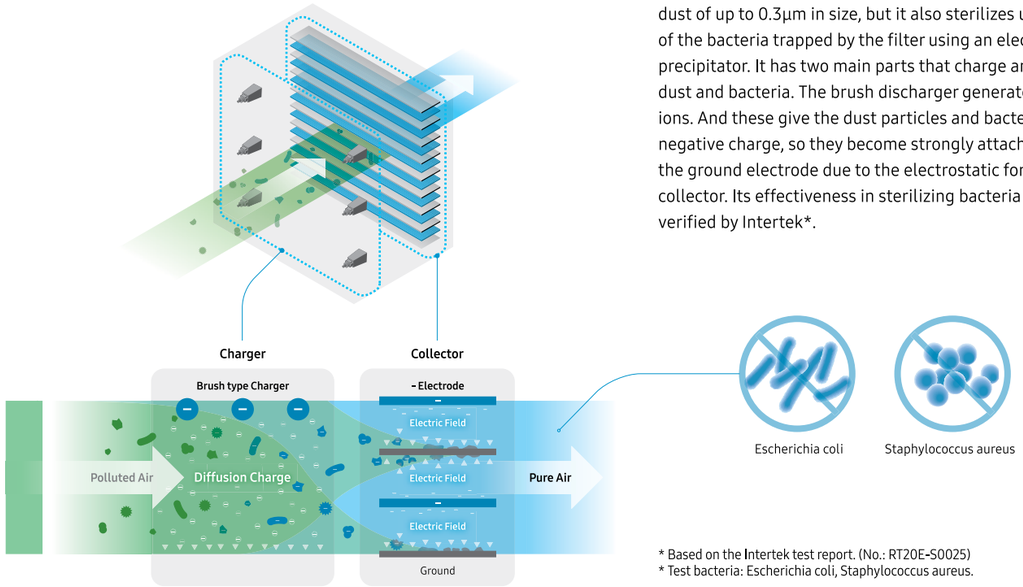


STEP 02/ Rinse and Air Dry

Rinse the filter and let it air dry for over 12 hours in a well-ventilated area that is out of direct sunlight.

Proven capability to sterilize bacteria as well as capturing ultrafine dust

PM1.0 Filter



The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3µm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. It has two main parts that charge and collect dust and bacteria. The brush discharger generates negative ions. And these give the dust particles and bacteria a negative charge, so they become strongly attached to the ground electrode due to the electrostatic force of the collector. Its effectiveness in sterilizing bacteria has been verified by Intertek*.

* Based on the Intertek test report. (No.: RT20E-S0025)
* Test bacteria: Escherichia coli, Staphylococcus aureus.

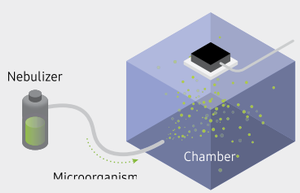
intertek
Total Quality. Assured.

Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.

"The PM 1.0 filter of Samsung Electronics can sterilize up to 99% of the microorganisms that are collected on the filter."

Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



Conclusion

More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.

IImage simulated for representational purposes only.

WindFree™ 4Way

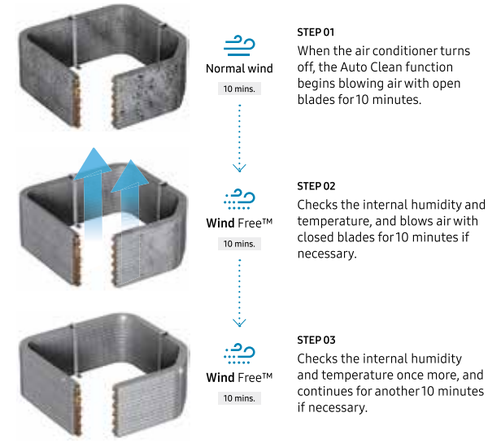
Hygiene

Stays clean & hygienic with less moisture

Auto Clean

When an air conditioner is turned off after working in cooling mode the difference in internal and external temperatures can lead to moisture condensing on the heat exchanger, enabling mold to grow that causes odors. To prevent this, the Samsung **Wind** Free™ 4Way Cassette has a humidity sensor and features an Auto Clean function*. After it's been working, it automatically dries the heat exchanger using a 3-step process, sensing the temperature and humidity inside the air conditioner. It removes moisture by blowing air for between 10 to 30 minutes, which prevents the build-up of bacteria and odors.

* Only available in **Wind** Free™ models that have a humidity sensor.



STEP 01
When the air conditioner turns off, the Auto Clean function begins blowing air with open blades for 10 minutes.

STEP 02
Checks the internal humidity and temperature, and blows air with closed blades for 10 minutes if necessary.

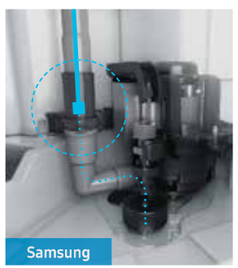
STEP 03
Checks the internal humidity and temperature once more, and continues for another 10 minutes if necessary.

No backflow, no fungi growing inside

Drain Pump with Check Valve

A built-in Drain Pump gives you much more flexibility in the installation of drainage. It also has a Check Valve as standard, which prevents condensed water from flowing back and dripping into indoor spaces. So you don't need to worry about water stagnation or the overflow of drain water. And, as less water collects in the Drain Board, it stays clean and there is less risk of bacteria and fungi growing.

When turned off, water in the pipe flows backward to the drain board, which may cause bacteria and fungi.



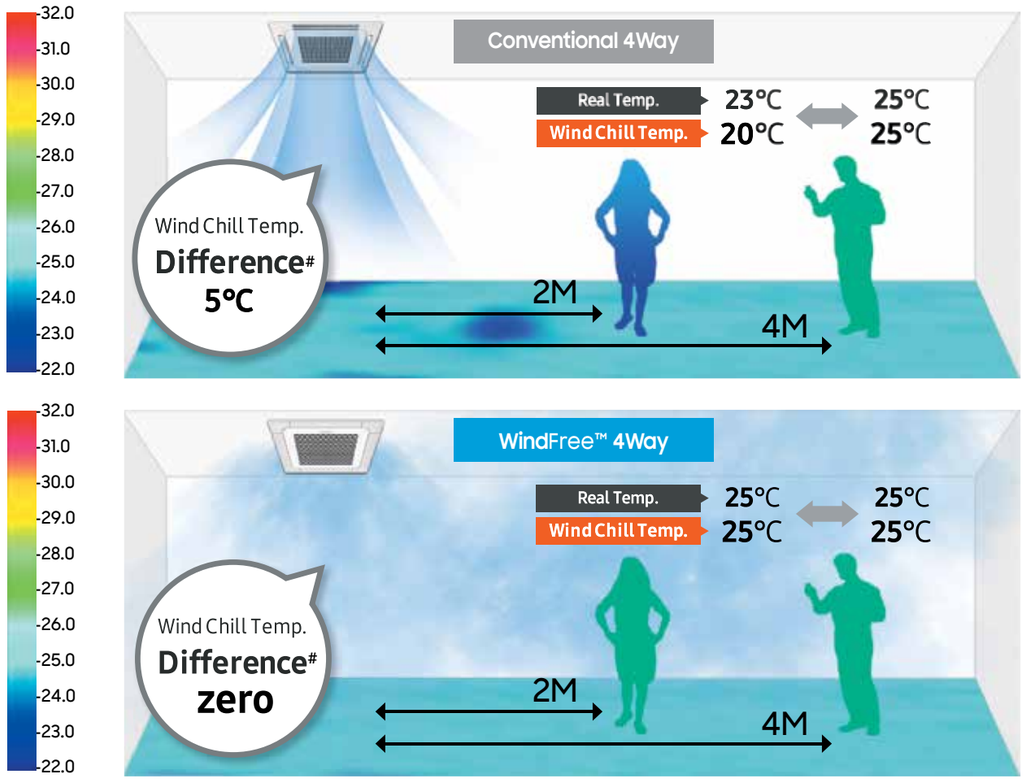
When turned off, a Check Valve prevents water from flowing back, so the drain board quickly gets dry and stays clean.

IImage simulated for representational purposes only.

WindFree™ 4Way Cassette S
Robust operation

Even cooling in all areas

WindFree™ Cooling keeps the temperature even inside the room.



WindFree™ cooling.
Gets cool fast, stays cool without direct wind

The **Wind**Free™ Air Conditioner pushes air out through 15700 micro holes in the panel, producing a dispersed and gentle flow of air, actually defined as "still air"※. The key here is all of those holes create a still, cooled air flow that infiltrates the room steadily.

※ Still Air Condition: According to ASHRAE, if velocity of wind is lower than 0.15m/s, people can not detect wind. They define that condition as "Still Air".

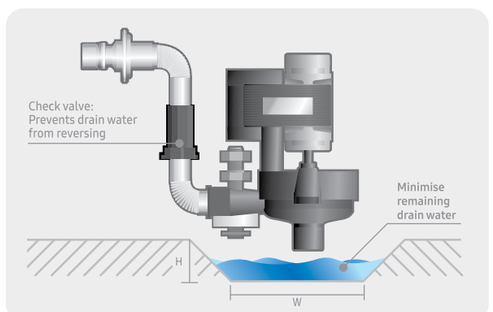
Streamline management with a flexible design

The Samsung 4Way Cassette S is uniquely designed for easy management. Featuring an advanced check valve, and detachable panel and airflow blades, this unit offers quick, simple setup and maintenance for the ultimate convenience, comfort, and performance.

#Temperature difference based on internal research.

Drip-free operation

The check valve on the drain pump prevents drained water from flowing backwards into the drain pan. This minimises the drain pan's water level, eliminating the worry and hassle of water stagnation or overflowing drain water dripping.

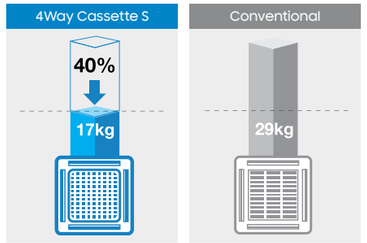


WindFree™ 4Way Cassette S
Low maintenance

Available panels in 4Way Cassette S

Lightweight build

The Samsung 4Way Cassette S indoor unit is now lighter in weight at 17kg. It is one of the lightest indoor units in the industry, about 40 percent lighter* than conventional products.



*Based on the comparison with conventional 10kW model.

Energy saving with **Wind**Free™ Cooling

Under the same condition, **Wind**Free™ Cooling Mode can save energy use by 55% compared to conventional cooling#.

Achieve peak performance with optimal airflow and superior control

Integrating the most advanced technologies, Samsung 4Way Cassette S delivers easy, efficient comfort with specialised blade control, adjustable operation and powerful airflow. An optional Loniser extends the unit's efficiency with air sanitation technology for a healthier atmosphere.

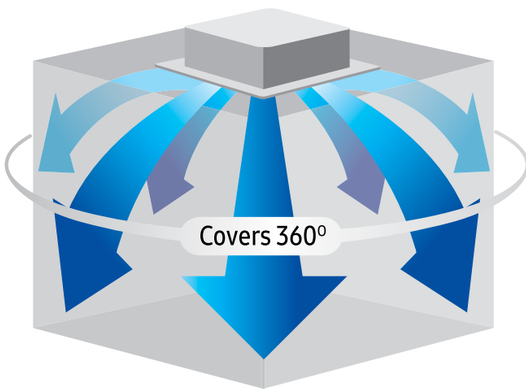
Individual blade control

Samsung 4Way Cassette S features a remote controller that enables users to manipulate the angles of the fan blades for more efficient cooling. With the remote controller, users can individually set the opening angles of the four blades at the same angle or different angles within a 32° - 65° range to create just the right atmosphere.

#Test Condition
- Test model: **Wind**Free™ 4Way 14.0 kW
- Temperature: OD 35°C DB / 24°C WB, ID 27°C DB / 19°C WB

Full-surround airflow

The 4Way outlet can cool every corner of the room. The new and practical design of the blades minimise blind spots at the corners of the panel, and can cover nearly a full 360° around the indoor unit.



WindFree™ 4Way Cassette S (600 x 600)

Tasteful design, compact and lightweight build

Add chic flair to your interior design with a stylish yet powerful AC system

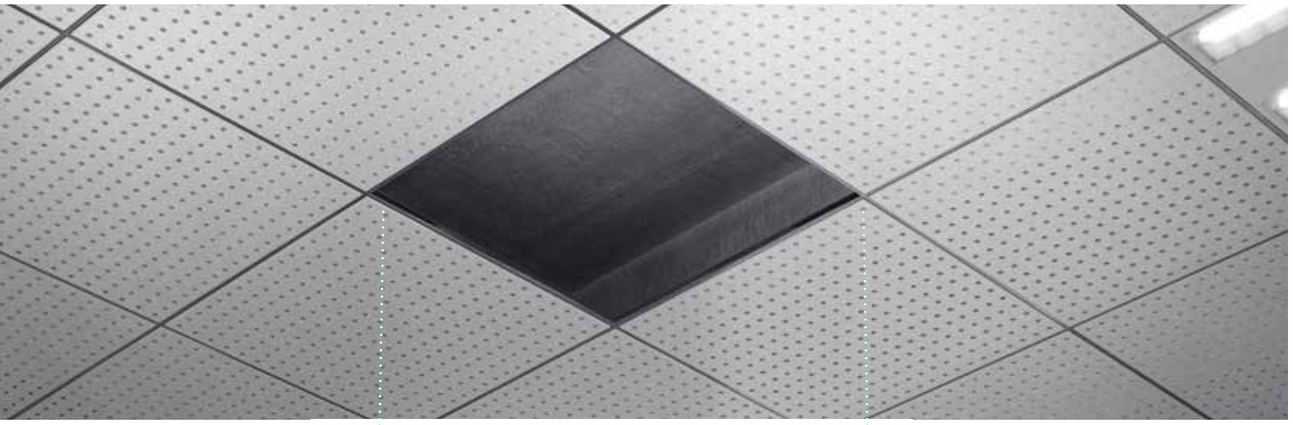
Samsung's advanced 4Way Cassette S (600 x 600) builds on the aesthetic appeal and performance of the standard 4Way Cassette S with an enhanced design. The 4Way Cassette S (600 x 600) comes in a variety of patterns to complement any interior. The stylish cassette unit visually harmonises with the indoor space, while the efficient cooling and heating performance makes it a dependable and practical air conditioning solution.

The 4Way Cassette S (600 x 600) indoor air conditioning system provides high-performance heating and cooling with features such as:

Tasteful design and compact, lightweight build: Creates a polished ambiance with a compact design and attractive panel patterns.

Enhanced comfort control: Optimise comfort and save energy with optional motion detection.

Low maintenance and powerful airflow: Easy installation and maintenance, and maximises airflow with an efficient design and robust performance.



Main Unit Dimensions (W x D mm)
575 x 575

Main Unit Weight (kg)
11.5

WindFree™ 4Way Cassette S (600 x 600)

Tasteful design, compact and lightweight build

WindFree™ Cooling also comes with 4Way Cassette (600 x 600)

Stylish design, effective Smart Inverter compressor and a plethora of innovative features make Samsung 4Way Cassette (600x600) great for residential and light commercial applications with limited roof space.

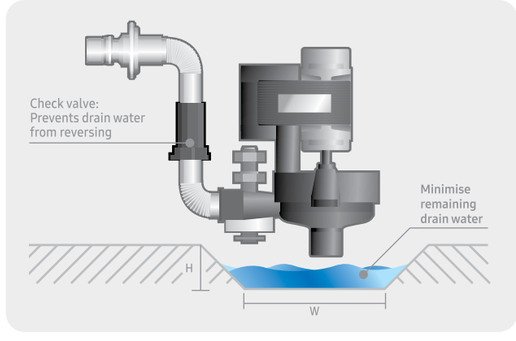
Available panels in 4Way Cassette S (600 x 600)

Customisable airflow

Samsung 4Way Cassette enables users to manipulate the angles of the fan blades for more efficient cooling through a remote controller.

Drip-free operation

Check valve on the drain pump prevents drained water from flowing backward into the drain pan. This minimises the drain pan's water level, eliminating the worry and hassle of water stagnation or overflowing drain water dripping into the interior.

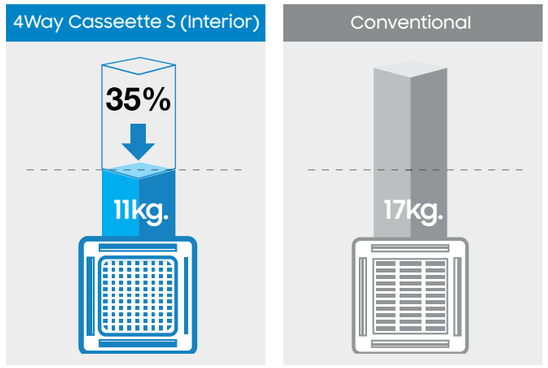


Ultra-compact size

Samsung's 4Way Cassette S (600 x 600) Air Conditioner can be installed on a single standard ceiling tile (600W x 600D) which helps minimise the installation time and effort.

Light, robust design

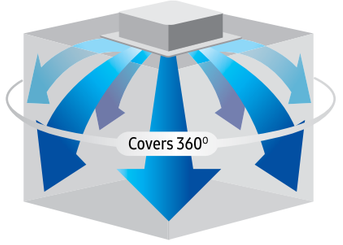
The Samsung 4Way Cassette S (600 x 600) indoor unit weighs only 11kg. It is one of the lightest indoor unit in the industry, about 35 percent lighter* than our conventional products.

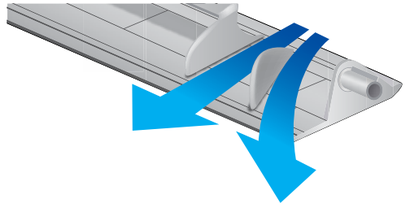


*Based on the comparison with conventional 3.5 kW model.

Full surround air flow

The 4Way outlet can cool every corner of the room. The new and practical design of the blades minimise blind spots at the corners of the panel, and can cover nearly a full 360° around the indoor unit.





WindFree™ 4Way Cassette S (600 x 600)
Enhanced comfort control

Create a flawless atmosphere with innovative motion-controlled operation

The optional Motion Detection Sensor (MDS) for 4Way Cassette S (600 x 600) creates the ideal environment with added comfort control and energy savings by providing just the right amount of airflow when needed.

Smart on/off function

Energy-saving MDS detects when individuals are absent from the area and automatically stops the air conditioning operation. It also automatically sets operation patterns to create the perfect atmosphere and maximise energy efficiency.

Ideal airflow distribution

The innovative MDS prevents the indoor unit from distributing airflow directly to individuals to reduced discomfort. It also reduces the difference of thermal sensation in the body by detecting the temperature around the floor.

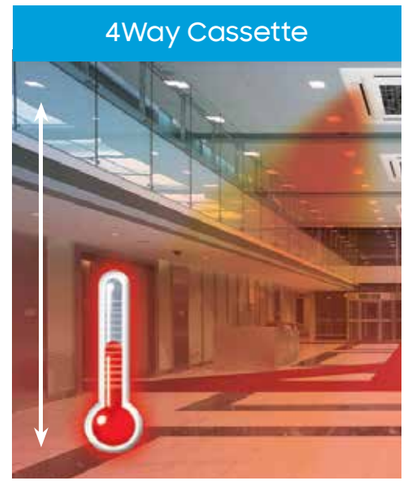
Individual blade control

Samsung 4Way Cassette S features a remote controller that enables users to manipulate the angles of the fan blades for more efficient cooling. With the remote controller, users can individually set the opening angles of the four blades at the same angle or different angles within a 32° - 65° range to create just the right atmosphere.

WindFree™ 4Way Cassette S (600 x 600)
Enhanced comfort control

Optimal airflow for high ceilings

You can get optimum fan speed for high ceilings through the remote control, without having to adjust the DIP switch on the PCB. And the high ceiling mode delivers even more powerful airflow coverage throughout the interior space, expanding the airflow coverage area.



Cleaner, healthier air

Users can sanitise indoor air with the optional Ioniser* for a cleaner work or living atmosphere. The easy-to-install Ioniser generates active hydrogen and oxygen ions to eliminate airborne contaminants, completely eradicate airborne bacteria and allergens, and even neutralise OH (hydroxyl) radicals.

*Ioniser device generates active hydrogen and oxygen ions which eliminate biological contaminants and active oxygen (OH- radical) in the air by turning them into harmless H_2O.

WindFree™ **1Way** Cassette

Comfort and energy saving - Cools comfortably and uses less energy

The Samsung 1Way Cassette air conditioner delivers a unique level of comfort by cooling optimally, without the unpleasant feeling of cold air on your skin, while minimizing noise and energy use.

Stay comfortably cool without feeling cold

WindFree™ Cooling*

Stay feeling comfortable cool with **Wind**Free™ Cooling. It cools effectively without the unpleasant sensation of cold wind being blown directly onto your skin. Cool air is gently dispersed across the room through 10000 micro air holes, which creates a "Still Air" environment** with a very low air speed of 0.15m/s. There are no drafts to disturb you and you don't feel too hot or too cold. So if your children kick off the blanket at night you don't have to worry about them feeling cold in the room.

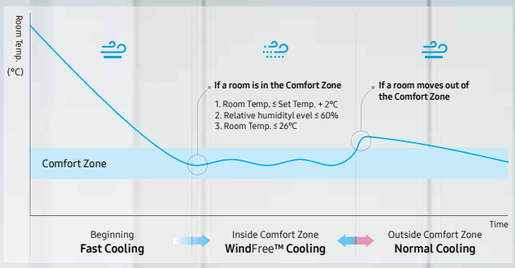
10000
Micro Air Holes

*Available only on the **Wind**Free™ models.

**ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as when the velocity of air is below 0.15m/s, so people cannot feel any cold drafts.

Enjoy a more intelligent way of working Smart comfort operation*

Experience an intelligent way of creating the ideal room conditions. The 1Way Cassette continually monitors both the temperature and relative humidity and analyzes the room conditions. It then automatically switches between operating modes to keep everyone feeling really comfortable without the need for any manual control.

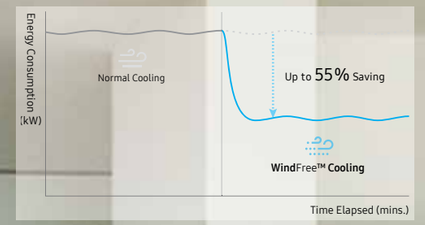


*Available only on the **Wind**Free™ models.

Reduces energy use by 55%** to save money

WindFree™ Cooling* (Energy saving)

Save money every day by optimizing power usage with the 1Way Cassette's highly energy-efficient **Wind**Free™ cooling. When operating in **Wind**Free™ mode, the outdoor unit consumes only minimal power - using up to 55% less electricity compared to the normal mode**. But it still provides sufficient cool air to maintain the desired temperature. So you can stay comfortably cool without worrying about your electricity bills.



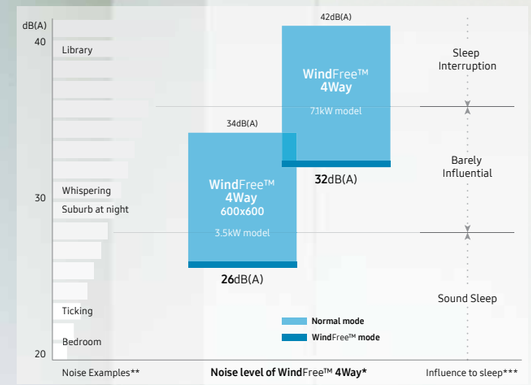
*Available only on the **Wind**Free™ models.

**Based on internal testing: Outdoor unit AM050FXMDEH running simultaneously with Indoor units AM056NN1DEH, AM036NN1DEH, AM022NN1DEH. Temperature conditions: Outdoor 35°C DB / 24°C WB, Indoor 27°C DB / 19°C WB. Results may vary depending on environmental factors and individual use.

Enjoy a quiet night without disturbance

Quiet operation

The Samsung 1Way Cassette air conditioner drastically reduces the amount of noise created by the air being dispersed. At its lowest level it only generates 24dB(A) of sound*, which is almost as quiet as a whisper. It means you won't be disturbed by unpleasant noise when you're going to sleep - or doing anything else. So it's ideal for places where you sleep, relax, concentrate or are sensitive to noise, such as the bedroom, study or baby's room.



*Based on internal testing of a 3.6kW model when set to **Wind**Free™ mode. Results may vary depending on environmental factors and individual use.

WindFree™ 1Way Cassette

Performance - Cools farther, from corner to corner

The Samsung 1Way Cassette air conditioner is designed to cool a large area - quickly and efficiently. Its big blade sends air over a much longer and wider area, while Auto Swing distributes air in every direction.

Installation - Fits into a small ceiling space

It can be difficult to find space for an air conditioner, especially without impacting the interior. The Samsung 1Way Cassette has a slim and elegant design that will fit seamlessly into many locations.

A big blade sends cool wind a long way

Long wind

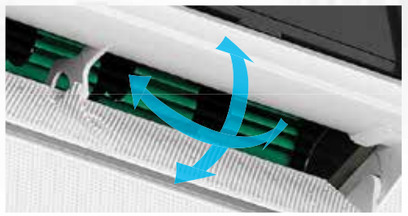
Cool your room quickly from corner to corner. The 1Way Cassette has a 100mm big blade that can deliver cool air over a long distance, reaching up to 8 meters*. It also has a wider operating angle, as the blade can move between 40 to 80 degrees. So it can cool a whole room rapidly and evenly by dispersing cool air farther and into every corner, without leaving any "dead zones".

*Based on internal testing on a 7.1kW model. Horizontal wind range: sitting height = 0.6m, wind speed = 0.3m/s. Results may vary depending on environmental factors and individual use.

Heats or cools evenly in every corner

Auto swing*

Create a comfortable environment with an even temperature in every corner of a room. Conventional 1-way systems are normally installed in the ceiling and it's difficult to manually adjust the wind direction from left to right. The 1Way Cassette's Auto Swing function* automatically expels cool air in every direction. As well as the auto up-down swing function it also has an auto left-right swing function, so air is evenly distributed across the room.



*Only available on certain models.

Compact and elegant for extra flexibility

Slim design

The 1Way Cassette's extremely slim design has a height of only 135mm and can fit into a small ceiling space of just 155mm. So it provides a suitable and effective solution for cooling and heating a wide range of locations where space is limited. In addition, its elegant and compact design means it blends discretely into interiors of all types and styles.

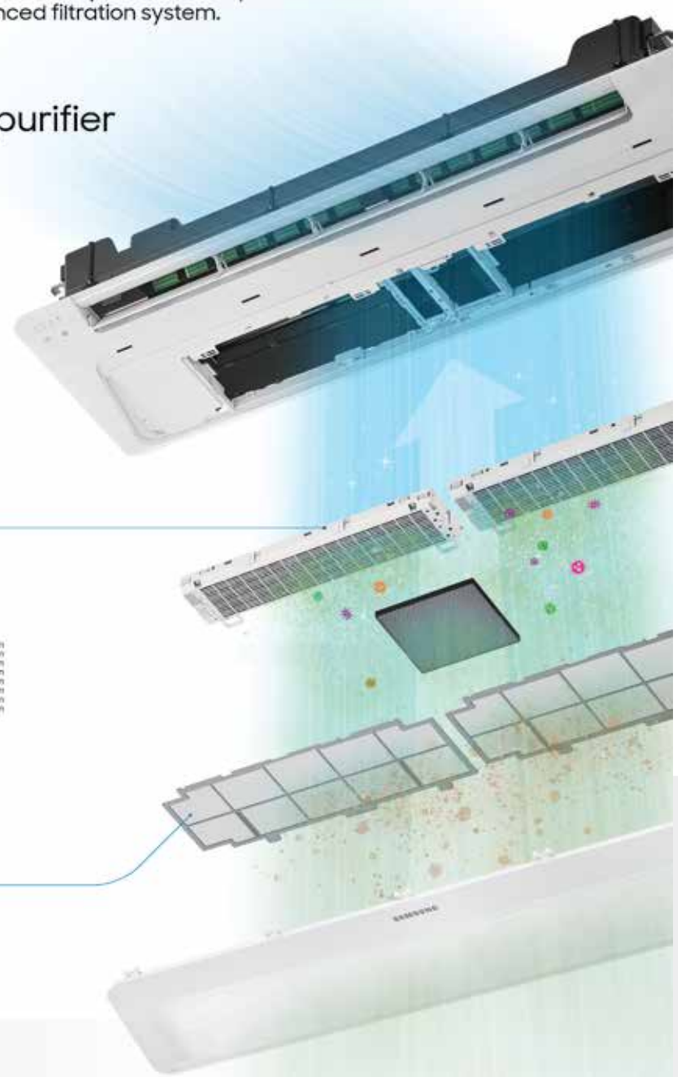
Hygiene - Even more comfort with even cleaner air

Staying cool is one thing, but to be really comfortable you also need to be breathing clean air. So the Samsung WindFree™ 1Way Cassette incorporates an air purifier that is designed to improve the air quality with its advanced filtration system.

An air conditioner and an air purifier rolled into one unit

Purification System (Optional)*

The Samsung Windfree 1Way Casette not only has a general panel but can also include an optional purifying panel that keeps the indoor aur fresh and clean. The purifying panel consists of 2 types of filter – a Pre-Filter & a PM1.0 Filter. This 2-Step filtration system ensures that you can breathe in pure, fresh air all day long.



PM1.0 Filter

Has an electrostatic charger that gives ultrafine dust, up to 0.3μm in size, a positive charge, so it becomes strongly attached to the ground plates.

PM1.0 1μm Ultrafine particles		PM2.5 2.5μm Fine particles		PM10 10μm Coarse particles	
Virus	0.005 ~ 0.3μm	Powder	0.1 ~ 30μm	Red blood cells	5 ~ 10μm
Bacteria	0.5 ~ 60μm	Printer toner	0.5 ~ 15μm	Car emissions	1 ~ 150μm
Cigarette smoke	0.001 ~ 4μm	Atmospheric dust	0.001 ~ 40μm	Pollen	6 ~ 100μm
		House dust	0.05 ~ 100μm	Hair	5 ~ 200μm
		Cobweb width	2 ~ 3μm	Human hair	40 ~ 300μm
				Sand	62 ~ 500μm
				Fog	70 ~ 350μm
				Glass wool	1000μm

Pre-Filter

Blocks large particles, such as household dust, fibers, etc.

Korea Air Cleaning Association

The filtration system of the WindFree™ 1Way has been certified by Korea Air Cleaning Association. Based on testing using the standard KACA-CAC-2011.

*This function is optional. The number and shape of filters may vary by model.

WindFree™ 1Way

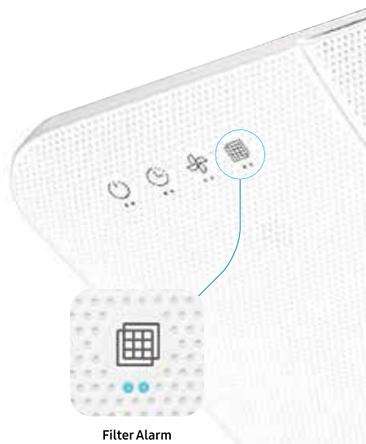
20% denser to capture more

Pre-Filter

The Pre-Filter of the WindFree™ 1Way Cassette is 50 mesh (about 0.5 mm), which is 20% denser than general vinyl chloride filters. So it can capture much finer dust particles, ensuring less dust in the indoor space and better air quality. The cleaning alarm indicator on the decoration panel lights up to inform you when it's time to clean the filter, and you can easily remove it by opening the return grille.

Vinyl Chloride Mesh Filter
Commonly used in general ducted air conditioners

Samsung's 50 Mesh Filter
Used in Samsung WindFree™ 1Way air conditioners



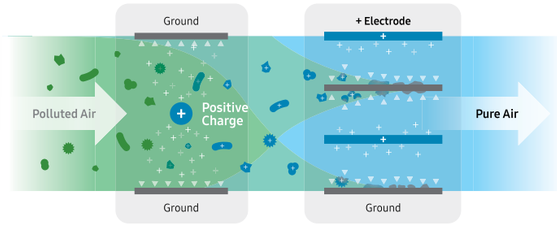
Filter Alarm

Proven capability to sterilize bacteria as well as capturing ultrafine dust

PM1.0 Filter

The PM1.0 filter is not only effective at capturing ultrafine dust of up to 0.3μm in size, but it also sterilizes up to 99% of the bacteria trapped by the filter using an electrostatic precipitator. Its effectiveness in sterilizing bacteria has been verified by Intertek*.

*Based on the Intertek test report. (No.: RT20E-S0010-R)
*Test bacteria: Escherichia coli, Staphylococcus aureus.



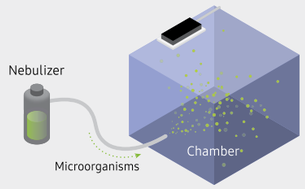
intertek
Total Quality. Assured.

Intertek is a British multinational company specializing in product assurance, inspection, testing and certification. This test was rigorously conducted by Intertek, and the test result was reported officially.

"The PM 1.0 filter of Samsung Electronics can sterilize up to 99% of the microorganisms that are collected on the filter."

Test method & measurement

1. Run the air conditioner while operating the PM1.0 Filter using high voltage power and a low fan speed. Spray bacteria towards the filter using a nebulizer, so that the bacteria are captured in the filter.
2. Stop spraying bacteria and keep the filter operating for an additional 10 minutes to allow the sterilization process to happen.
3. Calculate the sterilization rate by comparing the number of bacteria remaining on the filter with the number of bacteria cultivated on the source medium.



Conclusion

More than 99% of the microorganisms, such as Escherichia coli and Staphylococcus aureus, in the PM1.0 filter were destroyed by static electricity.

2Way Cassette

Comfort - Delivers consistent comfort over a long area

Even though it has a compact design, the Samsung 2Way Cassette is still very powerful. And its 2-way air flow spreads air evenly over a greater distance, so it is ideal for cooling or heating long and narrow spaces.

Cools and heats long or narrow areas evenly

Compact design with 2-way Air Flow

Make good use of valuable space with the compact 2Way Cassette. It is ideal for cooling or heating long and narrow areas, such as rectangular offices or hallways and corridors in hotels, schools and hospitals. Its 2-way air flow distributes air evenly over a long distance without any temperature deviation.

Cools even farther and in every direction

Auto surround swing

The 2Way Cassette features an innovative Twin Cross Flow Fan and an optimized air flow path, which enable air to be blown out over a long distance. Its Auto Surround Swing system then automatically distributes the air in every direction, ensuring that it is evenly distributed across the whole room. So you can enjoy a comfortable environment with an even temperature in every corner.

Comfort from corner to corner

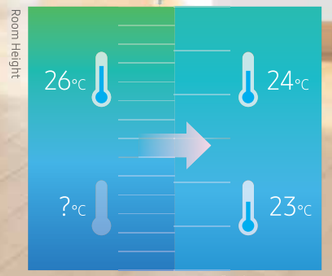
2 Motors and 2 Fans

Enjoy comfortable conditions wherever you are with the desired temperature in every corner of your room. The 2Way Cassette has two motors and two fans that can spread cool or warm air evenly throughout a large room, even if it is long and wide. They optimize the distribution and volume of air from two outlets, which ensures that a space quickly reaches the desired temperature - and stays that way.

Provides optimal comfort vertically

Optimum temperature control

Ensure a balanced and comfortable climate by ensuring a consistent vertical temperature across an entire room. The 2Way Cassette has an Optimum Temperature Control feature. It detects the temperature at the top and bottom of the area and then minimizes the difference and maintains the optimal temperature at every height in the room. Simply use the temperature sensor of the indoor unit and the wired remote control* to set up the indoor temperature detection conditions.



* Wired remote control model: MWR-WE13N, MWR-WG00JN.

2Way Cassette

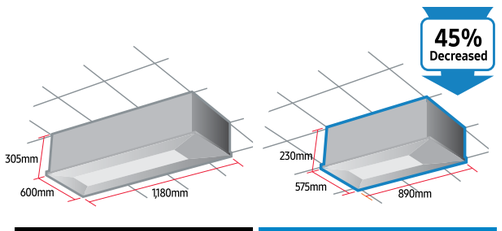
Easy, flexible installation

Reduce the hassle of installation with compact size and adaptable design

The modestly sized Samsung 2Way Cassette supports quick, simple setup for the ultimate convenience, comfort and performance.

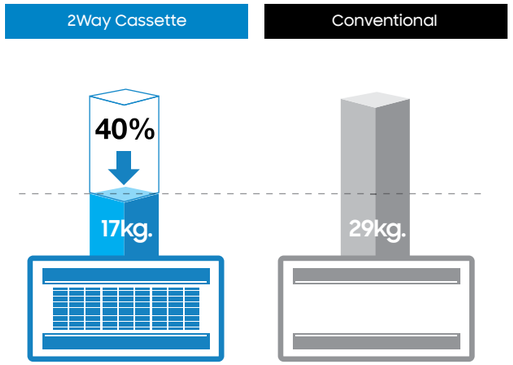
Small size, big performance

The 2Way Cassette indoor unit is now up to 45 percent smaller than conventional models, making it even easier to incorporate into the building design.



Ultra-light weight

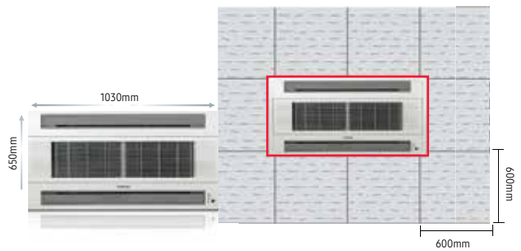
The slim and compact size reduces the setup space needed for easy installation and management.



Included Panel Weight 5.6kW

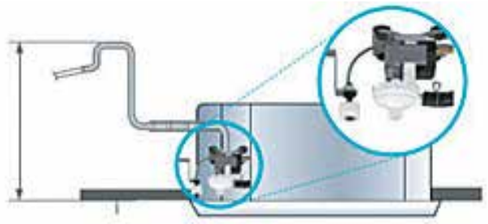
Standardised fit for easy installation

The 2Way Cassette unit dimensions allow for easy installation into standard ceiling grids (600W x 600D) for a tailored fit that blends unnoticeably into the interior framework.



Simple, smart drainage structure

With 75cm of discharge head, users can install the drain themselves, saving them time and money.



Advanced drain hose

Samsung's 2Way Cassette System Air Conditioner uses an advanced drain hose, which is recognised in Europe for its easy installation and leak prevention.

Ducted type

Efficient operation

Overview

Samsung Ducted type air conditioning units are a smart solution for low-maintenance, consistent cooling and heating performance in any environment. Their compact, slim frame blends seamlessly into ceilings, enhancing the beauty of the interior space and offering users more flexible installation options.

Various ducted air solutions

Offering a comprehensive lineup, Samsung Ducted type air conditioning units offer just the right solution for every need:

Slim Duct: This solution is a low static pressure model, which is optimised for places such as hotels and residences.

Middle Static Pressure (MSP): This model is specifically designed to enhance interior design for large spaces such as offices, stores, or residences.

High Static Pressure (HSP): This model is optimised for large spaces or places.

Smart pressure control

Samsung Ducted Type units feature a smart pressure control system. This system adjusts the fan speed based on the external static pressure (ESP), delivering consistent cooling and heating power, regardless of the surrounding environment.

Convenient installation

The optional lift-up drain pump lifts condensed water up to 75cm, compared to a limit of 70cm on conventional models, for flexible and convenient installation.

Slim Duct

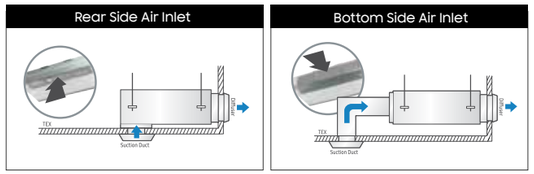
Ultra-light, adaptable design

Temper any environment with its light weight design and optimised airflow

The new Samsung Slim Duct visually blends into the ceiling while providing powerful cool and warm airflow. It's also easy to install and maintain in any interior regardless of the surrounding environment with its compact size and weight.

Flexible setup

The air inlet can be set up either on the bottom or rear of the unit, giving users greater flexibility in installation.

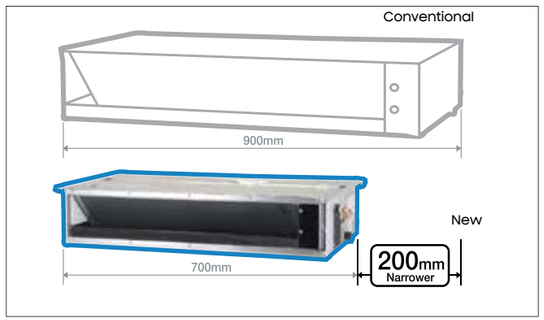


Simple drain pump installation

The new drain pump in the Slim Duct unit can be installed from the side by simply removing the right side panel. Users no longer need to disassemble the top cover to install, check or repair the drain pump for maximum convenience.

Various installation options

Slim Duct S adopts an ultra-compact, slim size with its thin width, which is 200mm* narrower than conventional products. This slender build enables flexible installation and maintenance in various environments.



*Only available in models with capacity up to 3.6 kW.

Lightweight

The efficient Slim Duct S is one of the lighest duct air conditioning unit on the market. Slim Duct S offers the best in convenient installation and maintenance.

Easy access, easy maintenance

Slim Duct features a flexible design that enables users to easily access its parts to maintain the unit.

MSP Duct

Silent, strong performance

Extensive coverage

MSP Duct offers greater static pressure than most slim ducts. This higher pressure level enables users to design more inlets and outlets with longer ductwork to provide even more airflow to larger areas.

World-class energy efficiency & savings

Smart Inverter System

Save money without sacrificing performance with its outstanding energy efficiency, earning it a Top-level Energy Efficiency Ratio. A large Sirocco Fan with aerodynamic blades and a DC Fan Motor expels more air, with less noise. And the Twin Rotary BLDC Compressor is quieter and more reliable.

3-way Service Access

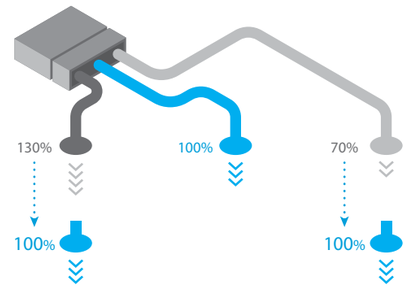
Service your ducted air conditioner more easily in a wide variety of locations. The MSP Duct is designed so that its fan, motor and coil can be accessed from three directions - top, side and bottom - using an easy to remove Slide Fit cover. As a result, it's simple to maintain wherever it's installed, which saves you time and money.

Silent operation with the static pressure control

The external static pressure control makes it easy to customise the ductwork to ensure efficiency and silent operation.

Auto ESP & Easy Tuning

The MSP Duct's Auto ESP function automatically senses the external static pressure (ESP). It then adjusts the fan speed to optimize the air volume and pressure and minimize noise. As no additional manual adjustment is necessary, it saves time on installation and maintenance. In addition, Easy Tuning lets you fine-tune the settings to suit your changing activity levels and requirements.



Easy upkeep and installation

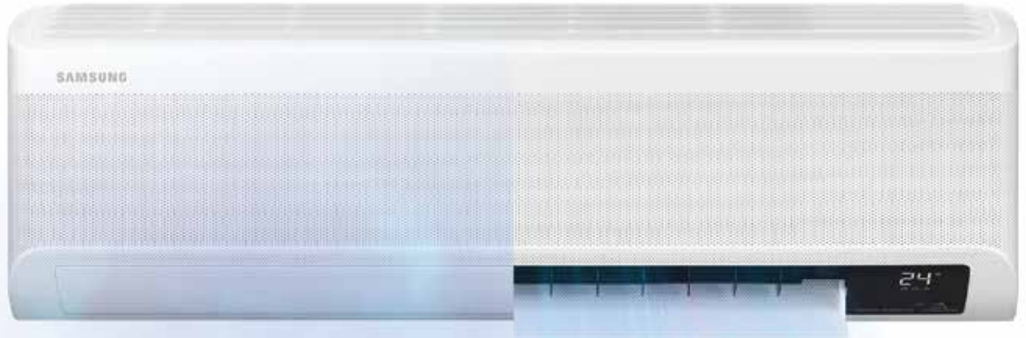
The MSP Duct unit features quickly accessible parts so users can maintain the unit with ease. Its compact size, Narrow width of 90cm and slim height of 19.9cm enable flexible installation and management for added user convenience.

Wall Mounted

WindFree™ Premium plus

Comfort - Intelligently optimised comfort for your life

The Samsung **Wind**Free™ air conditioner keeps you comfortably cool with **Wind**Free™ Cooling that is intelligently optimised to suit your needs. And it can quickly cool large spaces from corner to corner.

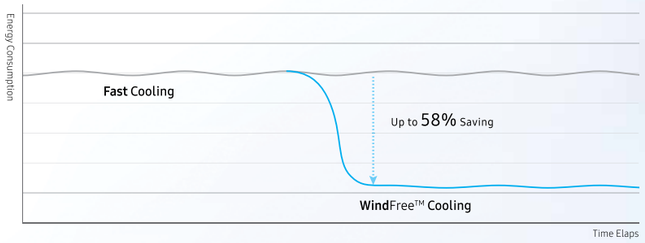


Stay cool without feeling cold

WindFree™ **Cooling**

Stay feeling comfortable cool with **Wind**Free™ Cooling. It cools gently and quietly without the unpleasant feeling of cold wind on your skin, as it disperses air through 23000 micro air holes. It creates a "Still Air" environment* with a very low air speed and much less noise**. Its advanced air flow structure also means it cools a wider and larger area more evenly. And it consumes 58% less energy than normal cooling mode*** so you can stay comfortably cool without worrying about electricity bills.

23000
Micro Air Holes



*ASHRAE (American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as air currents at speeds below 0.15m/s which lacks the presence of cold drafts.

Tested on the AM036TNVDKH/EU model. **WindFree™ Cooling mode only generates 26dB(A) of noise.

***Tested on AM080JXVHEH/ET, AM015TNVDKH/EU, AM036TNVDKH/EU, AM045TNVDKH/EU and AM082TNVDKH/EU models, based on the power consumption of normal mode vs. **Wind**Free™ Cooling mode.

Stay dry in humid weather

WindFree™ **Dry mode**

Even when the ambient humidity is high, you can keep the room air comfortably dry with the **Wind**Free™ Dry mode. When you select this mode on your remote controller, its Humidity Sensor monitors the room humidity and effectively dehumidifies it without creating any noise or a chilly wind. So you will feel comfortable, but won't notice that it's working.

Cools you down faster

Fast cooling

Cool rooms quickly from corner to corner, so you're always comfortable whenever you want and wherever you are. Digital Inverter Boost technology dramatically shortens the time it takes for the compressor to reach maximum power when it starts operating, so it cools the air 43% faster*. Its advanced design also has a 15% larger fan, 18% wider inlet and a 31% wider blade. So cool air is dispersed farther and wider into every corner of a room, reaching up to 15 meters**.

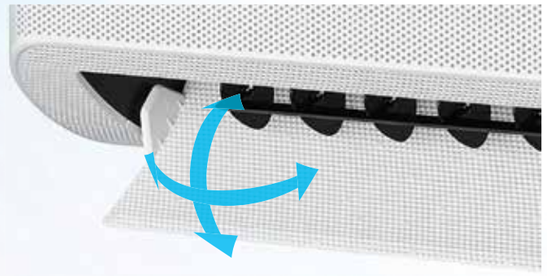
* Tested on the AR12TXCAAWKEU model compared with the Samsung conventional model AQ12EASER.

** Tested on the AR24TXFCAWKNEU model.

Distribute air to wherever you want

4-way swing*

Create a comfortable environment with an even temperature in every corner of a room. The **Wind**Free™ air conditioner features a 4-way Swing function that lets you remotely control the air direction, so it goes towards a specific location, or automatically expels air in every direction. As well as the auto up-down swing function it also has an auto left-right swing function, so air is evenly distributed across the room.



*Optionally available on certain models.

Hydro Unit

DVM Hydro

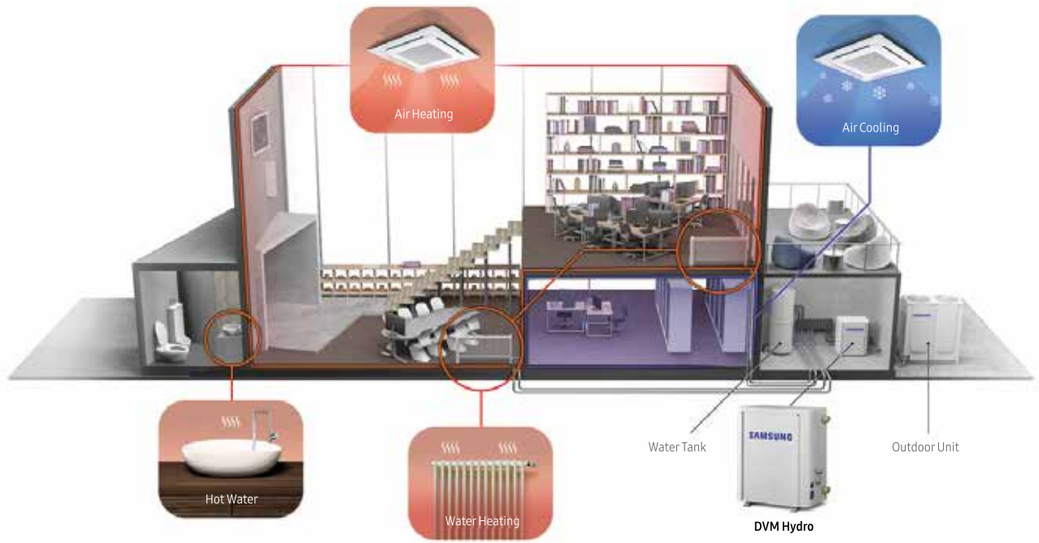
Performance - All you need for ultimate comfort

The Samsung DVM Hydro unit provides a single solution for cooling, heating and hot water that is both extremely efficient and easy to manage.

Altogether easier and more efficient

An integrated solution in one system

The DVM Hydro system is compatible with all DVM S Outdoor units and can be added to create a single, integrated solution for cooling, heating and hot water that's simple to manage. So it ensures much greater efficiency to suit a variety of demands - generating substantial energy and cost savings all year round with its high-efficiency Heat Pump technology.



DVM Hydro

Choose your hot favorite

2 Types - with a choice of water temperatures

The DVM Hydro is available in a choice of two types to suit your hot water needs. The DVM Hydro HE provides water at a mid temperature of 50°C, while the DVM Hydro HT's advanced, double compression technology generates much hotter water at 80°C. So, whatever your demands, there's the perfect solution to satisfy the requirements of various sites.

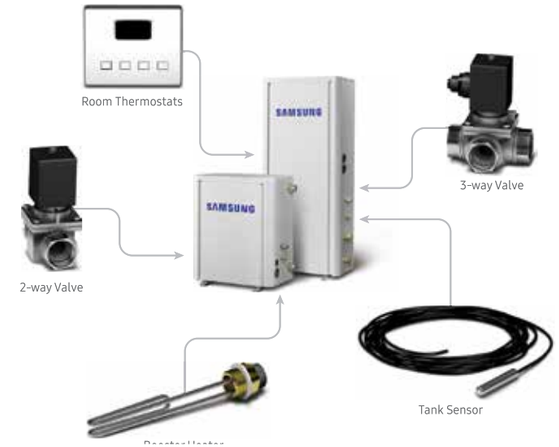
Installation and Control - Easily connect and control everything

The Samsung DVM Hydro unit is designed to be at the heart of your home or business. It is easy to install and connect to a range of other devices, and can also be independently or centrally controlled.

Simple plug and go installation

Simple and easy connection for external control

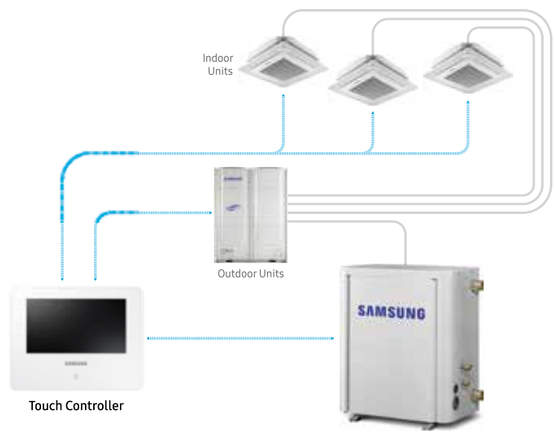
The DVM Hydro is very quick and easy to install and use for many different purposes. It includes a range of connections for various external input and output devices, such as Tank Sensors, Booster Heaters, 2- and 3-way Valves, and Room Thermostats.



Easy to control - independently or centrally

Integrated control system

The DVM Hydro can be independently or centrally operated along with a variety of Samsung DVM systems. For standalone use on individual sites it has its own control system or, using the Samsung DVM S Controller, it can be integrated with various DVM systems eg. for water and air, and managed centrally.



HSP Duct

Robust, high-pressure control

Covers large areas with extra-long ducts

High External Static Pressure (HSP)

Select the best location for your air conditioner, even if it needs long duct work, but still get plenty of air to cool or heat large spaces or places. The HSP Duct's High External Static Pressure (HSP) means it can send air further than most slim ducts*. Even if you don't have enough room for duct products in the ceiling, you can use outlets connected to an HSP duct that is installed some distance away. It gives you much more flexibility without impacting the interior design.
* Based on internal testing. HSP Duct = 20~28mmAq vs. MSP Duct = 15mmAq. Results may vary depending on environmental factors and individual use.

* Based on internal testing compared to conventiona air conditioners. Results may vary depending on environmental factors and individual use.

High Air Flow Rate & Less Noise

Thanks to its high air flow rate* the HSP Duct discharges a much larger volume of air, so it will cool or heat your room faster. It also works more efficiently, with less noise. So you can create the optimal conditions in a wide variety of environments with fewer noisy distractions.

* This feature is only available in the AM180JNHFKH and AM224JNHFKH tmodels.

Silent operation

The external static pressure control makes it easy to customise the ductwork to ensure efficiency and silent operation.

Split fan and coil

Products that are difficult to install are often challenging to use as well. Considering users' product experience from start to finish, Samsung separated the Duct S (AC6000) into two parts, coil and fan, for easier installation and management. When users experience difficulty handling the product due to space limitations or weight, they can install the parts separately and then put them back together as one unit.

Automatically more comfort & less noise

Auto ESP & Easy Tuning

The HSP Duct's Auto ESP function automatically senses the external static pressure (ESP). It then adjusts the fan speed to optimize the air volume and pressure and minimize noise. As no additional manual adjustment is necessary, it saves time on installation and maintenance. In addition, Easy Tuning lets you fine-tune the settings to suit your changing activity levels and requirements.

Ceiling Type

Slim yet functional design

Distribute refreshing airflow where needed with a compact, flexible design

Samsung's Ceiling Type indoor unit has two way installation options for the ceiling and floor, enabling more efficient use of available space. Users can enjoy crisp, powerful air throughout their entire space from the compact unit in the ceiling or floor.

Small package, big performance

The Samsung Ceiling Type air conditioner boasts a slim, compact design–half the size of conventional products–with cooling power comparable to larger units.

Choice of installation options

Depending on the available space and the purpose of the air conditioner, the indoor unit can be installed behind the ceiling or on the floor.

Under Ceiling

Floor Standing

Comfortable airflow control

The purpose of air conditioners is to provide a pleasant indoor environment for users. To better serve this purpose, Samsung 4Way Cassette S provides a Comfort Airflow Control function that prevents cold drafts. When the room temperature reaches 23°C during cooling mode, the indoor unit reduces the amount of discharged air. By doing so, people in the room avoid the discomfort of direct contact with cold airflow.

Floor Standing Type

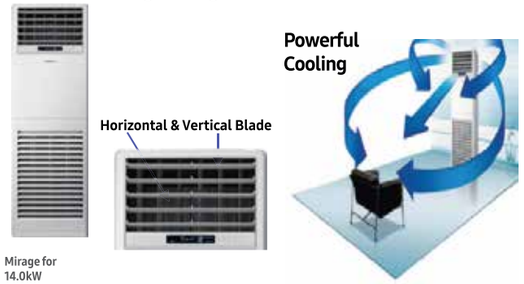
Powerful cooling

Better choice for simple installation

Solve all problems of installation with DVM floor standing unit. With long and wide distance airflow, floor standing unit is suitable for multiple applications including restaurant, church, classroom, and aisle, DVM floor standing indoor units provides powerful cooling.

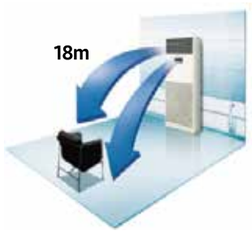
Key Features

Powerful cooling – Long and wide distance airflow



Easy control thanks to touch display panel

Super for
28.0kW



- Wide & Auto Blade
- Anti-bacterial Heat Exchanger
- Anti-bacterial Full HD Filter

Product concept

Floor Standing Type can correspond to various installation

Church or Mosque

General Restaurant

Class Room

Aisle

ERV / ERV Plus

Superior energy savings

Enjoy high-efficiency ventilation for a more refreshing atmosphere

Indoor air quality is gaining more attention as more people are getting affected from airborne contaminants. Indoor air contamination is often the cause behind building-related syndromes, such as asthma, headaches and dizziness.

The Samsung ERV (Energy Recovery Ventilation) system air conditioner provides fresh, healthy air from outside while minimising energy loss for maximum efficiency. Its intelligent structure incorporates features specifically designed for flawless ventilation and efficient operation.

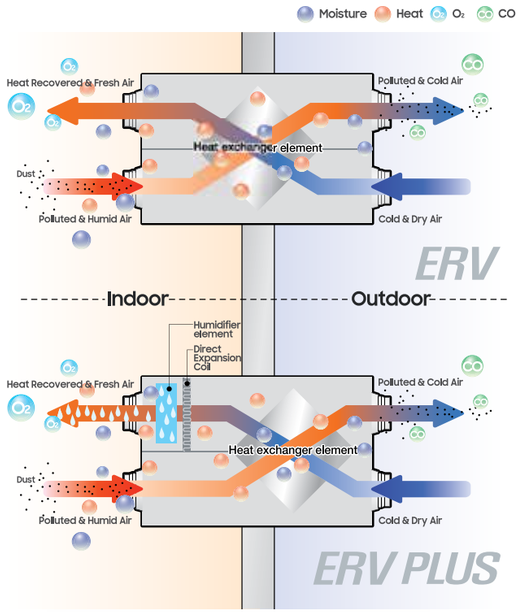
The Samsung ERV and ERV Plus air conditioner systems deliver optimal efficiency, quality and performance with features such as:

Superior energy savings: Lower energy consumption and costs with a direct expansion (DX) coil and advanced heat exchange.

Enhanced performance: Enjoy fresher air, quieter operation and humidity control for a more pleasant environment.

Optimised design: Easy installation offers more efficient airflow with a slim, compact design.

Heat recovering method of ERV system



Moisture Heat O_2 CO

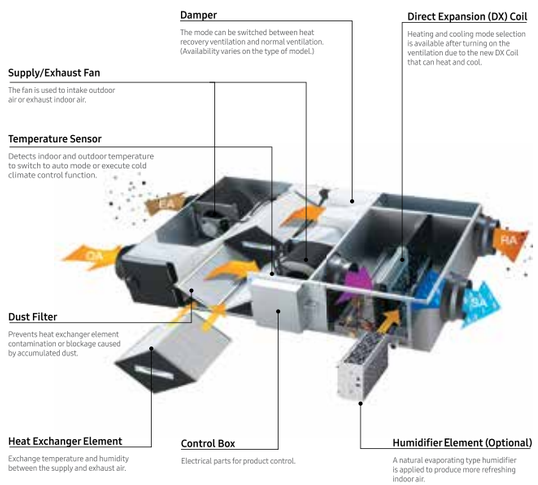
Drive energy savings with unparalleled heat exchange and automated temperature control

Samsung ERV and ERV Plus deliver exceptional cooling and heating all year round by employing the following heat recovery method:

A two way ventilation design with air inlets and outlets on both sides of the units provide superior ventilation efficiency.

The remaining surface of the heat exchange area transfers heat energy while preventing the discharged contaminants from re-entering.

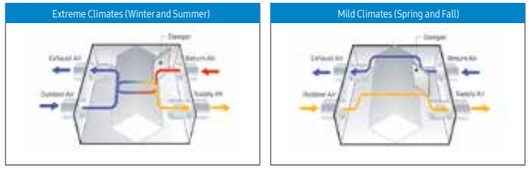
The system recovers up to 70 percent of the energy needed to cool or heat the environment. The efficient heat recovery maintains the indoor temperature and humidity during the winter, and prevents outdoor heat and moisture from entering indoors during the summer.



ERV / ERV Plus
Superior energy savings

Auto mode

ERV and ERV Plus automatically changes operation mode, depending on the temperature difference between the indoor and outdoor environment, to conserve energy.



Energy saving mode

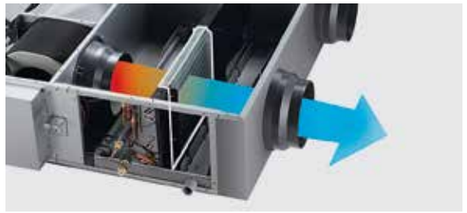
Samsung ERV systems, coupled with an air conditioner, provide world-class energy-saving solutions to intelligently reduce air conditioner operating hours. Decreased air conditioner operation lessens the cooling and heating load while maintaining optimal performance.

Enhance the indoor environment with ultimate freshness and distraction-free operation

With Samsung ERV and ERV Plus systems, users can enjoy high-performance comfort throughout their environment with crisp air quality and low noise levels.

Fresh air without temperature loss

ERV PLUS is equipped with a direct expansion coil to pre-condition the outdoor air that enters the indoor environment. Outdoor air passes through the DX coil to produce fresh air without any temperature loss.



Ideal humidity levels

Users can maintain a perfect indoor humidity level with an optional humidifier element. The Samsung humidifier kit delivers high-efficiency moisture balancing with its large humidification area. Plus, the ERV self-cleaning function, which sprays water from the top of the device when the system starts, prevents offensive odors caused by dust, and other particle accumulation.

Smart CO_2 detection

ERV provides fresh in-room airflow by detecting CO_2 with the optional CO_2 sensor. Users can also attach a humidity stat (procured locally), which detects the moisture of the room and automatically adjusts its humidity level.

Peaceful performance

Samsung ERV units feature Quiet Mode for more discreet operation compared to ordinary ventilators.

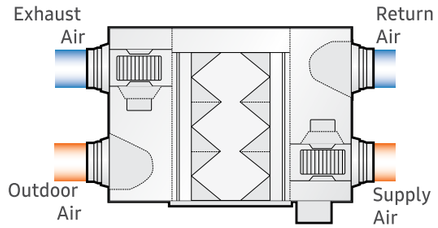
ERV / ERV Plus
Optimised design

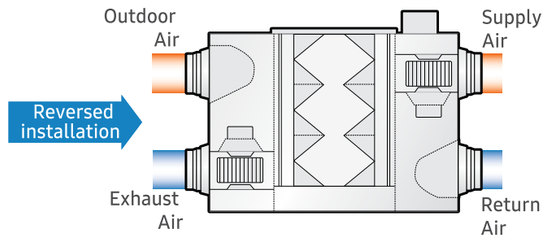
Simplify installation and expand airflow with an efficiency-boosting design

Samsung ERV and ERV Plus offers a smart, efficient design that enables users to deliver fresher air wherever needed with more installation options.

Flexible setup

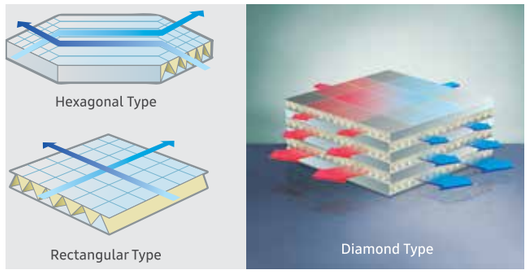
The ERV system can be installed vertically or horizontally. This installation flexibility saves time on maintenance when installing more than one unit. Users can reduce the number of service holes by installing ERV with the control box facing a single service hole (applicable to ERV only).





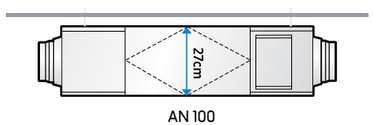
Perfect design for maximum airflow

The new diamond type heat exchanger features an optimised airflow design. This element is compact in size, but offers higher efficiency than conventional rectangular and hexagonal type heat exchangers.



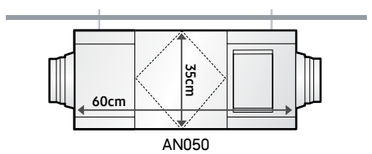
Slim build

Samsung's advanced technology promotes a slim, compact product. By applying a highly efficient heat exchanger element, Samsung has been able to reduce the ERV system's height to 27cm. Compared to traditional units with rectangular-type heat exchangers, Samsung ERV units use space more efficiently with their slim, diamond-shaped design.



AN 100

1,000 CMH



AN050

500 CMH

Indoor unit line up

Products	360 Cassette	WindFree™ 1Way Cassette Also available in non-WindFree™	WindFree™ 4Way Cassette Also available in non-WindFree™	WindFree™ Mini 4Way Cassette Also available in non-WindFree™	2Way Cassette	Premium Plus WindFree™ Also available in non WindFree™	MSP Duct	HSP Duct	Slim Duct	Floor Standing	Ceiling	DVM Hydro
Capacity kW												
2.2		●		●		●			●			
2.6		●										
2.8		●		●		●			●			
3.0		●										
3.6		●		●		●			●			
4.2		●										
4.5			●	●		●			●			
5.6	●	●	●	●	●	●	●		●			
6.0	●		●									
7.1	●●	●	●●		●	●	●		●		●	
8.2						●						
9.0	●●		●●				●					
10.0	●		●									
11.2	●		●				●					
12.8	●		●				●					
14.0	●		●				●			●		
16.0							●					●
17.0			●									
18.0								●				
22.4								●				
28.0								●		●		
16.0												●
25.0												●
31.5												●
50.4												●

● Available in chilled water FCU (Fan Coil Unit) ● Available in DX Coil

Specification
Indoor units

360 Cassette

- Perfect even cooling
- Cold-draft free
- Bladeless discharge
- Stylish design

Attribute/Model code		AM056KN4DEH/TL	AM071KN4DEH/TL	AM090KN4DEH/TL	AM112KN4DEH/TL	AM128KN4DEH/TL	AM140KN4DEH/TL
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1	9	11.2	12.8	14
	Cooling [Btu/h]	19,100	24,200	30,700	38,200	43,700	47,800
	Heating [kW]	6.3	8	10	12.5	13.8	16
	Heating [Btu/h]	21,500	27,300	34,100	42,700	47,100	54,600
Power input (Nominal)	Cooling 1) [W]	30	34	55	53	77	91
	Heating 2) [W]	30	34	55	53	77	91
Current input (Nominal)	Cooling 1) Amp	0.21	0.25	0.42	0.41	0.62	0.75
	Heating 2) Amp	0.21	0.25	0.42	0.41	0.62	0.75
Fan	Air flow rate (High / Mid / Low) [CFM]	565/512/476	635/565/494	776/653/565	900/741/618	1041/847/670	1112/935/741
	External static pressure std.(Min ~ Max) [mmAq]	NA	NA	NA	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52	9.52	9.52	9.52	9.52
	Gas pipe (Φ, mm)	12.7	15.9	15.9	15.9	15.9	15.9
	Drain pipe (Φ,mm)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	34/32/29	36/33/30	40/36/32	40/36/32	42/38/33	44/40/35
External dimension (Indoor unit)	Net weight (kg)	21	21	21	24	24	24
	Shipping weight (kg)	25	25	25	29	29	29
	Net dimensions (WxHxD) (cm)	94.7 x 28.1 x 94.7	94.7 x 28.1 x 94.7	94.7 x 28.1 x 94.7	94.7 x 36.5 x 94.7	94.7 x 36.5 x 94.7	94.7 x 36.5 x 94.7
	Shipping dimensions (WxHxD) (cm)	99 x 33 x 99	99 x 33 x 99	99 x 33 x 99	99 x 41.4 x 99	99 x 41.4 x 99	99 x 41.4 x 99
Panel	Net dimensions (WxHxD) (cm)	100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100	100 x 6.6 x 100
	Shipping dimensions (WxHxD) (cm)	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3	109.3 x 8.5 x 108.3
Additional accessories	Drain pump	Built-in					
	Air filter	Available					

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

AR-KH03I

MWR-WE13N

Panel Options

PC4NUNMAN

PC4NBNMAN

PC4NUDMAN

PC4NBDMAN

PC6EUCMAN
(Purification)

PC6EUXMAN
(Auto Elevation)

Specification
Indoor units

4Way Cassette S

- Surround flow
- Individual blade control
- Fan speed adjustment for high ceiling

Attribute/Model code		AM045NN4DEH/TL	AM056NN4DEH/TL	AM071NN4DEH/TL	AM090NN4DEH/TL	AM112NN4DEH/TL	AM128NN4DEH/TL	AM140NN4DEH/TL	AM170TN4DKH/EA
Features	Type								
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50/60
Capacity	Cooling [kW]	4.5	5.6	7.1	9	11.2	12.8	14	17.0
	Cooling [Btu/h]	15,400	19,100	24,200	30,700	38,200	43,700	47,800	58120
	Heating [kW]	5	6.3	8	10	12.5	13.8	16	19.0
	Heating [Btu/h]	17,100	21,500	27,300	34,100	42,700	47,100	54,600	64957
Power input (Nominal)	Cooling 1) [W]	32	32	45	62	78	73	89	98.0
	Heating 2) [W]	32	32	45	62	78	73	89	98.0
Current input (Nominal)	Cooling 1) Amp	0.22	0.22	0.31	0.43	0.55	0.51	0.62	0.83
	Heating 2) Amp	0.22	0.22	0.31	0.43	0.55	0.51	0.62	0.83
Fan	Air flow rate (High / Mid / Low) [CFM]	512/476/441	529/494/459	600/547/512	688/635/582	918/847/776	988/918/812	1059/988/918	1200/1024/918
	External static pressure std.(Min ~ Max) [mmAq]	NA	NA	NA	NA	NA	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Gas pipe (Φ, mm)	12.7	12.7	15.88	15.88	15.88	15.88	15.88	19.05
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	33/32/30	33/32/30	35/34/33	39/36/33	40/38/35	42/40/35	44/41/35	45/ 43 / 40
External dimension (Indoor unit)	Net weight (kg)	15	15	15	15	16.5	18.5	18.5	25.0
	Shipping weight (kg)	18.5	18.5	18.5	18.5	20	22.5	22.5	28.9
	Net dimensions (WxHxD) (cm)	84 x 20.4 x 84	84 x 20.4 x 84	84 x 20.4 x 84	84 x 20.4 x 84	84 x 24.6 x 84	84 x 28.8 x 84	84 x 28.8 x 84	84 x 37.2 x 84
	Shipping dimensions (WxHxD) (cm)	89.8 x 27.5 x 89.8	89.8 x 27.5 x 89.8	89.8 x 27.5 x 89.8	89.8 x 27.5 x 89.8	89.8 x 31.6 x 89.8	89.8 x 35.7 x 89.8	89.8 x 35.7 x 89.8	89.8 x 44 x 89.8
Panel	Net dimensions (WxHxD) (cm)	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95	95 x 6.4 x 95
	Shipping dimensions (WxHxD) (cm)	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100
Additional accessories	Drain pump	Built-in							
	Air filter	Built-in							

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controtllers

MWR-WE13N

AR-EH03I

MWR-SH00N

Panel Options

PC4NUCEAN
(Purification)

PC4NUFMAN
(WindFree™)

PC4NUSKAN
(Classic)

PC4NBSKAN
(Black)

Specification
Indoor units

Mini 4Way Cassette S

- Compact and light unit
- Motion Detect Sensor (Optional)
- No overflowing drain water

Attribute/Model code		AM022FNNDEH/EU	AM028NNNDEH/TL	AM036NNNDEH/TL	AM045NNNDEH/TL	AM056NNNDEH/TL
Features	Type					
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	2.2	2.8	3.6	4.5	5.6
	Cooling [Btu/h]	7,500	9,600	12,300	15,400	19,100
	Heating [kW]	2.5	3.2	4	5	6.3
	Heating [Btu/h]	8,500	10,900	13,600	17,100	21,500
Power input (Nominal)	Cooling 1) [W]	18	18	20	23	28
	Heating 2) [W]	18	18	20	23	28
Current input (Nominal)	Cooling 1) Amp	0.17	0.17	0.19	0.22	0.27
	Heating 2) Amp	0.17	0.17	0.19	0.22	0.27
Fan	Air flow rate (High / Mid / Low) [CFM]	317/271/229	353/300/264	370/317/264	406/360/317	459/388/335
	External static pressure std.(Min ~ Max) [mmAq]	NA	NA	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	6.35	6.35	6.35
	Gas pipe (Φ, mm)	12.7	12.7	12.7	12.7	12.7
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	32/29/25	33/30/26	34/30/26	36/34/32	39 /36 /33
External dimension (Indoor unit)	Net weight (kg)	12	12	12	12	12
	Shipping weight (kg)	14	14	14	14	14
	Net dimensions (WxHxD) (cm)	57.5 x 25 x 57.5	57.5 x 25 x 57.5	57.5 x 25 x 57.5	57.5 x 25 x 57.5	57.5 x 25 x 57.5
	Shipping dimensions (WxHxD) (cm)	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3	62.3 x 29.8 x 65.3
Panel	Net dimensions (WxHxD) (cm)	67 x 4.5 x 67	62 x 5.7 x 62	62 x 5.7 x 62	62 x 5.7 x 62	62 x 5.7 x 62
	Shipping dimensions (WxHxD) (cm)	71.4 x 10.6 x 72.4	67 x 12 x 65.5	67 x 12 x 65.5	67 x 12 x 65.5	67 x 12 x 65.5
Additional accessories	Drain pump	Built-in				
	Air filter	Built-in				

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MWR-SH00N

Panel Options

PC4SUFMAN
(WindFree™)

PC4SUSMFN
(Classic)

Specification
Indoor units

Slim 1Way Cassette

- Slim and compact design
- Quiet operation
- No overflowing drain water
- Stylish design

Attribute/Model code		AM022NN1DEH2TL	AM028NN1DEH2TL	AM036NN1DEH2TL	AM056NN1DEH/TL	AM071NN1DEH/TL
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50/60	1,2,220-240,50
Capacity	Cooling [kW]	2.2	2.8	3.6	5.6	7.1
	Cooling [Btu/h]	7,500	9,600	12,300	19,100	24,200
	Heating [kW]	2.5	3.2	4	6.3	8
	Heating [Btu/h]	8,500	10,900	13,600	21,500	27,300
Power input (Nominal)	Cooling 1) [W]	40	45	50	55	0.08
	Heating 2) [W]	40	45	50	55	0.08
Current input (Nominal)	Cooling 1) Amp	0.2	0.23	0.25	0.28	0.4
	Heating 2) Amp	0.2	0.23	0.25	0.28	0.4
Fan	Air flow rate (High / Mid / Low) [CFM]	211/176/141	247/211/176	282/247/211	529/459/388	600/547/494
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	6.35	6.35	9.52
	Gas pipe (Φ, mm)	12.7	12.7	12.7	12.7	15.88
	Drain pipe (Φ,mm)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)	VP20 (OD 25,ID 20)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	29 / 26 / 24	32 / 28 / 24	37 / 33 / 30	41 / 38 / 35	42 / 39 / 36
External dimension (Indoor unit)	Net weight (kg)	10	10	10	13.5	13.5
	Shipping weight (kg)	12.8	12.8	12.8	17.3	17.3
	Net dimensions (WxHxD) (cm)	97 x 13.5 x 40	97 x 13.5 x 40	97 x 13.5 x 40	120 x 13.8 x 45	120 x 13.8 x 45
	Shipping dimensions (WxHxD) (cm)	117.3 x 23.1 x 48.7	117.3 x 23.1 x 48.7	117.3 x 23.1 x 48.7	143.5 x 22.4 x 52.5	143.5 x 22.4 x 52.5
Panel	Net dimensions (WxHxD) (cm)	119.8 x 3.5 x 50	119.8 x 3.5 x 50	119.8 x 3.5 x 50	141 x 3.5 x 50	141 x 3.5 x 50
	Shipping dimensions (WxHxD) (cm)	126.2 x 12.4 x 56.8	126.2 x 12.4 x 56.8	126.2 x 12.4 x 56.8	147.3 x 12.4 x 56.8	147.3 x 12.4 x 56.8
Additional accessories	Drain pump	Built-in				
	Air filter	Built-in				

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MWR-SH00N

Panel Options

PC1NWFMAN (WindFree) Small

PC1BWFMAN (WindFree) Large

PC1NWCMAN (Purification) for Small chassis

PC1BWCMAN (Purification) for Big chassis

PC1NUSMAN/ PC1BWSEAN (Classic)

PC1NUPMAN/ PC1BWPEAN (Z-Slide)

PC1NWSMAN/ PC1BWSMAN (Fluidic)

Specification
Indoor units

2Way Cassette

- Standard formula for easy installation
- Twin cross flow fan
- Small size, big performance
- Ultra light weight

Attribute/Model code		AM056CN2DKH/EA	AM071CN2DKH/EA
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1
	Cooling [Btu/h]	19,100	24,200
	Heating [kW]	6.3	8
	Heating [Btu/h]	21,500	27,300
Power input (Nominal)	Cooling 1) [W]	70	75
	Heating 2) [W]	70	75
Current input (Nominal)	Cooling 1) Amp	0.38	0.4
	Heating 2) Amp	0.38	0.4
Fan	Air flow rate (High / Mid / Low) [CFM]	526/469/434	564/511/451
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52
	Gas pipe (Φ, mm)	12.7	15.88
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	38 /37 /35	41 /39 /37
External dimension (Indoor unit)	Net weight (kg)	21	22
	Shipping weight (kg)	25	26
	Net dimensions (WxHxD) (cm)	89 x 23 x 57.5	89 x 23 x 57.5
	Shipping dimensions (WxHxD) (cm)	107.7 x 29.9 x 64.2	107.7 x 29.9 x 64.2
Panel	Net dimensions (WxHxD) (cm)	103 x 2.5 x 65	103 x 2.5 x 65
	Shipping dimensions (WxHxD) (cm)	110.3 x 15.1 x 72.7	110.3 x 15.1 x 72.7
Additional accessories	Drain pump	Built-in	
	Air filter	Built-in	

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MWR-SH00N

Panel Options

PC2NWSMEN

Specification
Indoor units

Slim Duct

- Flexible installation
- Easier drain pump installation
- Slim design
- Easy to maintain

Attribute/Model code		AM022KNLDEH/TL	AM028KNLDEH/TL	AM036KNLDEH/TL	AM045MNLDEH/EU	AM056MNLDEH/EU	AM071MNLDEH/EU
Features	Type						
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220~240V,50	1,2,220~240V,50	1,2,220~240V,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	2.2	2.8	3.6	4.5	5.6	7.1
	Cooling [Btu/h]	7,500	9,600	12,300	15,400	19,100	24,200
	Heating [kW]	2.5	3.2	4	5.0	6.3	8.0
	Heating [Btu/h]	8,500	10,900	13,600	17,100	21,500	27,300
Power input (Nominal)	Cooling 1) [W]	30	34	40	51	73	82
	Heating 2) [W]	30	36	42	46	68	77
Current input (Nominal)	Cooling 1) Amp	0.25	0.28	0.33	0.45	0.62	0.69
	Heating 2) Amp	0.25	0.3	0.35	0.41	0.58	0.65
Fan	Air flow rate (High / Mid / Low) [CFM]	211/173/134	248/181/153	289/229/173	442/353/265	548/442/336	636/512/389
	External static pressure std. (Min ~ Max) [mmAq]	1(0~3)	1(0~3)	1(0~3)	2(0~4)	2(0~4)	2(0~4)
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35	6.35	6.35	6.35	9.52
	Gas pipe (Φ, mm)	12.7	12.7	12.7	12.70	12.70	15.88
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	2.5	2.5	2.5	2.5	2.5	2.5
	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	22 /23 /26	24 /26 /28	25 /28 /31	32/28/25	34/30/26	34/30/27
External dimension (Indoor unit)	Net weight (kg)	15.3	15.3	15.7	18.9	18.9	22.3
	Shipping weight (kg)	18.2	18.2	18.6	21.8	21.8	25.3
	Net dimensions (WxHxD) (cm)	70 x 19.9 x 44	70 x 19.9 x 44	70 x 19.9 x 44	90 x 19.9 x 44	90 x 19.9 x 44	110 x 19.9 x 44
	Shipping dimensions (WxHxD) (cm)	94.9 x 28 x 54.4	94.9 x 28 x 54.4	94.9 x 28 x 54.4	115.1 x 28 x 54.4	115.1 x 28 x 54.4	135.1 x 28 x 54.4
Additional accessories	Drain pump	Built-in					
	Air filter	Built-in					

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MRK-A10N

MWR-SH00N

Specification

Indoor units

MSP Duct

- Narrow width
- Strong and large coverage area
- Silent operation with the static pressure control
- Easy to maintain

Attribute/Model code		AM056DNMDEH/TL	AM071DNMDEH/TL	AM090DNMDEH/TL	AM112DNMDEH/TL	AM128DNMDEH/TL	AM140DNMDEH/TL	AM160DNMDEH/TL
Power Supply (Indoor Unit) [(Φ,#,V,Hz)]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	5.6	7.1	9.0	11.2	12.8	14.0	16.0
	Cooling [Btu/h]	19100	24200	30700	38200	43700	47800	54600
	Heating [kW]	6.3	8.0	10.0	12.5	13.8	16.0	18.0
	Heating [Btu/h]	21500	27300	34100	42700	47100	54600	61400
Power Input (Nominal)	Cooling 1) [W]	73	82	135	130	160	210	300
	Heating 2) [W]	68	77	135	130	160	210	300
Current Input (Nominal)	Cooling 1) [AMP]	0.62	0.69	1.2	1.2	1.4	1.7	2.5
	Heating 2) [AMP]	0.58	0.65	1.2	1.2	1.4	1.7	2.5
	Air Flow Rate (High /Mid /Low) [CFM]	547/441/335	635/511/388	953/776/564	1059/882/635	1271/1059/812	1412/1200/847	1589/1236/883
	External static Pressure std. (Min ~ Max) [mmAq]	2(0~6)	2(0~6)	4(0~15)	5.2(0~15)	5.2(0~15)	5.2(0~15)	5.2(0~15)
Piping Connections	Liquid Pipe (Φ,mm)	6.35	9.52	9.52	9.52	9.52	9.52	9.52
	Gas Pipe (Φ,mm)	12.70	15.88	15.88	15.88	15.88	15.88	15.88
	Drain Pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field Wiring	Power Source Wire	1.5 ~ 2.5	2.5	2.5	2.5	2.5	2.5	2.5
	Transmission Cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control Method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound Pressure (High / Mid / Low) [dB(A)]	34/30/26	34/30/27	37/33/29	36/33/30	37/34/31	39/36/33	43/39/35
External Dimensions (Indoor Unit)	Net Weight (kg)	19.7	23.2	33.8	39.6	39.6	39.6	44.6
	Shipping Weight (kg)	22.7	26.8	38.9	46.1	46.1	46.1	51.1
	Net Dimensions (W×H×D) (cm)	90 x 19.9 x 44	110 x 19.9 x 44	120 x 25 x 70	130 x 30 x 70	130 x 30 x 70	130 x 30 x 70	130 x 30 x 70
	Shipping Dimensions (W×H×D) (cm)	115.1 x 28 x 54.4	135.1 x 28 x 54.4	142.9 x 32 x 77.9	152.9 x 37 x 77.9	152.9 x 37 x 77.9	152.9 x 37 x 77.9	152.9 x 37 x 77.9
Additional accessories	Drain Pump	Built-In						
	Air Filter	Built-In						

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MRK-A10N

MWR-SH00N

Specification

Indoor units

HSP Duct

- High external static pressure
- Strong and large coverage area
- Silent operation with the static pressure control
- Easy to maintain

Attribute/Model code		AM180JNHFKH/EU	AM224JNHFKH/EU	AM280FNHDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	18	22.4	28
	Cooling [Btu/h]	61,400	76,400	95,500
	Heating [kW]	20	25	31.5
	Heating [Btu/h]	68,240	85,300	107,500
Power input (Nominal)	Cooling 10) [W]	340	530	790
	Heating 2) [W]	340	530	790
Current input (Nominal)	Cooling 1) Amp	1.9	2.9	5.9
	Heating 2) Amp	1.9	2.9	5.9
Fan	Air flow rate (High / Mid / Low) [CFM]	2048/1765/1518	2542/2154/1765	2542/2295/2048
	External static pressure std. (Min ~ Max) [mmAq]	7.34(5~20)	7.34(5~20)	15(5~28)
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	9.52
	Gas pipe (Φ, mm)	19.05	19.05	22.22
	Drain pipe (Φ,mm)	VP25 (OD25,ID 20)	VP25 (OD25,ID 20)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	43 /39 /35	44 /40 /36	48 /46 /43
External dimension (Indoor unit)	Net weight (kg)	82.5	82.5	89
	Shipping weight (kg)	92	92	99
	Net dimensions (WxHxD) (cm)	135 x 45 x 91	135 x 45 x 91	124 x 47 x 104
	Shipping dimensions (WxHxD) (cm)	161.2 x 51.9 x 98.4	161.2 x 51.9 x 98.4	150.7 x 55.8 x 115.5
Additional accessories	Drain pump	MDP-G075SP	MDP-G075SP	MDP-N047SNC1D
	Air filter	Not available		

Ceiling

- 2Way installation
- Compact but powerful
- Stay-clean panel
- Sophisticated control

Attribute/Model code		AM071FNCDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50
Capacity	Cooling [kW]	7.1
	Cooling [Btu/h]	24,200
	Heating [kW]	8
	Heating [Btu/h]	27,300
Power input (Nominal)	Cooling 1) [kW]	0.08
	Heating 2) [kW]	0.077
Current input (Nominal)	Cooling 1) Amp	0.35
	Heating 2) Amp	0.29
Fan	Air flow rate (High / Mid / Low) [CFM]	635/582/529
	External static pressure std. (Min ~ Max) [mmAq]	NA
Piping connections	Liquid pipe (Φ, mm)	9.52
	Gas pipe (Φ, mm)	15.88
	Drain pipe (Φ,mm)	ID 18 HOSE
Field wiring	Power source wire	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50
Refrigerant	Type	R410A
	Control method	EEV NOT INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	44 /42 /40
External dimension (Indoor unit)	Net weight (kg)	21
	Shipping weight (kg)	25.5
	Net dimensions (WxHxD) (cm)	100 x 65 x 20
	Shipping dimensions (WxHxD) (cm)	108 x 73 x 30
Additional accessories	Drain pump	NA
	Air filter	Built-in

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MRK-A10N

MWR-SH00N

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MWR-SH00N

EEV KIT

MEV-E32SA

Specification

Indoor units

Premium wall mounted

- Clean-cut front panel
- Silver accent line
- Bottom opening front panel
- Improved dust-filtration

Attribution/Model Code		AM022TNQDKH/TL, AM022TNVDKH/TL*	AM028TNQDKH/TL AM028TNVDKH/TL*	AM036TNQDKH/TL, AM036TNVDKH/TL*	AM045TNQDKH/TL, AM045TNVDKH/TL*	AM056TNQDKH/TL, AM056TNVDKH/TL*	AM071TNQDKH/TL, AM071TNVDKH/TL*	AM082TNQDKH/TL, AM082TNVDKH/TL*
Power supply (Indoor unit) [Φ, #, V, Hz]		1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz	1, 220~240V, 50/60Hz
Mode		HP/HR	HP/HR	HP/HR	HP/HR	HP/HR	HP/HR	HP/HR
Capacity (Nominal)	Cooling [kW]	2.2	2.8	3.6	4.5	5.6	6.8	8.2
	Heating [kW]	2.5	3.2	4	5	6.3	7	8.5
Power input (Nominal)	Cooling [W]	24	30	37	40	52	60	65
	Heating [W]	24	30	37	40	52	60	65
Current input (Nominal)	Cooling [A]	0.16	0.2	0.25	0.27	0.35	0.4	0.43
	Heating [A]	0.16	0.2	0.25	0.27	0.35	0.4	0.43
Fan	Air flow rate (High/Mid/Low) [CFM]	264/211/159	300/272/243	364/328/293	547/459/370	565/494/424	618/542/466	635/561/487
	Type	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
Fan motor	Output x n [W]	27 x 1	27 x 1	27 x 1	27 x 1	27 x 1	27 x 1	27 x 1
Piping connections	Liquid pipe (Φ,mm)	6.35	6.35	6.35	6.35	6.35	9.52	9.52
	Gas pipe (Φ,mm)	12.7	12.7	12.7	12.7	12.7	15.88	15.88
	Drain pipe (Φ,mm)	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
Refrigerant	Type	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure(High/ Mid/ Low/ Wind free) [dB(A)]	34/32/30/27	34/33/32/26	40/36/34/26	37/34/33/29	40/37/34/29	43/40/37/29	46/45/43/30
Dimensions	Net weight (kg)	9	9.5	9.5	12	12	12	13
	Shipping weight (kg)	10	10.5	10.5	13.5	13.5	13.5	14.5
	Net dimensions (W×H×D) (mm)	820x299x215	820x299x215	820x299x215	1055x299x215	1055x299x215	1055x299x215	1055x299x215
	Shipping dimensions (W×H×D) (mm)	880x290x375	880x290x375	880x290x375	1115x290x375	1115x290x375	1115x290x375	1115x290x375

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. *WindFree™ Models Thus, actual noise level may be different depending on the installation conditions.
5) Cordless controllers comes in indoor unit box.

Optional accessories

Individual Controllers

MWR-WE13N

Specification

Indoor units

Hydro unit (HE/HT)

- Integrated solution
- Water temperature choice
- Easy and simple connection
- Integrated control

Attribute/Model Code		AM160TNBFEB/EU	AM160FNBDEH/EU	AM250TNBFEB/EU	AM320FNBDEH/EU	AM500FNBDEH/EU
Model Name	Indoor Unit					
Power Supply (Indoor Unit) [Φ, #, V, Hz]		1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50	1,2,220-240,50
Capacity	Cooling [kW]	NA	14	NA	28	44.8
	Cooling [Btu/h]	NA	47,800	NA	95,600	152,900
	Heating [kW]	16	16	25	31.5	50.4
	Heating [Btu/h]	54,600	54,600	85,300	107,500	172,000
Power Input	Cooling [kW]	-	0.01	-	0.01	0.01
	Heating [kW]	3.1	0.01	5	0.01	0.01
Current Input	Cooling	-	0.05 A	-	0.05 A	0.05 A
	Heating	14.30 A	0.05 A	23.10 A	0.05 A	0.05 A
Condenser	Type	PHE	PHE	PHE	PHE	PHE
	Pipe Size (Φ, inch)	PT1 (25A)"	PT1 (25A)"	PT1 (25A)"	PT1 (25A)"	PT1-1/4(32A)"
	Water Flow Rate (LPM)	23	48	36	92	150
Piping Connections	Liquid Pipe (Φ, mm)	9.52	9.52	9.52	9.52	12.7
	Gas Pipe (Φ, mm)	15.88	15.88	15.88	22.2	28.58
Field Wiring	Power Source Wire	4	2.5	4	2.5	2.5
	Transmission Cable	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5	0.75 ~ 1.5
Refrigerant	Type	R134A(Contains fluorinated greenhouse gas, GWP=1,430)	R410A	R134A(Contains fluorinated greenhouse gas, GWP=1,430)	R410A	R410A
	Factory Charging (kg)	2.15	NA	2.15	NA	NA
	Factory Charging (tCO2e)	3.07 tCO2e	NA	3.07 tCO2e	NA	NA
	Control Method	EEV		EEV	EEV	EEV
Sound	Sound Pressure Level (High / Mid / Low) [dB(A)]	42	27	42	28	31
External Dimension (Indoor Unit)	Net Weight (kg)	105	29	105	33	40
	Shipping Weight (kg)	112.5	31	112.5	35	42
	Net Dimensions (WxHxD) (mm)	518 x 1210 x 330	518 x 627 x 330	518 x 1210 x 330 mm	518 x 627 x 330	518 x 627 x 330
	Shipping Dimensions (WxHxD) (mm)	652 x 1374 x 426	652 x 700 x 426	652 x 1374 x 426	652 x 700 x 426	652 x 700 x 426
Operating Temp. Range	Heating (℃)	-20~43	-20.0 ~ 35	-20.0 ~ 35	-20.0 ~ 35	-20.0 ~ 35

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Nominal cooling capacities are based on:
- Water temperature: 23°C inlet, 18°C outlet
- Indoor temperature: 27°C DB, 19°C WB
- Outdoor temperature: 35°C DB, 24°C WB

2) Nominal heating capacities are based on:
- Water temperature(HE): 30°C Inlet, 35°C Outlet
- Water temperature(HT): 55°C Inlet, 65°C Outlet
- Indoor temperature: 20°C DB
- Outdoor temperature: 7°C DB, 6°C WB

3) Sound pressure was acquired in an anechoic room. Thus, actual noise level may be different depending on the installation conditions.
4) AM500FNBDEH/EU model is not compatible with DVM heat recovery outdoor units.

Specification
Indoor units

Floor standing

- Powerful and clean cooling
- 4Way auto-swing
- Full touch panel control
- Auto shutter

Attribute/Model code		AM140RNPDKH/EU	AM280RNPDKH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50/60	1,2,220-240,50/60
Capacity	Cooling [kW]	14	28
	Cooling [Btu/h]	47,800	95,500
	Heating [kW]	16	31.5
	Heating [Btu/h]	54,600	107,500
Poer input (Nominal)	Cooling 1) [W]	190	955
	Heating 2) [W]	190	955
Current input (Nominal)	Cooling 1) Amp	0.9	4.73
	Heating 2) Amp	0.9	4.73
Fan	Air flow rate (High / Mid / Low) [CFM]	1236/1077/971	2471/2118/1765
	External static pressure std. (Min ~ Max) [mmAq]	NA	NA
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52
	Gas pipe (Φ, mm)	15.88	22.22
	Drain pipe (Φ,mm)	ID 18 HOSE	ID 18 HOSE
Field wiring	Power source wire	2.5	2.5
	Transmission cable	VCTF 0.75 ~ 1.5	VCTF 0.75 ~ 1.5
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure [dB(A)]	70	74
External dimension (Indoor unit)	Net weight (kg)	48	115
	Shipping weight (kg)	55	130
	Net dimensions (WxHxD) (cm)	61 x 185 x 40	110 x 180 x 48.5
	Shipping dimensions (WxHxD) (cm)	70.5 x 196.3 x 49.3	117.7 x 195 x 56.3
	Air filter	Built-in	

Note:

Specifications may be subject to change without prior notice for product improvement.
1) Mode: HP, Heat Pump
2) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure was acquired in a dead room. Thus, actual noise level may be different depending on the installation conditions.

Optional accessories

Individual Controllers

AR-EH03I

Specification
Indoor units

ERV Plus and ERV

- Slim design
- Direct expansion (DX) coil
- New diamond type element

Attribute/Model code		AM050FNKDEH/EU	AM100FNKDEH/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50	
System	Mode	HP/HR	HP/HR
Capacity	Cooling [kW]	5.1	10.5
	Cooling [Btu/h]	17,400 Btu/h	35,800 Btu/h
	Heating [kW]	6.5	13.2
	Heating [Btu/h]	22,200	45,000
Power input (Nominal)	Cooling [W]	220	510
	Heating [W]	220	510
Current input (Nominal)	Cooling 1) [A]	1.7	3.7
	Heating 2) [A]	1.7	3.7
	External static pressure (Min / Std / Max) [mmAq]	8.70/10.20/16.32	7.60/9.20/15.30
	External static pressure (Min / Std / Max) [Pa]	85.32/100.03/160.04	74.53/90.22/150.04
	Air flow rate (High / Low) [CFM]	294/212	588/406
Piping connections	Liquid pipe (Φ, mm)	6.35	6.35
	Gas pipe (Φ, mm)	12.7	12.7
	Drain pipe (Φ,mm)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)
Field wiring	Power source wire	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission cable	0.75 ~ 1.50	0.75 ~ 1.50
Refrigerant	Type	R410A	R410A
	Control method	EEV INCLUDED	EEV INCLUDED
Sound	Sound pressure (High / Mid / Low) [dB(A)]	36/32/28 dBA	36/33/31 dBA
	Sound power	67	67
External dimension (Indoor unit)	Net weight (kg)	61	90
	Shipping weight (kg)	75.2	107.5
	Net dimensions (WxHxD) (cm)	155.3 x 27 x 100	176.3 x 34 x 113.5
	Shipping dimensions (WxHxD) (cm)	184.7 x 34.9 x 130	202.7 x 42.8 x 142.4

Attribute/Model code		AN050JSKLKN/EU	AN100JSKLKN/EU
Power supply (Indoor unit) [Φ, #, V, Hz]		1,2,220-240,50/60	
Temperature exchange rate	Cooling	70.00%	70.00%
	Heating	74.00%	74.00%
Enthalpy exchange rate	Heating	50.00%	50.00%
	Cooling	70.00%	70.00%
Power input (Nominal) [W]		175	450
Current input (Nominal) [A]		1.1	2.9
Fan	Air flow rate (High / Low) [CFM]	294/212	588/406
	External static pressure (Min / Std / Max) [Pa]	85 / 100 / 165	75 / 90 / 155
External dimension (Indoor unit)	Net weight (kg)	42.5	67
	Net dimensions (WxHxD) (mm)	1012 x 270 x 1000 mm	1220 x 340 x 1135 mm

Note:

1) Nominal cooling capacities are based on indoor temperature: 27°C DB, 19°C WB, Outdoor temperature: 35°C DB, 24°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
2) Nominal heating capacities are based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
3) Humidifying capacity is based on indoor temperature: 20°C DB, 15°C WB, Outdoor temperature: 7°C DB, 6°C WB, Equivalent refrigerant piping: 7.5m, Level differences: 0m
4) Sound pressure

Optional accessories

Individual Controllers

MWR-VH12N (For ERV)

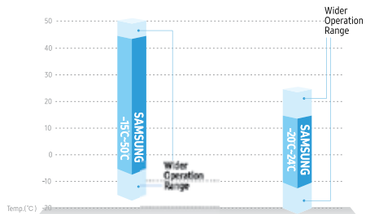
MWR-WE13N (For ERV Plus)

CAC Outdoor

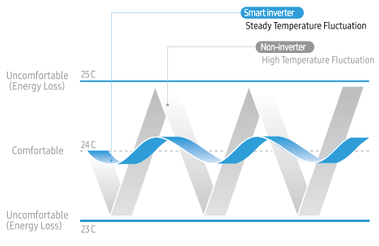
Energy saving

CAC is a smart choice for saving both money and energy.This economical outdoor unit employs advanced technologies to minimise waste and improve efficiency. By adopting the smart inverter technology, CAC not only offers silent operation, but also provides outstanding cooling and heating performance that is faster than conventional products.

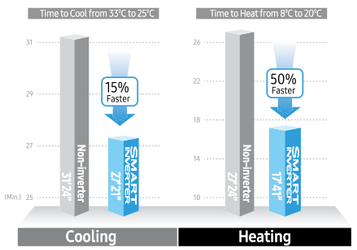
Wide temperature performance



Comfortable temperature

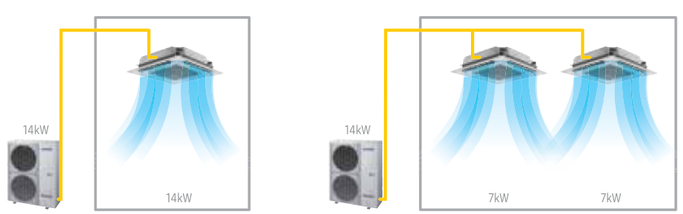


Fast cooling and heating



Small and light

Simultaneous On/Off function

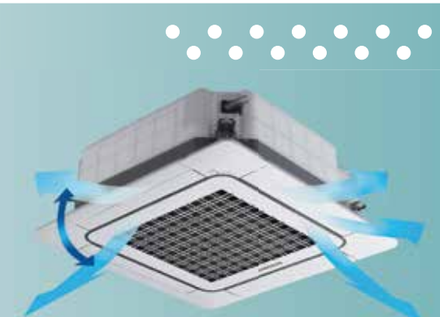


CAC Indoor

360 Cassette
Cold draft free
Perfect, even cooling
Circular to perfectly fit in everywhere
Fast cooling

WindFree™ Slim 1Way Cassette
Slim and compact design
Refined elegance and comfort to enhance any décor
Visually appealing panel
Light indoor unit

4Way Cassette
Individual blade control
Optimal airflow for high ceilings
Aesthetic panel and display



Specification
CAC





Model		AC100KN4DEH/TL	AC140KN4DEH/TL	AC036NN1PKC/TL	AC052NN1PKC/TL	AC071NN1PKC/TL
Type		360 Cassette	360 Cassette	1Way Cassette	1Way Cassette	1Way Cassette
Model name	Indoor unit	AC100KN4DEH/TL	AC140KN4DEH/TL	AC036NN1PKC/TL	AC052NN1PKC/TL	AC071NN1PKC/TL
	Outdoor unit	AC100KXADGH/TL	AC140KXADGH/TL	AC036NX1DKC/TL	AC052NX1DKC/TL	AC071NX1DKC/TL
System	Mode	Heat pump	Heat pump	Cooling only	Cooling only	Cooling only
Capacity	Cooling [kW]	3.50 / 10.00 / 12.00	3.50 / 13.60 / 15.50	1.2/3.6/4.8	1.5/5.2/6.0	1.8/6.5/7.8
	Heating [kW]	3.50 / 11.20 / 15.50	3.50 / 16.00 / 18.00	NA	NA	NA
Power input (Nominal)	Cooling [kW]	0.80 / 2.63 / 3.80	0.80 / 4.37 / 5.70	0.28/1.36/2.30	0.30/1.69/2.10	0.40/2.46/3.60
	Heating [kW]	0.70 / 2.76 / 4.50	0.70 / 4.65 / 7.90	NA	NA	NA
Energy efficiency	ISEER	3.98	3.63	3.5	3.8	3.5
	BEE Star rating	4 Star	3 Star	2 Star	3 Star	2 Star
	COP (Nominal heating)	4.06	3.44	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	9.52	9.52	6.35	6.35	6.35
	Gas pipe (Φ, mm)	15.88	15.88	12.7	12.7	15.88
	Installation max. length [m]	75	75	30	30	30
	Installation max. height [m]	30	30	15	15	15
Refrigerant	Type	R-410A	R-410A	R-410A	R-410A	R-410A
	Control method	EEV	EEV	EEV	EEV	EEV
	Factory charging (kg)	3	3.5	1.05	1.3	2
Power supply (Indoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz
Drain	Drain pipe (Φ,mm)	VP25 (OD32/ID25)	VP25 (OD32/ID25)	VP25 (OD32/ID25)	VP25 (OD32/ID25)	VP25 (OD32/ID25)
Airflow rate	(High / Mid / Low) [CMM]	30/24/20	33/28/23	9.2 / 8.3 / 7.8	14 / 13 / 12	15 / 14 / 12.5
Sound	Sound pressure (High / Mid / Low) [dB(A)]	43/37/32	44/40/36	34/32/30/28	41/38/35/29	46/42/38/30
External dimension (Indoor unit)	Net weight (kg)	26	26	9.2	13.4	13.4
	Shipping weight (kg)	30.5	30.5	11.5	16.5	16.5
	Net dimensions (WxHxD) (cm)	94.7x36.5x94.7	94.7x36.5x94.7	97 x 13.5 x 41	120 x 13.8 x 45	120 x 13.8 x 45
	Shipping dimensions (WxHxD) (cm)	99x41.4x99	99x41.4x99	117.3 x 23.1 x 48.7	143.5 x 22.4 x 52.5	143.5 x 22.4 x 52.5
Panel size	Panel model	PC4NUNMAN	PC4NUNMAN	PC1NWFMAN	PC1BWFMAN	PC1BWFMAN
	Panel net weight (kg)	3.6	3.6	4.3	5	5
	Shipping weight (kg)	6	6	6.3	7	7
	Net dimensions (WxHxD) (cm)	100x6.6x100	100x6.6x100	119.8 x 3.5 x 50	141 x 3.5 x 50	141 x 3.5 x 50
	Shipping dimensions (WxHxD) (cm)	109.3x8.5x108.3	109.3x8.5x108.3	126.2 x 12.2 x 56.6	147.4 x 12.2 x 56.6	147.4 x 12.2 x 56.6
Power supply (Outdoor unit) [Φ, #, V, Hz]		3Φ, 4, 380-415V, 50Hz	3Φ, 4, 380-415V, 50Hz	1Φ, 2, 220-240V, 50Hz	1Φ, 2, 220-240V, 50Hz	1Φ, 2, 220-240V, 50Hz
Compressor	Type	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
External dimension (Outdoor unit)	Net weight (kg)	90	92	33.5	40.5	52.8
	Shipping weight (kg)	99	101	36	43.5	56.3
	Net dimensions (WxHxD) (cm)	94x1,21x33	94x1,21x33	79x5.48x2.85	88x63.8x31	88x63.8x31
	Shipping dimensions (WxHxD) (cm)	99.5x1,38.8x42.6	99.5x1,38.8x42.6	93.8x64x37.5	102.3x73x41.3	102.3x73x41.3
Operating temp. range	Cooling (°C)	-15~52 °C	-15~52 °C	-5~52 °C	-5~52 °C	-5~52 °C
	Heating (°C)	-20~24 °C	-20~24 °C	NA	NA	NA

Optional accessories

Panel Options


PC4NUNMAN


PC4NBNMAN


PC4NUDMAN


PC4NBDMAN


PC6EUCMAN
(Purification)


PC6EUXMAN
(Auto Elevation)

Optional accessories

Panel Options


PC1NWFMAN
(WindFree) Small

PC1NWCMAN
(Purification)
for Small chassis


PC1BWFMAN
(WindFree) Large

PC1BWCMAN
(Purification)
for Big chassis


PC1NUSMAN/
PC1BWSEAN
(Classic)


PC1NUPMAN/
PC1BWPEAN
(Z-Slide)


PC1NWSMAN/
PC1BWSMAN
(Fluidic)

Specification
CAC



Model code		AC071NN4DKC/TL	AC100NN4DKC/TL	AC140NN4DKC/TL
Type		4Way Cassette	4Way Cassette	4Way Cassette
Model name	Indoor unit	AC071NN4DKC/TL	AC100NN4DKC/TL	AC140NN4DKC/TL
	Outdoor unit	AC071NXADKC/TL	AC100NXADKC/TL	AC140NXADNC/TL
System	Mode	Cooling only	Cooling only	Cooling only
Capacity	Cooling [kW] (Min, Med, Max)	1.7/6.8/8.0	3.0/10.6/12.0	3.5/13.6/15.5
	Heating [kW] (Min, Med, Max)	NA	NA	NA
Power input (Nominal)	Cooling [kW] (Min, Med, Max)	0.30/1.96/2.80	0.60/3.79/4.70	0.8/4.86/7.90
	Heating [kW] (Min, Med, Max)	NA	NA	NA
Energy efficiency	ISEER	4.5	3.39	3.59
	BEE Star rating	4 Star	2 Star	3 Star
	COP (Nominal heating)	NA	NA	NA
Piping connections	Liquid pipe (Φ, mm)	6.35	9.52	9.52
	Gas pipe (Φ, mm)	15.88	15.88	15.88
	Installation max. length [m]	50	50	75
	Installation max. height [m]	30	30	30
Refrigerant	Type	R-410A	R-410A	R-410A
	Control method	EEV	EEV	EEV
	Factory charging (kg)	2	2.4	2.9
Power supply (Indoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz	1Φ, 2, 220-240V/50Hz
Drain	Drain pipe (Φ,mm)	VP25(OD32/ID25)	VP25(OD32/ID25)	VP25(OD32/ID25)
Airflow rate	(High / Mid / Low) [CMM]	25 / 22 / 18	31.0/25.0/19.0	33.5/27.0/22.0
Sound	Sound pressure (High / Mid / Low) [dB(A)]	40/37/34	44/39/33	45/41/37
External dimension (Indoor unit)	Net weight (kg)	18	18	20
	Shipping weight (kg)	21.5	21.5	23.5
	Net dimensions (WxHxD) (cm)	84 x 28.8 x 84	84 x 28.8 x 84	84 x 28.8 x 84
	Shipping dimensions (WxHxD) (cm)	89.8 x 35.7 x 89.8	89.8 x 35.7 x 89.8	89.8 x 35.7 x 89.8
Panel size	Panel model	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN
	Panel net weight (kg)	6.3	6.3	6.3
	Shipping weight (kg)	8.7	8.7	8.7
	Net dimensions (WxHxD) (cm)	95 x 4.8 x 95	95 x 4.5 x 95	95 x 4.5 x 95
	Shipping dimensions (WxHxD) (cm)	101 x 11.7 x 100	101 x 11.7 x 100	101 x 11.7 x 100
Power supply (Outdoor unit) [Φ, #, V, Hz]		1Φ, 2, 220-240V, 50Hz	1Φ, 2, 220-240V, 50Hz	3Φ, 4, 380-415V, 50Hz
Compressor	Type	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary
External dimension (Outdoor unit)	Net weight (kg)	48.5	71	86.5
	Shipping weight (kg)	52	76	96.5
	Net dimensions (WxHxD) (cm)	88x79.8x31	94 x 99.8 x 33	94 x 121 x 33
	Shipping dimensions (WxHxD) (cm)	102.3x88.1x41.3	99.5 x 109.6 x 42.6	99.5 x 138.8 x 42.6
Operating temp. range	Cooling (℃)	-15~52 ℃	-15 ~ 52 ℃	-15 ~ 52 ℃
	Heating (℃)	NA	NA	NA

Optional accessories

Individual Controtllers


MWR-WE13N

AR-EH03I


MWR-SH00N

Panel Options


PC4NUCEAN
(Purification)


PC4NUFMAN
(WindFree™)


PC4NUSKAN
(Classic)


PC4NBSKAN
(Black)

Specification
Chilled Water FCU



Model		AG026TN1DKH/EU	AG032TN1DKH/EU	AG042TN1DKH/EU
Type		1Way Cassette	1Way Cassette	1Way Cassette
Power Supply (Indoor Unit) [Φ, #, V, Hz]		1,2,220~240,50/60	1,2,220~240,50/60	1,2,220~240,50/60
System	Mode	Heat pump	Heat pump	Heat pump
Capacity	Cooling [kW]	2.60	3.00	4.15
	Heating [kW]	2.90	3.35	5.00
Power Input	Cooling [kW]	0.027	0.035	0.055
	Heating [kW]	0.027	0.035	0.055
Current Input	Cooling [A]	0.14	0.19	0.29
	Heating [A]	0.14	0.19	0.29
Fan	Type	Cross Flow Fan	Cross Flow Fan	Cross Flow Fan
	Motor (Output) [W]	27	27	65
	Air Flow Rate (Cooling) (High/Medium/Low) Insert [CMM]	6.8 / 5.8 / 4.9	7.8 / 6.8 / 5.8	14.6 / 12.6 / 10.7
Water Side Heat Exchanger	Water Flow Rate (Cooling) [LPM]	7.5	9.6	11.9
	Water Flow Rate (Heating) [LPM]	8.4	9.7	14.4
Piping Connections	Liquid Pipe (Φ, mm)	20	20	20
	Gas Pipe (Φ, mm)	20	20	20
	Drain Pipe (Φ,mm)	VP20 (OD26, ID20)	VP20 (OD26, ID20)	VP25 (OD 32, ID 25)
Field Wiring	Power Source Wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission Cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Sound	Sound Pressure (High / Mid / Low) [dB(A)]	33/31/29	38/35/31	40/37/33
External Dimension (Indoor Unit)	Net Weight (kg)	10.1	10.1	14.0
	Shipping Weight (kg)	13.0	13.0	17.5
	Net Dimensions (WxHxD) (mm)	970*135*410	970*135*410	1200*138*450
	Shipping Dimensions (WxHxD) (mm)	1173*231*487	1173*231*487	1435*224*525
Panel	Model Name	PC1NWFMBN(WindFree™)	PC1NWFMBN(WindFree™)	PC1BWFMBN(WindFree™)
	Net Weight (kg)	4.3	4.3	5
	Shipping Weight (kg)	6.6	6.6	7.5
	Net Dimensions (WxHxD) (mm)	1198*35*500	1198*35*500	1410*35*500
	Shipping Dimensions (WxHxD) (mm)	1262*122*566	1262*122*566	1474*122*566
Additional Accessories	Drain Pump	Built In	Built In	Built In

Optional accessories

Individual Controllers


MWR-WE13N


AR-EH03I


MWR-SH00N

Specification
Chilled Water FCU

Model		AG060AN4DKH/EU	AG072AN4DKH/EU	AG090AN4DKH/EU	AG105AN4DKH/EU
Type		4Way Cassette	4Way Cassette	4Way Cassette	4Way Cassette
Power Supply (Indoor Unit) [Φ, #, V, Hz]		1,220~240,50/60	1,220~240,50/60	1,220~240,50/60	1,220~240,50/60
System	Mode	Heat pump	Heat pump	Heat pump	Heat pump
Capacity	Cooling [kW]	6.00	7.20	9.00	10.00
	Heating [kW]	7.30	8.50	10.00	10.70
Power Input	Cooling [kW]	0.050	0.073	0.082	0.099
	Heating [kW]	0.050	0.073	0.082	0.099
Current Input	Cooling [A]	0.37	0.50	0.58	0.79
	Heating [A]	0.37	0.50	0.58	0.79
Fan	Type	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor (Output) [W]	65	65	97	97
	Air Flow Rate (Cooling) (High/Medium/Low) Insert [CMM]	18.9 / 16.5 / 13.6	21.3 / 18.2 / 13.6	23.3 / 21.3 / 19.4	30.1 / 26.2 / 19.4
Water Side Heat Exchanger	Water Flow Rate (Cooling) [LPM]	17.5	20.8	26	28.9
	Water Flow Rate (Heating) [LPM]	21.1	24.5	28.9	30.9
Piping Connections	Liquid Pipe (Φ, mm)	20	20	20	20
	Gas Pipe (Φ, mm)	20	20	20	20
	Drain Pipe (Φ,mm)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
Field Wiring	Power Source Wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission Cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Sound	Sound Pressure (High / Mid / Low) [dB(A)]	37/33/30	41/36/30	42/39/36	45/41/37
External Dimension (Indoor Unit)	Net Weight (kg)	15.5	15.5	18.0	18.0
	Shipping Weight (kg)	19.0	19.0	21.5	21.5
	Net Dimensions (WxHxD) (mm)	840*204*840	840*204*840	840*246*840	840*246*840
	Shipping Dimensions (WxHxD) (mm)	898*275*898	898*275*898	898*316*898	898*316*898
Panel	Model Name	PC4NUFMAN(WindFree)	PC4NUFMAN(WindFree)	PC4NUFMAN(WindFree)	PC4NUFMAN(WindFree)
	Net Weight (kg)	6.3	6.3	6.3	6.3
	Shipping Weight (kg)	8.7	8.7	8.7	8.7
	Net Dimensions (WxHxD) (mm)	950x48x950	950x48x950	950x48x950	950x48x950
	Shipping Dimensions (WxHxD) (mm)	1010x117x1000	1010x117x1000	1010x117x1000	1010x117x1000
Additional Accessories	Drain Pump	Built In	Built In	Built In	Built In

Optional accessories

Individual Controllers

MWR-WE13N

AR-EH03I

MWR-SH00N

Specification
Chilled Water FCU

Model		AG060MN4PKH/EU	AG072MN4PKH/EU	AG090MN4PKH/EU	AG105MN4PKH/EU
Type		360 Cassette	360 Cassette	360 Cassette	360 Cassette
Power Supply (Indoor Unit) [Φ, #, V, Hz]		1,220~240,50/60	1,220~240,50/60	1,220~240,50/60	1,220~240,50/60
System	Mode	Heat pump	Heat pump	Heat pump	Heat pump
Capacity	Cooling [kW]	6.00	7.20	9.00	10.00
	Heating [kW]	7.30	8.50	10.00	10.70
Power Input	Cooling [kW]	0.058	0.058	0.077	0.100
	Heating [kW]	0.058	0.058	0.077	0.100
Current Input	Cooling [A]	0.50	0.50	0.62	0.79
	Heating [A]	0.50	0.50	0.62	0.79
Fan	Type	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Motor (Output) [W]	65	97	97	97
	Air Flow Rate (Cooling) (High/Medium/Low) Insert [CMM]	21 / 17.5 /15	25.5 / 22 / 19.8	29.5 / 24 / 19.8	31.5 / 22.5 / 19.8
Water Side Heat Exchanger	Water Flow Rate (Cooling) [LPM]	17.5	20.8	26	28.8
	Water Flow Rate (Heating) [LPM]	21	24.5	28.9	30.8
Piping Connections	Liquid Pipe (Φ, mm)	20	20	20	20
	Gas Pipe (Φ, mm)	20	20	20	20
	Drain Pipe (Φ,mm)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
Field Wiring	Power Source Wire	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5	1.5 ~ 2.5
	Transmission Cable	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50	0.75 ~ 1.50
Sound	Sound Pressure (High / Mid / Low) [dB(A)]	40/37/32	39/35/33	43/38/33	45/39/33
External Dimension (Indoor Unit)	Net Weight (kg)	21.0	25.0	25.0	25.0
	Shipping Weight (kg)	25.9	30.4	30.4	30.4
	Net Dimensions (WxHxD) (mm)	947*281*947	947*365*947	947*365*947	947*365*947
	Shipping Dimensions (WxHxD) (mm)	990*330*990	990*414*990	990*414*990	990*414*990
Panel	Model Name	PC4NUNMAN	PC4NUNMAN	PC4NUNMAN	PC4NUNMAN
	Net Weight (kg)	3.6	3.6	3.6	3.6
	Shipping Weight (kg)	6	6	6	6
	Net Dimensions (WxHxD) (mm)	1000x66x1000	1000x66x1000	1000x66x1000	1000x66x1000
	Shipping Dimensions (WxHxD) (mm)	1093x85x1083	1093x85x1083	1093x85x1083	1093x85x1083
Additional Accessories	Drain Pump	Built In	Built In	Built In	Built In

Optional accessories

Individual Controllers

AR-KH03I

MWR-WE13N

Air Conditioner
Controls

Individually or centrally, from anywhere you want. Everything is always under control.

Samsung Control System offers convenient control of individual indoor units or entire groups of multiple units. Using a variety of systems, users can easily monitor and control multiple functions.

Air Conditioner
Controls | **Individual Control**

Wireless / Wired Remote Controllers

Wireless Remote Controller
Standard type
AR-EH03I

- Wind-Free™ On/Off
- Filter replacement alarm reset
- Simple On/Off timer
- Indoor unit option code setting
- Temperature setting range
  - Auto/Cool/Dry : 18℃ (65℉) ~ 30℃ (86℉)
  - Heat : 16℃ (61℉) ~ 30℃ (86℉)
- Direct/Indirect function On/Off
  - Motion Detect Sensor necessary

Wireless Remote Controller
for 360 Cassette
AR-KH03I

- 360 Cassette air flow direction control
- Filter replacement alarm reset
- Simple On/Off timer
- Indoor unit option code setting
- Temperature setting range
  - Auto/Cool/Dry : 18℃ (65℉) ~ 30℃ (86℉)
  - Heat : 16℃ (61℉) ~ 30℃ (86℉)
- Direct/Indirect function
- Air Flow Direction Indicator
  - Spot / Mid / Wide / Swing

Wired Remote Controller
MWR-WE13N

- Air conditioner/ERV operation setting (Horizontal air flow, Wind-Free™)
- LCD Backlight
- Air conditioner/ERV error monitoring
- Air conditioner individual blade control
- Filter cleaning alert/reset alert time
- Air conditioner/ERV interlocking control
- Energy saving control
- Automatic operation stop function
- Weekly operation schedule setting
- Button restriction function
- Built-in room temperature sensor
- Real time clock (Daylight Savings Time)
- Control max. 16 indoor units (Air conditioner + ERV) in group with single wired remote controller

Wired Remote Controller
Premium type
MWR-WG00JN

- Full color 11.43 cm LCD screen
- Easy and Intuitive UI
- LCD Backlight
- Dual Set Point
- Auto Change Over
- Energy Consumption monitoring
- IR receiver is included
- Daylight Savings Time
- ℃ / ℉ Convertible
- Indoor model number display
- Error list display
- Built-in room temperature sensor
- SD slot

Air Conditioner

Controls | **Individual Control**

Wireless / Wired Remote Controllers

Wired Remote Controller
Simple type

MWR-SH00N

- Simplified wired remote controller
- Air conditioner operation On/Off control
- Fan speed control
- Setting operation mode and temperature
- Reset filter cleaning alert indicator
- Adjust air flow direction
- Operation On/Off timer function

Wired Remote Controller
Touch Simple type

MWR-SH11N

- Touch screen wired remote controller
- LCD Backlight
- IR receiver is included
- Away function
- Quiet mode, Sleep mode
- Reset filter cleaning alert indicator
- Air conditioner Individual/group control
- Operation On/Off timer function
- Wind-Free™/Long horizontal wind
- Button locking function
- Eliminate Operation Mode function : Auto/Cool/Dry/Fan/Heat mode
- Built-in room temperature sensor
- °C / °F Convertible
- Relative temperature setting function : -3 ~ +3°C setting
- Control max. 16 indoor units in group with a single wired remote controller

Wired Remote Controller
for ERV

MWR-VH12N

- ERV only controller
- Operation mode setting
- Fan speed control
- Filter replacement alarm display and reset
- Away mode
- Simple On/Off timer
- Control max. 16 ERV units in group with single wired remote controller

Wired Remote Controller
for DVM Chiller

MCM-A00N

- DVM Chiller On/Off control (Module/Group)
- Operation mode, water outlet temperature setting
- Optional operation setting
- Module/Group setting
- Weekly operation schedule setting
- Control max. 16 DVM Chiller units with single wired remote controller
- Support the Daylight Savings Time function

Wired Remote Controller
Standard type for EHS

MWR-WW10N

- Full color 11.43 cm LCD screen
- Easy and Intuitive UI
- 2-Zone Control
- LCD Backlight
- IR receiver is included
- Daylight Savings Time
- °C / °F Convertible
- Error list display
- Built-in room temperature sensor
- SD slot

Air Conditioner

Controls | **Centralized Control**

Centralized Control Systems

On/Off Controller

MCM-A202DN

- Max. 16-group controller (Max. 128 units)
- Whole/Group/Individual indoor unit control (On/Off)
- Restriction on the use of wireless/wired remote controllers and external contact control
- Cooling and heating mode control
- Indoor unit error display

Touch Controller

MCM-A300BN

- 25.65 cm touch LCD controller
- Controls max. 128 indoor units
- Schedule control, Indoor unit usage restriction, View indoor unit error history
- Energy usage monitoring
- Air quality monitoring

Wi-Fi Kit 2.0

MIM-H04N

- **Enhanced Convenience**
  - Voice Control available through a smartphone with Bixby*
  - Connected home with affordable units in every home using SmartThings#
  - Welcome cooling and heating based on Geo-fencing
  - Individual indoor unit control
- **Personalized Climate Environment**
  - Preferred automation
  - Multi-device experience interoperable with smart appliances
- **Energy Usage Monitoring**
  - Current and daily, weekly or monthly energy usage** of the outdoor unit

  ** Calculated by Samsung's own algorithm, it cannot be used as a legal basis.
- **Provides ease of installation**
  - Easy set-up possible for up to 16 indoor units at once

*Bixby Voice commands recognise English (US/UK), French, Spanish, German, Italian, Chinese and Korean. Not all accents, dialects and expressions are recognized.
#SmartThings app available on Android and iOS devices. A separate Wi-Fi connectivity and a Samsung Account may be required. Depends on connectivity with compatible devices.

Air Conditioner
Controls | **Centralized Control**

Integrated Control Systems

DMS2.5

MIM-D01AN

- Built-in web server for PC-independent management and remote access control
- Multiple upper-layer control access (S-NET 3, Web-client)
- Weekly/Daily schedule control
- Power distribution function
- Current time management even during power failure (for 24 hours)
- Emergency stop function with simple contact interface
- Individual/Group control of up to 256 indoor units, AHU and ERV
- User editable control logic
- Accessible level management.
- Dynamic security management
- Operation & error history management
- Data storage in non-volatile memory & SD memory

S-NET3

MST-P3P

S-NET 3 is a complex management program that controls and monitors a complete air conditioner network system. The S-NET series provides flexible and complete control for a variety of applications.

- Connect up to 16 DMSs using Ethernet
- Control and Monitoring
- Schedule Control
- Zone Management
- Power Distribution Management
- History Management

Air Conditioner
Controls | **Interface Devices**

Module, Application Kit, Gateway

External Contact Interface Module

MIM-B14

The Samsung Guestroom Management System saves users the energy and money wasted on cooling an unoccupied room. The air conditioner is activated when the Key-Tag is in place and turns off when the Key-Tag is removed.

An external contact interface module provides direct indoor unit control via an external contact signal, as well as window-synchronised indoor unit control. The emergency control function features simple contact input. Plus the module generates indoor unit operation/error state output through relay contacts.

- Direct indoor unit control by external contact signal
- Window-synchronised indoor unit control
- Emergency control with simple contact input
- Indoor unit operation/error state output through relay contacts

Air Conditioner
Controls | **Interface Devices**

Module, Application Kit, Gateway

ERV Interface Module

MIM-N10

- Communication interface module between ERV and controller
- Connect 1 ERV interface module to max. 16 ERVs
- Individual control – max. 16 ERVs
- Group control – max. 16 groups
- Supported communication type
  - Conventional communication ERV ←→ New communication upper level controller
  - New communication ERV ←→ Conventional communication upper level controller
  - New communication ERV ←→ New communication upper level controller

Modbus Interface Module

MIM-B19N

A BMS or 3rd controller can control a Samsung SAC by using the Modbus protocol.

- BMS unit protocol: Modbus RS485 (2 wires, max. 1000m)
- Unit connection protocol: Samsung Control Layer Protocol (R1/R2)
- Max. No. of connection units: 1 outdoor unit (4 outdoor units including sub units in the case of modular installation) and 48 indoor units
- Modbus interface module address range : up to 247

Pulse Interface Module (PIM)

MIM-B16N

- The Watt-hour Meter Interface Module can be exclusively used for DMS 2.5 power distribution, displaying power consumption for each watt-hour meter.
- Exclusive use for DMS 2.5 power distribution
- Connection with up to 8 watt-hour meters
- Pulse interface with watt-hour meters
- Watt-hour meter - by 3rd party

BACnet Gateway

MIM-B17BN

With the BMS control and monitoring function, the BACnet gateway makes it easy to control the air conditioning network in various ways. The BACnet gateway can control up to 256 indoor units.

- Interface for the BACnet management system
- Maximum 256 indoor units plus ERVs support with a maximum of 80 interface modules
- Includes DMS 2.5 functions

LonWorks Gateway

MIM-B18BN

The LonWorks gateway is an interface for Lon-Connection to the LonWorks management system, providing you with a more convenient way to manage your air conditioning system. It can control a maximum of 128 indoor units, used in combination with S-NET 3.

- Exclusive use for DMS 2.5 power distribution
- Connection with up to 8 watt-hour meters
- Pulse interface with watt-hour meters
- Watt-hour meter - by 3rd party

Air Conditioner

Controls | **Others**

Other Devices

Interface Module

MIM-N01

Provides a communication interface between outdoor units and the upper level controller, which uses a different type of communication.

- Connect 1 interface module to 1 outdoor unit
- Individual control - Maximum 48 indoor units
- Detecting communication type automatically: Judge the communication type of the upper level controller according to communication type of the outdoor unit
- Supported communication type
  - Conventional communication outdoor unit
    ←→ New communication upper level controller
  - New communication outdoor unit
    ←→ Conventional communication upper level controller

MTFC
(Multi Tenant Function Controller)

MCM-C210N

- The Multi Tenant Function Controller is an auxiliary power supply device that allows the indoor unit to turn off (close EEV) normally and maintain communication when the main power supply is cut.
- It is used in sites such as a hotel where individual power is supplied to the indoor unit.

Operation Mode Selection Switch

MCM-C200

- Outdoor unit operation mode selection (Cooling, Heating or Auto)
- Mixed operation mode protection

Receiver Kit

MRK-A10N

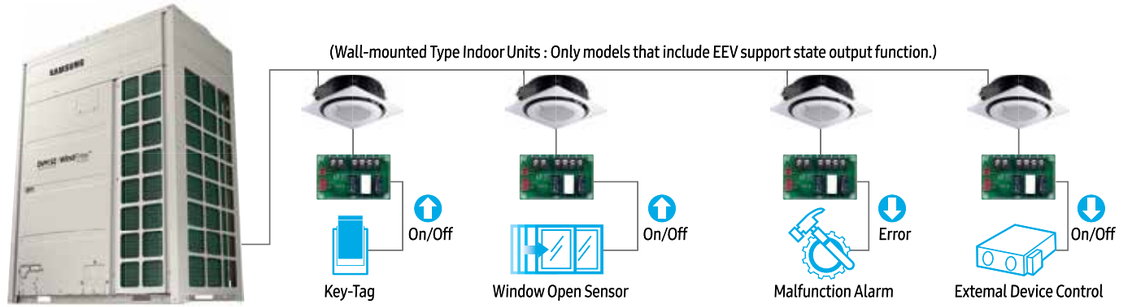
- Concealed wireless signal receiver
- Filter replacement sign
- Fan operation display
- Operation Timer setting display
- Operation On/Off button
- Operation On display LED (blue)
- Defrost operation display LED (red)

Guestroom management module

Avoid unnecessary energy usage and cooling costs

Samsung Guestroom Management System saves users the energy and money wasted on cooling an unoccupied room. The air conditioner is activated when the Key-Tag is in place and turns off when the Key-Tag is removed.

An external contact interface module provides direct indoor unit control via an external contact signal, as well as window-synchronised indoor unit control. The emergency control function features simple contact input. Plus the module generates indoor unit operation/error state output through relay contacts.

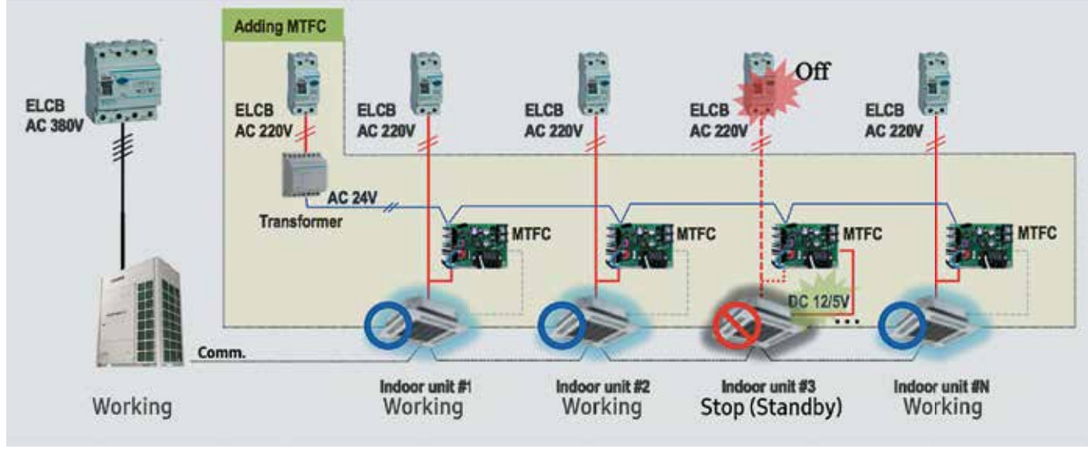


Multi tenant function Controller (MCM-C210)

MTFC solution

Even if some of the indoor units are switched off, MTFC detects it and supplies DC power to the indoor unit.

Also, the indoor unit stays standby mode closing EEV and blocking control signal until being switched on.



As a result, the other indoor units will be working well.

AHU kit

Optimise performance and energy savings with seamless AHU connectivity

Samsung AHU Kit allows DVM S outdoor units to connect to air handling units (AHUs), which results in energy savings and improved performance and efficiency.

Features includes:

Variable capacity

2.5/5/7.5/10 HP Kit

Simple BMS application

0-10 V

Discharge air temperature control

Setting range: Cooling 8°- 18°
Heating: 30°- 43°

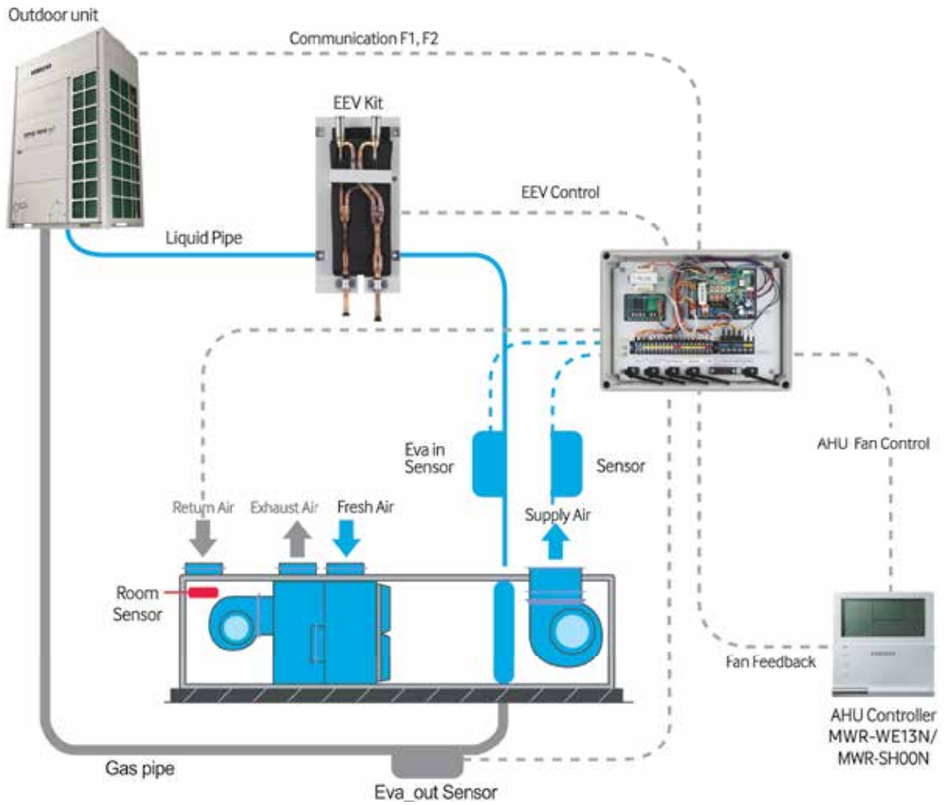
EEV and AHU controller- MXD-A64K100E (10HP), MCM-D201N (upto 40HP)

MXD-K025AN

MXD-K050AN

MXD-K075AN

MXD-K100AN



Business with Samsung | Engineering

Always optimising your air conditioning systems

CAE (Computer Aided Engineering)

Samsung provides professional CAE support, with various analysis and evaluation services in the building design and information modeling phases. Using the workstations and super computers of the Samsung Advanced Institute of Technology, multiple projects can be simulated simultaneously. It ensures that the building has an optimised air conditioning system that works effectively and efficiently and provides a comfortable indoor environment.

How to **request**

1. Prepare

Prepare drawing data in advance that shows the installation conditions:

- An installation location and the layout of outdoor units
- A machine room and its louvre structure, if the outdoor units are installed in the machine room
- The building exterior and the layout of surrounding buildings
- The layout of indoor units

2. Request

Contact a Samsung technical expert in your area. And, request engineering support in providing prepared drawing data

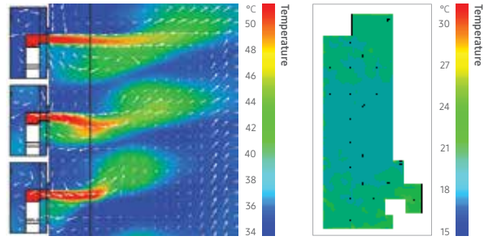
Samsung CAE support includes:

- Outdoor unit machine room temperature simulation
- Indoor unit room temperature simulation
- Air flow distribution simulation
- Specialised simulation of theatre, residential, airport and machinery room noise.

Various engineering softwares for Samsung CAE support

CFD (Computational Fluid Dynamic)

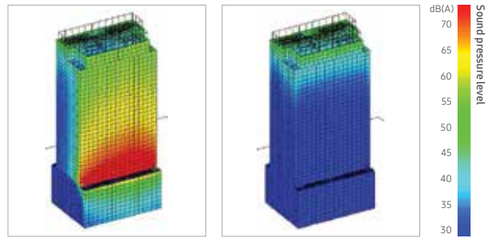
The installation location and surrounding conditions significantly impact the performance of an air conditioning system. In particular, these days the structure of buildings has become more complex and often includes a machine room to hide outdoor units, so they are not visible on the outside. As a result, it is much more important to determine in advance if the preferred location will have any impact on the performance of the system. Samsung supports CFD simulation and analysis to assess the performance of the Samsung air conditioning system before deciding on its installation location, and also provides a guidance report if it is necessary to change it.



Discharge air of outdoor units | Indoor temperature

Noise analysis

To ensure a more comfortable indoor environment, noise mitigation is now an important factor. So, it's essential to anticipate possible noises during the building planning stage - before they really happen. Samsung provides noise effect evaluation, based on the location of indoor and outdoor units, by modeling the actual building design and data about the air conditioning system. After the evaluation, Samsung will suggest the best choice of installation location, and also provide a guidance report if necessary.



Initial planning | **Optimal planning** after improvement

Energy simulation

In general buildings, the HVAC (Heating, Ventilating and Air Conditioning) products usually consume around 30% of the total energy used in the building. Samsung helps conduct energy simulations to analyse the economical efficiency of the installed HVAC systems by evaluating the operation cost of each product category. This enables developers and consultants to propose the optimal HVAC solution to their clients.

Now DVM Pro 2.0

Samsung DVM Pro 2.0 is an advanced design automation program that helps you design your air conditioning system more easily and precisely. You can simply select the most suitable equipment from the entire range of Samsung air conditioner products and design the system with its user-friendly interface, which significantly improves usability. And, it helps to ensure that the system' design complies with Samsung's engineering guidelines. The ability to export reports, pipe and wire diagrams, additional refrigerant values and other information make Samsung DVM Pro 2.0 a powerful tool for you as an engineer, designer or installer.

1. Register

Go to the Samsung DVM Pro website*. Simply complete the registration process and a confirmation email with access details will be sent to you.

2. Access

Using a temporary password, sign in to the website. If you want, you can then change the password.

3. Download

Download the DVM Pro 2 installation file, view the user manuals, and start the design of your project.

Sales Mode

All design processes, including product selection, piping wiring and system checks, are seamlessly integrated to provide a streamlined user experience, so you can respond to client requests rapidly. And, it includes an intuitive interface and range of convenient features to simplify and speed -up the whole design process.

Product Selection

Simply find and quickly select any Samsung air conditioners with product thumbnails and "favorites" functions.

Reports

Supports various report formats to suit any of your needs. You can also selectively print by item, such as a floor or system.

Concurrent design for wiring & controls

The wiring and controls of the indoor and outdoor units can be designed on one screen. With fewer steps, designs can be completed quickly.

Design based on rooms & floors

A visualized structure, based on floors and rooms, lets you intuitively view the installation location and working load.

Designer Mode

A dedicated CAD program, developed by Samsung, lets you design system without the need for any expensive commercial CAD programs. It is also optimised with specialised features to design air conditioning systems.

Piping design

Refrigerant piping and drainpipes can be drawn automatically, using the correct material and size to suit the installation guidelines perfectly.

Reports

As well as a basic report, it provides integrated drawing data, including the equipment, power supply, and communication wiring diagrams.

Modular Design

Let's you design the system in modules, which can be easily duplicated without wasting time and effort on repetitive tasks. So you can quickly complete a whole system.

Compatible with AutoCAD

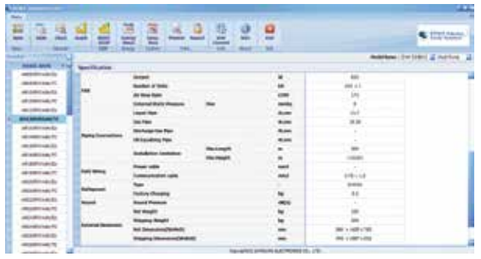
It is compatible with commercial CAD programs, including AutoCAD, for added convenience. Exported design and drawing data can be easily handled and modified separately.

Energy simulation software

DVM E-solution

DVM E-solution is used to perform energy load and usage simulation based on different equipment selection and operating conditions, by taking into consideration the initial and operating costs. Simulation reports available in various file formats make supporting technical data easily accessible.

Product specification



Engineers can search products with detailed specification at their desktops.

Capacity chart

Designers can find capacity chart instantly at their desktops.

SEER, SCOP and energy simulation

Engineers can optimise their design to achieve the best energy efficiency by carrying out energy simulation of DVM S with annual temperature data. The DVM S' SEER / SCOP at various temperatures and the weight factors can be simulated too.

Automatic report

A comprehensive report that includes specifications, SEER, SCOP and energy simulation results can be generated automatically.

Accessories

Classification	Image	Model DVM S, single (New communication protocol)	Application
Drain pump		MDP-E075SEE3D	Slim Duct (2.0 ~ 14.0 kW)
		MDP-M075SGU1D	M.S.P Duct (9.0/11.2 kW)
		MDP-M075SGU2D	M.S.P Duct (12.8/14.0 kW) H.S.P Duct (14.0/16.0 kW)
		MDP-M075SGU3v D	M.S.P Duct (5.6/7.1 kW)
		MDP-N047SNC0D	O.A.P Duct (14.0 kW)
		MDP-N047SNC1D	H.S.P Duct (22.4/28.0 kW) Fresh Air Intake Duct (22.4/28.0 kW)
		MDP-G075SP	Duct S (External type)
		MDP-G075SQ	Duct S (Internal type)
PDM kits (High elevation kits)		MXD-A38K2A	8~12 HP
		MXD-A12K2A	14~16 HP
		MXD-A58K2A	18~22 HP
AHU kits		MXD-K025AN	7.0 ~ 8.75 kW AHU
		MXD-K050AN	14.0 ~ 17.5 kW AHU
		MXD-K075AN	21.0 ~ 26.25 kW AHU
		MXD-K100AN	28.0 ~ 35.0 kW AHU
		MXD-A64K100E	AHU EEV Kit (10HP)
		MCM-D201N	Control Kit (PBA, 10HP~40HP)
360 Cassette AC panel		PC4NUDMAN	NASA, Square
		PC4NBDMAN	NASA, Square - Black
		PC4NUNMAN	NASA, Circle (Exposed installation)
		PC4NBNMAN	NASA, Circle (Exposed installation) - Black
		PC6EUCMAN (Purification)	
		PC6EUXMAN (Auto elevation)	
4Way Cassette front panel		PC4NUFMAN	4Way Cassette S - WindFree™
		PC4NUSKAN	4Way Cassette S - Waffle
		PC4NBSKAN	4Way Cassette S - Black
		PC4NUCEAN	4Way Cassette S - Purification
4Way Cassette (600 x 600) front panel		PC4SUFMAN	4Way Cassette S - (600x600) - WindFree™
		PC4SUSMBN	4Way Cassette S (600x600) - Black
		PC4SUSMFN	4Way Cassette S (600x600) -Classic
1Way Cassette front panel		PC1NWSMAN/PC1BWSMAN	1Way Cassette (New air fluid design) (2.2~3.6kW) Slim 1Way Cassette (5.6~7.1kW)
		PC1NUSMAN/PC1BWSEAN	Slim 1Way Cassette (2.2~3.6kW) 1Way Cassette (Classic) (5.6~7.1kW)
		PC1NWCMAN (Purification) Small chassis	
		PC1BWCMAN (Purification) Big chassis	
		PC1NUPMAN/PC1BWPEAN	Slim 1Way Cassette Z-Sliding (2.2~3.6kW) Slim 1Way Cassette Z-Sliding (5.6~7.1kW)

Accessories

Classification	Image	Model	Description	Application
2Way Cassette front panel		PC2NWSMEN	-	2Way Cassette
Motion detect sensor		MCR-SMD	MCR-SMD	4 Way 600x600 Cassette
		MCR-SMC	MCR-SMC	4 Way Cassette
Y - Joint		MXJ-YA1509N/M	15.0kW and below	DVM S/DVM S2
		MXJ-YA2512N/M	Over 15.0 ~ 40.6kW and below	
		MXJ-YA2812N/M	Over 40.6 ~ 46.4 kW and below	
		MXJ-YA2815N/M	Over 46.4 ~ 69.6 kW and below	
		MXJ-YA3419N/M	Over 69.6 ~ 98.6 kW and below	
		MXJ-YA4119N/M	Over 98.6 ~ 139.2 kW and below	
		MXJ-YA4422M	Over 139.2 kW	
Y-joint (High pressure gas) for HR module		MXJ-YA1500M	23.2 kW and below	DVM S HR
		MXJ-YA2500M	Over 23.2 ~ 69.6 kW and below	
		MXJ-YA3100M	Over 69.6 ~ 139.2 kW and below	
		MXJ-YA3800M	Over 139.2 kW	
Outdoor Joint (Outdoor connection)		MXJ-TA3819M MXJ-TA3419M	Below 48 HP	DVM S/DVM S2
		MXJ-TA4422M MXJ-TA4122M	Over 48 HP	
Outdoor Joint (High pressure gas) for HR module		MXJ-TA3100M	Below 48 HP	DVM S HR
		MXJ-TA3800M	Over 48 HP	
DPM Y-joint		MXJ-2D2509K	2-indoor unit connection	CAC Inverter (4way, 4way 600 x 600)
		MXJ-3D2509K	3-indoor unit connection	
		MXJ-4D2509K	4-indoor unit connection	
Header joint		MXJ-HA3819N	Over 69.7 kW	DVM S/DVM S2
		MXJ-HA3115M	Below 69.6 kW	
		MXJ-HA2512N	Below 46.4 kW	
MCU kits		MCU-S6NEK2N	Up to 48 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 61.6 KW	DVM S HR/DVM S2
		MCU-S4NEK3N	Up to 32 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 61.6 KW	
		MCU-S2NEK2N	Up to 16 units (1 port, 8 units) - Below 16 kW: Port 1EA - Max capacity: 32 KW	
		MCU-S1NEK1N	Up to 8 units - Below 16 kW: Port 1EA - Max capacity: 16 KW	

Note

Note