

SAMSUNG

Climate Solutions

Product Catalogue

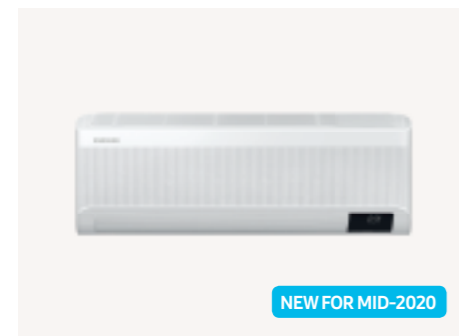
Commercial

2020

Highlights for 2020

Wind-Free™

Samsung introduced the market's first air conditioner with Wind-Free™ technology in 2017. Wind-Free™ Cooling disperses fresh air gently and evenly through thousands of micro-holes, creating "Still Air" conditions¹. This allows people to live, work and relax comfortably without experiencing unpleasant cold drafts. For 2020, Samsung will introduce a completely new Wind-Free™ wall-mounted model in a modernised design for its VRF product range, featuring new intelligent technologies for enhanced indoor comfort and improved energy efficiency.



Wind-Free™ Avant



- Wind-Free™ Cooling
 - Wi-Fi Control (optional)
 - AI Auto Comfort
 - Tri-Care Filter
- New compressor with Digital Inverter Boost technology for improved energy efficiency.
 - Equipped with NASA communication protocol.
 - Available for VRF (DVM) in capacity range 1.5 - 8.2 kW, with or without EEV.

NEW FOR MID-2020

Wi-Fi Control

The new optional Wi-Fi Kit allows users to control up to 16 connectable indoor units via smartphone with the Samsung SmartThings app². The app checks indoor temperature, outdoor temperature and air quality levels, and then recommends the optimal operating mode. It also offers the option of adding user scenes such as working, walking or resting. The geofencing functionality allows the room temperature to be automatically set at the desired level when the user approaches to within a preset distance of 100 m - 150 km from the building.



Wi-Fi Kit

- Wi-Fi control of up to 16 indoor units through Samsung SmartThings.
- Welcome Cooling or Heating through geofencing functionality.
- Individual power monitoring for up to 16 outdoor units.

NEW

¹ASHRAE (the American Society of Heating, Refrigeration, and Air-Conditioning Engineers) defines "Still Air" as air currents moving at speeds below 0.15 m/s, with no cold drafts.
²Available on iPhones and Android devices. A network connection is required. Samsung application account is necessary.

HVM

Samsung HVM (HydroVariableMulti) is a water-based, hybrid VRF solution that is flexible and environmentally friendly. It offers the existing benefits of traditional VRF systems, with the added advantage of future-ready versatility. For 2020, the compact Samsung HVM Chiller units are compatible with an extended range of Fan Coil Units (FCU). The complete system's integrated and standardised control solution makes for efficient installation and commissioning. Control and maintenance is easy with Samsung's Data Management Server, DMS 2.5.



Wind-Free™ 1-Way Cassette FCU



- Wind-Free™ Cooling
 - Wi-Fi Control (optional)
- Two-step cooling: Fast Cooling mode and Wind-Free™ Cooling mode.
 - Built-in condensation drain pump and humidity sensor.
 - Compatible with Wi-Fi Kit.

NEW FOR MID-2020

From the beginning of 2020, Samsung HVM will also be compatible with new Concealed FCU and Cased FCU units.

b.IoT

Samsung b.IoT (building Internet of Things) is a building management solution that is designed to efficiently manage and save on energy consumption. It is an open platform with various expandability and compatibility options, enabling the integrated control of the facility's major systems, such as VRF and third-party devices via BACnet interface.



b.IoT

- Open platform.
- Easy and smart operation.
- Effective energy consumption management.
- Intelligent energy-saving algorithms.

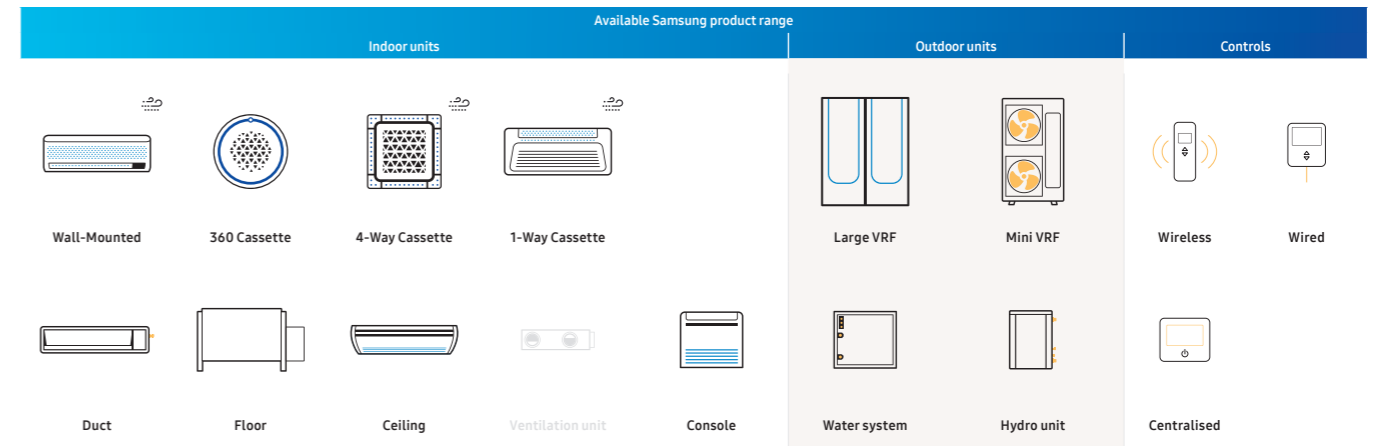
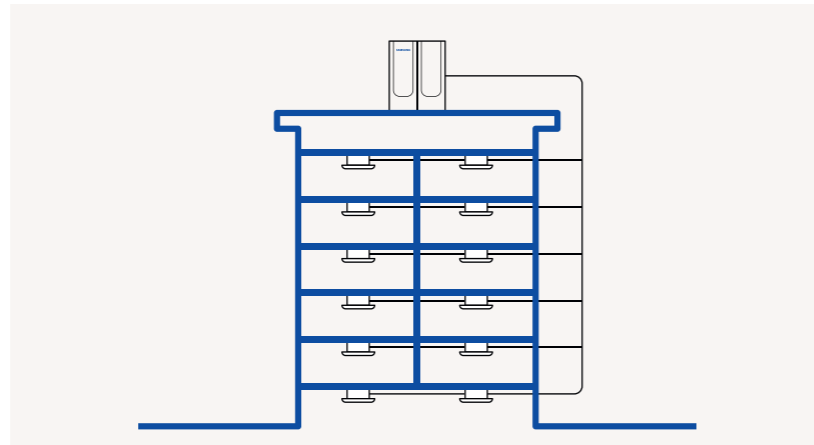
NEW

For more detailed product information and technical specifications, please consult the respective product pages of this Product Catalogue.

Product overview

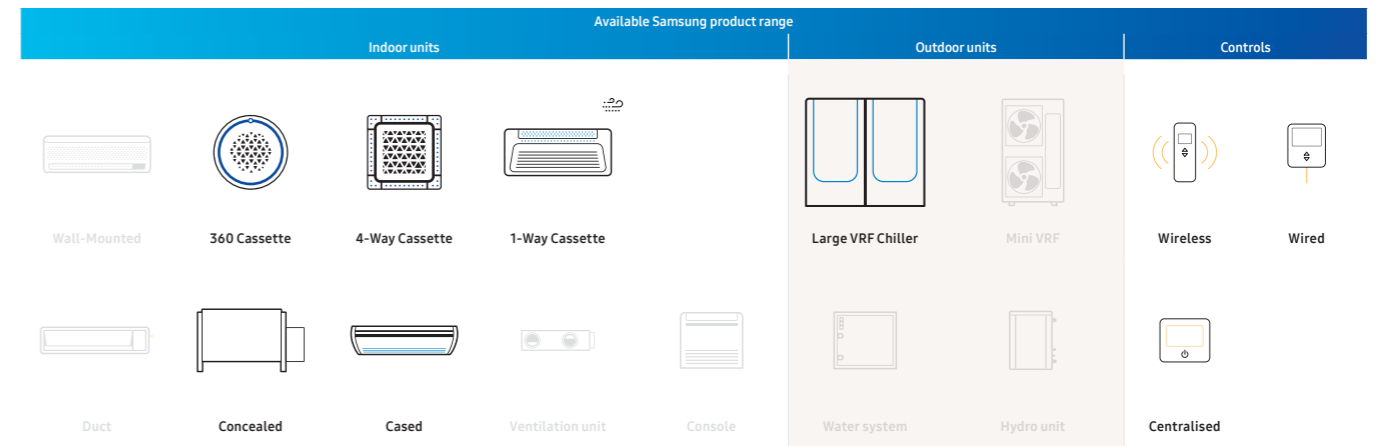
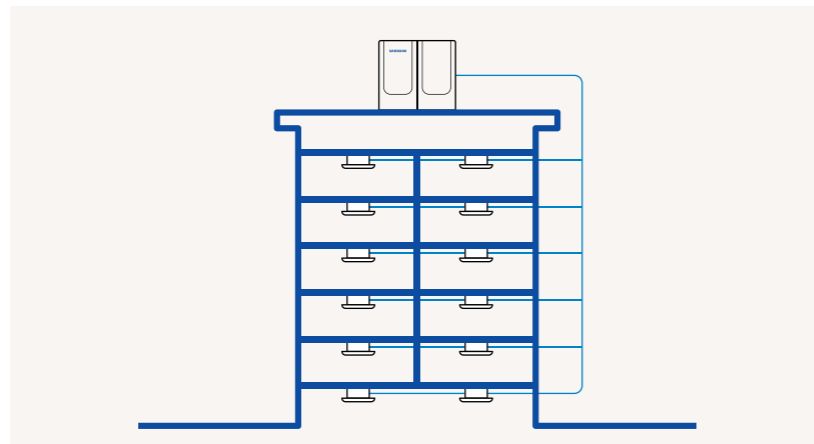
VRF (DVM)

A Samsung VRF air conditioning system offers high installation flexibility with compact DVM outdoor units, each of which can connect to up to 80 indoor units. This is an ideal solution for medium-sized to large commercial buildings, with the option of independently cooling or heating multiple rooms simultaneously.



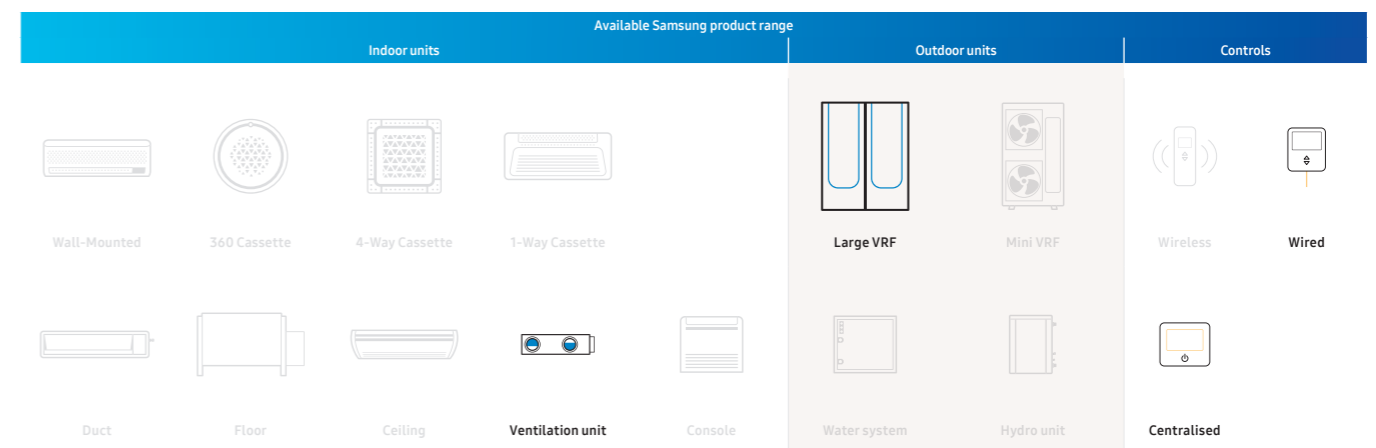
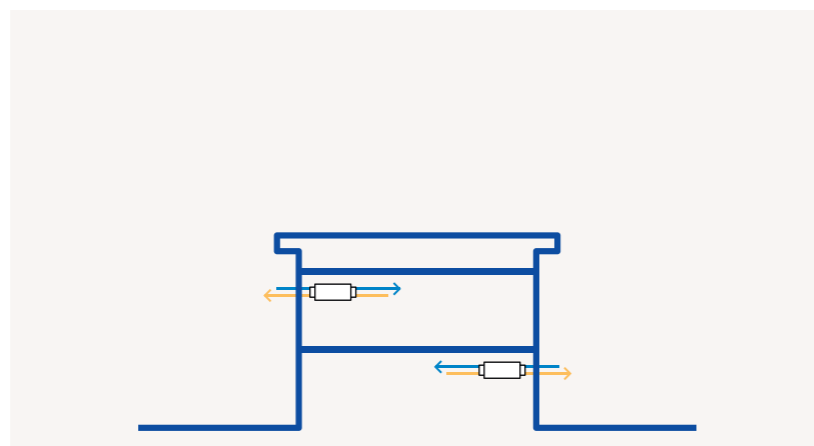
VRF Chiller (HVM)

A Samsung VRF Chiller air conditioning system follows a modular concept with the option of combining up to 16 HVM outdoor units to form one climate solution, which can be connected to a wide range of Fan Coil Units. The system utilises water for comfortable cooling and heating of any type of space.



Ventilation (ERV)

A Samsung ERV system brings fresh outside air into a room to optimise indoor air quality, while automatically adjusting its operation mode in accordance with indoor and outdoor temperatures. It can be connected to a Samsung VRF system to form a total climate solution.



Schematic drawings are for illustrative purposes only. For accurate installation information please consult the technical data book. The selection of the exact product is subject to specific application conditions. FCU = Fan Coil Unit. For more detailed product information and technical specifications, please consult the respective product pages of this Product Catalogue. = available as Wind-Free™. Wind-Free™ versions of Wall-Mounted for VRF and 1-Way Cassette for VRF Chiller will be available from mid-2020.



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 Duct S
 Wind-Free™ Wall-Mounted **NEW FOR MID-2020**
 360 Cassette **MARKET FIRST**
 Wind-Free™ 4-Way Cassette **MARKET FIRST**
 Wind-Free™ 1-Way Cassette **MARKET FIRST**
 ERV (Plus)
 Air Handling Unit (AHU) Kit
 b.iOT **NEW**

VRF (DVM)

Line-up outdoor
 Line-up indoor
 Selection guide
 Nomenclature
 DVM S Eco Heat Pump
 DVM S Essential Heat Pump (2-Pipe)
 DVM S Standard Heat Pump (2-Pipe)
 DVM S High EER Heat Pump (2-Pipe)
 DVM S Eco Heat Recovery
 DVM S High EER Heat Recovery (3-Pipe)
 DVM S Water
 360 Cassette **MARKET FIRST**
 Wind-Free™ 4-Way Cassette **MARKET FIRST**
 Wind-Free™ 1-Way Cassette **MARKET FIRST**
 Duct S
 LSP Slim Duct
 MSP Duct
 HSP Duct
 Big Duct
 Console
 Floor/Ceiling
 Big Ceiling

Concealed Floor-Standing
 Concealed Floor-Standing High Static Pressure
 Packaged Floor-Standing
 Boracay Wall-Mounted (EEV excluded)
 Boracay Wall-Mounted (EEV included)
 AR5000 Wall-Mounted (EEV included)
 Max Wall-Mounted
 Hydro Unit
 Mode Control Unit (MCU)
 AHU Kit for Outdoor Unit

VRF Chiller (HVM)

Line-up outdoor
 Line-up indoor
 Selection guide
 Nomenclature
 HVM Chiller
 1-Way Cassette FCU
 4-Way Cassette FCU
 360 Cassette FCU
 Concealed FCU **NEW**
 Cased FCU **NEW**

Ventilation (ERV)

ERV
 ERV Plus for DVM S
 OAP Duct for DVM S

Controls

Line-up
 Selection guide
 Features and dimensional drawings

Accessories

Line-up

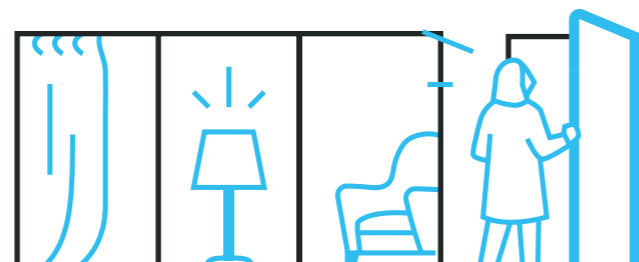
Design and support

Samsung Climate Solutions Partner Portal
 Samsung DVM-Pro
 Samsung HVM Selection Tool **NEW**
 Samsung specialist design support
 Samsung Climate Solutions Academy

This document may either contain preliminary values or may lack some values that were not yet available at the time of creation. To obtain the latest information, please consult the Samsung Climate Solutions Partner Portal at partnerhub.samsung.com/climate or contact your Samsung representative.

Samsung Climate Solutions at a glance

Climate solutions that we offer



At Samsung, we focus on providing cutting-edge innovations in indoor climate comfort and being a leader in intelligent digital connectivity solutions.

Our market-centric product ranges

	Home	Hotel	Retail	Office	Restaurant	Education
Residential	RAC FJM					
Light Commercial	CAC FJM			CAC		
Commercial		DVM HVM ERV				
Heating	EHS					
Controls	CONTROLS					



Services we provide to empower our partners

Milestone highlights that make us proud

1974

Samsung introduces its first air conditioner.

2005

Samsung Electronics enters the European market for commercial air conditioning.

2017

Samsung Electronics opens Samsung Electronics Air Conditioner Europe B.V. (SEACE) in Amsterdam.

2014



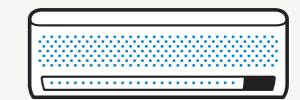
Arrival of the Samsung TDM concept, an all-in-one heat pump solution for heating, cooling and domestic hot water supply.

2015



Introduction of the Samsung 360 Cassette, the world's first circular air conditioner that fits seamlessly into the design of any space.

2017



Samsung Wind-Free™ technology comes onto the market, gently and evenly dispersing fresh air through thousands of micro-holes to limit cold drafts.

Wind-Free™

Wind-Free™ Cooling

SmartThings

Wi-Fi Control

b.IoT

Building Management System

Our flagship technologies that enrich people's lives

Our European footprint with the locations from which we operate

- 1 | Samsung Electronics Air Conditioner Europe B.V.
- 16 | Samsung offices
- 8 | Warehouses
- 9 | Training centres



Samsung reference projects in the spotlight

Toptani Shopping Mall



Edit Grabovari

CFO
Energy Systems Ergova Ltd

Toptani Shopping Mall

Rr. Abdi Toptani, Tirane 1001, Albania

“Toptani Shopping Mall is one of the best shopping malls in Albania with the world’s leading brands. We wanted the best in air conditioning solutions to match that, and we naturally installed Samsung climate solutions. DVM S has world-class energy efficiency and can minimise the operational costs of the building. The beautiful indoor units provided by Samsung harmonise with the interior of the shop, giving great satisfaction to the store owner and the consumer.”

Application



Retail

Samsung products installed



360 Cassette



4-Way Cassette



Duct



DVM S

Samsung reference projects in the spotlight

Hotel Oceania le Jura



Marc Bonivert

Manager Hotel Oceania le Jura

Hotel Oceania le Jura
14 Avenue Maréchal Foch
21000 Dijon, France

“The Hotel Oceania le Jura is housed in a building constructed in the 18th century. For this reason, there is not enough space to install a large outdoor unit, which was a cause for concern when selecting air conditioning products. We eventually chose Samsung DVM S. Unlike a central chiller, the DVM S was the best choice for our hotel because we could install an outdoor unit with a small footprint in a compact space above the building.”

Application



Hotel

Samsung products installed



4-Way Cassette



Duct



Wall-Mounted



DVM S

Regulations and standards




Samsung strives to provide customers with new eco-friendly experiences and lead the way to a sustainable future for the global community through innovative and eco-friendly products and technology. We endeavour to comply with international environmental standards, and European and national laws and regulations across our climate solutions operations. Samsung also conducts environmental improvement activities across all product development, production, distribution, use and disposal phases.

Ecodesign

The Ecodesign Directive for Energy Related Products (ErP) aims to raise awareness about the energy efficiency of products, while stimulating manufacturers to make their products more energy efficient from the design phase. The Directive is applicable to a broad range of cooling and heating products, which have been divided into different lots.

LOT 10 was implemented on 1 January 2013 and covers air conditioners with a capacity less than 12 kW, typically residential or light commercial systems. It requires manufacturers to provide highly visible

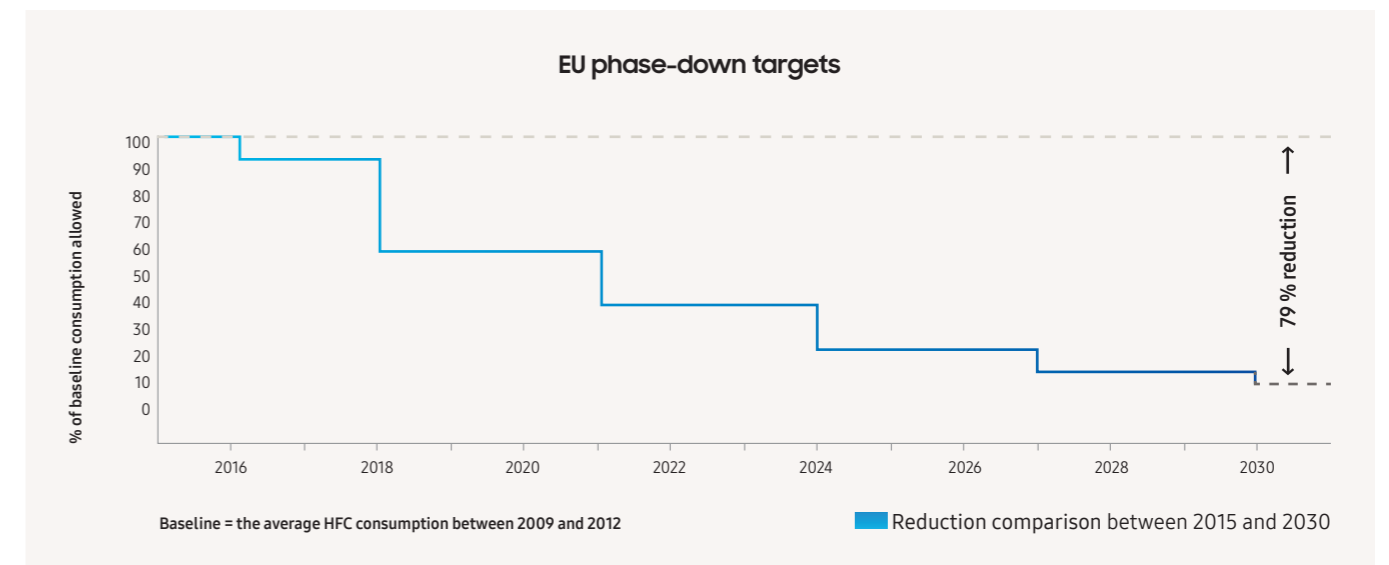
information regarding energy efficiency, including an energy label. LOT 1 and 2 took effect on 26 September 2015 and include residential air to water heat pumps for space heating and hot water production respectively (< 400 kW). It is mandatory to provide energy labels for products with a capacity less than 70 kW. On 1 January 2018, LOT 21 came into force. LOT 21 covers commercial cooling and heating products with a capacity greater than 12 kW. It does not require manufacturers to publish energy labels, but energy performance data should be made available online.

	LOTS 1/2	LOT 10	LOT 21
In effect since	26 September 2015	1 January 2013	1 January 2018
Applicable products	A2W heat pumps < 400 kW	Air conditioners < 12 kW	Air conditioners > 12 kW
Energy label required	✓	✓	
Samsung product range	 EHS	 RAC FJM CAC	 CAC DVM HVM

F-Gas regulation

The EU aims to reduce the environmental impact of F-gases through the reduction of the CO₂ equivalent consumption of HFCs (hydrofluorocarbons). EU regulation 517/2014 prescribes a phase-down of HFCs, where the quantities of HFCs that are placed on the market are gradually reduced through the allocation of quotas by the European Commission. The phase-down targets are expressed in CO₂ equivalents (= kg x GWP - Global Warming Potential) and aim to reduce HFC

consumption by 79 % in 2030. For new installations of single split air conditioners with a refrigerant charge below 3 kg, the GWP limit is set at 750 starting in 2025. The regulation has been put into force to motivate industry and users to transition to refrigerants with a lower GWP. Samsung is accelerating the transition towards lower GWP refrigerants, such as R32, and will continue its investments in environmentally friendly alternatives.



EN378 standard

Effective since 31 May 2017, the European EN378 standard provides guidance for companies who design, install, operate and maintain air conditioners, heat pumps and similar systems that use refrigerants. Based on the access characteristics of occupied spaces into which a refrigerant could leak, and an assessment of the refrigerant's toxicity and flammability, refrigerant charge limits are set and safety measures are prescribed to mitigate risk in the possible event of a refrigerant leakage.

Access categories range from general access areas, such as hotels, restaurants and shopping areas, to more restricted supervised and authorised areas.

The location of refrigerant systems follows a classification of four classes, where VRF systems are typically defined as Class II, either located in a machine room or in the open air. Subject to the available ventilation in rooms, additional measures may be needed such as mechanical ventilation or detectors.

Samsung offers specialist support to professionals in the design of cooling and heating installations. Please contact your Samsung representative to enquire about support in aligning your project design with the requirements of the EN378 standard.

WEEE: Electronic Waste

Samsung adheres to the WEEE (Waste Electrical and Electronic Equipment) Directive, which applies the principles of extended producer responsibility. This Directive stipulates the safe collection, treatment, recycling and environmentally sound disposal of all electrical and electronic equipment. Working with collective recycling schemes in each EU member state, Samsung co-finances the take-back and recycling of electronic products.

Batteries

Samsung has been giving new life to used batteries by funding collection, treatment and recycling by local battery recycling organisations.

Packaging

Samsung works together with recycling schemes and governmental organisations to collect, separate and reuse all packaging materials at various points in the distribution chain. Many materials can be recycled into new products and recycling helps to save natural resources. Recycling packaging helps to reuse valuable raw materials and to reduce the overall impact on the environment.

Innovations in detail

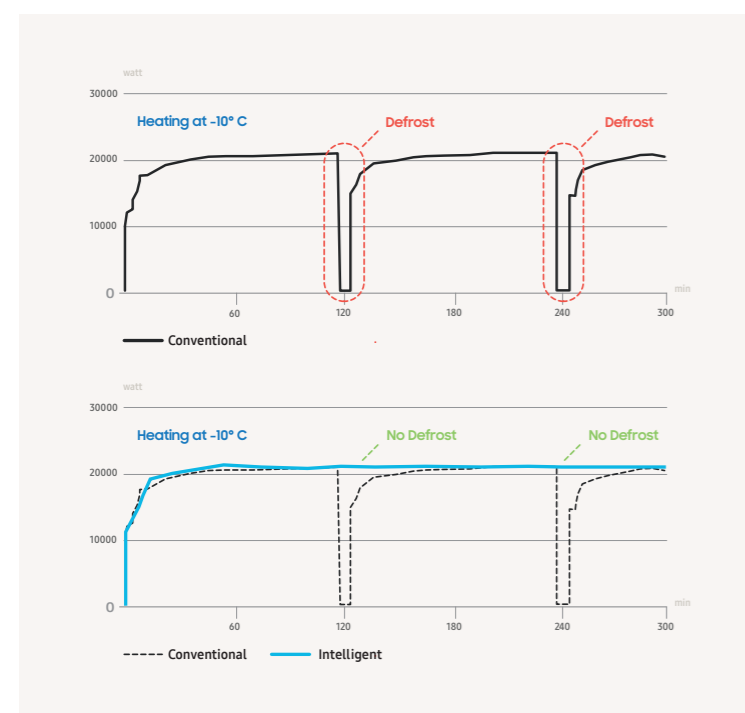
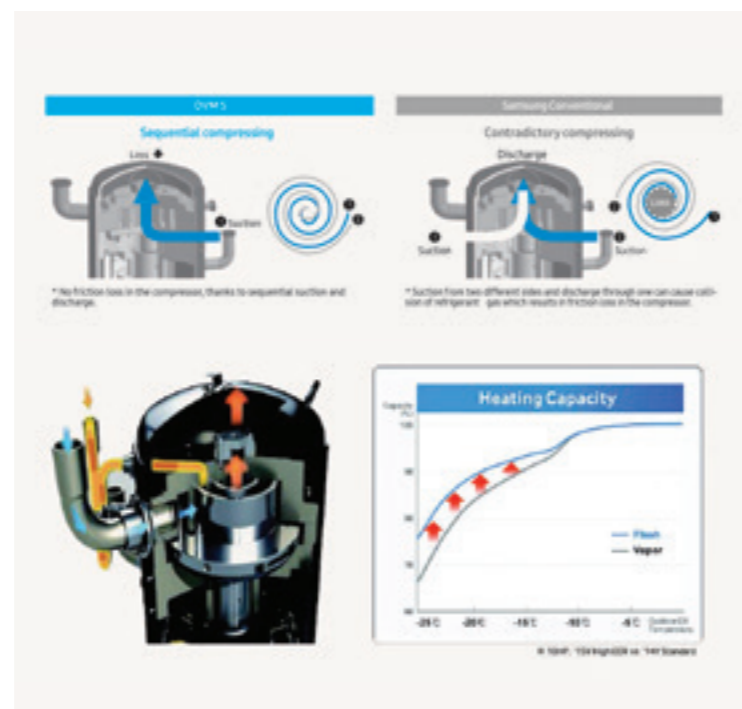


DVM S

Flash Injection - Scroll Compressor

The Samsung asymmetric scroll compressor combines fluid dynamic design with minimum refrigerant loss during compression. Thanks to advanced refrigerant control technology, Samsung's flash injection extends its heating operation range at -25°C by increasing refrigerant flow by 32%*, meaning maximum performance at all times. Even at lower temperatures, DVM S continues to perform, delivering reliable comfort in challenging conditions.

*Compared to Samsung vapour injection technology.



Intelligent Defrost

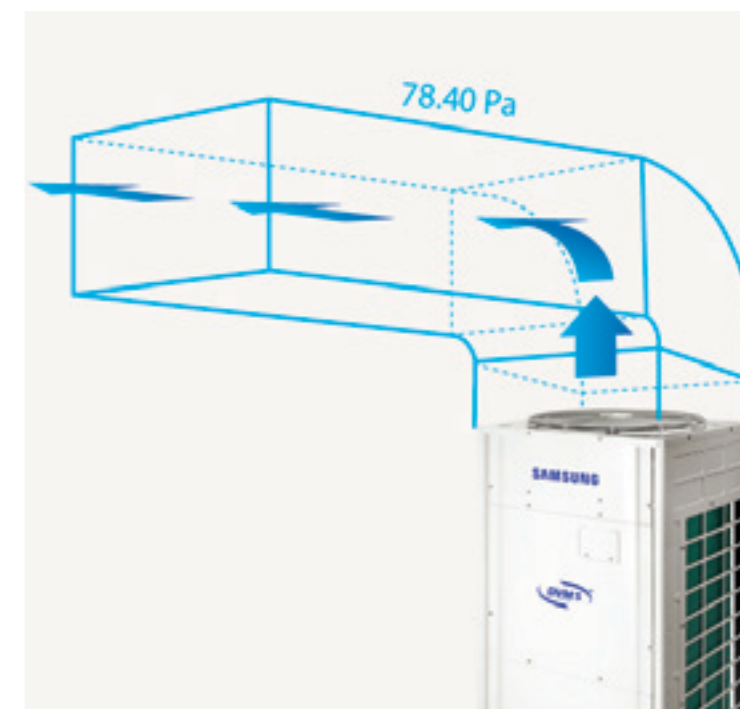
When humidity levels are low, a unit can often take longer than normal to activate a defrost operation. When a system operates at a lower performance level, faults may occur. In order to prevent such issues, and to help maintain the desired indoor temperature, 'Intelligent Defrost' performs a periodic defrost operation.



DVM S

External Static Pressure

DVM S is designed to manage high external static pressures of up to 78 Pa. This resilient build and design can help in situations involving difficult or complex installation conditions.



Mode Control Unit

An indoor unit connects to a 3-pipe Heat Recovery outdoor unit, which heats and cools independently using a Mode Control Unit (MCU). MCUs are available in configurations ranging from 2 to 6 ports and can be piped together. This allows for up to 80 indoor unit connections to a single DVM S system (where specifications allow).

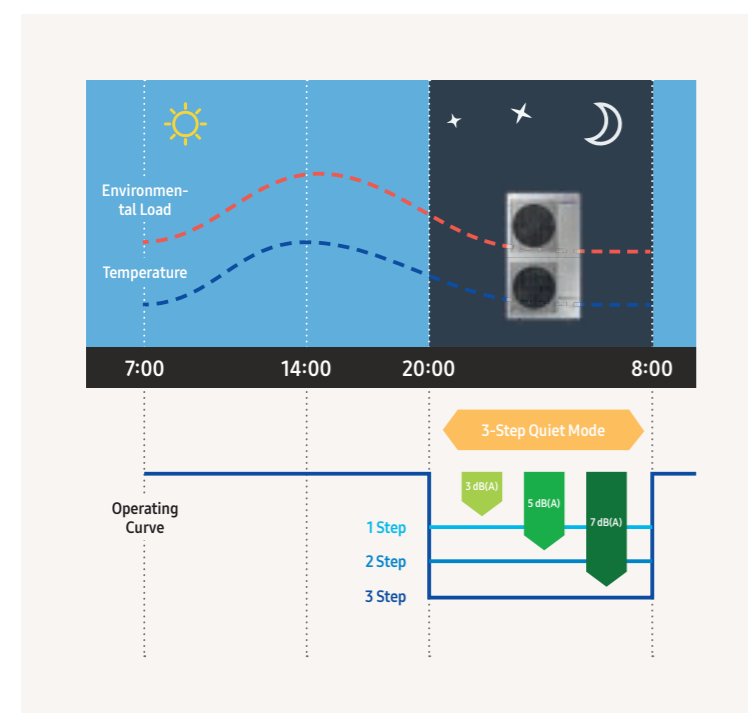
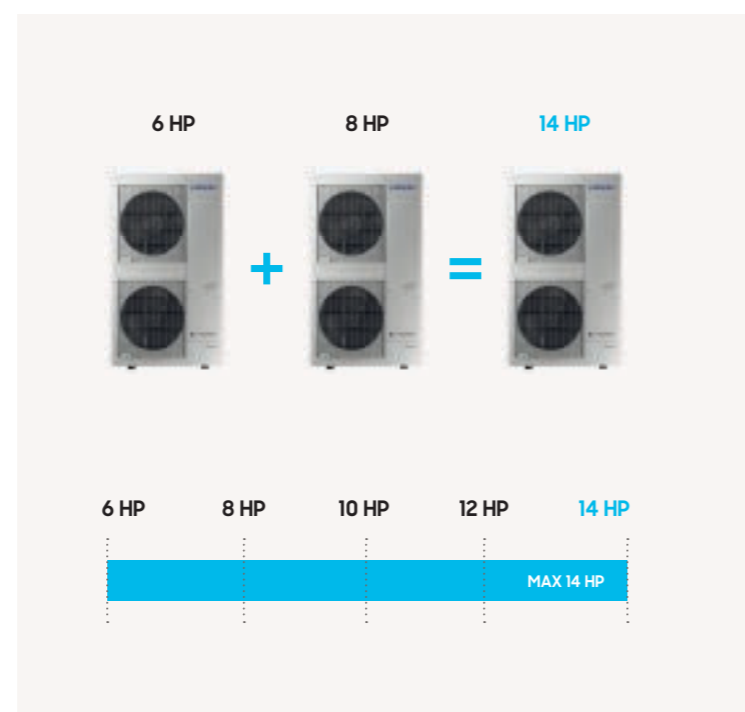
Innovations in detail



DVM S Eco

High capacity in a compact design

DVM S Eco combines a high capacity up to 14 hp with a small footprint. It is one of the most compact air conditioner units in its class today, making the DVM S Eco very easy and economical to install and operate without compromising on performance. It leaves plenty of extra space that can be used for other purposes.



Silent mode

By producing less noise than conventional models, the DVM S Eco imposes fewer distractions on residential and working environments. Its compact, unimposing design and specially shaped fan blades help reduce sound levels by up to 5 dB(A), creating a more pleasant environment.

Additionally, its quiet operation during the night creates a restful environment with a reduced noise level of 2–7 dB(A).



DVM S Water

Optimal water flow controller

The DVM S Water comes with a built-in Water Flow Controller that helps control the amount of water used to cool and heat an outdoor unit. The optimum flow of water is automatically determined by the temperature of the indoor space, making for minimum energy consumption at optimum standards, at reduced costs. And because this feature is standard, there is no need for a separate water flow control kit.



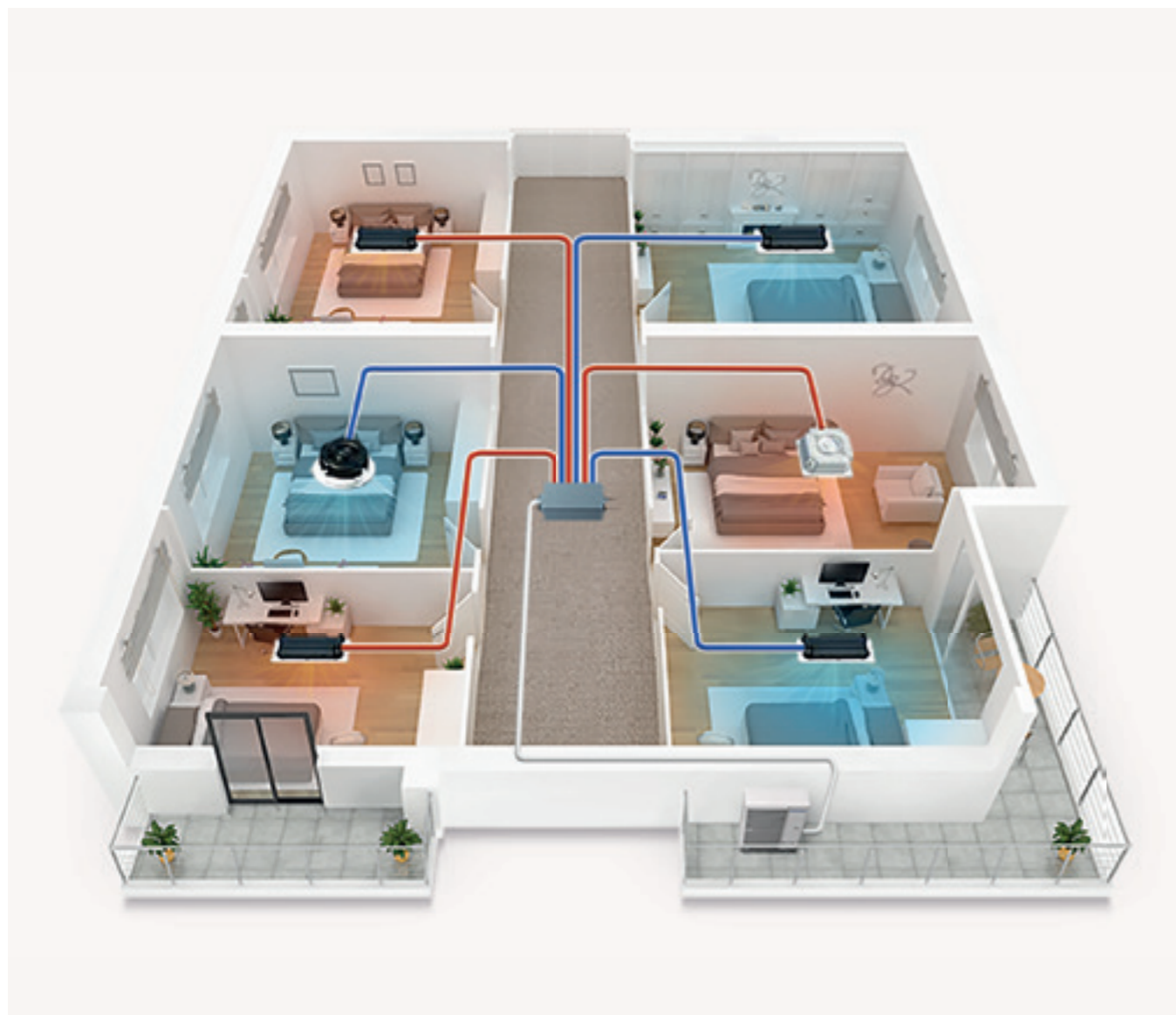
Geothermal applications

Using a highly efficient compressor and heat exchanger, DVM S Water gives an effective and reliable performance, despite any changes to its environment. DVM S Water uses water as a means of heat exchange, and can be connected to various sources such as cooling towers, boilers, geothermal loops, lakes, ponds, soil, seawater and more. Its long piping and lightweight design make it easy and economical to install almost anywhere.

Innovations in detail



Heat Recovery for DVM



Compact heat recovery solution

The Heat Recovery (HR) feature for Samsung DVM S ECO and DVM S High EER is designed to control temperatures in multiple spaces at once. Optimised for small hotels and residential buildings, it can provide cooling and heating for up to 10 indoor units simultaneously.

An HR Changer is used to convert a DVM S Eco Heat Pump (4, 5 and 6 hp) to a Heat Recovery (HR) model, which can be connected to a multiport Mode Control Unit (MCU).

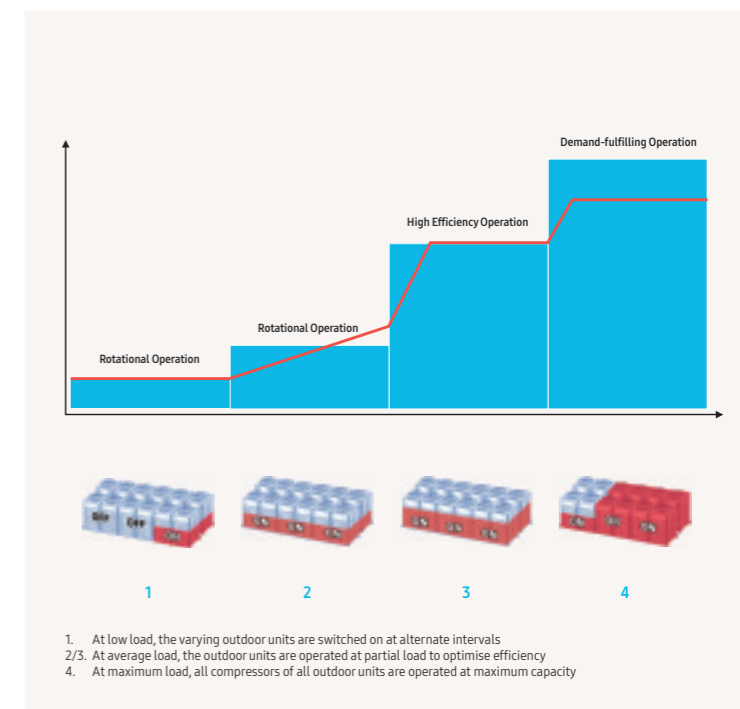
HVM Chiller

Modular Function

HVM Chiller heat pump outdoor units are available in three different sizes: 42/56/65 kW. A maximum of 16 outdoor units can be connected to achieve a maximum capacity of 1,040 kW. By connecting multiple units within a single system, the workload is adjusted automatically for maximum efficiency.

The HVM system's water-based concept eliminates the need for refrigerant inside the building, making it a safe solution. Its refrigerant charge is up to 65 % lower¹ than in traditional VRF systems.

¹Compared to a Samsung DVM S 60 hp, holding R410A refrigerant, connected to twelve 14 kW indoor units and 100 metres of pipes.



Local and centralised controls

The DVM Chiller utilises the same integrated control systems as a VRF system, and can be connected to a third-party Building Management System (BMS). With the use of the Fan Coil Unit (FCU) kit, third-party indoor units and control systems can also be connected. The Samsung DMS 2.5 makes control and maintenance easy.

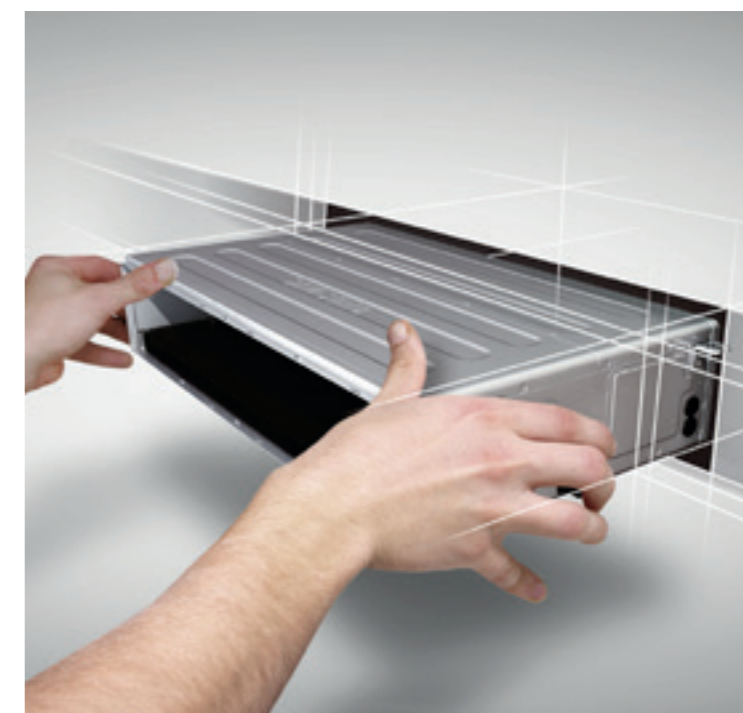




Slim Duct S

Slim design for small ceiling spaces

The Slim Duct S is a slim 200 mm in width, making it much narrower than conventional products. This allows for easy installation and maintenance in all kinds of spaces.



Built-in drain pump

A check valve on the drain pump prevents drained water from flowing back into the drain pan, minimising the water level in the drain pan. This modern design feature means no water stagnation, and prevents drain water overflowing into your interiors.

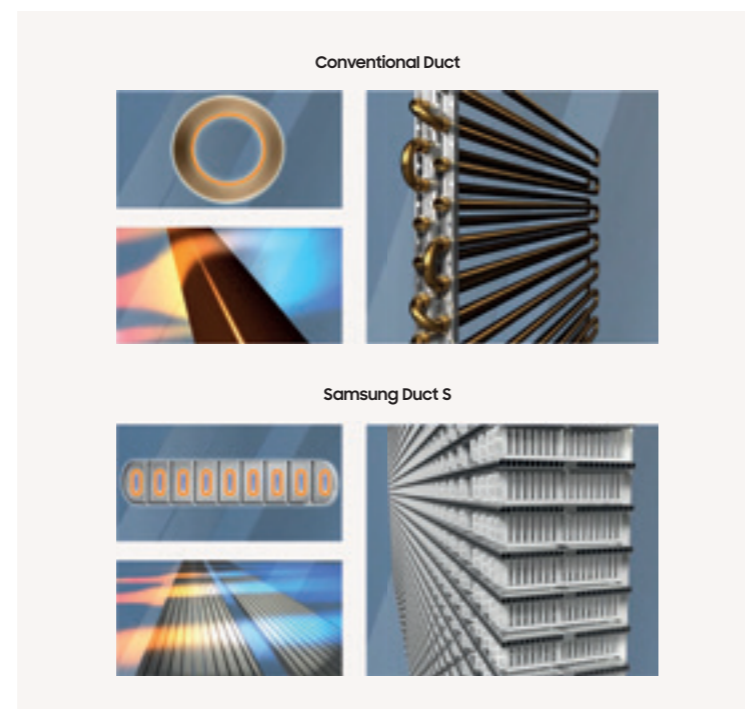
Innovations in detail



Duct S

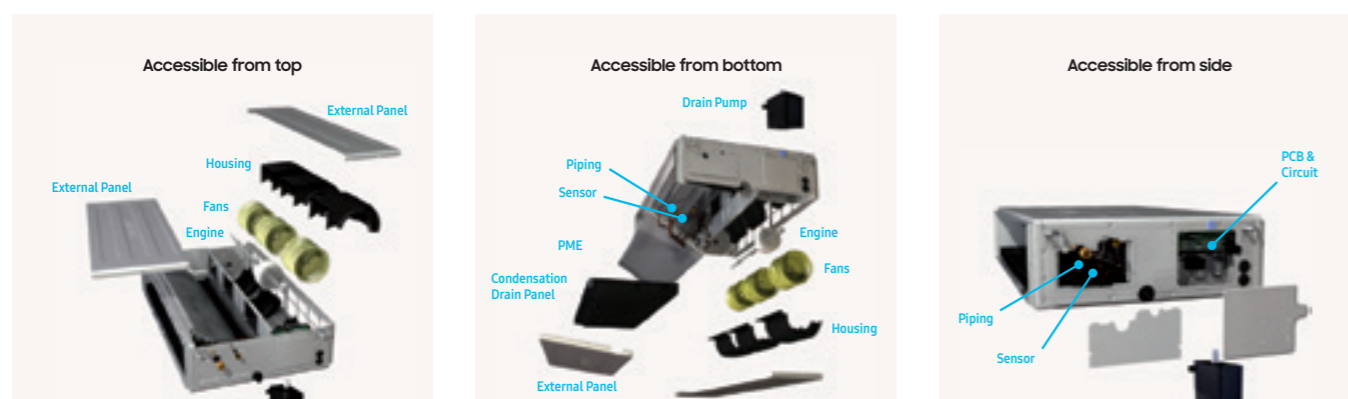
Flat microchannel heat evaporator/condenser

Samsung's innovative FME/FMC technology provides increased efficiency compared with the conventional fin and tube type. These modern innovations have also enabled a reduction in the size of the unit.



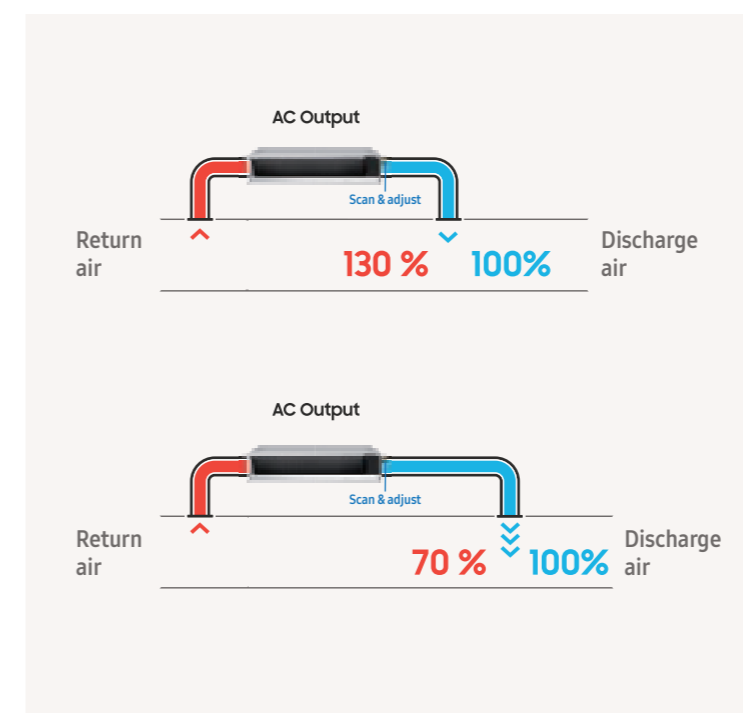
Indoor discharge temperature

Each ducted indoor unit, or AHU kit, boasts a discharge air temperature control function that offers greater comfort without the need to change the outdoor unit setting. The MWR-WE13N remote control can be used to select and maintain the cooling or heating option, and works with all ducted/AHU connected systems.



Easy installation and maintenance

Thanks to their ultra-compact design, Samsung duct units can be placed anywhere, and can even be split into two parts (18/20/25 kW models). This makes for easy installation and maintenance. The indoor unit can be accessed from three directions: from the top, bottom and one side, making maintenance simpler than ever.



Automatic ESP setting

The automatic operation of the external static pressure feature is very simple to set up.

This auto setting enables you to choose the optimal operating range for the fan. The result is the greatest possible comfort with an optimal balance between sound level and capacity. Please contact your Samsung representative to find out which indoor units feature this function.

Innovations in detail



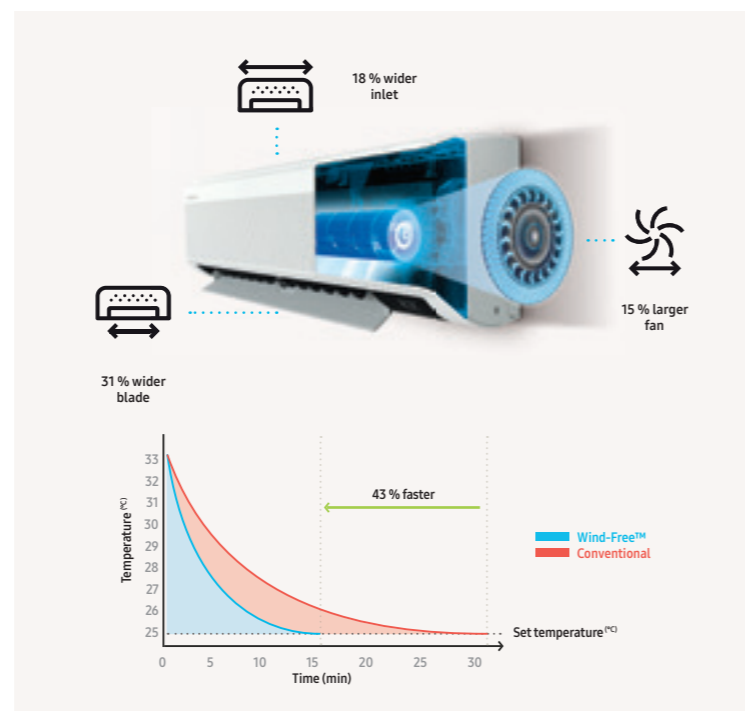
Wind-Free™ Wall-Mounted

Fast Cooling

Samsung wall-mounted air conditioners with Wind-Free™ technology cool quickly from corner to corner, making people comfortable whenever they want and wherever they are. Powerboost with Digital Inverter TT (Twin Tube) technology dramatically shortens the time it takes for the compressor to reach maximum power when it starts operating, so it cools the air 43 % faster¹. Its advanced design also features a 15 % larger fan, 18 % wider inlet and a 31 % wider blade than conventional models. This means that cool air is dispersed farther and wider into every corner of a room, reaching up to 15 metres².

¹ Tested on the AR12TXCAAWKEU model compared with the Samsung conventional model AQ1ZEASER under specific testing conditions and may vary depending on environmental factors and use.

² Tested on the AR24TXFCAWKNEU model under specific testing conditions and may vary depending on environmental factors and use.

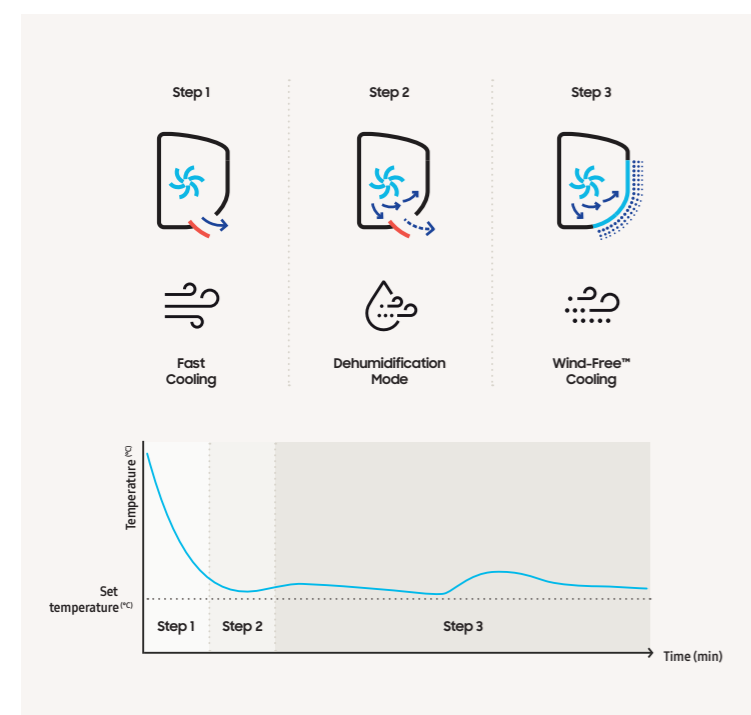
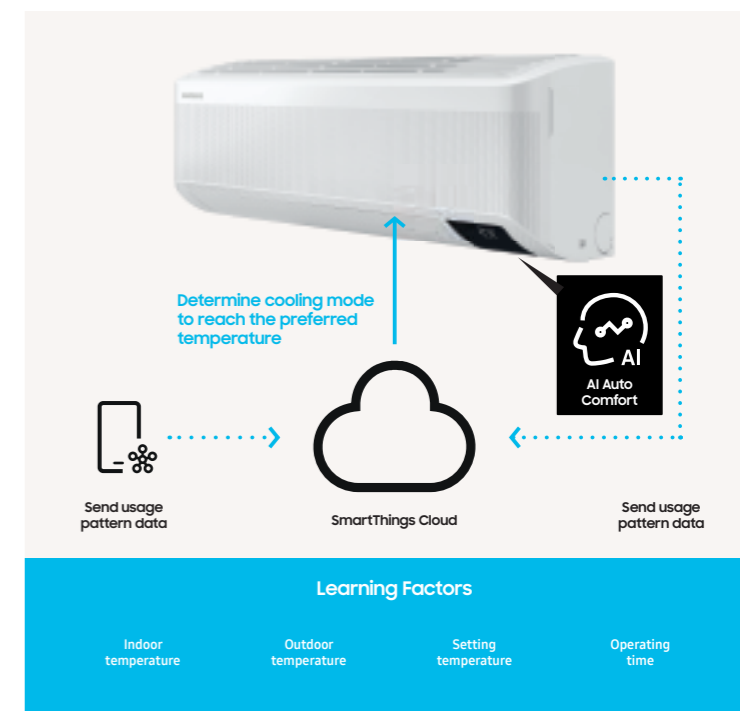


AI Auto Comfort

AI Auto Comfort introduces residents to the experience of intelligent climate control¹. To make life simpler and more efficient, it automatically optimises the various modes by analysing room conditions and usage patterns². Based on users' preferred temperature and the outside temperature, it automatically switches to the most appropriate mode, including Wind-Free™, Fast and Normal Cooling, to maintain optimal, comfortable room conditions.

¹ AI = Artificial Intelligence. A Wi-Fi connection and Samsung SmartThings application account are required.

² Stores user data, preferences and usage patterns, enabling it to suggest the most useful options.



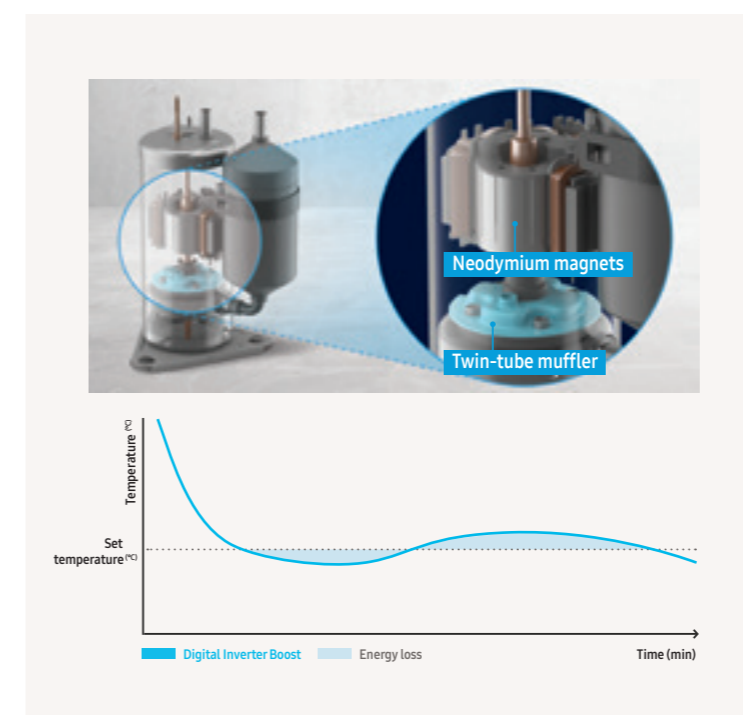
Wind-Free™ Cooling

Wind-Free™ Cooling mode keeps the room comfortably cool. It cools gently and quietly, dispersing air through 23,000 micro-holes so that people never have to deal with the unpleasant feeling of a cold draft on their skin. This results in a "Still Air" environment¹ with a very low air speed and limited noise². The advanced airflow structure of this mode also means that it cools a wider and larger area more evenly. And it consumes 77 % less energy than Fast Cooling mode³, so people can stay comfortably cool while reducing energy costs.

¹ ASHRAE (the American Society of Heating, Refrigerating, and Air-Conditioning Engineers) defines "Still Air" as air currents moving at speeds below 0.15 m/s, with no cold drafts.

² Tested on the AR12TXCAAWKNEU model in an anechoic environment. Wind-Free™ mode generates 23 dB(A) of noise, compared to 26 dB(A) produced by the conventional Samsung model. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions.

³ Tested on the AR12TVEAAWKNEU model under specific testing conditions, based on the power consumption of Fast Cooling mode vs. Wind-Free™ Cooling mode.



Digital Inverter Boost

Samsung's compressor with Digital Inverter Boost technology helps to save on energy consumption. Unlike conventional fixed-speed compressors, it maintains the desired temperature without frequently turning off and on, resulting in less fluctuation. As it's equipped with strong neodymium magnets and a muffler, it works efficiently and produces less noise and vibration than conventional models. When cooling, it optimises power usage and therefore reduces energy consumption by up to 5 %¹.

¹ Tested on the AR09TXCAAWKNEU model compared with the previous Samsung Wind-Free™ model AR09NXCAWKNEU.

Innovations in detail

360 Cassette

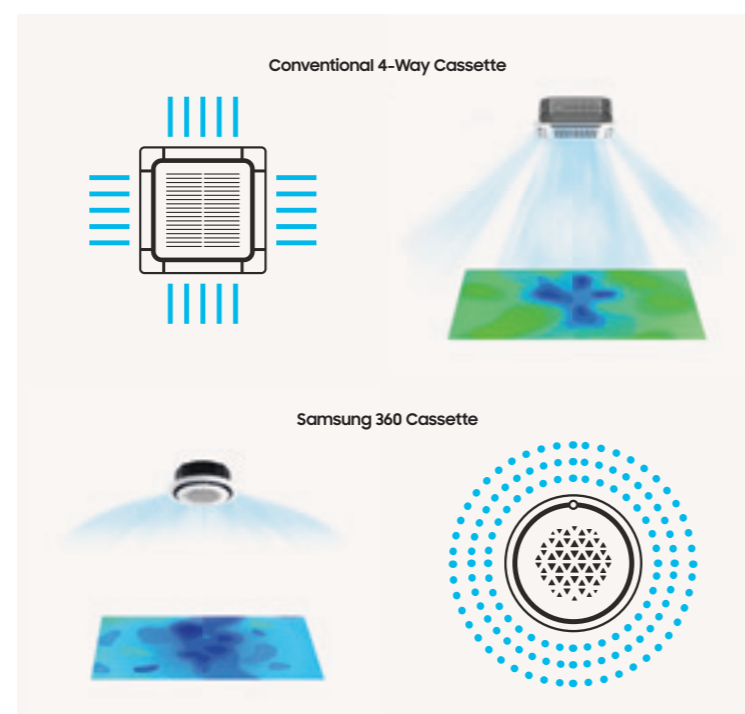
Circular airflow

Unlike traditional 4-Way Cassette units¹, which create areas of uneven airflow², the 360 Cassette ensures that cool air reaches every single corner. Its circular outlet blows cool air in every direction. The bladeless design keeps things comfortably cool without creating a cold draft³, and without blades blocking the airflow, it sends 25 % more air even further¹.

¹ Samsung testing compares the 360 Cassette to a conventional 4-Way cassette type air conditioner.

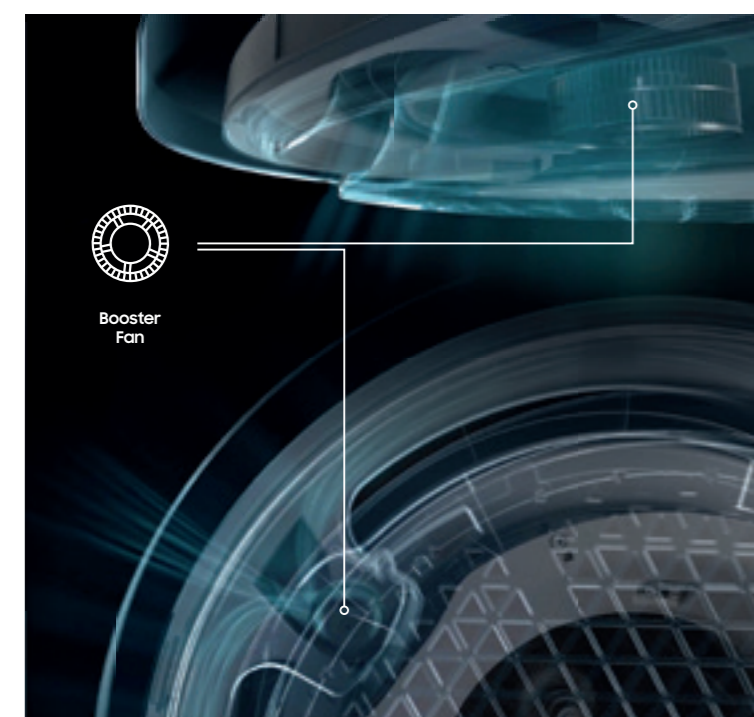
² The temperature difference is less than 0.6 °C within a 9.3 m radius.

³ No cold draft between 0–1.5 m in height (with a 14.0 kW indoor unit) within a 5 m radius.



LED display

The unit features a stylish panel and an intuitive LED display. This allows users to choose and change the direction of airflow. Users have a choice of settings, and controlling the air in an individual zone is easy.



Airflow control

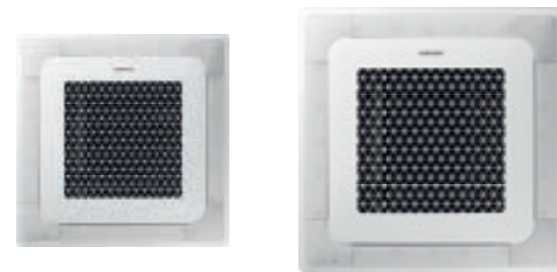
The air supply is easily adjusted without the use of flaps. Three booster fans alter the direction of airflow from within the cassette's hollow space. A rain-like distribution of air (known as the 'Coandă' effect) keeps the room cool and comfortable at all times.



Stylish design

The 360 Cassette adds a touch of style to any room. It comes in black or white, in a square or circular design, and can be fitted into the ceiling or exposed on the surface of any material. It suits any type of background, from wood to concrete and wallpaper to paint.

Innovations in detail

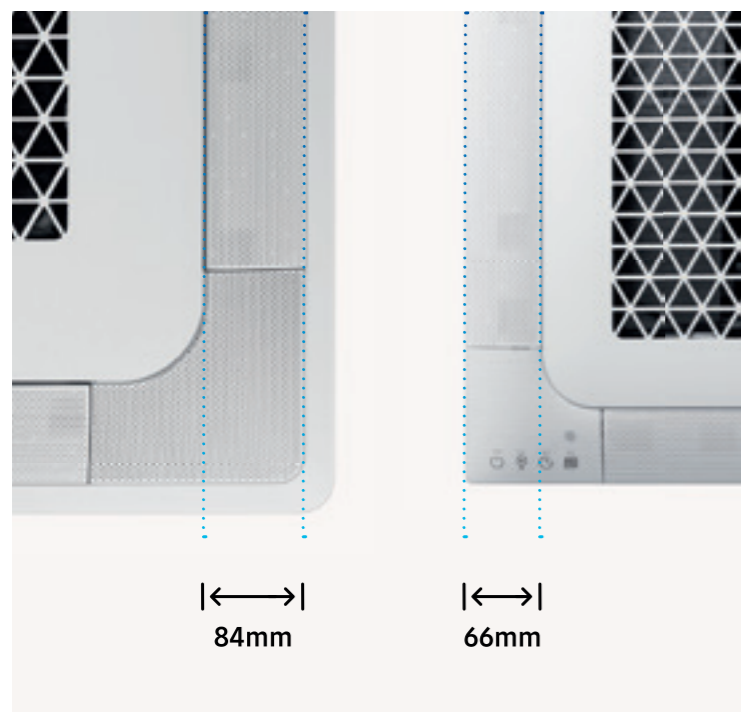
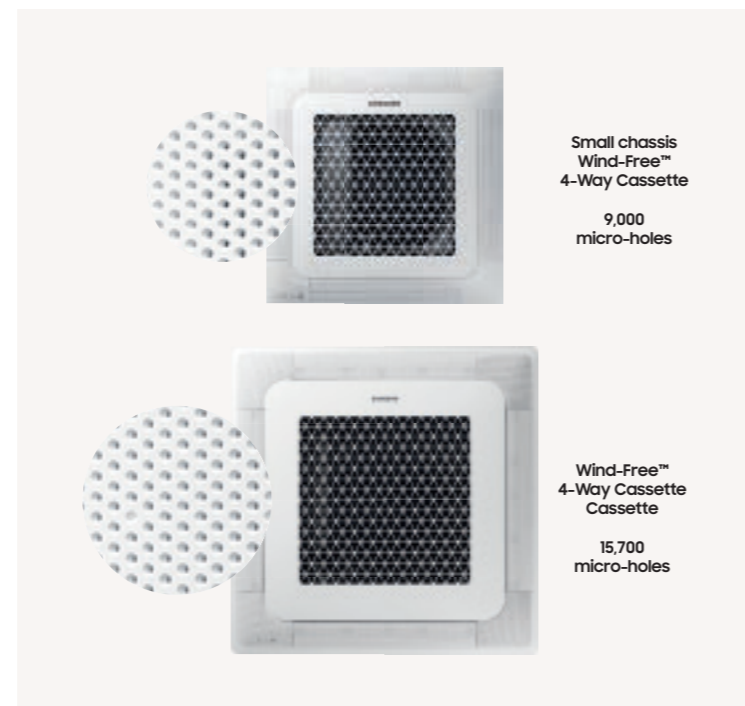


Wind-Free™ 4-Way Cassette

Wind-Free™ technology

Wind-Free™ Cooling is some of Samsung's most advanced technology. The Wind-Free™ 4-Way Cassette directs air through 15,700 micro-holes in the panel, while the small chassis Wind-Free™ Cassette directs air through 9,000 micro-holes in the panel. These micro-holes are essential for creating a type of airflow called "Still Air"¹, which cools the room gradually and noticeably without drafts.

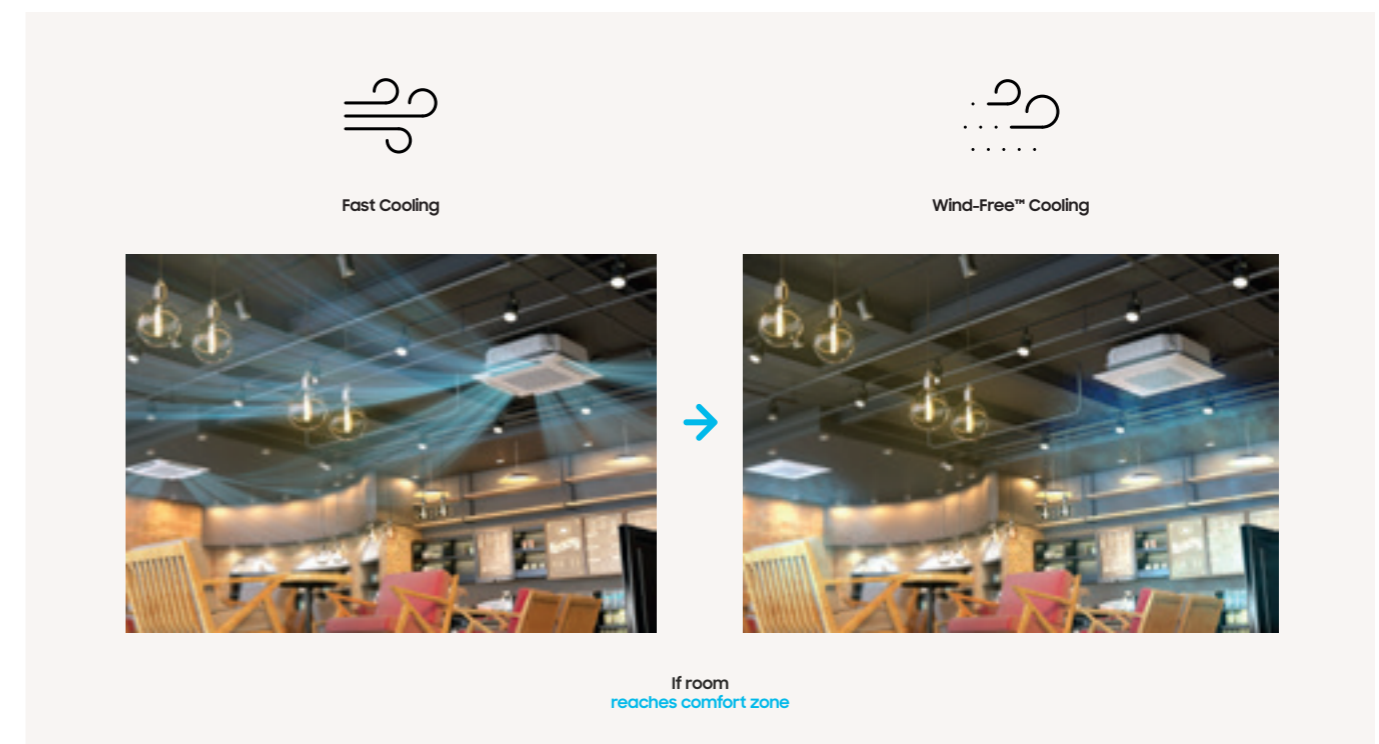
¹ ASHRAE (the American Society of Heating, Refrigeration, and Air-Conditioning Engineers) defines "Still Air" as air currents moving at speeds below 0.15 m/s, with no cold drafts.



Optimised blades

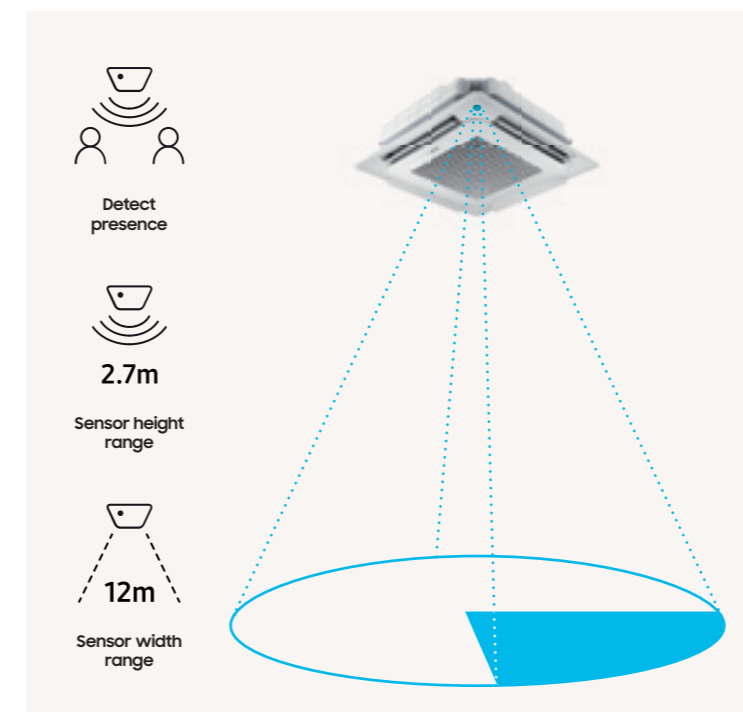
The larger and optimised blades¹ enable a wider cooling range and improved air circulation within the room. This advanced technology also cools the space much faster, leaving no zone untouched.

¹ Samsung testing compares the Wind-Free™ 4-Way to a conventional 4-Way Cassette type air conditioner.



Smart Comfort Operation

The Wind-Free™ 4-Way Cassette boasts Smart Comfort Operation. The Fast Cooling process helps to achieve the desired temperature in a room quickly. By simultaneously detecting the humidity levels, the Smart Comfort Operation feature maintains the room's temperature automatically.



Motion Detect Sensor (optional)

The improved Motion Detect Sensor (MDS) detects the presence and location of people in the room, enabling automatic management of airflow direction and efficient air cooling.

Innovations in detail



Wind-Free™ 1-Way Cassette

Wind-Free™ technology

Wind-Free™ Cooling is some of Samsung's most advanced technology. The Wind-Free™ 1-Way Cassette directs air through tiny holes in the panel, dispersing a gentle flow of air. These 13,000 micro-holes are essential for creating a type of airflow called "Still Air"¹, which cools the room gradually and noticeably without drafts.

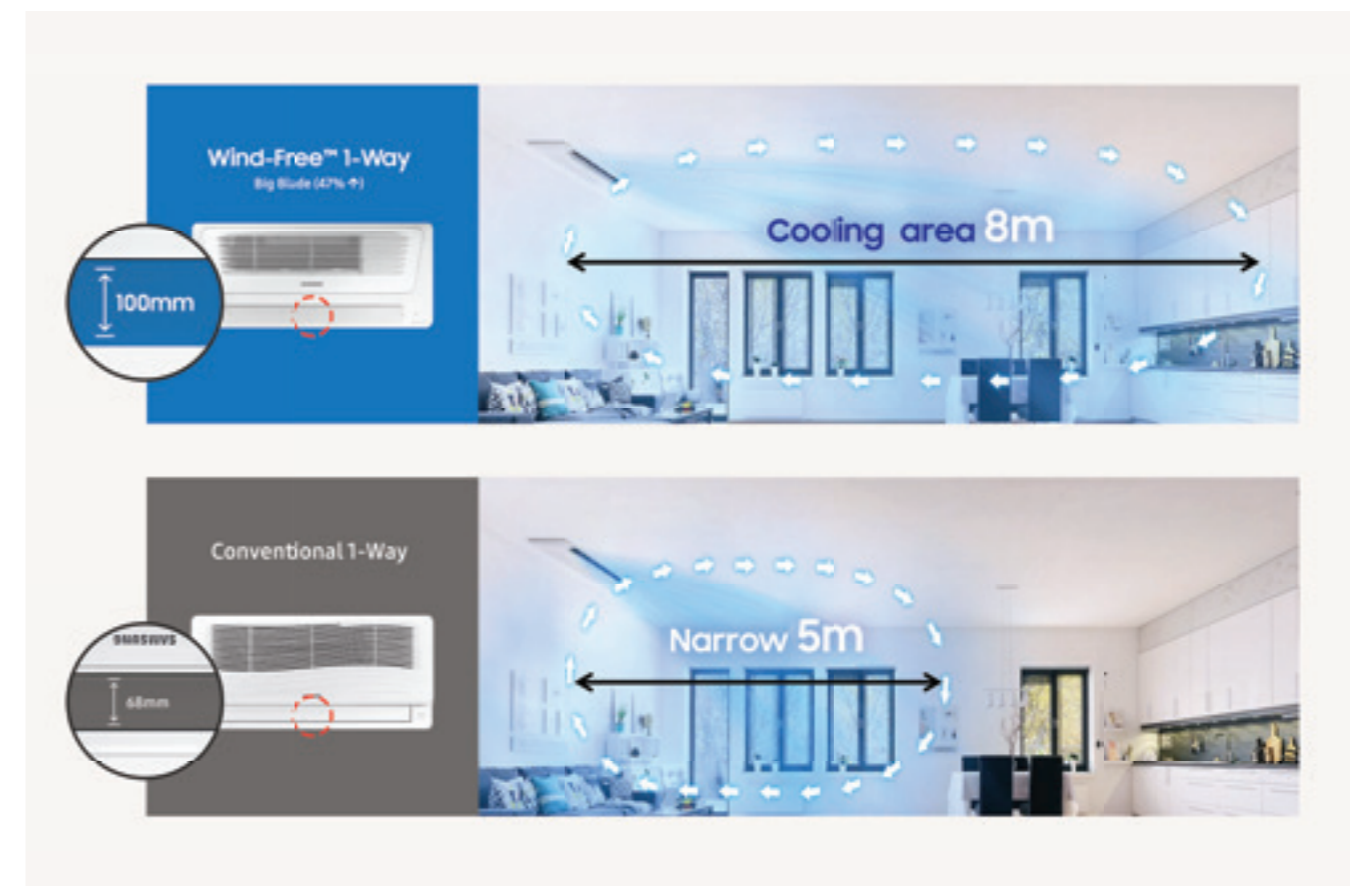
¹ ASHRAE (the American Society of Heating, Refrigeration, and Air-Conditioning Engineers) defines "Still Air" as air currents moving at speeds below 0.15 m/s, with no cold drafts.



Slim installation/small footprint

At a height of only 152 mm¹, the Wind-Free™ 1-Way Cassette is a compact and lightweight device (8-13.5 kg²). This slim design makes it not only visually pleasing, but also easier to install and maintain, and it can be fitted into small gaps or ceilings.

¹ Up to 3.6 kW, larger models measure 155 mm.
² 1.7 kW and 2.2 kW models weigh 8 kg. The 5.6 kW and 7.1 kW models weigh 13.5 kg.

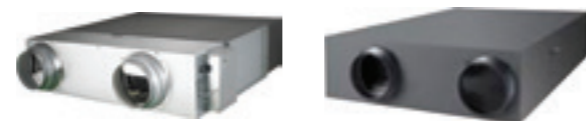


Wider cooling range

The larger, optimised blade¹ works to cool a larger area much faster. Its sleek design can deliver cool air efficiently, rapidly and evenly over an area of up to 8 m², leaving no zone untouched.

¹ Samsung testing compares the Wind-Free™ 1-Way Cassette to a conventional 1-Way Cassette type air conditioner.
² Based on the 7.1 kW indoor unit.

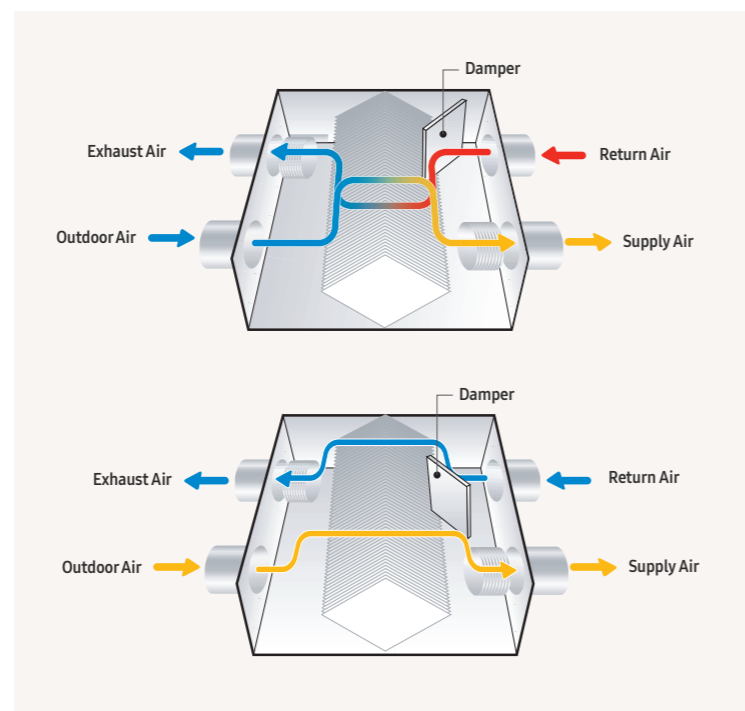
Innovations in detail



ERV (Plus)

Smart cooling - auto mode

To conserve energy and remain cost-effective, the ERV and ERV Plus (for DVM) both automatically change operation modes depending on the indoor and outdoor temperatures. The ERV Plus (DVM only) is equipped with a direct expansion coil, which brings fresh outside air through the DX coil and into your space. It heats or cools, and can keep rooms at your desired temperature.



Fresh air and humidity

The ERV sends fresh air into a room automatically by detecting CO₂ with the CO₂ sensor¹ (optional). An optional humidifier helps maintain a perfect indoor humidity level¹. The Samsung humidifier kit balances moisture levels effectively, and the ERV's self-cleaning function sprays water from the top of the device upon operation, preventing any offensive odours caused by particle accumulation.

¹ CO₂ sensor and humidifier must be purchased separately.

Air Handling Unit (AHU) Kit

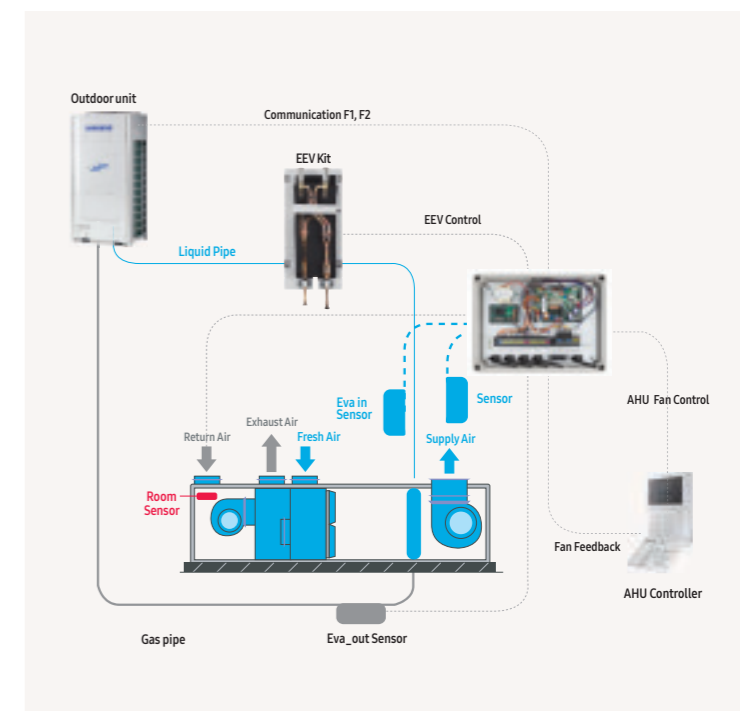
Connect to third-party air handling units

The Samsung AHU kit allows the connection of DVM S outdoor units to third-party air handling units (AHUs)¹. With this kit you can supply heating or cooling to a DX coil in the AHU. This is a cost-effective and efficient way to provide fresh air to the building at the correct temperature. The unit improves performance and efficiency and is cost-effective.

Features include:

- IP54 waterproof certification (for MXD type AHU kit only)
- Variable capacity
- 2.5 hp–40 hp
- Simple BMS application (0–10 V, MXD-K/X Series)
- Discharge air temperature control and outdoor capacity control

¹ Please contact your local Samsung representative for more information.



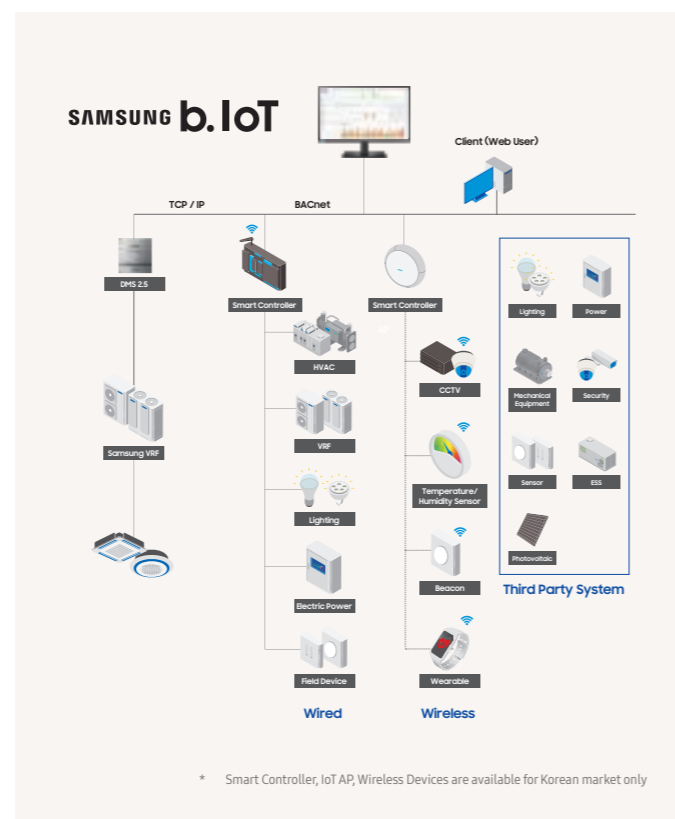
Innovations in detail

b.IoT

Samsung b.IoT (building Internet of Things) is a building management solution that can efficiently manage and save energy. It is an open platform with expandability and compatibility options that enable integrated control of the facility's major systems, such as VRF and third-party party devices via BACnet interface.

Samsung b.IoT helps to ensure:

- Efficient installation periods
- Reductions in installation and operation costs
- Optimal energy efficiency
- Efficient management of integrated systems installed in the building - VRF



Easy and smart operation

- Optimal operation for Samsung VRF (DVM) products
- Intuitive Graphic UI & convenient rules editor for various solutions
- Trends & alarm lookup



Effective energy usage management

- Energy usage analysis
- Hybrid (HVAC+VRF) energy consumption distribution

Samsung b.IoT provides:

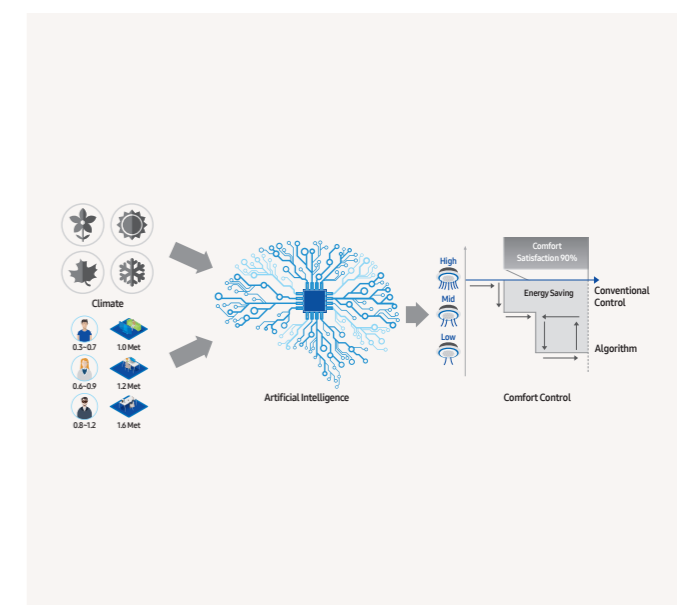


Open platform

- Supports Open Protocol (BACnet) and API for integration of various devices
- Integrates various sensors and devices wirelessly via IoT gateway

Intelligent energy saving algorithms

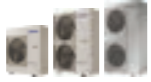
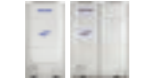





- Data-Based Comfort Control – Comfort based on user-specific algorithms
- Learning-Based Control – Optimised control by artificial intelligence (AI)
- Occupancy-Based Control – Lighting, humidity & temperature
- Inefficient Operation Detection – Time, space & temperature



VRF



Line-up outdoor

Model	Image	Capacity (hp)															
		4	5	6	8	10	12	14	16	18	20	22	24	26	30		
Heat Pump	DVM S Eco Heat Pump		•	•		•	•	•	•								
	DVM S Essential Heat Pump (2-Pipe)							•	•	•	•	•					
	DVM S Standard Heat Pump (2-Pipe)						•	•	•	•	•	•	•	•	•	•	
	DVM S High EER Heat Pump (2-Pipe)						•	•	•	•	•	•	•	•	•	•	
Heat Recovery	DVM S Eco Heat Recovery (With Heat Recovery Changer Kit)		•	•	•												
	DVM S High EER Heat Recovery (3-Pipe)						•	•	•	•	•	•	•	•	•	•	
Water to Air/Water	DVM S Water						•	•	•			•					•



Line-up indoor

Model	Image	Capacity (kW)									
		1.1	1.7	2.2	2.8	3.2	3.6	4.5	5.6	6.0	7.1
Wind-Free™ 1-Way Cassette		•		•	•		•	•	•		•
Wind-Free™ 4-Way Cassette		•		•	•		•	•	•		•
360 Cassette								•	•		•
Duct 5							•	•	•		•
MSP Duct				•	•		•	•	•		•
LSP Slim Duct			•	•	•		•	•	•		•
HSP Duct											
Big Duct											
Console				•	•		•	•	•		
Ceiling									•		•
Concealed Floor-Standing							•		•		•
Packaged Floor-Standing											
Boracay Wall-Mounted (EEV included)		•		•	•		•	•	•		•
Boracay Wall-Mounted (EEV excluded)		•		•	•		•	•	•		•
AR5000 Wall-Mounted (EEV included)		•		•	•		•	•	•		•
Max Wall-Mounted											
Hydro Unit HE											
Hydro Unit HT											

Capacity (kW)												
8.2	6.0	11.2	12.8	14.0	16.0	18.0	20.0	22.0	25.0	28.0	32.0	50.0
	•	•	•	•								
	•	•	•	•								
	•	•	•	•								
	•	•										
			•	•					•		•	
									•			
					•							•
•												
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•												
	•											
						•					•	•
						•				•		

NOTE

- Make sure to use an indoor unit that is compatible with DVM S.
- Indoor units can be connected within the range indicated in the following table.
- If the total capacity of the connected indoor units exceeds the indicated maximum capacity, the cooling and heating capacity of the indoor unit may decrease.
- The total allowable capacity of the connected indoor units can be from 50 % to 130 % of the total outdoor unit capacity. $0.5 \times \Sigma$ (Outdoor unit capacity) \leq Total capacity of the connected indoor units $\leq 1.3 \times \Sigma$ (Outdoor unit capacity).



Selection guide

VRF



Model	DVM S Eco		DVM S Essential	DVM S Standard	DVM S High EER
	AM***KXMDEH/EU AM***MXMDEH/EU	AM***FXMDGH/EU AM***KXMDGH/EU	AM***MXVDGH/ET	AM***JXVAGH/ET AM***KXVAGH/ET	AM***JXVHGH/ET AM***KXVGGH/ET
Type	Heat Pump				
	Heat Recovery				
Capacity range	4-8 hp	6-14 hp	10-40 hp	8-80 hp	8-80 hp
Connectability	Standard Cassette				
	Wind-Free™ Cassette				
	360 Cassette				
	LSP Duct				
	MSP Duct				
	HSP Duct				
	Wall-Mounted				
	Floor-Standing/Concealed/Ceiling				
	ERV Plus				
	Hydro unit HE/HT				
	MCU Kit				
	AHU Kit				
	Features	Refrigerant check mode			
Simultaneous cooling and heating					
7-Segment display					
Four-way direction piping connection					
Flash vapour injection					
Heating @ -25 °C					
Intelligent defrost					
Improved fan diffuser					
Reduced air flow noise					
Leak detection (pump down function)					
Night silent mode					
Variable Refrigerant Temperature					
Inverter scroll compressor					
Twin BLDC rotary compressor					
DC fan motor					
Refrigerant type					
Smart Protection Technology		Adaptive Sine Wave			
	Refrigerant cooled PCB				
	Resonance Avoidance Technology				

DVM S Eco	DVM S High EER	DVM S Water
AM***NXMDER/EU AM***NXMDGR/EU	AM***JXVHGH/ET AM***MXVGNRH/ET	AM***MXWANR/EU AM***KXWANR/EU
Heat Pump		
Heat Recovery		
4-6 hp	8-80 hp	8-90 hp
Standard Cassette		
Wind-Free™ Cassette		
360 Cassette		
LSP Duct		
MSP Duct		
HSP Duct		
Wall-Mounted		
Floor-Standing/Concealed/Ceiling		
ERV Plus		
Hydro unit HE/HT		
MCU Kit		
AHU Kit		
Refrigerant check mode		
Simultaneous cooling and heating		
7-Segment display		
Four-way direction piping connection		
Flash vapour injection		
Heating @ -25 °C		
Intelligent defrost		
Improved fan diffuser		
Reduced air flow noise		
Leak detection (pump down function)		
Night silent mode		
Variable Refrigerant Temperature		
Inverter scroll compressor		
Twin BLDC rotary compressor		
DC fan motor		
Refrigerant type		
Adaptive Sine Wave		
Refrigerant cooled PCB		
Resonance Avoidance Technology		

VRF

¹ Can be connected as a 2-pipe system.

Selection guide



Model		Wind-Free™ 1-Way Cassette	Wind-Free™ 4-Way Cassette	360 Cassette
Airflow	Wind-Free™ Cooling	•	•	
	360 Degree Air Supply			•
Air Purification	SPI Ioniser	Optional	Optional	Optional
	Air Filter			
Functions	Compatible with Samsung SmartThings	•	•	•
	Compatible with Wi-Fi Kit	•	•	•
	Humidity Sensor	•	•	
	MDS (Motion Detect Sensor)		•	
	Automatic ESP Setting			
Controls	Quiet Mode			
	Wireless remote controller included			
Others	EEV included	•	•	•
	Built-In Drain Pump	•	•	•



Model		Console	Floor/Ceiling	Big Ceiling	Concealed Floor-Standing	Packaged Floor-Standing
Airflow	Wind-Free™ Cooling					
	360 Degree Air Supply					
Air Purification	SPI Ioniser	•				
	Air Filter	•	•	•	•	•
Functions	Compatible with Samsung SmartThings	•	•	•	•	•
	Compatible with Wi-Fi Kit	•	•	•	•	•
	Humidity Sensor					
	MDS (Motion Detect Sensor)					
	Automatic ESP Setting					
Controls	Quiet Mode				•	
	Wireless remote controller included	•				
Others	EEV included	•		•	•	•
	Built-In Drain Pump					



Model		Duct S	LSP Duct	MSP Duct	HSP Duct	Big Duct
Airflow	Optional					
		•	•	•	•	•
Air Purification		•	•	•	•	•
		•	•	•	•	•
Functions		•	•	•	•	•
		•	•	•	•	•
		•	•	•	•	•
Controls					•	
Others		•	•	•	•	•
			Model-specific	Model-specific	Model-specific	Optional



Model		Hydro Unit HE	Hydro Unit HT
Airflow			
Air Purification			
Functions		•	•
		•	•
Controls			
Others		•	•



Model		Boracay Wall-Mounted	AR5000 Wall-Mounted	Max Wall-Mounted
Airflow				
Air Purification				
Functions		•	•	•
		•	•	•
Controls			•	
Others		Model-specific	Model-specific	•



Nomenclature

Indoor units

AM 045 N N 4 D E H
1 2 3 4 5 6 7 8

1	Classification	AM	VRF
		AN	Ventilation (ERV)
2	Capacity	x1/10 hp DVM (3 digits)	
3	Version	F	2013
		H	2014
		J	2015
		K	2016
		M	2017
		N	2018
		R	2019
		T	2020
4	Product Type	N	Indoor Unit (NASA)
		S	ERV
5	Product Notation	"1"	Wind-Free™ 1-Way Cassette
		"2"	2-Way Cassette
		"4"	360 Cassette & Wind-Free™ 4-Way Cassette
		N	Small chassis Wind-Free™ 4-Way Cassette
		L	Low Static Pressure Duct (Slim Duct)
		M	Medium Static Pressure Duct
		H	High Static Pressure Duct
		E	Outdoor Air Processing Duct
		C	Ceiling
		J	Console
		F	Floor-Standing
		P	Packaged Floor-Standing
		T	Boracay Wall-Mounted without EEV
		Q	Boracay Wall-Mounted (EEV)
		V	AR5000 Wall-Mounted (EEV)
		B	Hydro Unit
		6	Feature
P	Premium		
D	Deluxe		
S	Standard		
7	Voltage Rating	E	1Φ, 220~240 V, 50 Hz
		K	1Φ, 220~240 V, 50/60 Hz
		G	3Φ, 220~240 V, 50 Hz
8	Mode	H	Heat Pump (R410A)
		B	Heat Pump (R134A)
		N	ERV

Outdoor units

AM 080 K X V A G H
1 2 3 4 5 6 7 8

1	Classification	AM	VRF
2	Capacity	x1/10 hp DVM (3 digits)	
3	Version	F	2013
		H	2014
		J	2015
		K	2016
		M	2017
		N	2018
		R	2019
T	2020		
4	Product Type	X	DVM S
5	Product Notation	V	DVM S Essential/Standard/High EER
		W	DVM S Water
		M	DVM S Eco
6	Feature	A	Standard + General Temperature + Module
		H	High EER + Low Temperature + Module
		G	High EER + General Temperature + Module
		D	Standard + General Temperature + Non-Module
7	Voltage Rating	E	1Φ, 220~240 V, 50 Hz
		G	3Φ, 380~415 V, 50 Hz
		N	3Φ, 380~415 V, 50/60 Hz
8	Mode	H	Heat Pump
		R	Heat Recovery

Specifications

DVM S Eco Heat Pump

- Horizontal discharge and rear suction by means of one (4–5 hp) or two (8–14 hp) propeller BLDC Inverter fan(s).
- Each module houses one compressor: Twin BLDC Rotatory (4–8 hp) or Inverter Scroll with Flash Injection technology (10–14 hp).
- Compressor micro frequency control with 0.01 Hz step.
- Night Silent Mode available.
- Eurovent certified and ErP (Ecodesign) compliant.
- Four-way direction piping connection.



Model Name			AM040KXMDH/EU	AM050KXMDH/EU	AM080MXMDGH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220–240 V, 50 Hz	1Φ, 2, 220–240 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	
Performance	hp	hp	4	5	8	
	Capacity	Cooling	kW	12.1	14.0	22.4
		Heating	kW	12.1	14.0	22.4
	Maximum number of connectable indoor units	ea	6.0	8.0	13.0	
	Total capacity of the connected indoor units	Min.	kW	5.6	7.0	11.2
Max.		kW	15.7	18.2	29.1	
Power	Power Input	Cooling	kW	3.60	4.00	6.90
		Heating	kW	2.90	3.40	5.80
	Current Input	Cooling	A	17.50	19.50	11.70
		Heating	A	14.00	16.50	9.50
	Current	Minimum SSC value	MVA	-	-	3.4
		MCA	A	24.0	27.0	18.4
MFA		A	32	40	25	
Energy Efficiency ¹	EER	Cooling	W/W	3.36	3.50	3.25
	COP ¹	Heating	W/W	4.17	4.12	3.86
	ESEER	W/W	7.25	6.71	7.46	
Compressor	Type	-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
	Output	kW × n	4.12	4.12	4.92 x 1	
	Oil	Type	-	PVE	PVE	PVE
		Initial Charge	cc	1,700	1,700	1,700
Fan	Type & Discharge direction	-	Propeller	Propeller	Propeller	
		-	Horizontal	Horizontal	Horizontal	
	Number of Fans	-	1	1	2	
	Airflow Rate	m ³ /min	64	70	135	
		l/s	1067	1167	2250	
	External Static Pressure	Max.	mmAq	3.00	3.00	3.00
Pa		29.40	29.40	29.40		
Fan Motor	Model	-	BLDC Motor	BLDC Motor	BLDC Motor	
	Output x n	W	125 x 1	139 x 1	139 x 2	
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
	Gas Pipe	ø, mm	15.88	15.88	19.05	
		ø, inch	5/8	5/8	3/4	
	Piping length (ODU-IDU)	Max. (Equiv.)	m	50 (65)	50 (65)	100 (130)
	Piping length (1st Branch - IDU)	Max.	m	40	40	40
	Total piping length (System)	Max.	m	150	150	300
	Level Difference (Outdoor in highest position)	Max.	m	30	30	30
Level Difference (Indoor in highest position)	Max.	m	25	25	30	
Level Difference (IDU-IDU)	Max.	m	15	15	30	
Wiring Connections	Communication	Minimum	mm ²	0.75	0.75	0.75
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant	Type		R410A	R410A	R410A	
	Factory Charging	kg / tCO ₂ e	2.00/4.18	2.50/5.22	3.70/7.73	
Sound ²	Sound Pressure	Cooling	dB(A)	52	55	59
		Heating	dB(A)	54	57	59
	Sound Power	dB(A)	73	75	77	
External Dimensions	Net Weight	kg	79.0	83.5	115.0	
	Net Dimensions (W x H x D)	mm	940 x 998 x 330	940 x 998 x 330	940 x 1,420 x 330	
Operating Temperature Range	Cooling	°C	-5.0–48.0	-5.0–48.0	-5.0–48.0	
	Heating	°C	-20.0–24.0	-20.0–24.0	-20.0–24.0	

AM080FXMDGH/EU	AM100KXMDGH/EU	AM120KXMDGH/EU	AM140KXMDGH/EU
3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz	3Φ, 4, 380–415 V, 50 Hz
8	10	12	14
22.4	28.0	33.5	40.0
25.0	31.5	37.5	45.0
13.0	18.0	21.0	26.0
11.2	14.0	16.8	20.0
29.1	36.4	43.6	52.0
5.72	7.29	8.77	10.59
4.88	6.74	7.81	9.88
9.66	11.51	13.74	16.48
8.24	10.58	12.23	15.55
3.4	4.6	5.1	5.9
18.0	21.5	23.5	32.0
25	30	30	40
3.92	3.84	3.82	3.78
5.12	4.67	4.79	4.55
9.22	7.09	6.94	6.83
Inverter Scroll	Inverter Scroll	Inverter Scroll	Inverter Scroll
4.96 x 1	5.18 x 1	6.39 x 1	6.76 x 1
PVE	PVE	PVE	PVE
2,800	2,300	2,300	2,300
Propeller	Propeller	Propeller	Propeller
Horizontal	Horizontal	Horizontal	Horizontal
2	2	2	2
135	165	166	180
2250	2750	2766.67	3000
3.00	3.00	3.00	3.00
29.40	29.40	29.40	29.40
BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
139 x 2	244 x 2	244 x 2	244 x 2
9.52	9.52	12.7	12.7
3/8	3/8	1/2	1/2
19.05	22.22	28.58	28.58
3/4	7/8	11/8	11/8
100 (130)	160 (185)	160 (185)	160 (185)
40	40	40	40
300	300	300	300
30	50	50	50
30	40	40	40
30	50	50	50
0.75	0.75	0.75	0.75
F1, F2	F1, F2	F1, F2	F1, F2
R410A	R410A	R410A	R410A
3.70/7.73	3.70/7.73	4.30/8.98	4.80/10.02
56	58	59	62
58	60	61	64
74	74	76	79
135.0	145.0	155.0	162.0
940 x 1,420 x 330	940 x 1,630 x 460	940 x 1,630 x 460	940 x 1,630 x 460
-5.0–48.0	-5.0–52.0	-5.0–52.0	-5.0–52.0
-20.0–24.0	-25.0–24.0	-25.0–24.0	-25.0–24.0

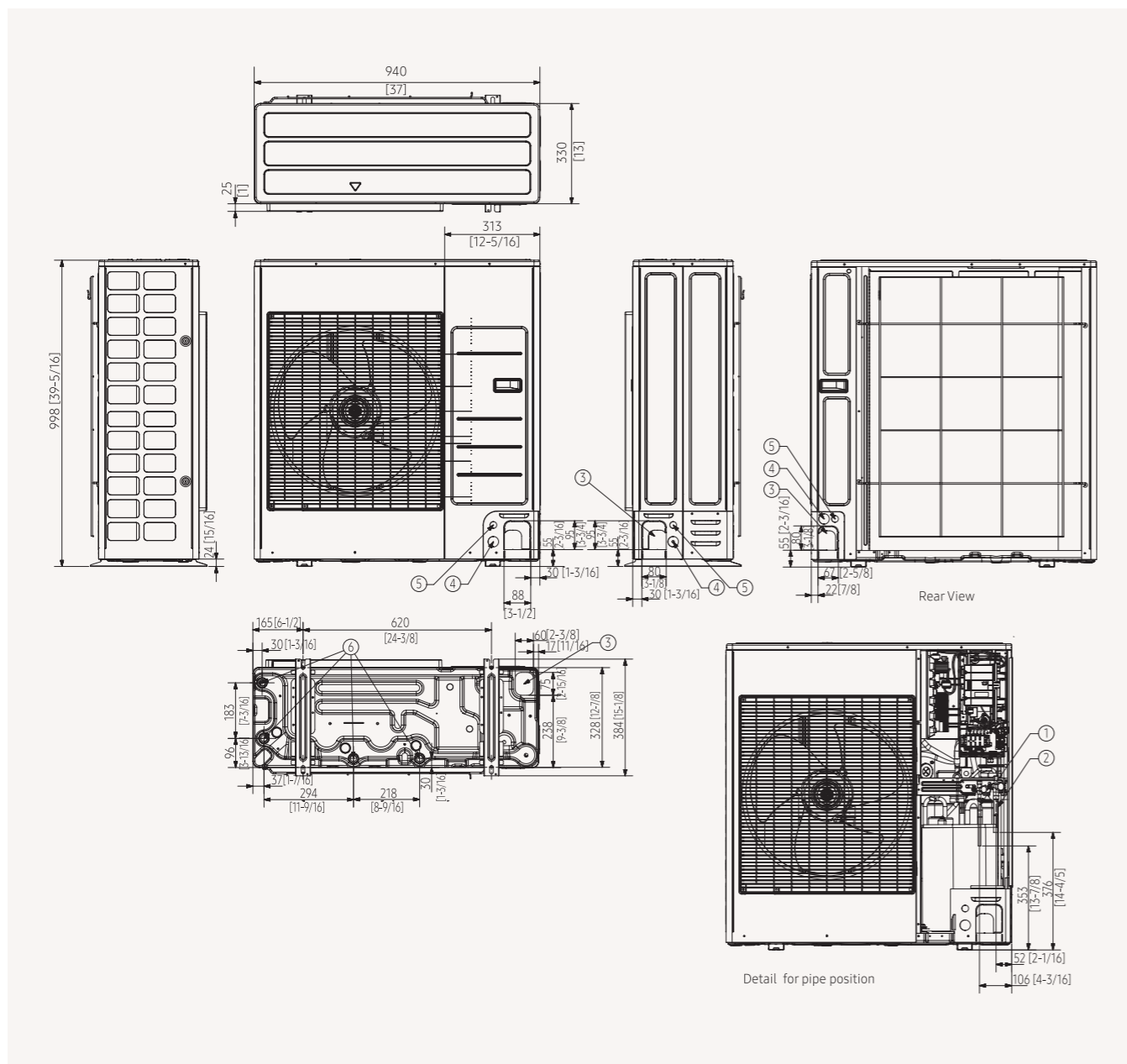
¹Performances are based on the following test conditions:
 - Cooling: Indoor temperature: 27 °C DB, 19 °C WB, Outdoor temperature: 35 °C DB, 24 °C WB
 - Heating: Indoor temperature: 20 °C DB, 15 °C WB, Outdoor temperature: 7 °C DB, 6 °C WB
 - Equivalent refrigerant piping: 7.5 m, Level differences: 0 m

²Sound 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 according to operating conditions. Sound power level is an absolute value that a sound source generates.

Dimensional drawings

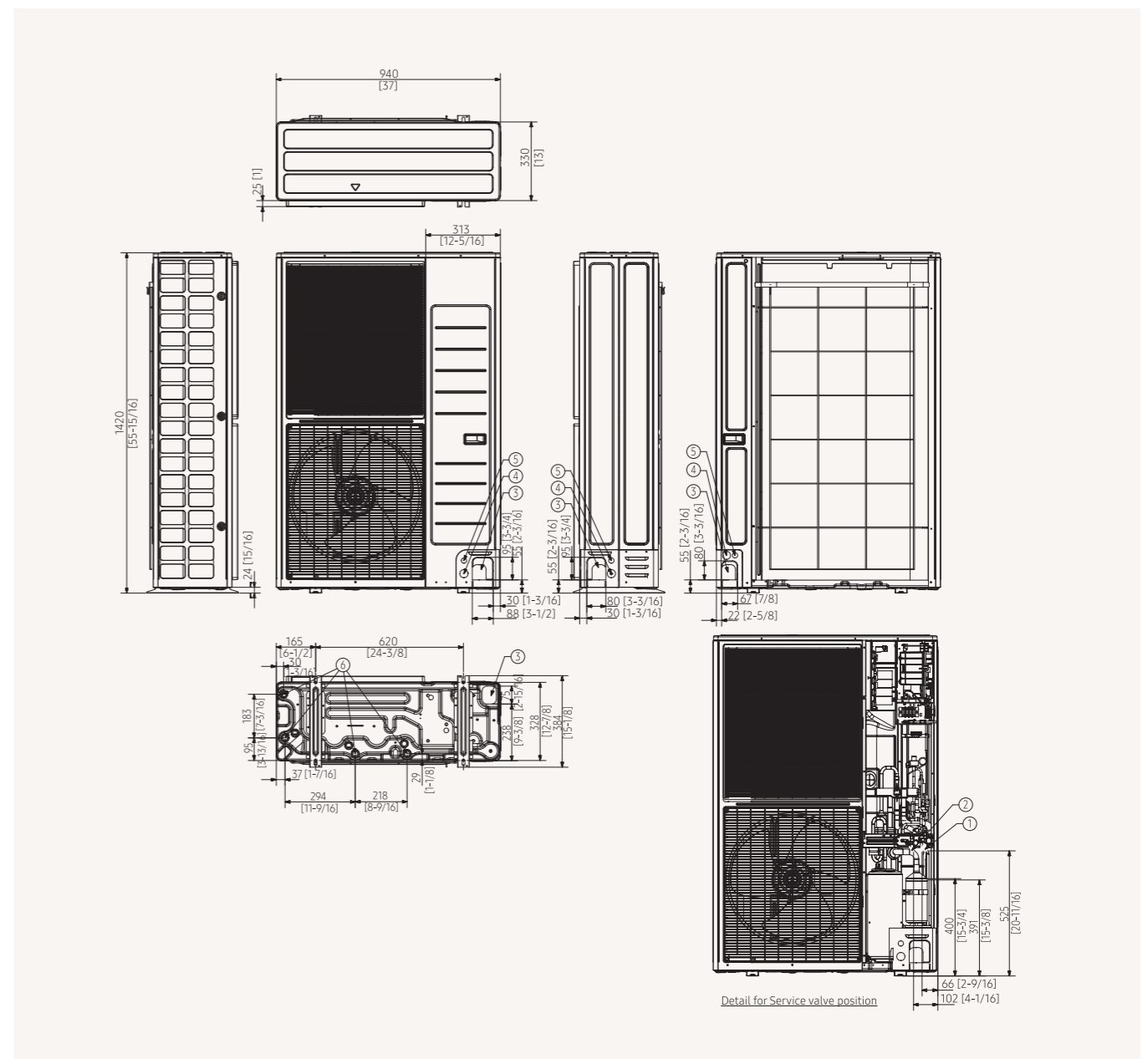
DVM S Eco Heat Pump

AM040KXMEH/EU, AM050KXMDE



NO	Name	Description
4/5 hp		
1	Refrigerant liquid pipe	ø9.52 (ø3/8)
2	Refrigerant gas pipe	ø15.88 (ø5/8)
3	Knock-out hole for pipe intake	Front/Side/Rear/Bottom
4	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)
5	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)
6	Drain holes	Connect with the provided drain plug.

AM080*XMDGH/EU

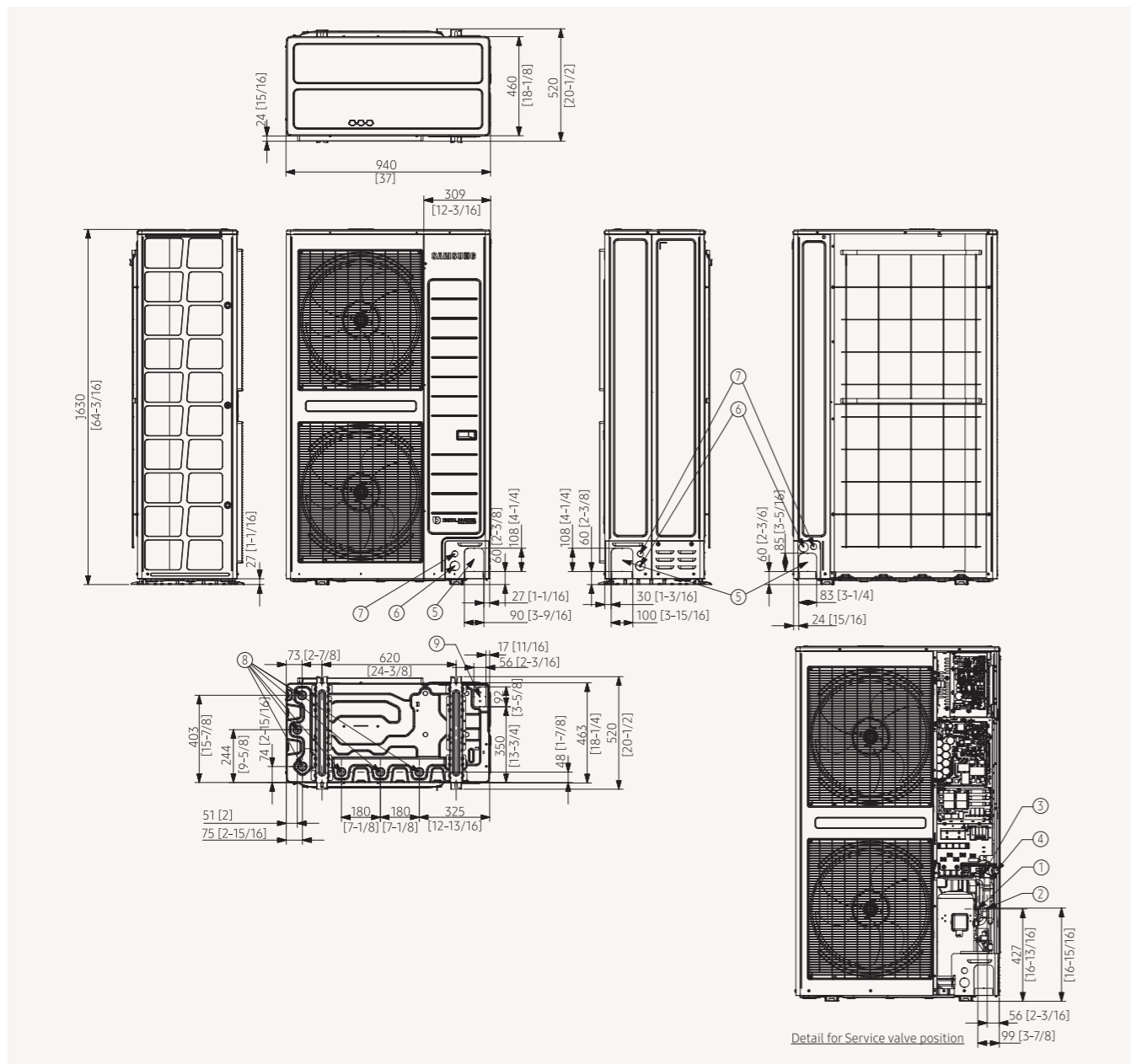


NO	Name	Description
8 hp		
1	Refrigerant gas pipe	ø19.05 (ø3/4)
2	Refrigerant liquid pipe	ø9.52 (ø3/8)
3	Knock-out hole for pipe intake	Front/Side/Rear/Bottom
4	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)
5	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)
6	Drain holes	Connect with the provided drain plug.

Dimensional drawings

DVM S Eco Heat Pump

AM100KXMDGH/EU, AM120KXMDGH/EU, AM140KXMDGH/EU



NO	Name	Description	
		10 hp	12/14 hp
1	Refrigerant liquid pipe	ø9.52 (ø3/8)	ø12.70 (ø1/2)
2	Refrigerant gas pipe	ø22.28 (ø5/8)	ø28.58 (ø3/4)
3	Service valve (gas)		
4	Service valve (liquid)		
5	Knock-out hole for pipe intake		Front/Side/Rear
6	Power wiring conduits		Front/Side/Rear, ø44 (ø1 3/4)
7	Communication wiring conduits		Front/Side/Rear, ø28 (ø1 1/8)
8	Drain holes		Connect with the provided drain plug.
9	Knock-out hole for pipe intake		Bottom



Specifications

DVM S Essential Heat Pump (2-Pipe)

- Horizontal discharge and rear suction by means of one (4-5 hp) or two (8-14 hp) propeller BLDC Inverter fan(s).
- Each module houses one Inverter Scroll compressor.
- Night Silent Mode available.
- Pump Down function (Leak detection).
- "Intelligent defrost" (air resistant factor added) technology to minimise defrost operation.
- Eurovent certified and ErP (Ecodesign) compliant.
- Continuous operation in heating even during oil recovery cycle.



Model Name			AM100MXVDGH/ET	AM120MXVDGH/ET	AM140MXVDGH/ET	
Power Supply		Φ, #, V, Hz	3Φ, 4, 380-415 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz	
Performance	hp	hp	10	12	14	
	Capacity	Cooling (Rated)	kW	28.0	33.6	40.0
		Heating (Rated)		28.0	33.6	40.0
		Heating (Max)		31.5	37.8	45.0
	Maximum number of connectable indoor units	ea	18	21	26	
Total capacity of the connected indoor units	Min.	kW	14.0	16.8	20.0	
	Max.		36.4	43.7	52.0	
Power	Power Input	Cooling (Rated)	kW	7.18	9.36	12.42
		Heating (Rated)		6.67	8.20	9.90
		Heating (Max)		7.99	9.82	11.86
	Current Input	Cooling (Rated)	A	11.50	15.00	19.90
		Heating (Rated)		10.70	13.20	15.90
		Heating (Max)		12.80	15.80	19.00
	Current	Minimum SSC value	MVA	4.5	5.3	5.4
		MCA	A	21.1	25.0	25.0
		MFA		32	32	32
Energy efficiency ¹	EER	Cooling (Rated)	W/W	3.90	3.59	3.22
	COP ¹	Heating (Rated)	W/W	4.20	4.10	4.04
	ESEER	W/W	7.08	6.58	6.60	
Compressor	Type	-	Inverter Scroll x1	Inverter Scroll x1	Inverter Scroll x1	
	Output	kW x n	6.39 x 1	6.39 x 1	6.39 x 1	
	Oil	Type	-	PVE	PVE	PVE
	Initial Charge	cc x n	1,100 x 1	1,100 x 1	1,100 x 1	
Fan	Type	-	Propeller	Propeller	Propeller	
	Discharge direction	-	Vertical	Vertical	Vertical	
	Number of Fans	-	1	1	2	
	Airflow Rate	m ³ /min	170	220	255	
		l/s	2.833	3.667	4.250	
	External Static Pressure	Max.	mmAq	8.00	8.00	8.00
		Pa	78.45	78.45	78.45	
Fan Motor	Type	-	BLDC Motor	BLDC Motor	BLDC Motor	
	Output	W x n	830 x 1	830 x 1	620 x 2	
Piping Connections	Liquid Pipe	ø, mm	9.52	12.70	12.70	
		ø, inch	3/8	1/2	1/2	
	Gas Pipe	ø, mm	22.22	28.58	28.58	
		ø, inch	7/8	1 1/8	1 1/8	
	Piping length (ODU-IDU)	Max. (Equiv.)	m	200 [220]	200 [220]	200 [220]
	Piping length (1st Branch - IDU)	Max.		90	90	90
	Total piping length (System)	Max.		1,000	1,000	1,000
	Level difference (ODU in highest position)	Max.		110	110	110
Level difference (IDU in highest position)	Max.		110	110	110	
Level Difference (IDU-IDU)	Max.		50	50	50	
Wiring Connections	Transmission Cable	Min.	mm ²	0.75	0.75	0.75
	Remark	-		F1, F2	F1, F2	F1, F2
Refrigerant	Type	-	R410A	R410A	R410A	
	Factory Charging	kg	5.5	6.5	7.7	
		tCO ₂ e	11.48	13.57	16.08	
Sound ²	Sound Pressure	Cooling	dB(A)	58	62	61
		Heating		60	64	63
	Sound Power			79	81	81
External Dimensions	Net Weight	kg	197.0	210.0	226.0	
	Net Dimensions (W x H x D)	mm	880 x 1,695 x 765	880 x 1,695 x 765	1,295 x 1,695 x 765	
Operating Temperature Range	Cooling	°C	-5-48	-5-48	-5-48	
	Heating		-25-24	-25-24	-25-24	

AM160MXVDGH/ET	AM180MXVDGH/ET
3Φ, 4, 380-415 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz
16	18
45.0	50.4
45.0	50.4
50.4	56.7
29	32
22.5	25.2
58.5	65.5
13.80	16.00
11.28	13.16
13.51	15.77
22.10	25.70
18.10	21.10
21.70	25.30
7.2	8.8
32.0	39.2
40	50
3.26	3.15
3.99	3.83
6.39	5.91
Inverter Scroll x1	Inverter Scroll x1
7.81 x 1	7.81 x 1
PVE	PVE
1,400 x 1	1,400 x 1
Propeller	Propeller
Vertical	Vertical
2	2
255	290
4.250	4.833
8.00	8.00
78.45	78.45
BLDC Motor	BLDC Motor
620 x 2	620 x 2
12.70	15.88
1/2	5/8
28.58	28.58
1 1/8	1 1/8
200 [220]	200 [220]
90	90
1,000	1,000
110	110
110	110
50	50
0.75	0.75
F1, F2	F1, F2
R410A	R410A
8.4	8.4
17.54	17.54
63	64
67	67
83	84
253.0	255.0
1,295 x 1,695 x 765	1,295 x 1,695 x 765
-5-48	-5-48
-25-24	-25-24

¹Performances are based on the following test conditions:
 - Cooling: Indoor temperature: 27 °C DB, 19 °C WB, Outdoor temperature: 35 °C DB, 24 °C WB
 - Heating: Indoor temperature: 20 °C DB, 15 °C WB, Outdoor temperature: 7 °C DB, 6 °C WB
 - Equivalent refrigerant piping: 7.5 m, Level differences: 0 m

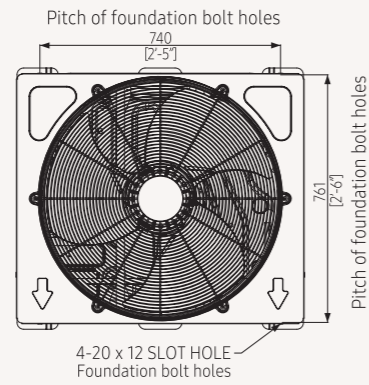
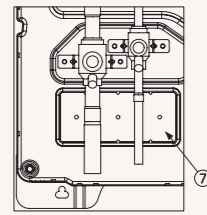
²Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates.

Dimensional drawings

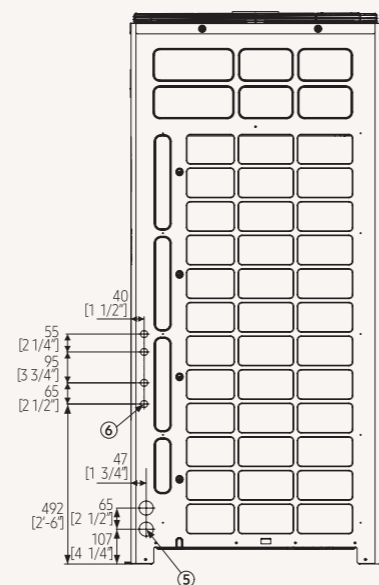
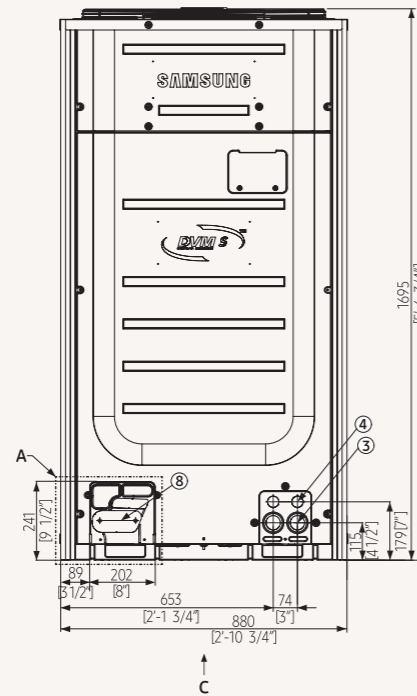
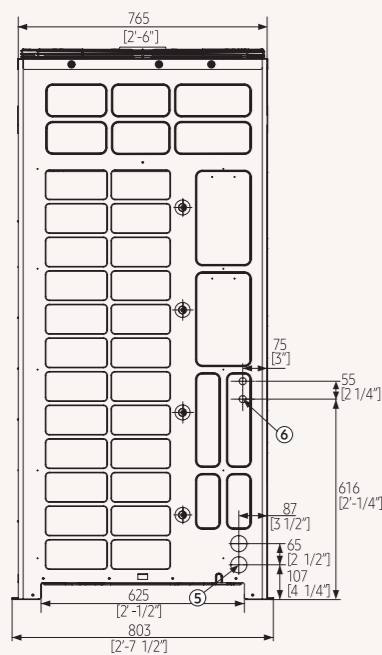
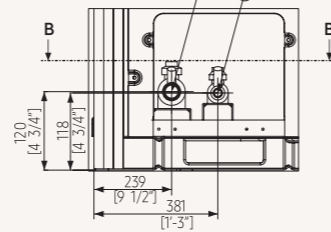
DVM S Essential Heat Pump (2-Pipe)

AM100-120MXVDGH

Section B-B

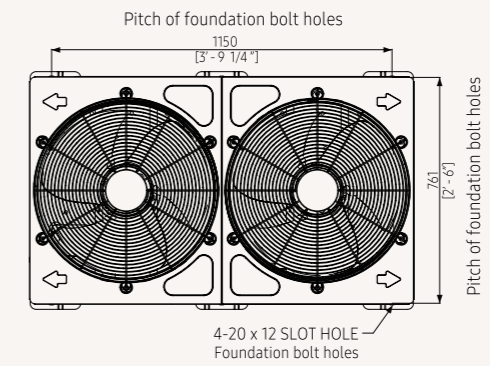
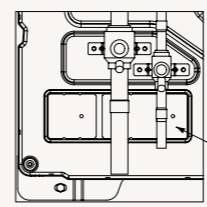


Detail A

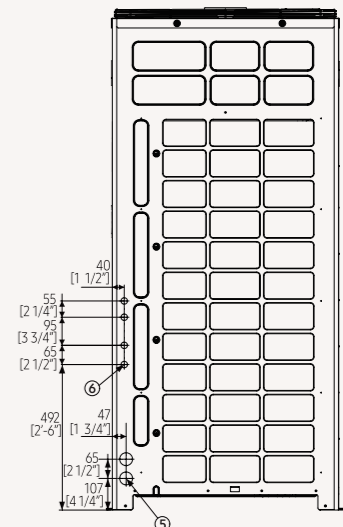
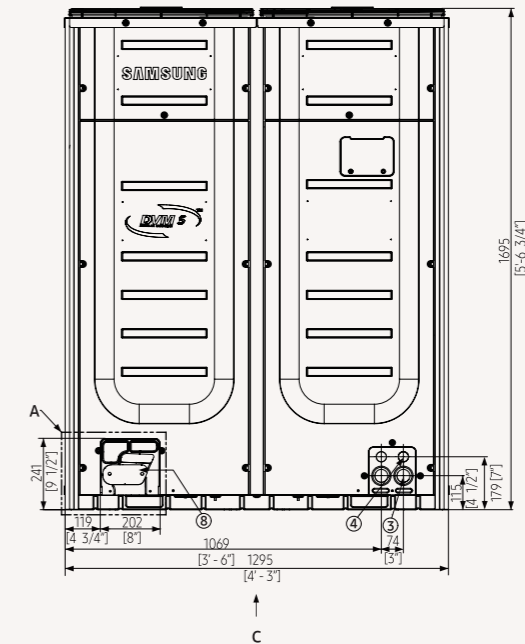
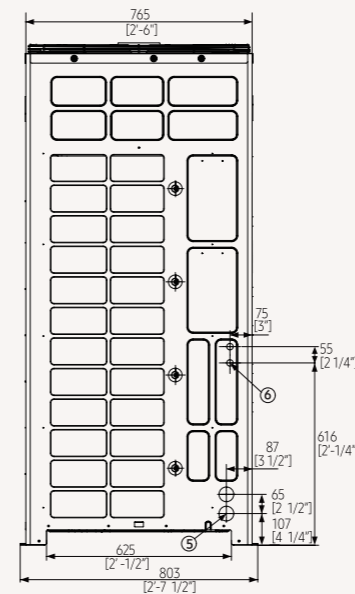
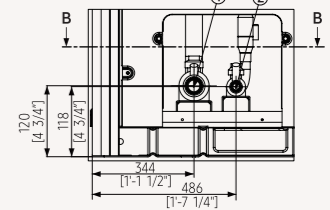


AM140-180MXVDGH

Section B-B



Detail A



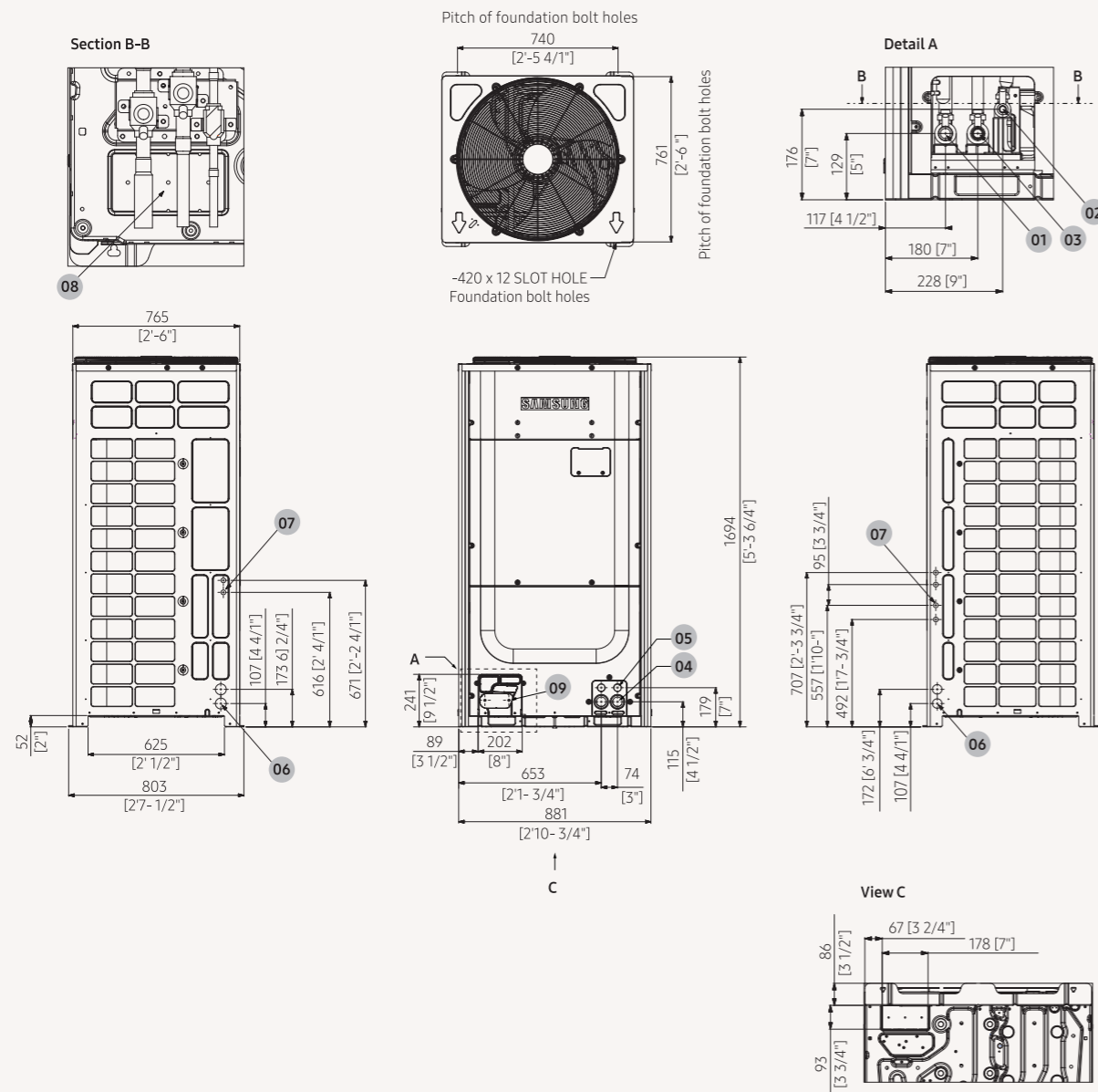
NO	Name	Description
1	Gas Ref. pipe	See note 4
2	Liquid Ref. pipe	See note 4
3	Power wiring conduits	ø44
4	Communication wiring conduits	ø34
5	Power wiring conduits	ø44
6	Communication wiring conduits	ø22
7	Knock-out hole for Ref. piping (bottom)	
8	Knock-out hole for Ref. piping (front)	

NO	Name	Description
1	Gas Ref. pipe	See note 4
2	Liquid Ref. pipe	See note 4
3	Power wiring conduits	ø44
4	Communication wiring conduits	ø34
5	Power wiring conduits	ø44
6	Communication wiring conduits	ø22
7	Knock-out hole for Ref. piping (bottom)	
8	Knock-out hole for Ref. piping (front)	

Dimensional drawings

DVM S Standard Heat Pump (2-Pipe)

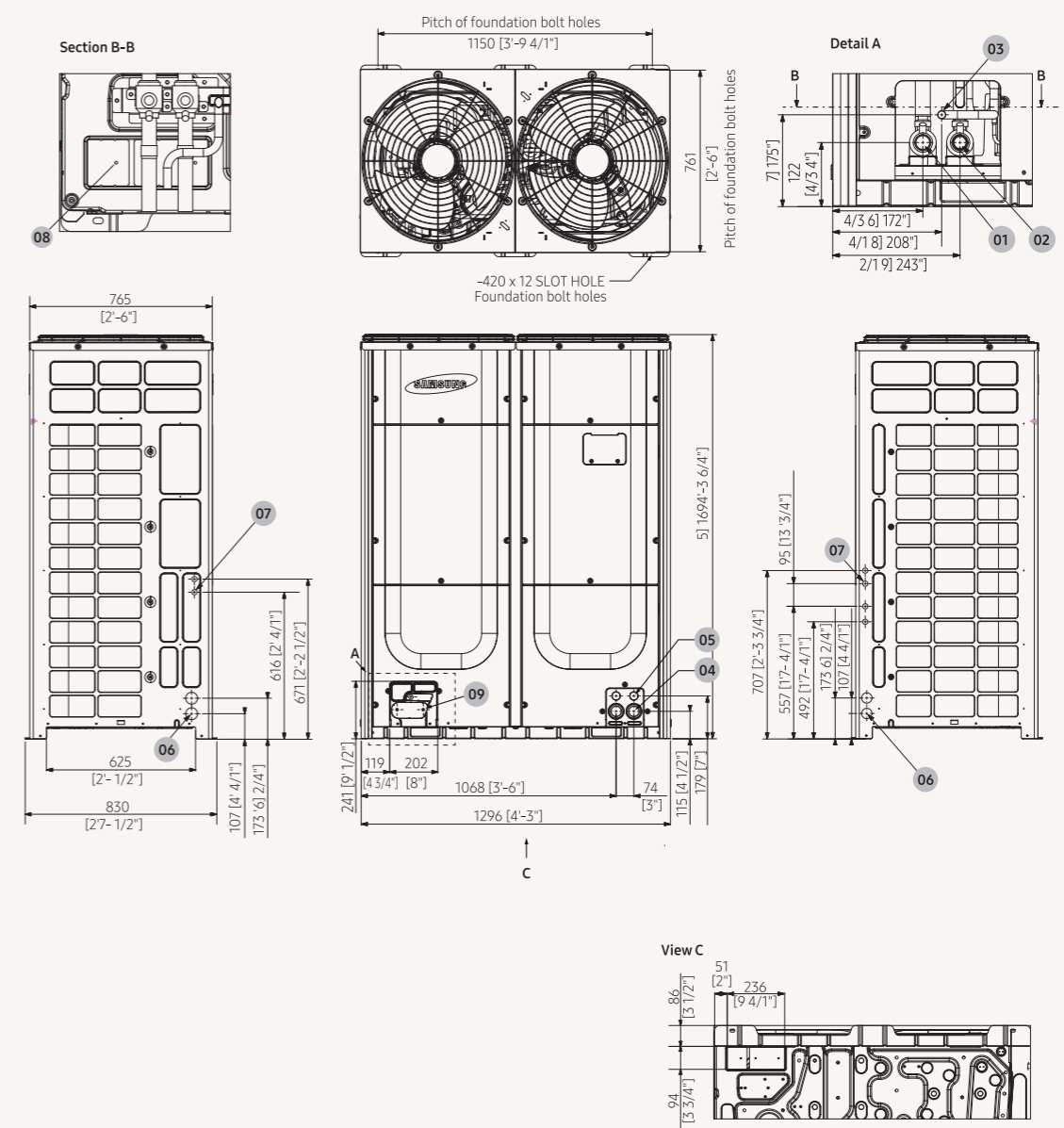
AM080/100/120JXVAGH



NO	Name	Description
1	Low Pressure Gas Ref. pipe	See note 4
2	High Pressure Gas Ref. pipe	See note 4
3	Liquid Ref. pipe	ø44
4	Power wiring conduits	ø34
5	Communication wiring conduits	ø44
6	Power wiring conduits	ø22
7	Communication wiring conduits	
8	Knock-out hole for Ref. piping (bottom)	
9	Knock-out hole for Ref. piping (front)	

1. Detail A and SECTION B-B indicate the dimensions after fixing the attached piping.
2. Item 4-9: Knock-out hole.
3. View C indicates the dimensions of the knock-out hole (bottom).
4. Pipe [ø, mm (inch)]: Brazing connection.

AM140/160/180/200/220KXVAGH



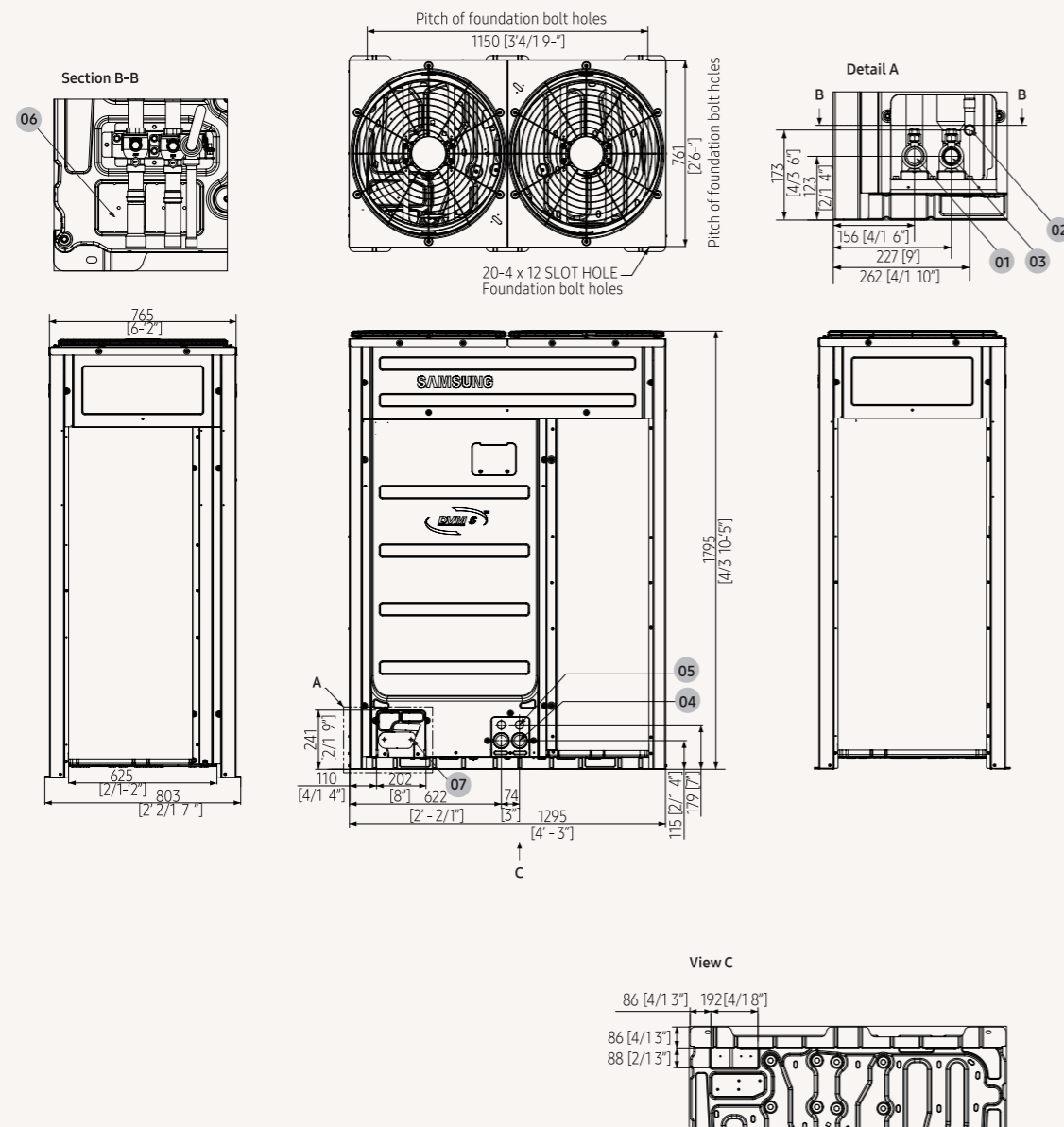
NO	Name	Description
1	Low Pressure Gas Ref. pipe	See note 4
2	High Pressure Gas Ref. pipe	See note 4
3	Liquid Ref. pipe	ø44
4	Power wiring conduits	ø34
5	Communication wiring conduits	ø44
6	Power wiring conduits	ø22
7	Communication wiring conduits	
8	Knock-out hole for Ref. piping (bottom)	
9	Knock-out hole for Ref. piping (front)	

1. Detail A and SECTION B-B indicate the dimensions after fixing the attached piping.
2. Item 4-9: Knock-out hole.
3. View C indicates the dimensions of the knock-out hole (bottom).
4. Pipe [ø, mm (inch)]: Brazing connection.

Dimensional drawings

DVM S Standard Heat Pump (2-Pipe)

AM240/260KXVAGH



NO	Name	Description
1	Low Pressure Gas Ref. pipe	See note 4
2	High Pressure Gas Ref. pipe	See note 4
3	Liquid Ref. pipe	ø44
4	Power wiring conduits	ø34
5	Communication wiring conduits	ø44
6	Power wiring conduits	ø22
7	Communication wiring conduits	
8	Knock-out hole for Ref. piping (bottom)	
9	Knock-out hole for Ref. piping (front)	

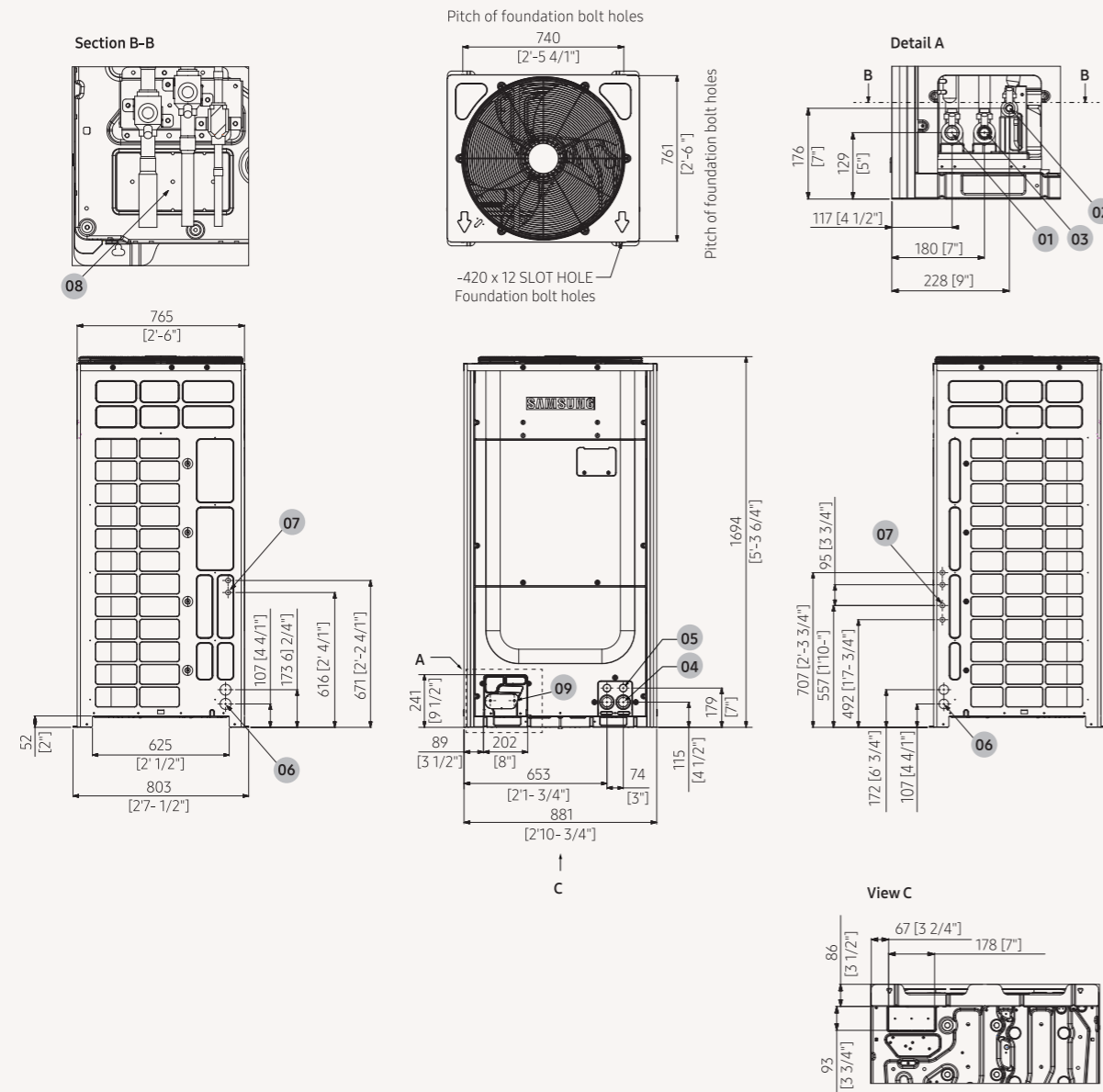
1. Detail A and SECTION B-B indicate the dimensions after fixing the attached piping.
2. Item 4-9: Knock-out hole.
3. View C indicates the dimensions of the knock-out hole (bottom).
4. Pipe [ø, mm (inch)]: Brazing connection.



Dimensional drawings

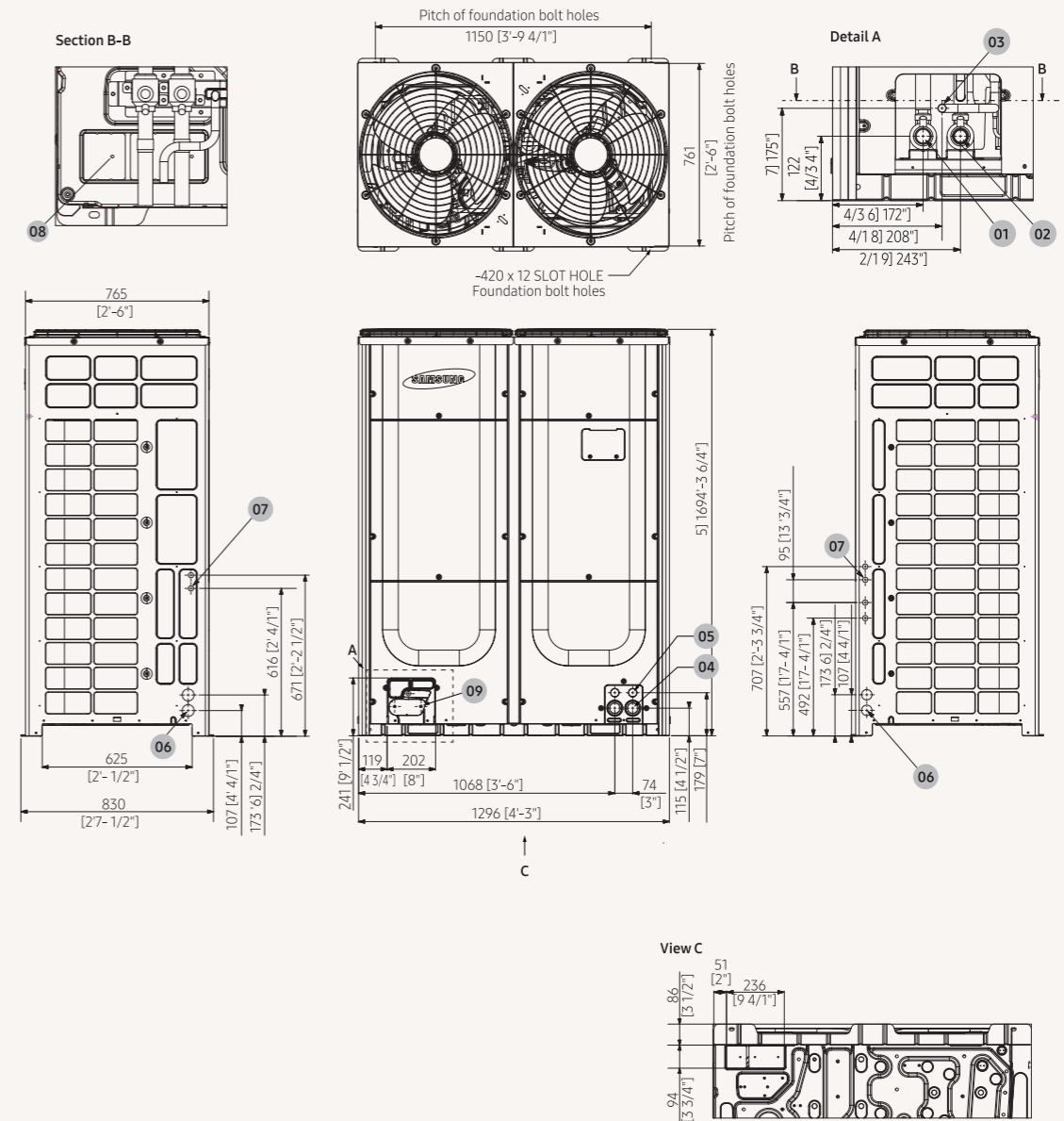
DVM S High EER Heat Pump (2-Pipe)

AM080/100/120JXVHGH



NO	Name	Description
1	Refrigerant gas pipe	See note 4
2	Refrigerant liquid pipe	See note 4
3	Power wiring conduits	ø44
4	Communication wiring conduits	ø34
5	Power wiring conduits	ø44
6	Communication wiring conduits	ø22
7	Knock-out hole for Ref. piping (bottom)	
8	Knock-out hole for Ref. piping (front)	

AM140/160/180/200/220JXVHGH

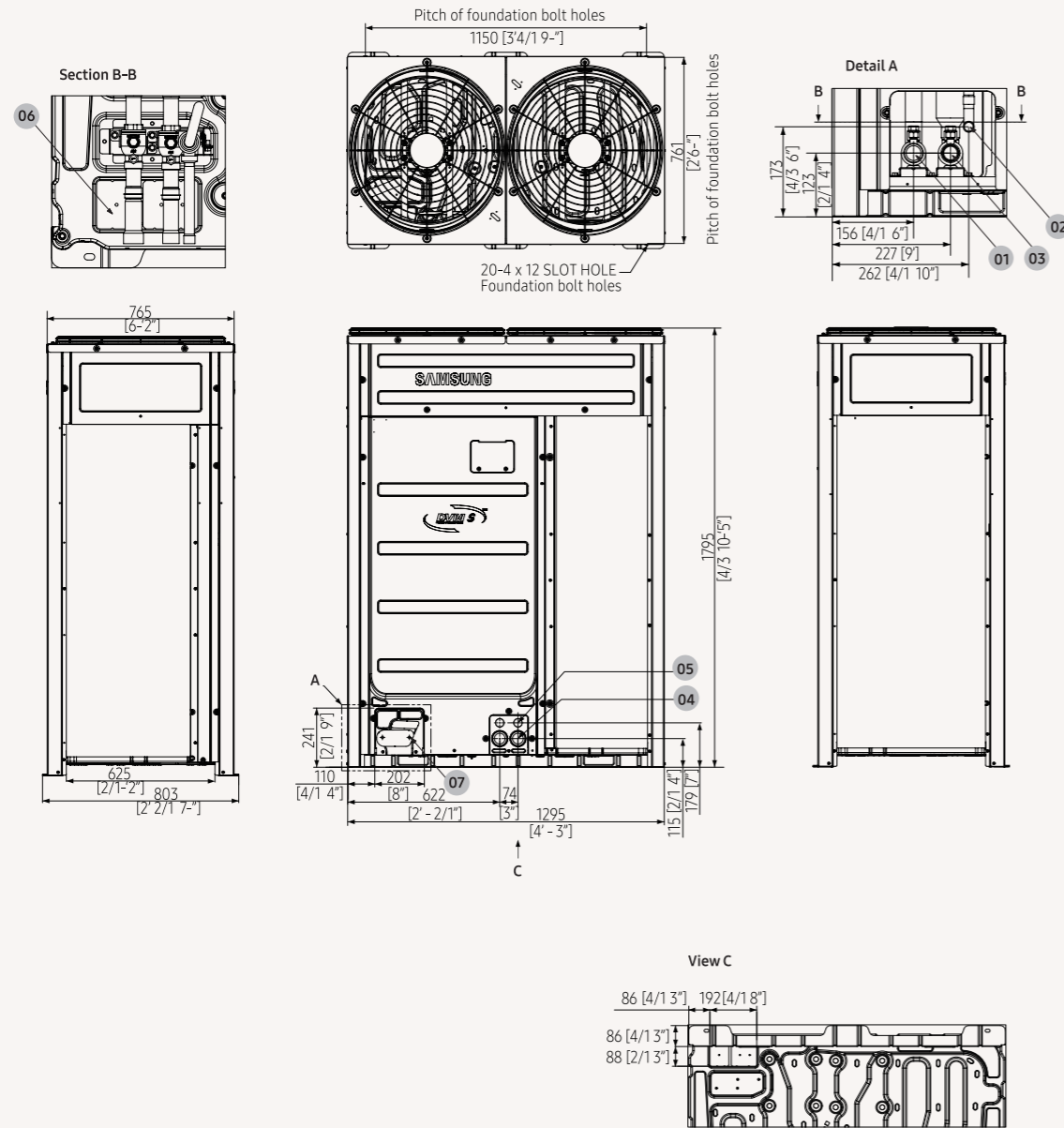


NO	Name	Description
1	Refrigerant gas pipe	See note 4
2	Refrigerant liquid pipe	See note 4
3	Power wiring conduits	ø44
4	Communication wiring conduits	ø34
5	Power wiring conduits	ø44
6	Communication wiring conduits	ø22
7	Knock-out hole for Ref. piping (bottom)	
8	Knock-out hole for Ref. piping (front)	

Dimensional drawings

DVM S High EER Heat Pump (2-Pipe)

AM240/260.JXVGGH



NO	Name	Description
1	Refrigerant gas pipe	See note 4
2	Refrigerant liquid pipe	See note 4
3	Power wiring conduits	ø44
4	Communication wiring conduits	ø34
5	Knock-out hole for Ref. piping (bottom)	
6	Knock-out hole for Ref. piping (front)	



Specifications

DVM S Eco Heat Recovery (With Heat Recovery Changer Kit)

- Horizontal discharge and rear suction by means of two propeller BLDC inverter fans.
- Each module houses one Twin BLDC Rotary compressor.
- Night Silent Mode available.
- Eurovent certified and ErP (Ecodesign) compliant.
- Four-way direction piping connection.



Model Code				AM040NXMDER/EU	AM050NXMDER/EU	AM060NXMDER/EU
Power Supply		Φ, V, Hz	1Φ, 220-240 V, 50 Hz	1Φ, 220-240 V, 50 Hz	1Φ, 220-240 V, 50 Hz	
Performance	hp	hp	4	5	6	
	Capacity	Cooling	kW	12.1	14.0	15.5
Heating		kW	12.1	14.0	15.5	
Power	Power Input (Nominal)	Cooling	kW	2.69	3.41	4.13
		Heating	kW	2.58	3.11	3.65
	Current Input (Nominal)	Cooling	A	4.1	5.2	6.3
		Heating	A	3.8	4.5	5.3
Current	MCA	A	22.0	24.0	30.0	
	MFA	A	25	30	40	
Energy Efficiency ¹	EER (Nominal Cooling)	-	4.50	4.11	3.75	
	COP ¹ (Nominal Heating)	-	4.69	4.50	4.25	
	SEER	-	10.50	10.10	9.50	
Compressor	Type	-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
	Output	kW	4.04	4.04	4.04	
	Oil	Type	-	PVE	PVE	PVE
Initial Charge		cc	1,700	1,700	1,700	
Fan	Type	-	Propeller/BLDC	Propeller/BLDC	Propeller/BLDC	
	Discharge direction	-	Horizontal	Horizontal	Horizontal	
	Motor (Output)	kW × n	125.0 × 2	125.0 × 2	125.0 × 2	
	Airflow Rate	(H/M/L)	m ³ /min	100	100	100
		(H/M/L)	l/s	1,666.7	1,666.7	1,666.7
	External Static Pressure	(Min/Std/Max)	mmAq	3	3	3
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
	Gas Pipe	ø, mm	15.88	15.88	19.05	
		ø, inch	5/8	5/8	3/4	
	Discharge Gas Pipe	ø, mm	15.88	15.88	15.88	
		ø, inch	5/8	5/8	5/8	
	Installation Max. Length	m	150	150	150	
	Installation Max. Height	m	50	50	50	
Field Wiring	Transmission Cable	m	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Factory Charging	kg	3.2	3.2	3.3	
		kg / tCO ₂ e	kg	6.7	6.7	6.9
Sound ²	Sound Pressure	dB(A)	52	52	53	
	Sound Power	dB	67	68	70	
External Dimensions	Net Weight	kg	97.0	97.0	100.0	
	Net Dimensions (W x H x D)	mm	940 x 1,210 x 330	940 x 1,210 x 330	940 x 1,210 x 330	
Operating Temperature Range	Cooling	°C	-5.0-48.0	-5.0-48.0	-5.0-48.0	
	Heating	°C	-25.0-26.0	-25.0-26.0	-25.0-26.0	

Model Code				AM040NXMDGR/EU	AM050NXMDGR/EU	AM060NXMDGR/EU
Power Supply		Φ, V, Hz	3Φ, 380-415 V, 50 Hz	3Φ, 380-415 V, 50 Hz	3Φ, 380-415 V, 50 Hz	
Performance	hp	hp	4	5	6	
	Capacity	Cooling	kW	12.1	14.0	15.5
Heating		kW	12.1	14.0	15.5	
Power	Power Input (Nominal)	Cooling	kW	2.69	3.41	4.13
		Heating	kW	2.58	3.11	3.65
	Current Input (Nominal)	Cooling	A	4.1	5.2	6.3
		Heating	A	3.8	4.5	5.3
Current	MCA	A	10.0	12.0	12.0	
	MFA	A	16	16	16	
Energy Efficiency ¹	EER (Nominal Cooling)	-	4.50	4.11	3.75	
	COP ¹ (Nominal Heating)	-	4.69	4.50	4.25	
	SEER	-	10.50	10.10	9.50	
Compressor	Type	-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
	Output	kW	4.04	4.04	4.04	
	Oil	Type	-	PVE	PVE	PVE
Initial Charge		cc	1,700	1,700	1,700	
Fan	Type	-	Propeller/BLDC	Propeller/BLDC	Propeller/BLDC	
	Discharge direction	-	Horizontal	Horizontal	Horizontal	
	Motor (Output)	kW × n	125.0 × 2	125.0 × 2	125.0 × 2	
	Airflow Rate	(H/M/L)	m ³ /min	100	100	100
		(H/M/L)	l/s	1,666.7	1,666.7	1,666.7
	External Static Pressure	(Min/Std/Max)	mmAq	3	3	3
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
	Gas Pipe	ø, mm	19.05	19.05	19.05	
		ø, inch	3/4	3/4	3/4	
	Discharge Gas Pipe	ø, mm	15.88	15.88	15.88	
		ø, inch	5/8	5/8	5/8	
	Installation Max. Length	m	150	150	150	
	Installation Max. Height	m	50	50	50	
Field Wiring	Transmission Cable	m	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Factory Charging	kg	3.2	3.2	3.3	
		kg / tCO ₂ e	kg	6.7	6.7	6.9
Sound ²	Sound Pressure	dB(A)	52	52	53	
	Sound Power	dB	67	68	70	
External Dimensions	Net Weight	kg	95.0	95.0	98.0	
	Net Dimensions (W x H x D)	mm	940 x 1,210 x 330	940 x 1,210 x 330	940 x 1,210 x 330	
Operating Temperature Range	Cooling	°C	-5.0-48.0	-5.0-48.0	-5.0-48.0	
	Heating	°C	-25.0-26.0	-25.0-26.0	-25.0-26.0	

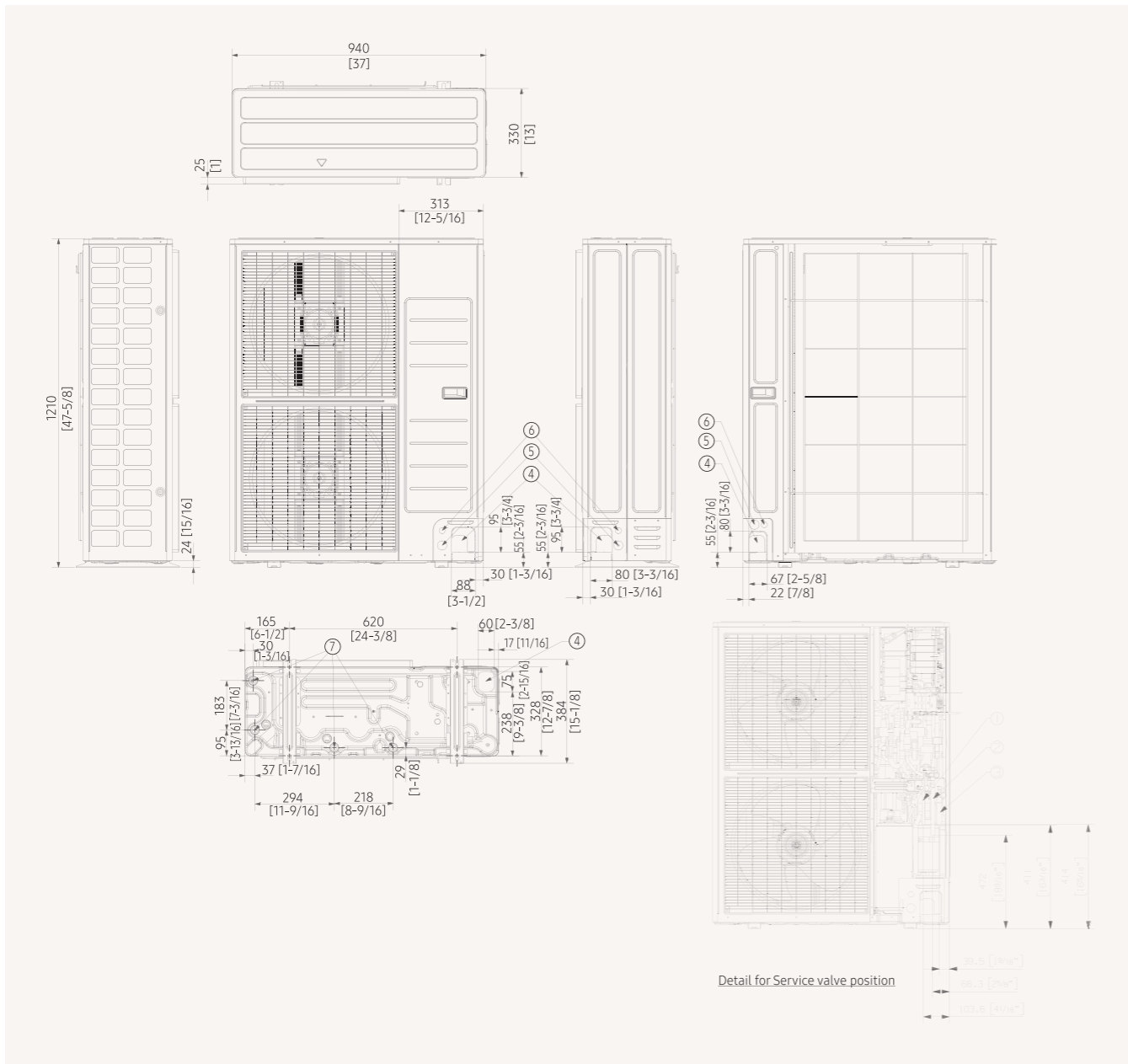
¹Performances are based on the following test conditions:
 - Cooling: Indoor temperature: 27 °C DB, 19 °C WB, Outdoor temperature: 35 °C DB, 24 °C WB
 - Heating: Indoor temperature: 20 °C DB, 15 °C WB, Outdoor temperature: 7 °C DB, 6 °C WB
 - Equivalent refrigerant piping: 7.5 m, Level differences: 0 m

²Sound 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 according to operating conditions. Sound power level is an absolute value that a sound source generates.

Dimensional drawings

DVM S Eco Heat Recovery (With Heat Recovery Changer Kit)

AM***NXMD*R/EU



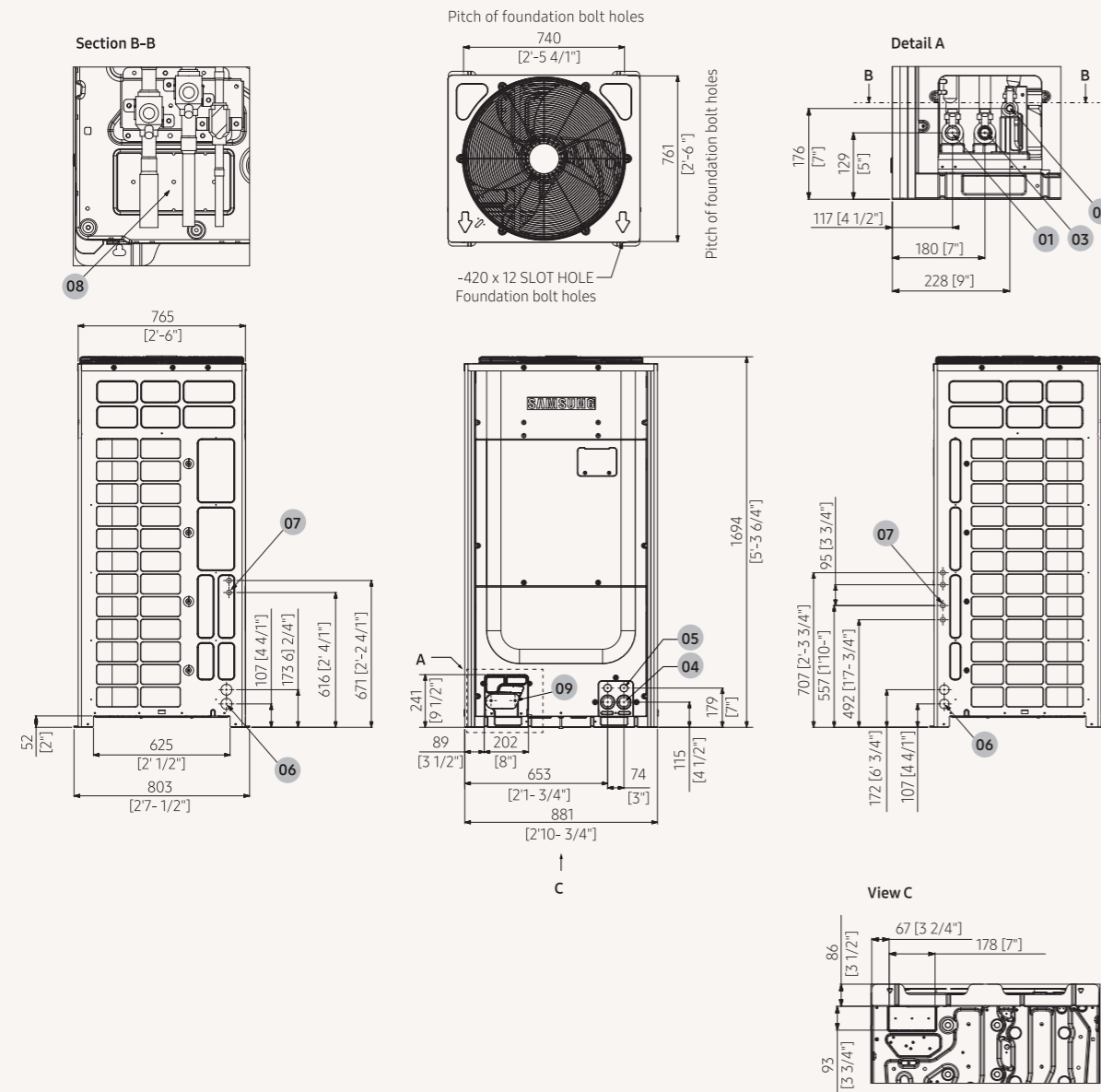
NO	Name	Description	
		4/5 hp	6 hp
1	Refrigerant liquid pipe	ø9.52 (ø3/8)	
2	Refrigerant gas pipe	ø15.88 (ø5/8)	ø19.05 (ø3/4)
3	Knock-out hole for pipe intake	Front/Side/Rear/Bottom	
4	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)	
5	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)	
6	Drain holes	Connect with the provided drain plug.	



Dimensional drawings

DVM S High EER Heat Recovery (3-Pipe)

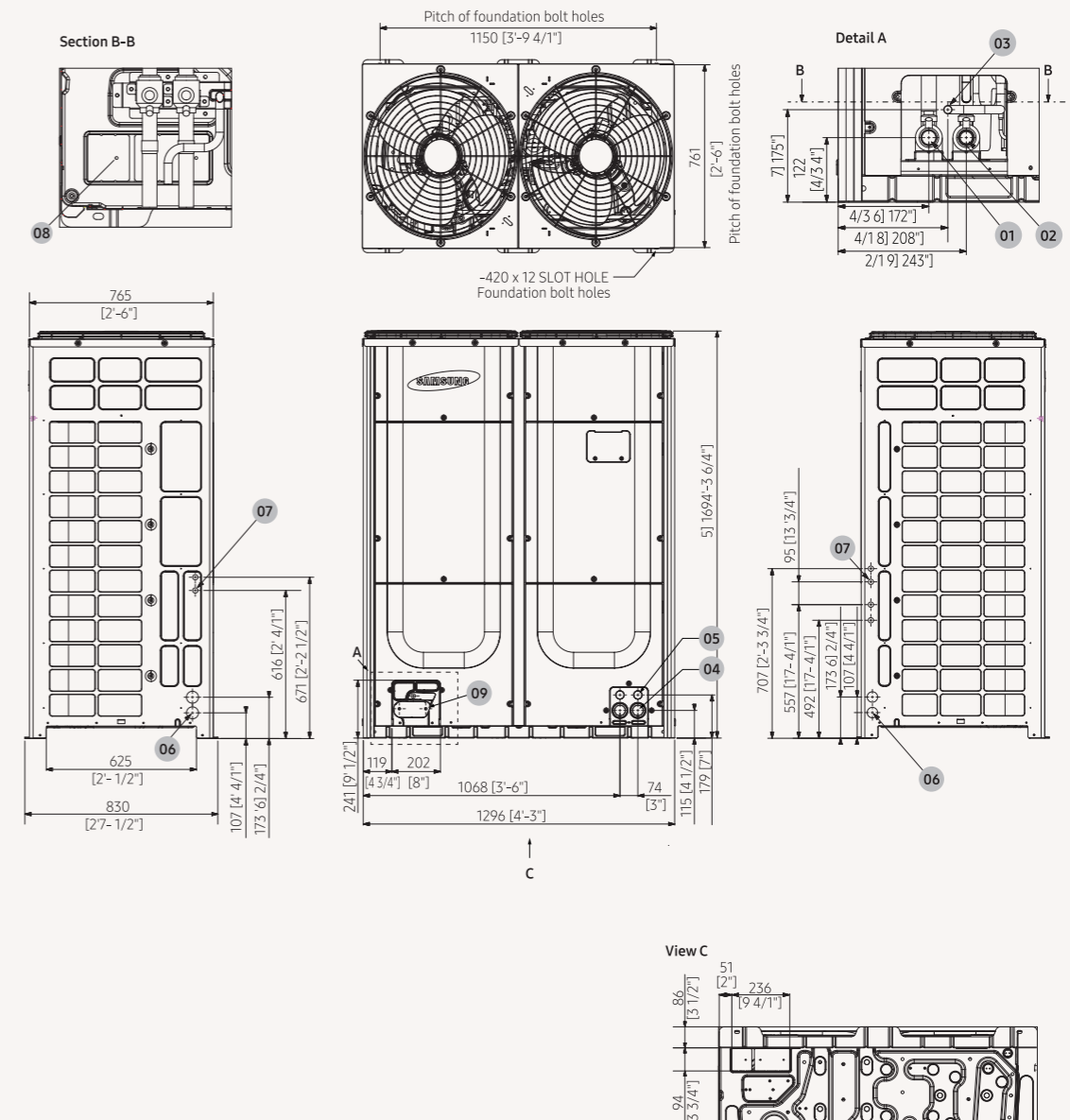
AM080/100/120JXVHGR



NO	Name	Description
1	Low Pressure Gas Ref. pipe	See note 4
2	High Pressure Gas Ref. pipe	See note 4
3	Liquid Ref. pipe	See note 4
4	Power wiring conduits	ø44
5	Communication wiring conduits	ø34
6	Power wiring conduits	ø44
7	Communication wiring conduits	ø22
8	Knock-out hole for Ref. piping (bottom)	
9	Knock-out hole for Ref. piping (front)	

1. Detail A and SECTION B-B indicate the dimensions after fixing the attached piping.
2. Item 4-9: Knock-out hole.
3. View C indicates the dimensions of the knock-out hole (bottom).
4. Pipe [ø, mm (inch)]: Brazing connection.

AM140/160/180/200/220JXVHGR



NO	Name	Description
1	Low Pressure Gas Ref. pipe	See note 4
2	High Pressure Gas Ref. pipe	See note 4
3	Liquid Ref. pipe	See note 4
4	Power wiring conduits	ø44
5	Communication wiring conduits	ø34
6	Power wiring conduits	ø44
7	Communication wiring conduits	ø22
8	Knock-out hole for Ref. piping (bottom)	
9	Knock-out hole for Ref. piping (front)	

1. Detail A and SECTION B-B indicate the dimensions after fixing the attached piping.
2. Item 4-9: Knock-out hole.
3. View C indicates the dimensions of the knock-out hole (bottom).
4. Pipe [ø, mm (inch)]: Brazing connection.

Specifications

DVM S Water

- Water Cooled, Variable Refrigerant Flow Heat Pump/ Heat Recovery Unit R410A.
- Suitable for indoor and outdoor installation
- Each unit houses one (8-12 hp) or two (20-30 hp) Inverter Scroll compressors with Flash Injection technology.



Model Name				AM080MXWANR/EU	AM100MXWANR/EU	AM120MXWANR/EU			
Power Supply				Φ, #, V, Hz			3Φ, 4, 380-415 V, 50/60 Hz	3Φ, 4, 380-415 V, 50/60 Hz	3Φ, 4, 380-415 V, 50/60 Hz
Performance	hp			8	10	12			
	Capacity (Nominal)	Cooling	kW	22.4	28.0	33.6			
		Heating	kW	25.2	31.5	37.8			
	Maximum number of connectable indoor units			14	18	22			
	Total capacity of the connected indoor units	Min.	kW	11.2	14.0	16.8			
Max.		kW	29.1	36.4	43.7				
Power	Power Input (Nominal)	Cooling	kW	3.67	4.87	6.00			
		Heating		3.97	5.04	6.25			
	Current Input (Nominal)	Cooling	A	5.9	8.1	9.6			
		Heating		6.4	8.4	10.0			
	Current	Minimum SSC value		MVA	3.9	3.9	4.8		
		MCA	A	16.1	16.1	20.0			
MFA		A	20	20	25				
COP ¹	Nominal Cooling		W/W	6.10	5.75	5.60			
	Nominal Heating		W/W	6.35	6.25	6.05			
Compressor	Type			-	Inverter Scroll	Inverter Scroll	Inverter Scroll		
	Output			kW × n	4.96 x 1	4.96 x 1	6.13 x 1		
	Oil	Type		-	PVE	PVE	PVE		
Initial Charge		cc	3,900	3,900	3,900				
Condenser	Type			Type	Plate Heat Exchanger	Plate Heat Exchanger	Plate Heat Exchanger		
	Pipe Size			ø, inch	PT 1 1/4	PT 1 1/4	PT 1 1/4		
	Pressure Drop			kPa	22	30	43		
	Water Flow Rate			l/min	80	96	114		
	Max. Pressure			MPa	1.96	1.96	1.96		
	Liquid Pipe			ø, mm	9.52	9.52	12.70		
				ø, inch	3/8	3/8	1/2		
	Gas Pipe			ø, mm	19.05	22.22	28.58		
				ø, inch	3/4	7/8	1 1/8		
Piping Connections	Discharge Gas Pipe			ø, mm	15.88	19.05	19.05		
				ø, inch	5/8	3/4	3/4		
	Piping length	Outdoor-Indoor	Max.	m	170 (190)	170 (190)	170 (190)		
			After branch	Max.	m	90	90	90	
	Total piping length			System	Actual	m	500	500	500
	Level difference	Outdoor-Indoor	Outdoor unit in highest position		m	50	50	50	
			Indoor unit in highest position		m	40	40	40	
Indoor-Indoor		Max.	m	50	50	50			
Wiring Connections	Communication		Minimum	mm ²	0.75	0.75	0.75		
	Remark			-	F1, F2	F1, F2	F1, F2		
Refrigerant	Type			-	R410A	R410A	R410A		
	Factory Charging			kg	5.5	5.8	6.0		
				tCO ₂ e	11.48	12.11	12.53		
Sound ²	Sound Pressure	Cooling	dB(A)	48	48	50			
		Heating		51	51	52			
Sound Power				70	70	70			
External Dimensions	Net Weight			kg	160.0	160.0	160.0		
	Net Dimensions (W x H x D)			mm	770 x 1,000 x 545	770 x 1,000 x 545	770 x 1,000 x 545		
Operating Temperature Range	Cooling			°C	10.0-45.0	10.0-45.0	10.0-45.0		
	Heating			°C	10.0-45.0	10.0-45.0	10.0-45.0		

AM200MXWANR/EU		AM300KXWANR/EU		
3Φ, 4, 380-415 V, 50/60 Hz				3Φ, 4, 380-415 V, 50/60 Hz
hp		30		
Capacity (Nominal)	Cooling	84		
	Heating	94.5		
Maximum number of connectable indoor units		55		
Total capacity of the connected indoor units	Min.	42.0		
	Max.	109.2		
Power Input (Nominal)	Cooling	16.80		
	Heating	16.88		
Current Input (Nominal)	Cooling	26.4		
	Heating	26.5		
Current	Minimum SSC value		-	
	MCA	48.0		
	MFA	63		
COP ¹	Nominal Cooling		5.00	
	Nominal Heating		5.60	
Compressor	Type		SSC Scroll x 2	
	Output		6.75 x 2	
	Oil		PVE	
Initial Charge		6,200		
Condenser	Type		Plate Heat Exchanger	
	Pipe Size		PT 1 1/4	
	Pressure Drop		50	
	Water Flow Rate		285	
	Max. Pressure		1.96	
	Liquid Pipe	ø, mm		19.05
		ø, inch		3/4
	Gas Pipe	ø, mm		34.92
		ø, inch		1 3/8
Piping Connections	Discharge Gas Pipe		28.58	
			11/8	
	Piping length	Outdoor-Indoor	Max.	170 (190)
			After branch	90
	Total piping length		System	Actual
	Level difference	Outdoor-Indoor	Outdoor unit in highest position	
			Indoor unit in highest position	
Indoor-Indoor		Max.	50	
Wiring Connections	Communication		0.75	
	Remark		F1, F2	
Refrigerant	Type		R410A	
	Factory Charging		11.0	
			22.96	
Sound ²	Sound Pressure	Cooling	55	
		Heating	58	
Sound Power		75		
External Dimensions	Net Weight		280.0	
	Net Dimensions (W x H x D)		1,100 x 1,000 x 545	
Operating Temperature Range	Cooling		10.0-45.0	
	Heating		10.0-45.0	

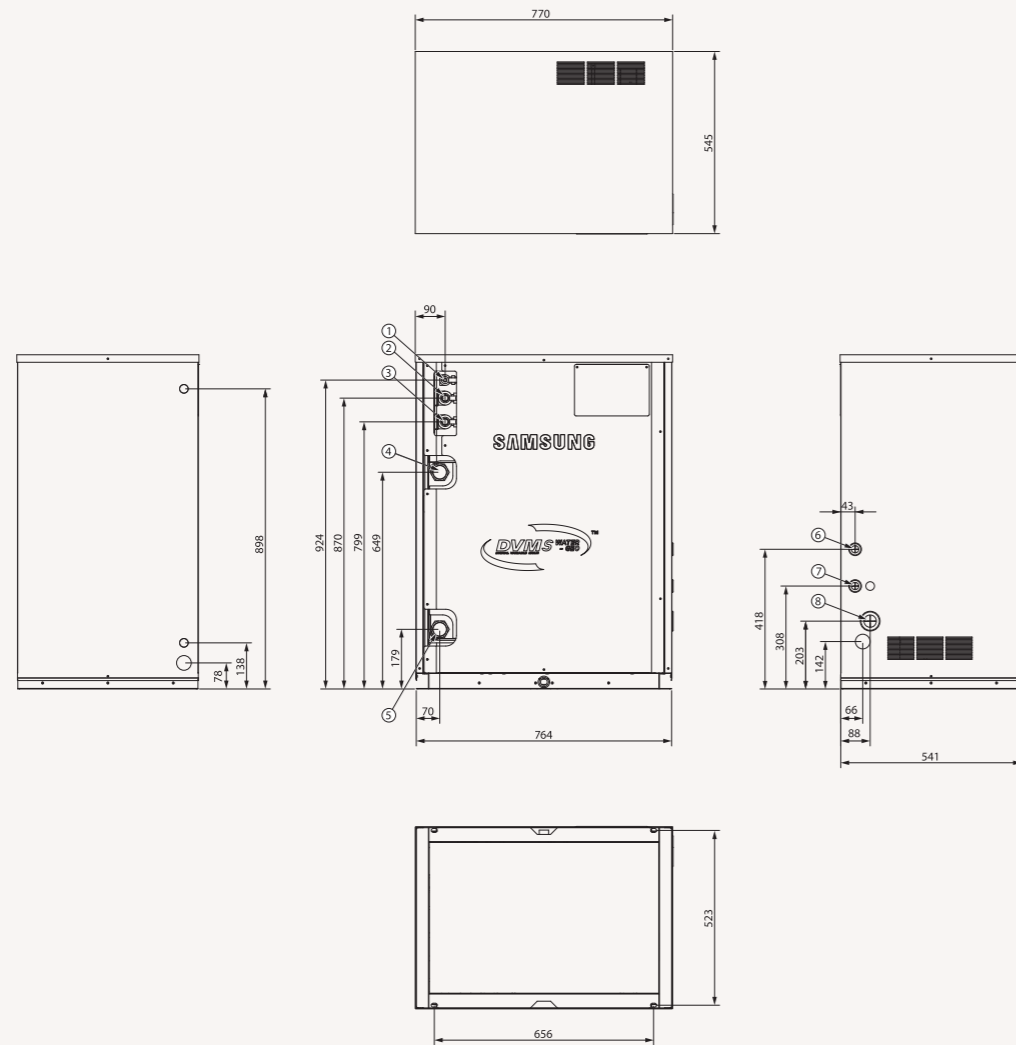
¹Performances are based on the following test conditions:
 - Cooling: Indoor temperature: 27 °C DB, 19 °C WB, Inlet water temperature: 30 °C
 - Heating: Indoor temperature: 20 °C DB, 15 °C WB, Inlet water temperature: 20 °C
 - Equivalent refrigerant piping: 7.5 m, Level differences: 0 m

²Sound 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 according to operating conditions. Sound power level is an absolute value that a sound source generates.

Dimensional Drawing

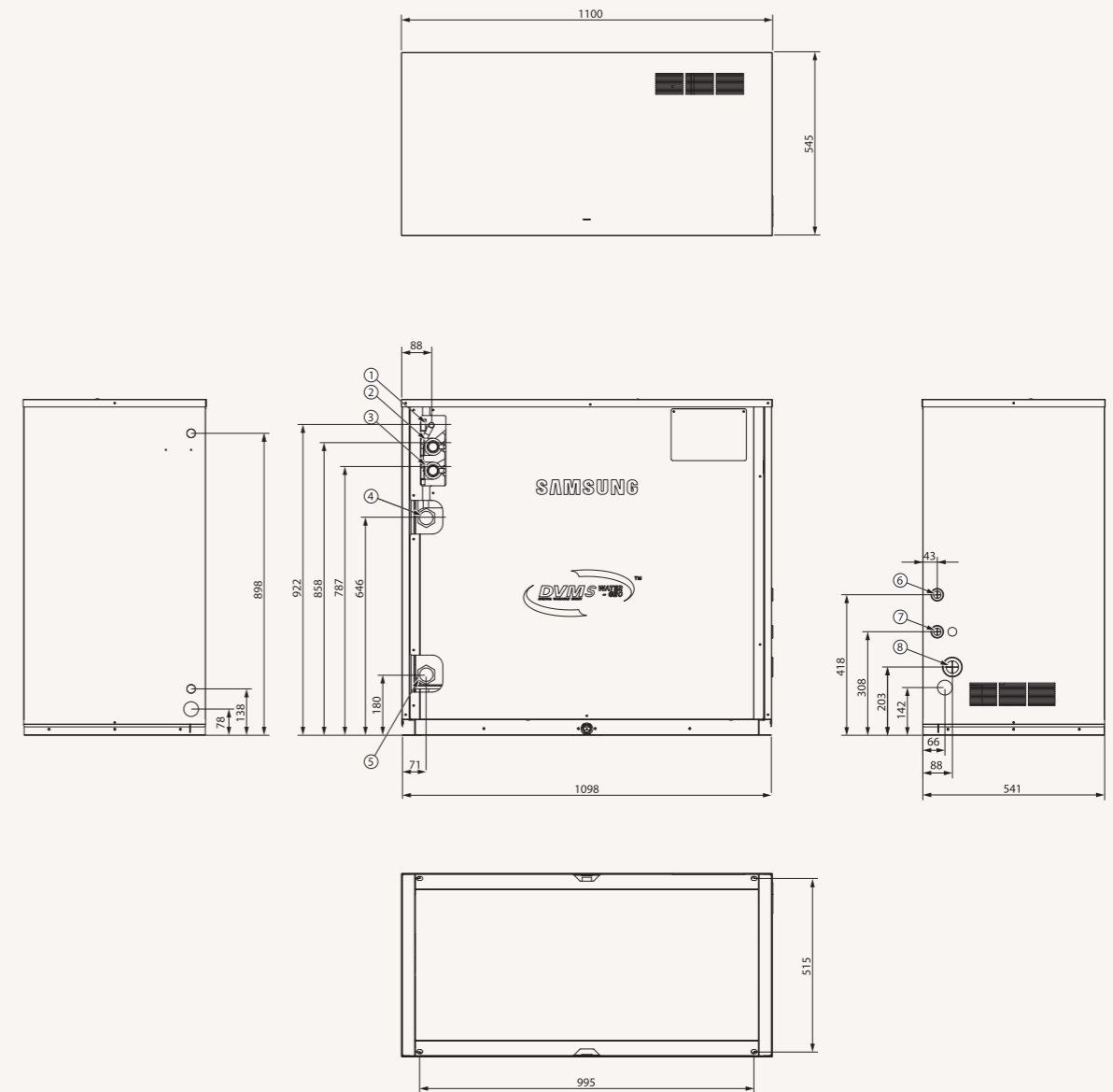
DVM S Water

AM080/100/120MXWANR



NO	Name	Description
1	Liquid Ref. pipe	ø19.05 (3/4)
2	High Pressure Gas Ref. pipe	ø28.58 (1 1/8)
3	Low Pressure Gas Ref. pipe	ø 34.92 (1 3/8)
4	Water outlet pipe	PT 2
5	Water inlet pipe	PT 2
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	

AM200MXWANR

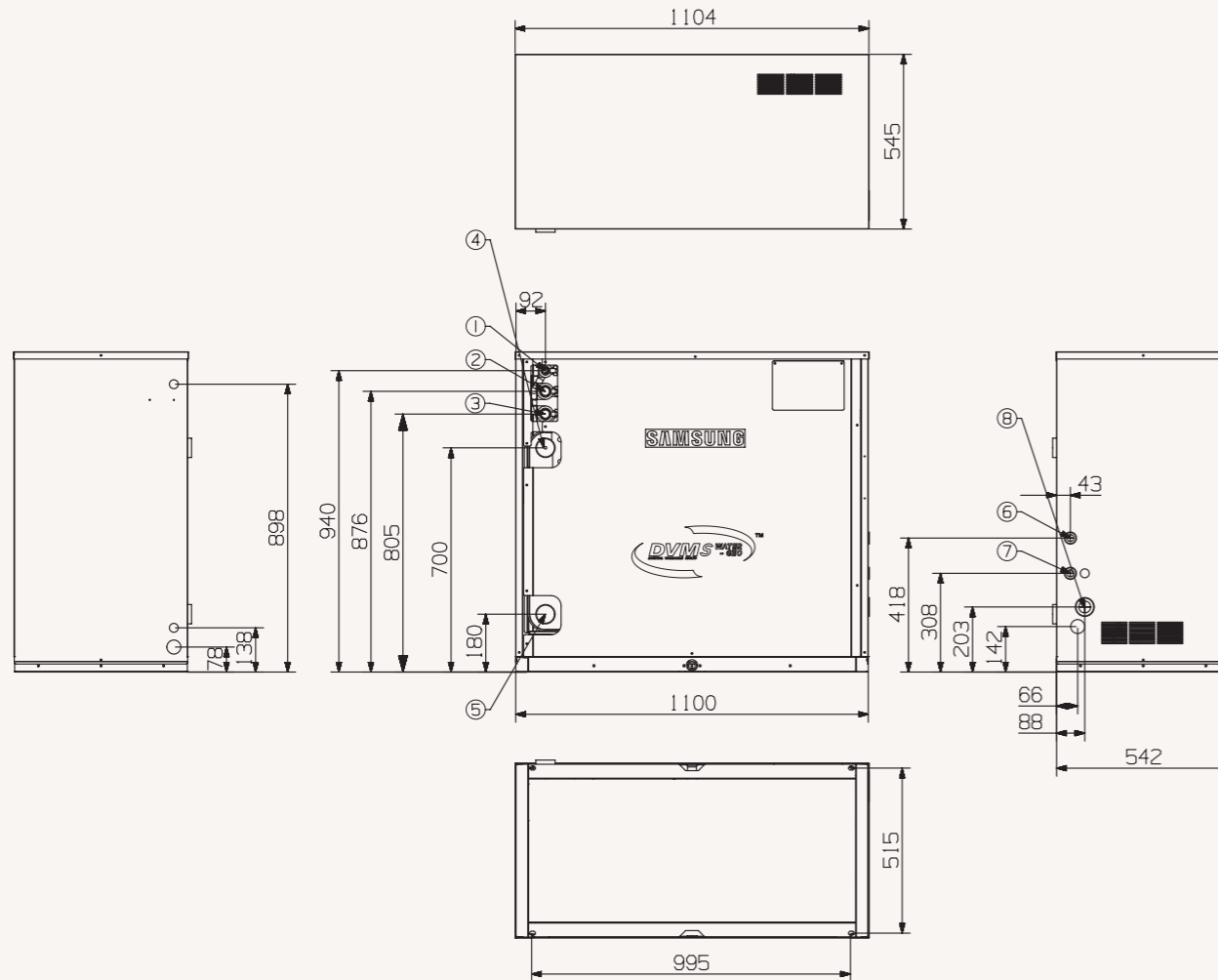


NO	Name	Description
1	Liquid Ref. pipe	15.88 (5/8)
2	High Pressure Gas Ref. pipe	ø28.58 (1 1/8)
3	Low Pressure Gas Ref. pipe	ø28.58 (1 1/8)
4	Water outlet pipe	PT 1 1/4
5	Water inlet pipe	PT 1 1/4
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	

Dimensional Drawing

DVM S Water

AM300MXWANR



NO	Name	Description
1	Liquid Ref. pipe	ø19.05 (3/4)
2	High Pressure Gas Ref. pipe	ø28.58 (1 1/8)
3	Low Pressure Gas Ref. pipe	ø 34.92 (1 3/8)
4	Water outlet pipe	PT 2
5	Water inlet pipe	PT 2
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	



Specifications

360 Cassette

- 360 degree air supply.
- Bladeless discharge. Booster fans can be individually controlled, allowing for completely horizontal flow discharge. Coandă effect is created even without ceiling.












- Built-in condensation drain pump.
- Predisposition of the air inlet to let fresh air in.
- Compatible with Wi-Fi Kit controller.
- Circular or square cassette panel.



Model			AM045KN4DEH/EU	AM056KN4DEH/EU	AM071KN4DEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	4.5	5.6	7.1
		Heating		5.0	6.3	8.0
Power	Power Input (Nominal)	Cooling	W	26	30	34
		Heating		26	30	34
	Current Input (Nominal)	Cooling	A	0.18	0.21	0.25
		Heating		0.18	0.21	0.25
Fan	Motor	Type	-	Turbo Fan	Turbo Fan	
	Output x n	w	65 x 1	65 x 1	65 x 1	
	Airflow Rate	H/M/L (UL)	m ³ /min	14.50/13.50/12.50	16.00/14.50/13.50	18.00/16.00/14.00
		l/s	241.67/225.00/208.33	266.67/241.67/225.00	300.00/266.67/233.33	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	9.52	
		ø, inch	1/4	1/4	3/8	
	Gas Pipe	ø, mm	12.70	12.70	15.88	
		ø, inch	1/2	1/2	5/8	
	Drain Pipe	ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
	Field Wiring	Power Source Wire	mm ²	1.5-2.5	1.5-2.5	1.5-2.5
Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Pressure	(H/M/L)	dB(A)	33/31/29	34/32/29	36/33/30
	Power	Cooling		50	51	53
Dimension	Net Weight	kg	21.0	21.0	21.0	
	Net Dimensions (W x H x D)	mm	947 x 281 x 947	947 x 281 x 947	947 x 281 x 947	
Panel	Model Name	-	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN	

	AM090KN4DEH/EU	AM112KN4DEH/EU	AM128KN4DEH/EU	AM140KN4DEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	9.0	11.2	12.8	14.0
	10.0	12.5	13.8	16.0
	55	53	77	91
	55	53	77	91
	0.42	0.41	0.62	0.75
	0.42	0.41	0.62	0.75
	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	65 x 1	97 x 1	97 x 1	97 x 1
	22.00/18.50/16.00	25.50/21.00/17.50	29.50/24.00/19.00	31.50/26.50/21.00
	366.67/308.33/266.67	425.00/350.00/291.67	491.67/400.00/316.67	525.00/441.67/350.00
	9.52	9.52	9.52	9.52
	3/8	3/8	3/8	3/8
	15.88	15.88	15.88	15.88
	5/8	5/8	5/8	5/8
	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5
	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50
	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	40/36/32	40/36/32	42/38/33	44/40/35
	57	58	60	61
	21.0	24.0	24.0	24.0
	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN

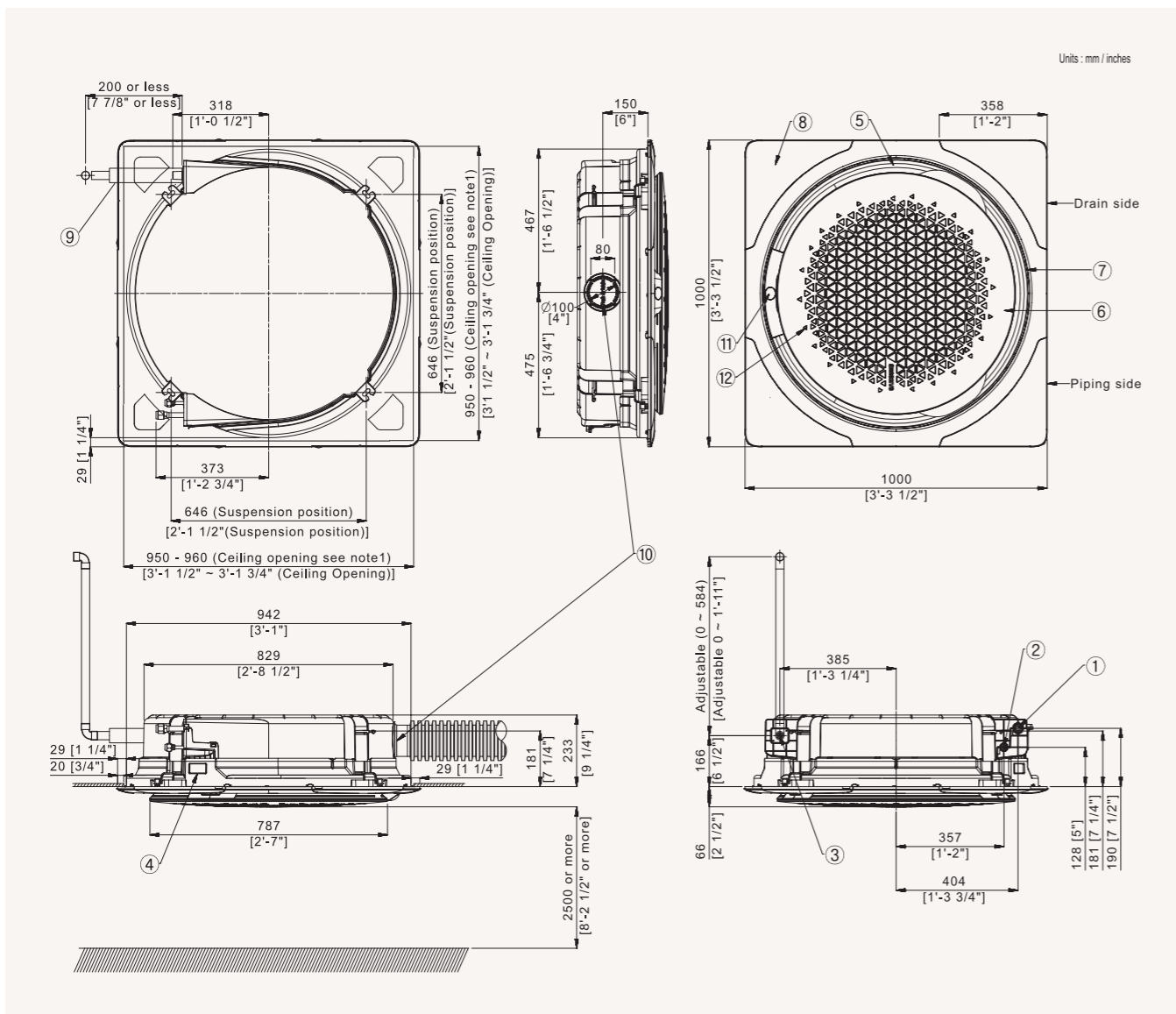
Accessories

					
Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit
AR-KH03E	MWR-SH00N	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN
					
External Thermostat	Panel (Mandatory)	Panel (Mandatory)	Panel (Mandatory)	Panel (Mandatory)	
MRW-TA	PC4NUDMAN	PC4NUNMAN	PC4NBDMAN	PC4NBNMAN	

Dimensional drawings

360 Cassette (square)

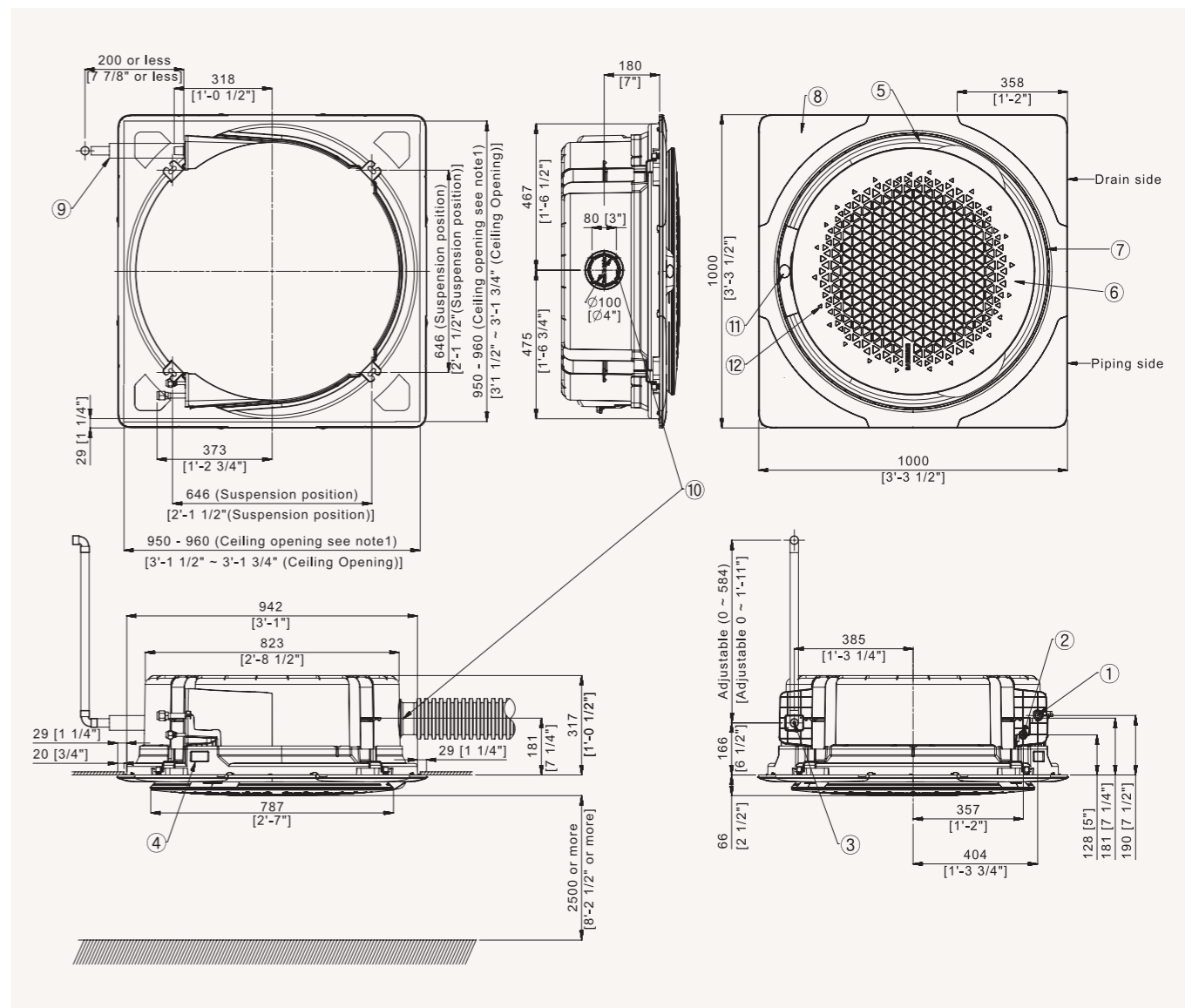
AM045KN4DEH/EU, AM056KN4DEH/EU, AM071KN4DEH/EU, AM090KN4DEH/EU



1. Make sure the spacing between the ceiling and the cassette is no more than 29 mm [1 1/4"].
Max ceiling opening: 960 mm [3'-1 3/4"]
2. When the conditions exceed 30 °C and RH 80 % in the ceiling or fresh air inducted into the ceiling, additional insulation is required (polythene foam, thickness 10 mm [3/8"] or more)
3. Open type panel model code: PC4NUDMAN

NO	Name
1	Refrigerant liquid pipe
2	Refrigerant gas pipe
3	Condensate drain
4	Power supply/communication wiring conduits
5	Air discharge opening
6	Air suction grille
7	Suction rim for booster fan
8	Corner decoration cover
9	Drain hose
10	Fresh air intake knock-out hole
11	Display window
12	Infrared receiver

AM112KN4DEH/EU, AM128KN4DEH/EU, AM140KN4DEH/EU



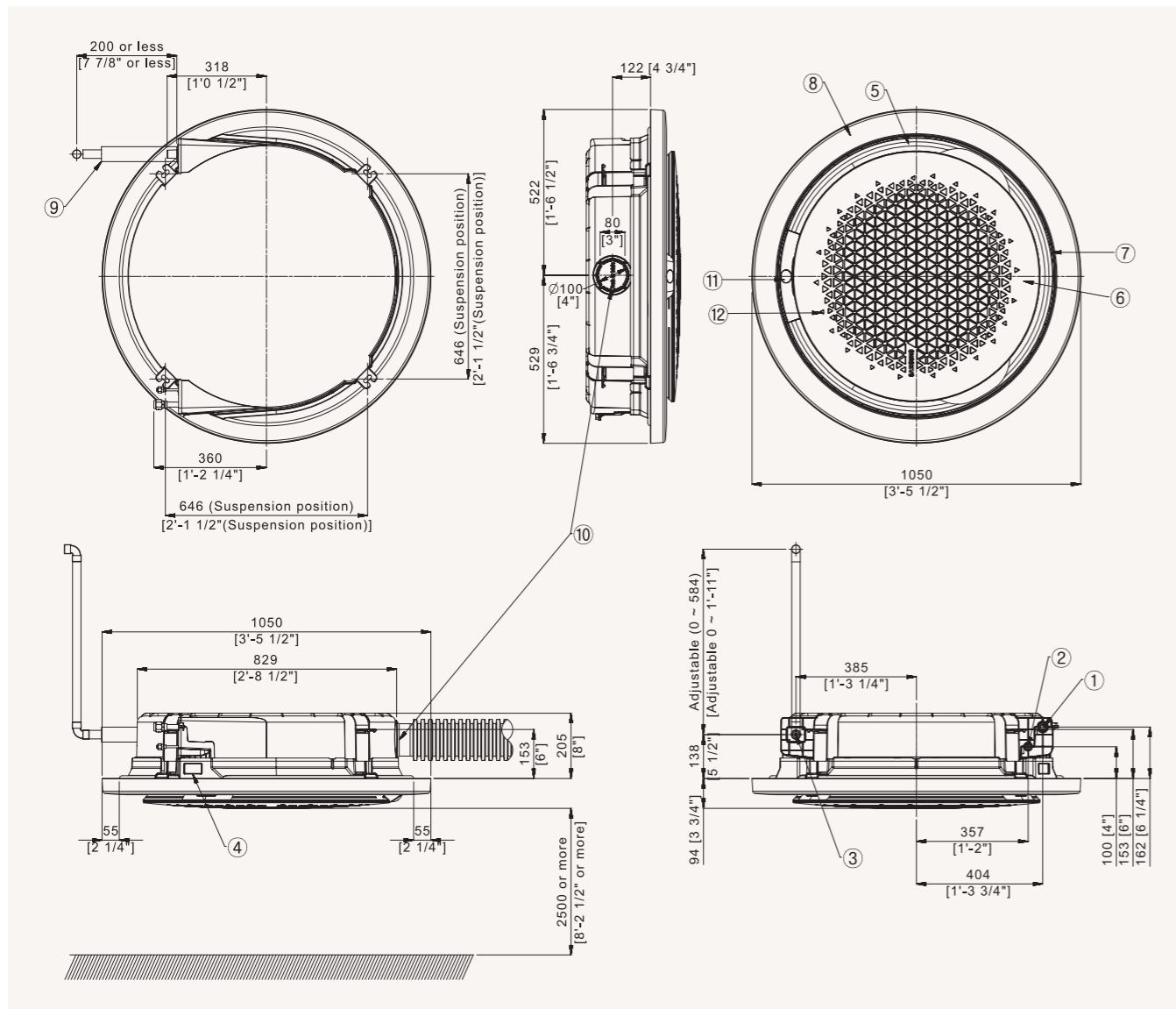
1. Make sure the spacing between the ceiling and the cassette is no more than 29 mm [1 1/4"].
Max ceiling opening: 960 mm [3'-1 3/4"]
2. When the conditions exceed 30 °C and RH 80 % in the ceiling or fresh air inducted into the ceiling, additional insulation is required (polythene foam, thickness 10 mm [3/8"] or more)
3. Open type panel model code: PC4NUDMAN

NO	Name
1	Refrigerant liquid pipe
2	Refrigerant gas pipe
3	Condensate drain
4	Power supply/communication wiring conduits
5	Air discharge opening
6	Air suction grille
7	Suction rim for booster fan
8	Corner decoration cover
9	Drain hose
10	Fresh air intake knock-out hole
11	Display window
12	Infrared receiver

Dimensional drawings

360 Cassette (circular)

AM045KN4DEH/EU, AM056KN4DEH/EU, AM071KN4DEH/EU, AM090KN4DEH/EU

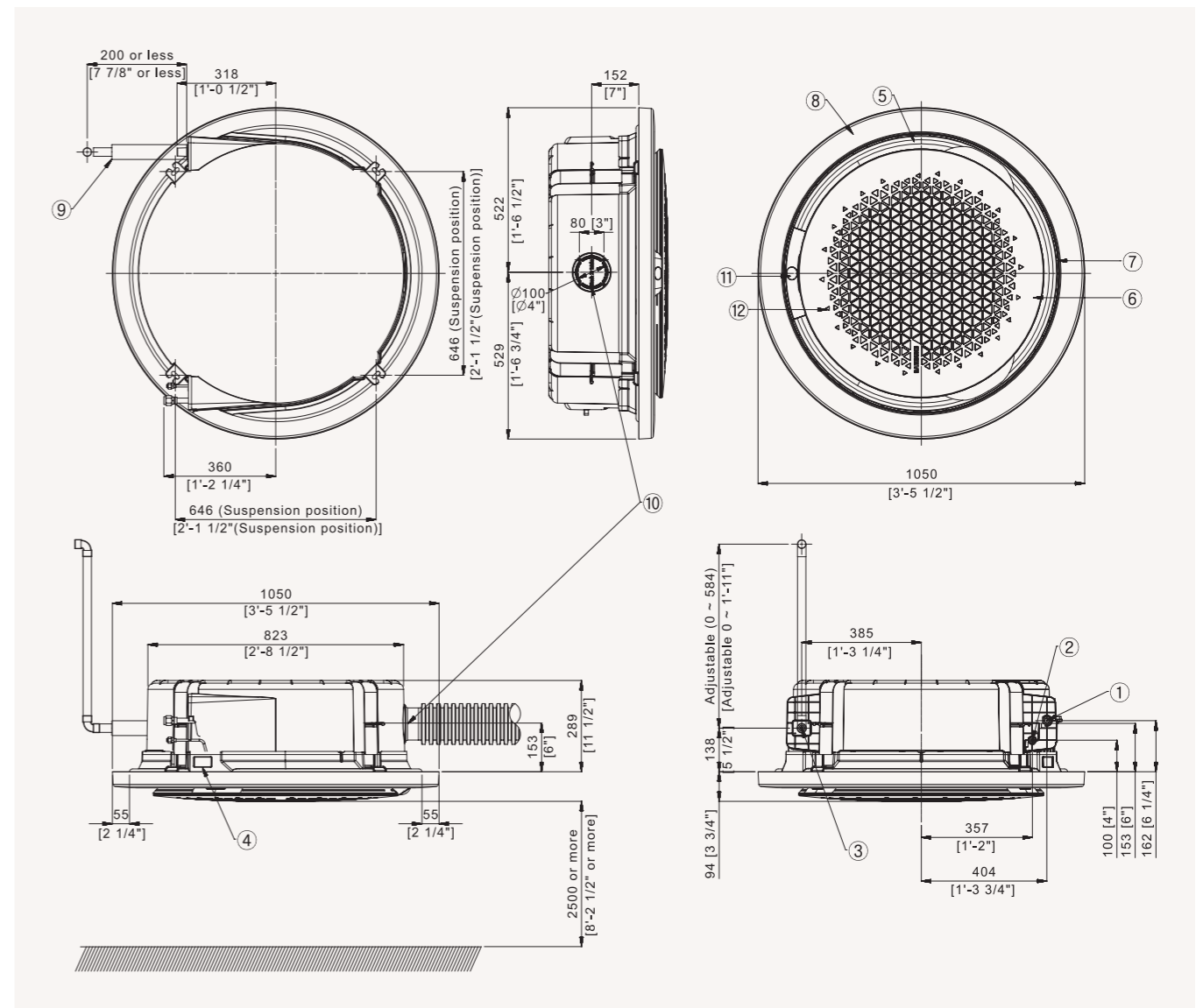


NO	Name
1	Refrigerant liquid pipe
2	Refrigerant gas pipe
3	Condensate drain
4	Power supply/communication wiring conduits
5	Air discharge opening
6	Air suction grille
7	Suction rim for booster fan
8	Corner decoration cover
9	Drain hose
10	Fresh air intake knock-out hole
11	Display window
12	Infrared receiver

Category	Inspection hole	
	Recessed installation	Exposed installation
	Integrated	Suspended
Square Panel	1 ea	-
Circle Panel	2 ea	-

1. Make sure the spacing between the ceiling and the cassette is no more than 10 mm [3/8"].
2. When the conditions exceed 30 °C and RH 80 % in the ceiling or fresh air inducted into the ceiling, additional insulation is required (polythene foam, thickness 10 mm [3/8"] or more)
3. Open type panel model code: PC4NUNMAN
4. The circular panel is available by default in the exposed installation.
5. Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table. (An inspection hole must be at least 450 mm x 450 mm in size.)
6. A suspended ceiling structure can substitute for the inspection holes.

AM112KN4DEH/EU, AM128KN4DEH/EU, AM140KN4DEH/EU



NO	Name
1	Refrigerant liquid pipe
2	Refrigerant gas pipe
3	Condensate drain
4	Power supply/communication wiring conduits
5	Air discharge opening
6	Air suction grille
7	Suction rim for booster fan
8	Corner decoration cover
9	Drain hose
10	Fresh air intake knock-out hole
11	Display window
12	Infrared receiver

Category	Inspection hole	
	Recessed installation	Exposed installation
	Integrated	Suspended
Square Panel	1 ea	-
Circle Panel	2 ea	-

1. Make sure the spacing between the ceiling and the cassette is no more than 10 mm [3/8"].
2. When the conditions exceed 30 °C and RH 80 % in the ceiling or fresh air inducted into the ceiling, additional insulation is required (polythene foam, thickness 10 mm [3/8"] or more)
3. Open type panel model code: PC4NUNMAN
4. The circular panel is available by default in the exposed installation.
5. Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table. (An inspection hole must be at least 450 mm x 450 mm in size.)
6. A suspended ceiling structure can substitute for the inspection holes.

Specifications

Wind-Free™ 4-Way Cassette

- Two-step cooling: Fast Cooling mode and Wind-Free™ Cooling mode.
- Four-way air supply via independently adjustable blades.
- Built-in condensation drain pump and humidity sensor.
- Direct drive fan powered by a BLDC motor.
- Compatible with Wi-Fi Kit controller.
- Motion Detect Sensor (optional).



Model Name				AM015NNNDEH/EU	AM022NNNDEH/EU	AM028NNNDEH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity	Cooling	kW	1.5	2.2	2.8
		Heating		1.7	2.5	3.2
Power	Power Input	Cooling	W	18	18	18
		Heating		18	18	18
	Current Input	Cooling	A	0.17	0.17	0.17
		Heating		0.17	0.17	0.17
Current	MCA	A	0.2	0.2	0.2	
	MFA		15	15	15	
Fan	Type	-		Turbo Fan	Turbo Fan	Turbo Fan
	Number of Fans	-		1	1	1
	Airflow Rate	H/M/L	m ³ /min		8.2/7.0/6.3	9.0/7.7/6.5
		l/s		137/117/105	150/128/108	167/142/125
Fan Motor	Model	-		BLDC Motor	BLDC Motor	BLDC Motor
	Output x n	W		65 x 1	65 x 1	65 x 1
Piping Connections	Liquid Pipe	ø, mm		6.35	6.35	6.35
		ø, inch		1/4	1/4	1/4
	Gas Pipe	ø, mm		12.7	12.7	12.7
		ø, inch		1/2	1/2	1/2
Drain Pipe	ø, mm		VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
Wiring Connections	Communication	Min.	mm ²	0.75	0.75	0.75
		Remark	-		F1, F2	F1, F2
Refrigerant	Type	-		R410A	R410A	R410A
	Electronic Expansion Valve	-		EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound ²	Sound Pressure	H/M/L	dB(A)	30.0/28.0/23.0	32.0/29.0/25.0	33.0/30.0/26.0
		Cooling		46	47	50
Dimensions	Net Weight	kg		12.0	12.0	12.0
	Net Dimensions (W × H × D)	mm		575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
Panel	Model Name	-		PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
Drain Pump	Drain Pump	-		INCLUDED	INCLUDED	INCLUDED
	Max. Lifting Height/Displacement	mm / litres/h		750/24	750/24	750/24

	AM036NNNDEH/EU	AM045NNNDEH/EU	AM056NNNDEH/EU	AM060NNNDEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	3.6	4.5	5.6	6.0
	4.0	5.0	6.3	6.8
	20	23	28	31
	20	23	28	31
	0.19	0.22	0.27	0.30
	0.19	0.22	0.27	0.30
	0.2	0.3	0.4	0.4
	15	15	15	15
	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	1	1	1	1
	10.5/9.5/8.0	11.5/10.2/9.0	13.0/11.0/9.5	13.5/12.0/10.2
	175/158/133	192/170/150	217/183/158	225/200/170
	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
	65 x 1	65 x 1	65 x 1	65 x 1
	6.35	6.35	6.35	6.35
	1/4	1/4	1/4	1/4
	12.7	12.7	12.7	12.7
	1/2	1/2	1/2	1/2
	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	0.75	0.75	0.75	0.75
	F1, F2	F1, F2	F1, F2	F1, F2
	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	34.0/30.0/26.0	36.0/34.0/32.0	39.0/36.0/33.0	40.0/38.0/35.0
	51	53	56	57
	12.0	12.0	12.0	12.0
	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575
	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN	PC4SUFMAN
	INCLUDED	INCLUDED	INCLUDED	INCLUDED
	750/24	750/24	750/24	750/24

Accessories



Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Panel (Required)
AR-EH03E	MWR-SH00N	MWR-SH11N	MWR-WG00*N	MWR-WE13N	MIM-H04EN	PC4SUFMAN

Specifications

Wind-Free™ 4-Way Cassette

- Two-step cooling: Fast Cooling mode and Wind-Free™ Cooling mode.
- Four-way air supply via independently adjustable blades.
- Built-in condensation drain pump and humidity sensor.
- Direct drive fan powered by a BLDC motor.
- Compatible with Wi-Fi Kit controller.
- Motion Detect Sensor (optional).



Model Name			AM045NN4DEH/EU	AM056NN4DEH/EU	AM071NN4DEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Mode			HP/HR	HP/HR	HP/HR	
Performance	Capacity	Cooling	kW	4.5	5.6	7.1
		Heating		5.0	6.3	8.0
Power	Power Input	Cooling	W	32	32	45
		Heating		32	32	45
	Current Input	Cooling	A	0.22	0.22	0.31
		Heating		0.22	0.22	0.31
Current	MCA	A	0.3	0.3	0.4	
	MFA		15	15	15	
Fan	Type		Turbo Fan	Turbo Fan	Turbo Fan	
	Number of Fans		1	1	1	
	Airflow Rate H/M/L	m³/min	14.5/13.5/12.5	15.0/14.0/13.0	17.0/15.5/14.5	
Fan Motor	Model		BLDC Motor	BLDC Motor	BLDC Motor	
	Output x n	W	65 x 1	65 x 1	65 x 1	
	Liquid Pipe	ø, mm	6.35	6.35	9.52	
Piping Connections	Gas Pipe	ø, inch	1/4	1/4	3/8	
		ø, mm	12.7	12.7	15.88	
	Drain Pipe	ø, inch	1/2	1/2	5/8	
		ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
Wiring Connections	Communication	Minimum	mm²	0.75	0.75	0.75
	Remark			F1, F2	F1, F2	F1, F2
Refrigerant	Type		R410A	R410A	R410A	
	Electronic Expansion Valve		EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	H/M/L	dB(A)	33.0/32.0/30.0	33.0/32.0/30.0	35.0/34.0/33.0
	Sound Power	Cooling		49	50	54
Dimensions	Net Weight		kg	15.5	15.5	15.5
	Net Dimensions (W x H x D)		mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840
Panel	Model Name		PC4NUFMAN	PC4NUFMAN	PC4NUFMAN	
Drain Pump	Drain Pump		INCLUDED	INCLUDED	INCLUDED	
	Max. Lifting Height/Displacement		mm / litres/h	750/24	750/24	750/24

	AM090NN4DEH/EU	AM112NN4DEH/EU	AM128NN4DEH/EU	AM140NN4DEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	HP/HR	HP/HR	HP/HR	HP/HR
	9.0	11.2	12.8	14.0
	10.0	12.5	13.8	16.0
	62	78	73	89
	62	78	73	89
	0.43	0.55	0.51	0.62
	0.43	0.55	0.51	0.62
	0.6	0.9	0.8	0.9
	15	15	15	15
	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	1	1	1	1
	19.5/18.0/16.5	26.0/24.0/22.0	28.0/26.0/23.0	30.0/28.0/26.0
	325/300/275	433/400/367	467/433/383	500/467/433
	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
	65 x 1	65 x 1	97 x 1	97 x 1
	9.52	9.52	9.52	9.52
	3/8	3/8	3/8	3/8
	15.88	15.88	15.88	15.88
	5/8	5/8	5/8	5/8
	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
	0.75	0.75	0.75	0.75
	F1, F2	F1, F2	F1, F2	F1, F2
	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	39.0/36.0/33.0	40.0/38.0/35.0	42.0/40.0/35.0	44.0/41.0/35.0
	57	57	58	60
	15.5	17.0	19.0	19.0
	840 x 204 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN	PC4NUFMAN
	INCLUDED	INCLUDED	INCLUDED	INCLUDED
	750/24	750/24	750/24	750/24

Accessories

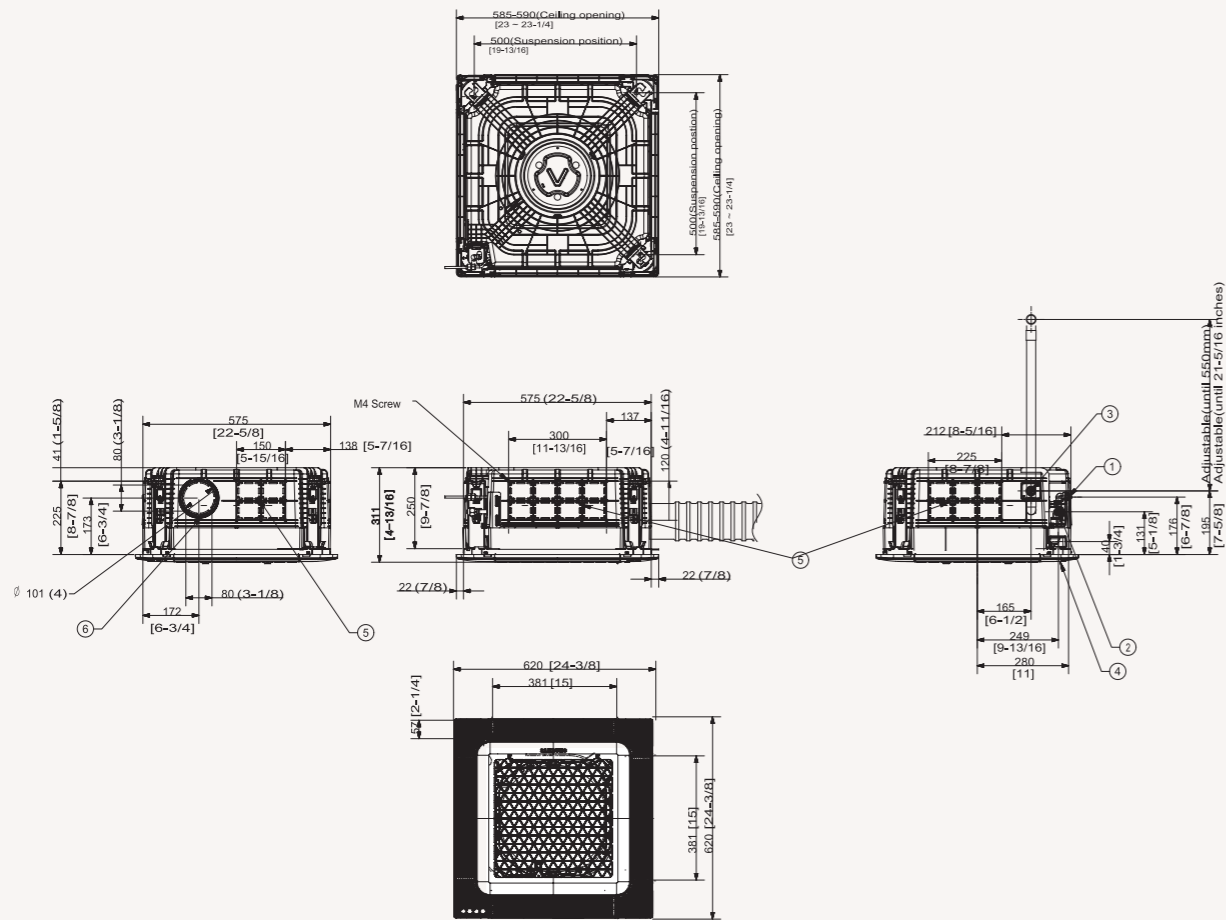


Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat	Panel (Mandatory)
AR-EH03E	MWR-SH00N	MWR-SH11N	MWR-WG00*N	MWR-WE13N	MIM-H04EN	MRW-TA	PC4NUFMAN

Technical Drawings

Wind-Free™ 4-Way Cassette

AM***NNNDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	Use M4 Screw
5	Fresh air intake knock-out hole	ø10 [4], use M4 Screw

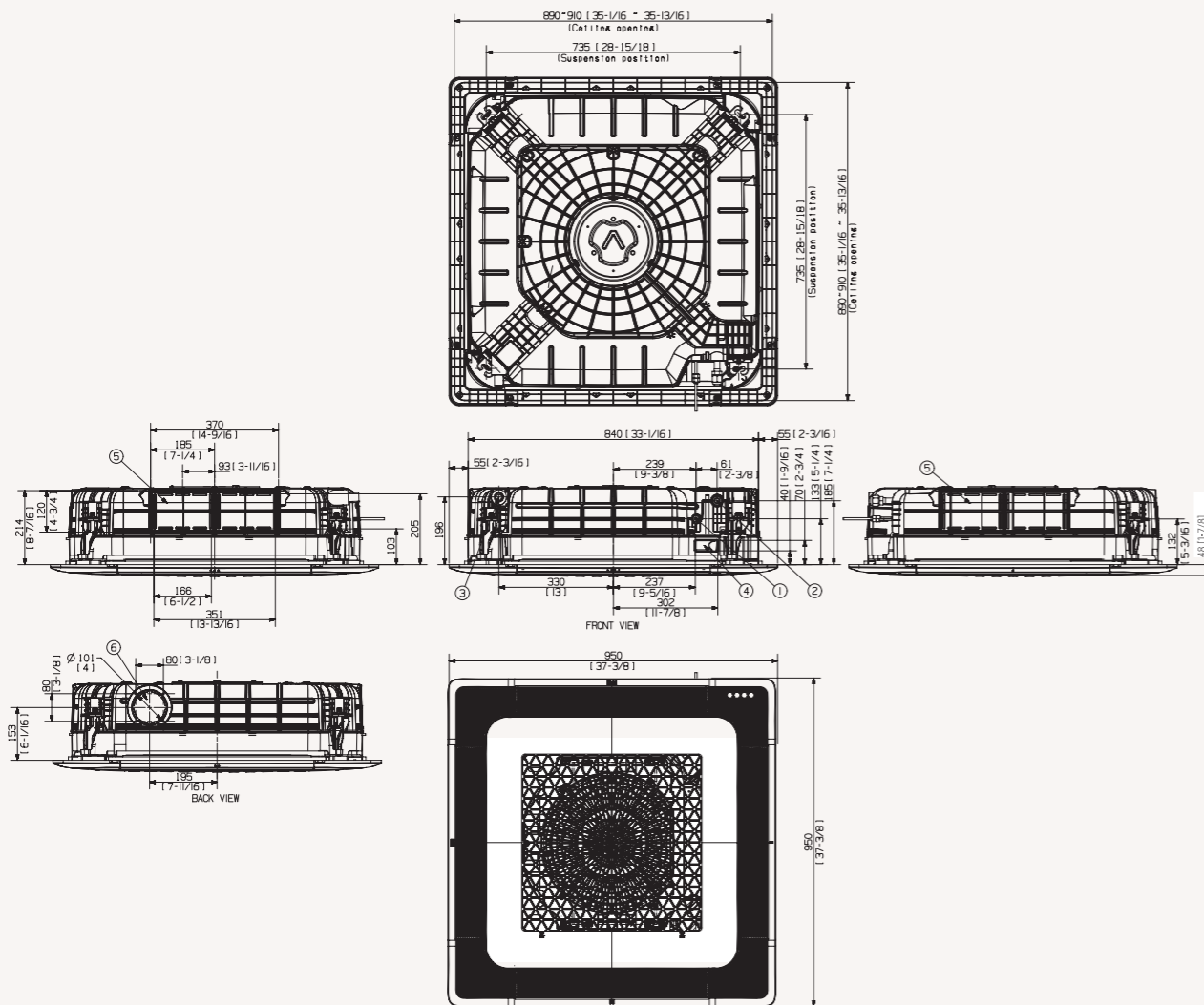
Note: As for suspension bolt, please use M8-M10. (Procured at local site)



Technical Drawings

Wind-Free™ 4-Way Cassette

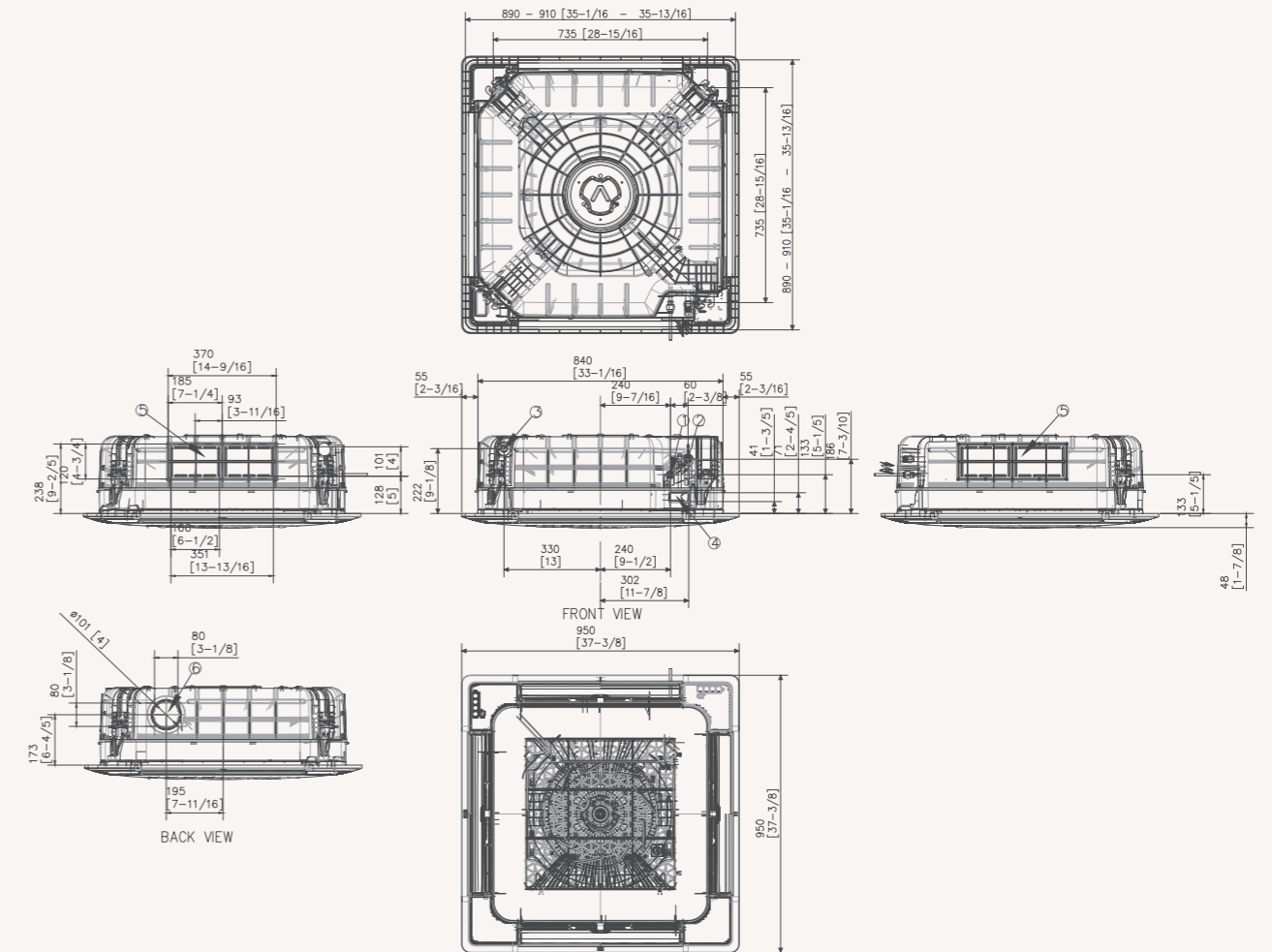
AM045/056/071/090NN4DEH/EU



NO	Name	Description			
		4.5 kW	5.6 kW	7.1 kW	9.0 kW
1	Liquid pipe connection	ø6.35 (1/4)		ø9.52 (3/8)	
2	Gas pipe connection	ø12.7 (1/2)		ø15.88 (5/8)	
3	Drain pipe connection		VP25 (OD 32, ID 25)		
4	Power supply/communication wiring conduits				
5	Fresh air intake knock-out hole		ø10 [4], use M4 Screw		

Note: As for suspension bolt, please use M8-M10. (Procured at local site)

AM112NN4DEH/EU



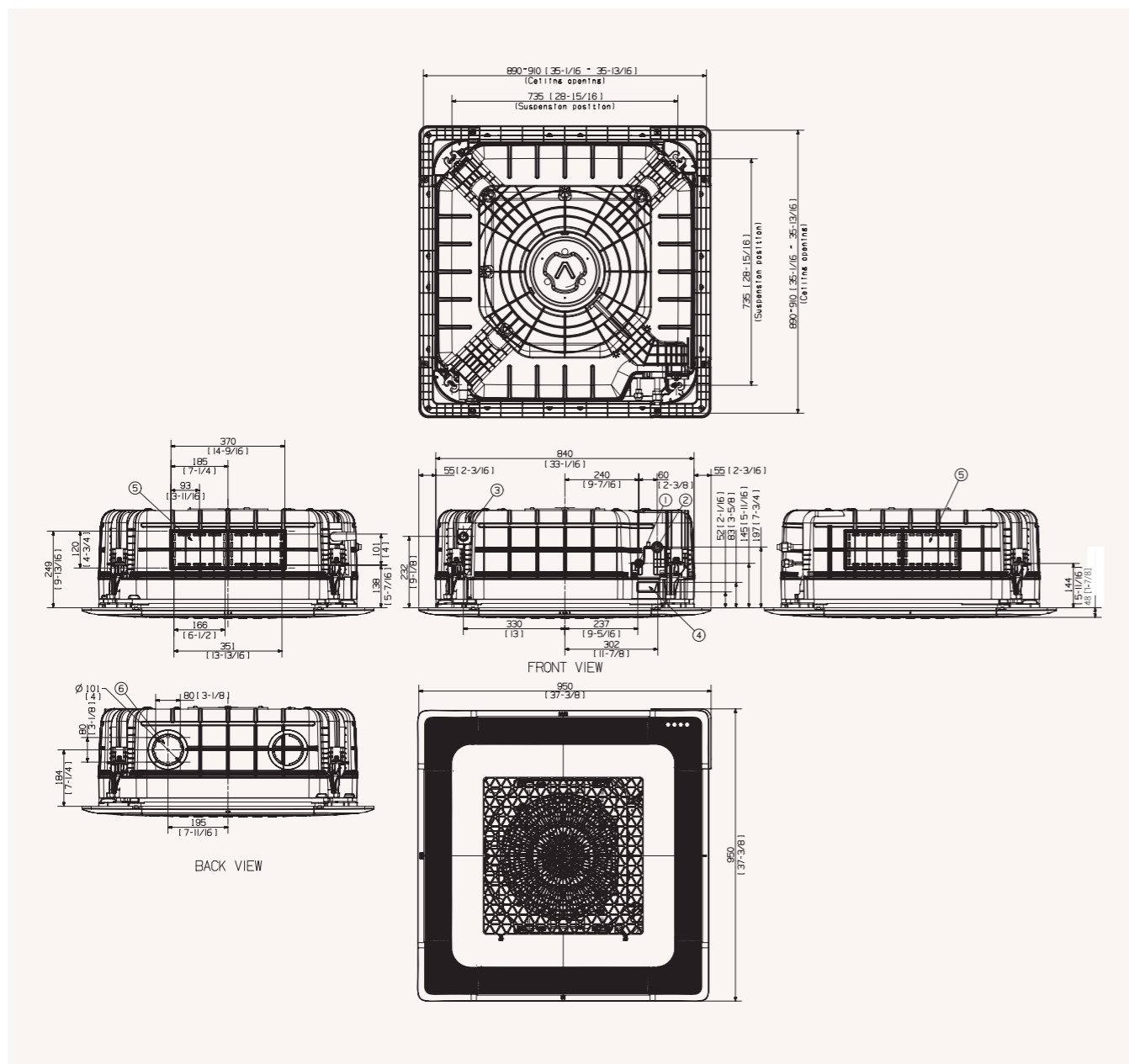
NO	Name	Description	
1	Liquid pipe connection	ø9.52 (3/8)	
2	Gas pipe connection	ø15.88 (5/8)	
3	Drain pipe connection	VP25 (OD 32, ID 25)	
4	Power supply/communication wiring conduits		
5	Fresh air intake knock-out hole	ø10 [4], use M4 Screw	

Note: As for suspension bolt, please use M8-M10. (Procured at local site)

Technical Drawings

Wind-Free™ 4-Way Cassette

AM128/140NN4DEH/EU



NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø15.88 (5/8)
3	Drain pipe connection	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	
5	Fresh air intake knock-out hole	ø10 [4], use M4 Screw

Note: As for suspension bolt, please use M8-M10. (Procured at local site)



Specifications

Wind-Free™ 1-Way Cassette

- Two-step cooling: Fast Cooling mode and Wind-Free™ Cooling mode.
- One-way air supply by means of a 100 mm wide blade.
- Built-in condensation drain pump and humidity sensor.
- Cross-flow fan direct driven by a BLDC motor.
- Compatible with Wi-Fi Kit controller.



Model			AM017NN1PEH/EU	AM022NN1PEH/EU	AM022NN1DEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity	Cooling	kW	1.7	2.2	2.2
		Heating		1.9	2.5	2.5
Power	Power Input	Cooling	W	24	25	40
		Heating		24	25	40
	Current Input	Cooling	A	0.14	0.15	0.20
		Heating		0.14	0.15	0.20
	Current	MCA	A	0.18	0.19	0.25
		MFA		15	15	15
Fan	Type	-	Crossflow Fan	Crossflow Fan	Crossflow Fan	
	Number of Fans	-	1	1	1	
	Airflow Rate	H/M/L	m ³ /min	4.80/4.30/4.10	5.10/4.60/4.30	6.00/5.00/4.00
		l/s	80.00/71.67/68.33	85.00/76.67/71.67	100.00/83.33/66.67	
Fan Motor	Model	-	BLDC Motor	BLDC Motor	AC Motor	
	Output x n	W	27 x 1	27 x 1	17 x 1	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.7	12.7	12.7	
		ø, inch	1/2	1/2	1/2	
Drain Pipe	ø, mm	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)		
Wiring Connections	Connection with Indoor	Minimum	mm ²	0.75	0.75	0.75
	Remark	-		F1, F2	F1, F2	F1, F2
Refrigerant	Type	-	R410A	R410A	R410A	
	Electronic Expansion Valve	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ¹	Sound Pressure	(H/M/L)	dB(A)	28/26/24	29/26/24	29/26/24
	Sound Power	Cooling		46	47	47
Dimension	Net Weight		kg	8.0	8.0	10.0
	Net Dimensions (W x H x D)		mm	740 x 135 x 360	740 x 135 x 360	970 x 135 x 410
Panel	Model Name	-	PC1MWFMAN	PC1MWFMAN	PC1NWFMAN	
Drain pump		-	INCLUDED	INCLUDED	INCLUDED	
	Max. Lifting Height/Displacement		mm / litres/h	750/24	750/24	750/24

Model			AM028NN1DEH/EU	AM036NN1DEH/EU	AM056NN1DEH/EU	AM071NN1DEH/EU	
		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity	Cooling	kW	2.8	3.6	5.6	7.1
		Heating		3.2	4.0	6.3	8.0
Power	Power Input	Cooling	W	45	50	55	80
		Heating		45	50	55	80
	Current Input	Cooling	A	0.23	0.25	0.28	0.4
		Heating		0.23	0.25	0.28	0.4
	Current	MCA	A	0.29	0.31	0.35	0.50
		MFA		15	15	15	15
Fan	Type	-	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan	
	Number of Fans	-	1	1	1	1	
	Airflow Rate	H/M/L	m ³ /min	7.00/6.00/5.00	8.00/7.00/6.00	16.00/14.00/12.50	17.00/15.50/14.00
		l/s	116.67/100.00/83.33	133.33/116.67/100.00	266.67/233.33/208.33	283.33/258.33/233.33	
Fan Motor	Model	-	AC Motor	AC Motor	BLDC Motor	BLDC Motor	
	Output x n	W	17 x 1	17 x 1	54 x 1	54 x 1	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	9.52	
		ø, inch	1/4	1/4	1/4	3/8	
	Gas Pipe	ø, mm	12.7	12.7	12.7	15.88	
		ø, inch	1/2	1/2	1/2	5/8	
Drain Pipe	ø, mm	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)		
Wiring Connections	Connection with Indoor	Minimum	mm ²	0.75	0.75	0.75	
	Remark	-		F1, F2	F1, F2	F1, F2	
Refrigerant	Type	-	R410A	R410A	R410A	R410A	
	Electronic Expansion Valve	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ¹	Sound Pressure	(H/M/L)	dB(A)	32/28/24	37/33/30	41/38/35	42/39/36
	Sound Power	Cooling		50	55	59	60
Dimension	Net Weight		kg	10.0	10.0	13.5	
	Net Dimensions (W x H x D)		mm	970 x 135 x 410	970 x 135 x 410	1,200 x 138 x 450	1,200 x 138 x 450
Panel	Model Name	-	PC1NWFMAN	PC1NWFMAN	PC1BWFMAN	PC1BWFMAN	
Drain pump		-	INCLUDED	INCLUDED	INCLUDED	INCLUDED	
	Max. Lifting Height/Displacement		mm / litres/h	750/24	750/24	750/24	750/24

Accessories

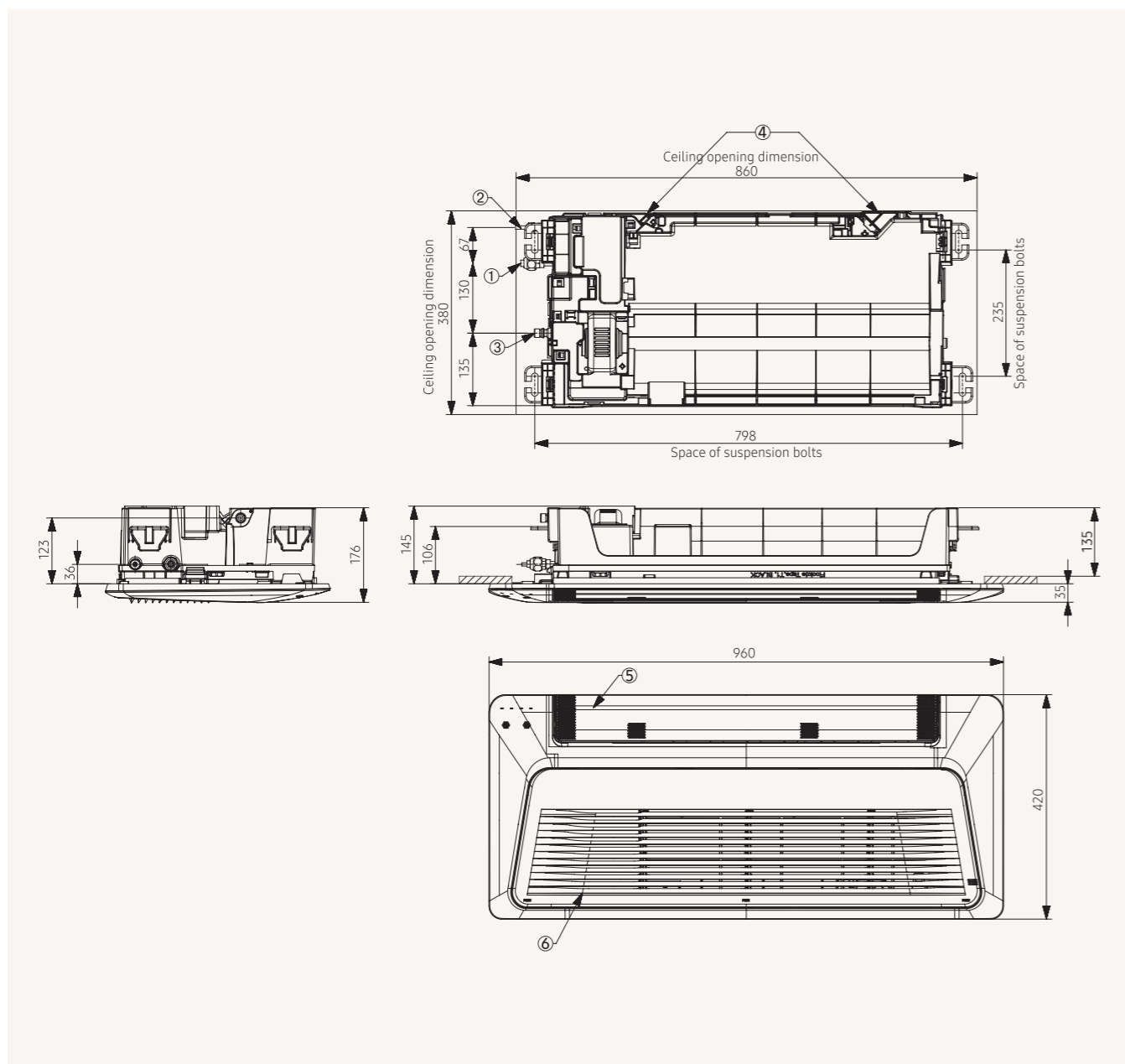


Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Panel	External Thermostat
AR-EH03E	MWR-SH00N	MWR-SH11N	MWR-WG00*N	MWR-WE13N	MIM-H04EN	PC1*WFMAN	MRW-TA

Dimensional drawings

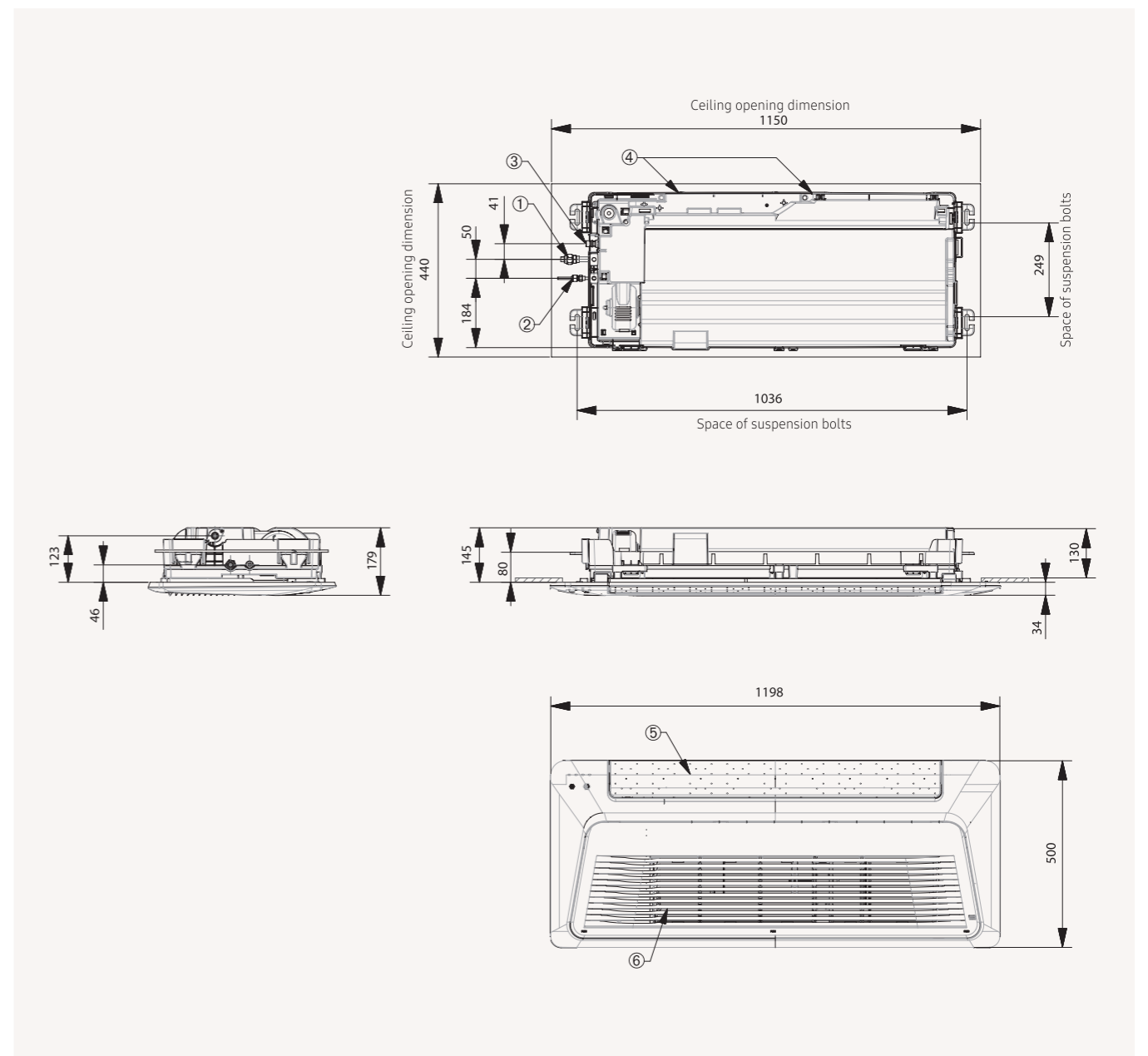
Wind-Free™ 1-Way Cassette

AM017/022NN1PEH/**AM017/022NN1PEH/**



NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø6.35 (1/4)
3	Drain pipe connection	VP20 (OD 26, ID 20)
4	Power supply/communication wiring conduits	
5	Fresh air intake knock-out hole	

AM022/028/036NN1DEH/**

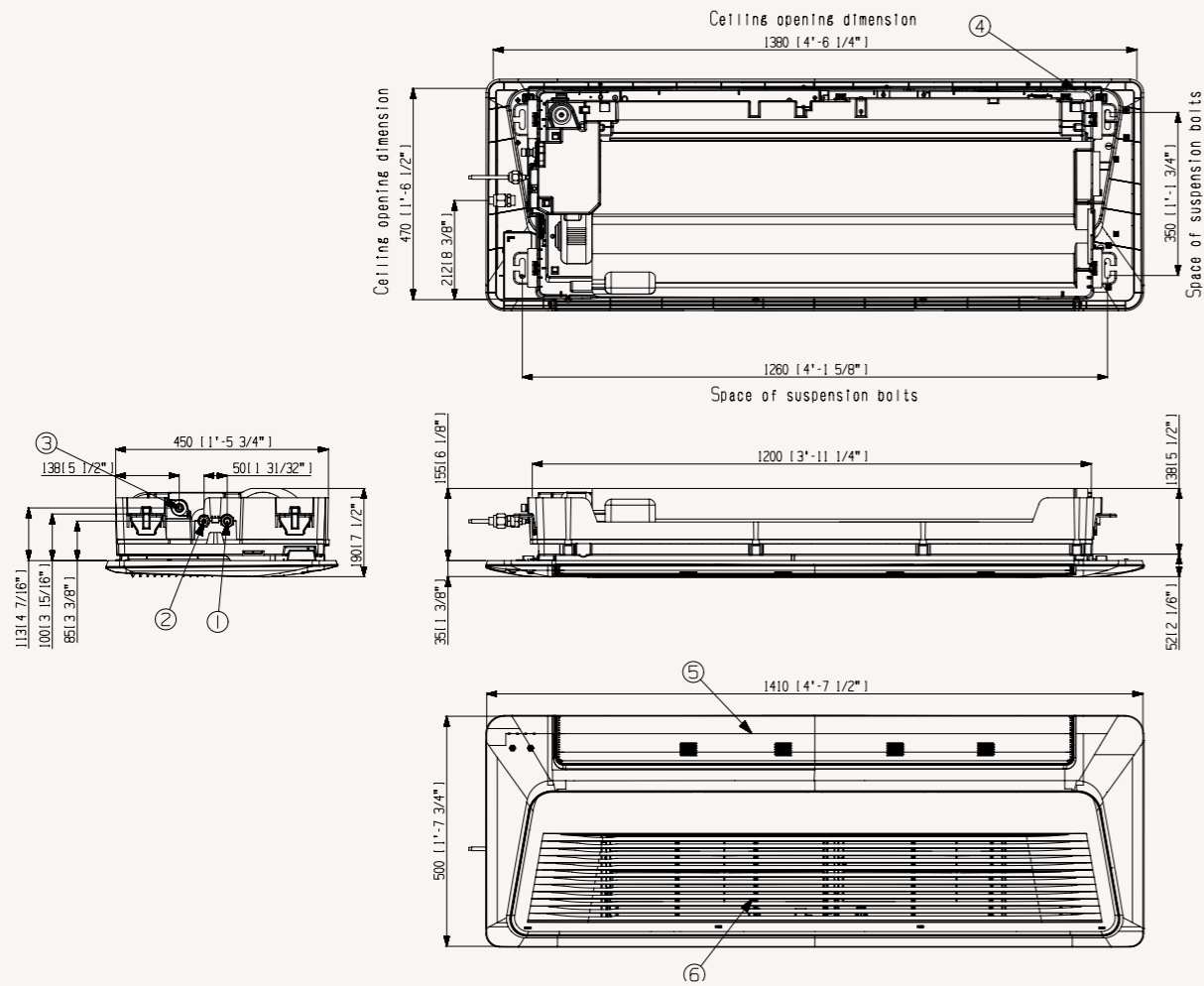


NO	Name	Description
1	Liquid pipe connection	ø12.70 (1/2)
2	Gas pipe connection	ø6.35 (1/4)
3	Drain pipe connection	VP20 (OD 26, ID 20)
4	Power supply/communication wiring conduits	
5	Fresh air intake knock-out hole	

Dimensional drawings

Wind-Free™ 1-Way Cassette

AM056/071NN1DEH/**



NO	Name	Description	
		5.2 kW	7.1 kW
1	Gas pipe connection	ø12.70 (1/2)	ø15.88 (5/8)
2	Liquid pipe connection	ø6.35 (1/4)	ø9.52 (3/8)
3	Drain hose connection	V25 (OD 32, ID 25)	
4	Power supply/communication wiring conduits		
5	Air outlet louvre		
6	Air inlet grille		

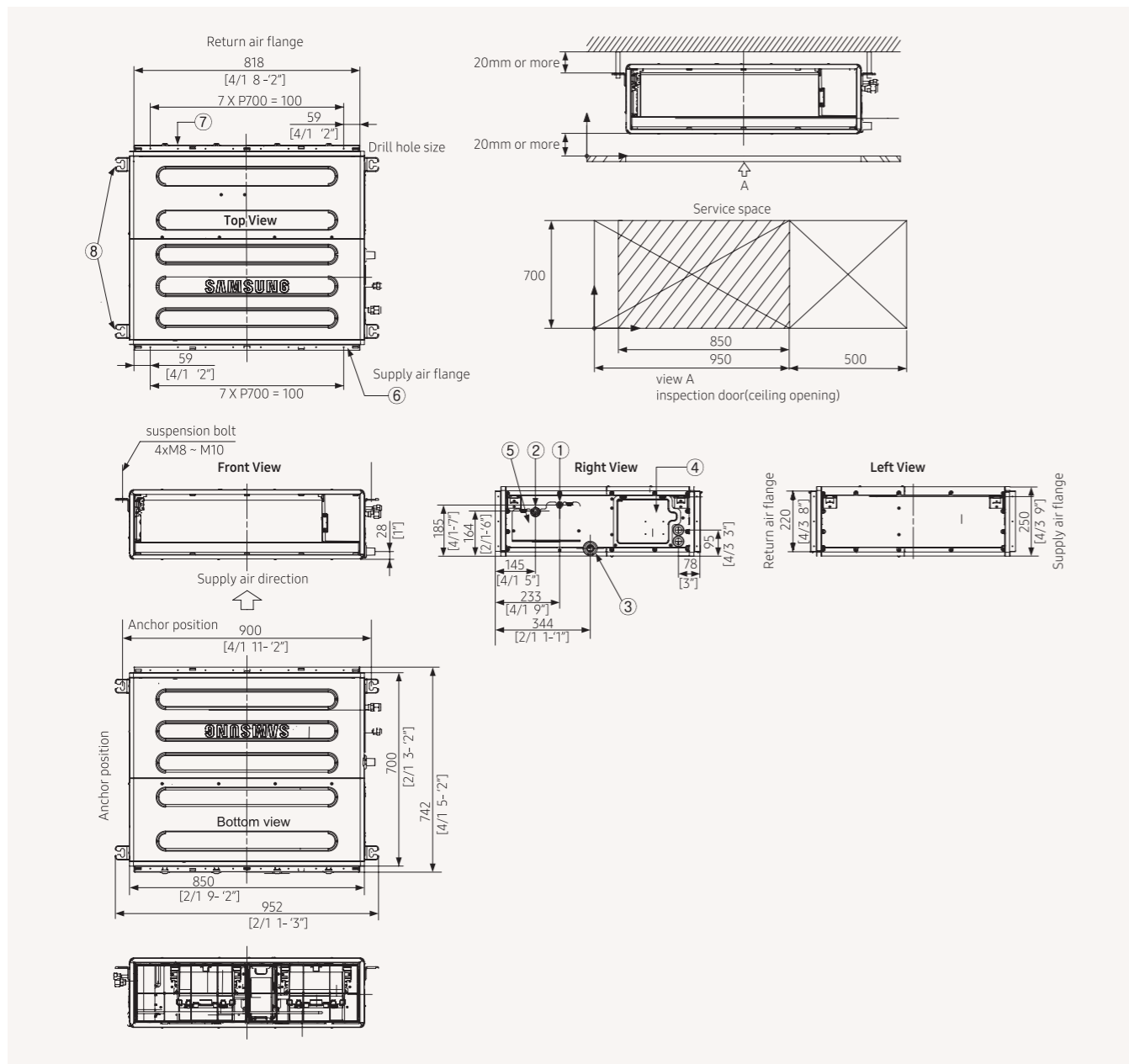




Technical Drawings

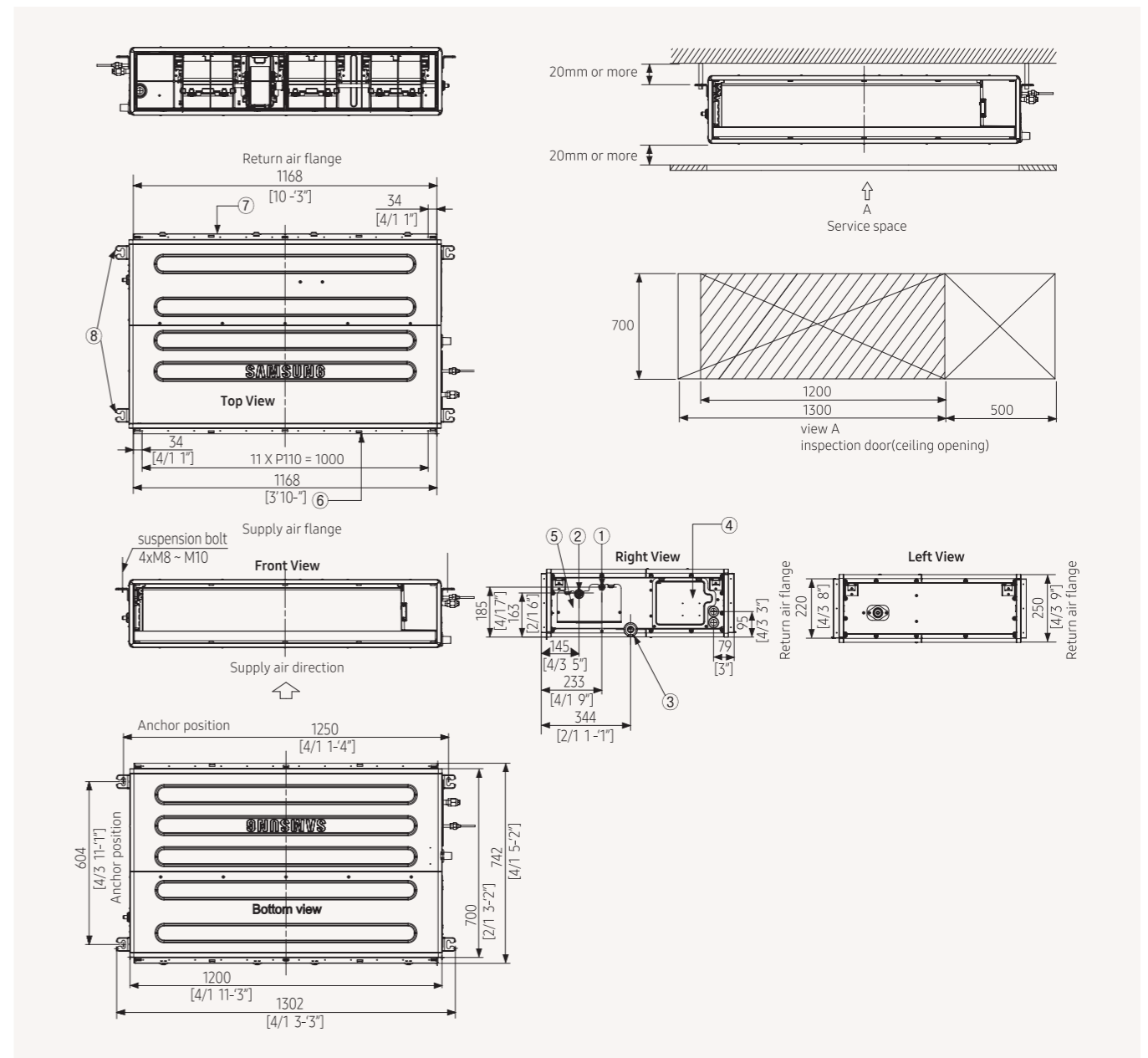
Duct S

AM036HNMPKH/EU, AM045HNMPKH/EU, AM056HNMPKH/EU, AM071HNMPKH/EU



NO	Name	Description
1	Refrigerant liquid pipe	ø6.35 [1/4] Flare
2	Refrigerant gas pipe	ø12.70 [1/2] Flare
3	Condensate drain	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	
5	Refrigerant pipe conduits	
6	Supply air flange	
7	Return air flange	
8	Hook	

AM090HNMPKH/EU

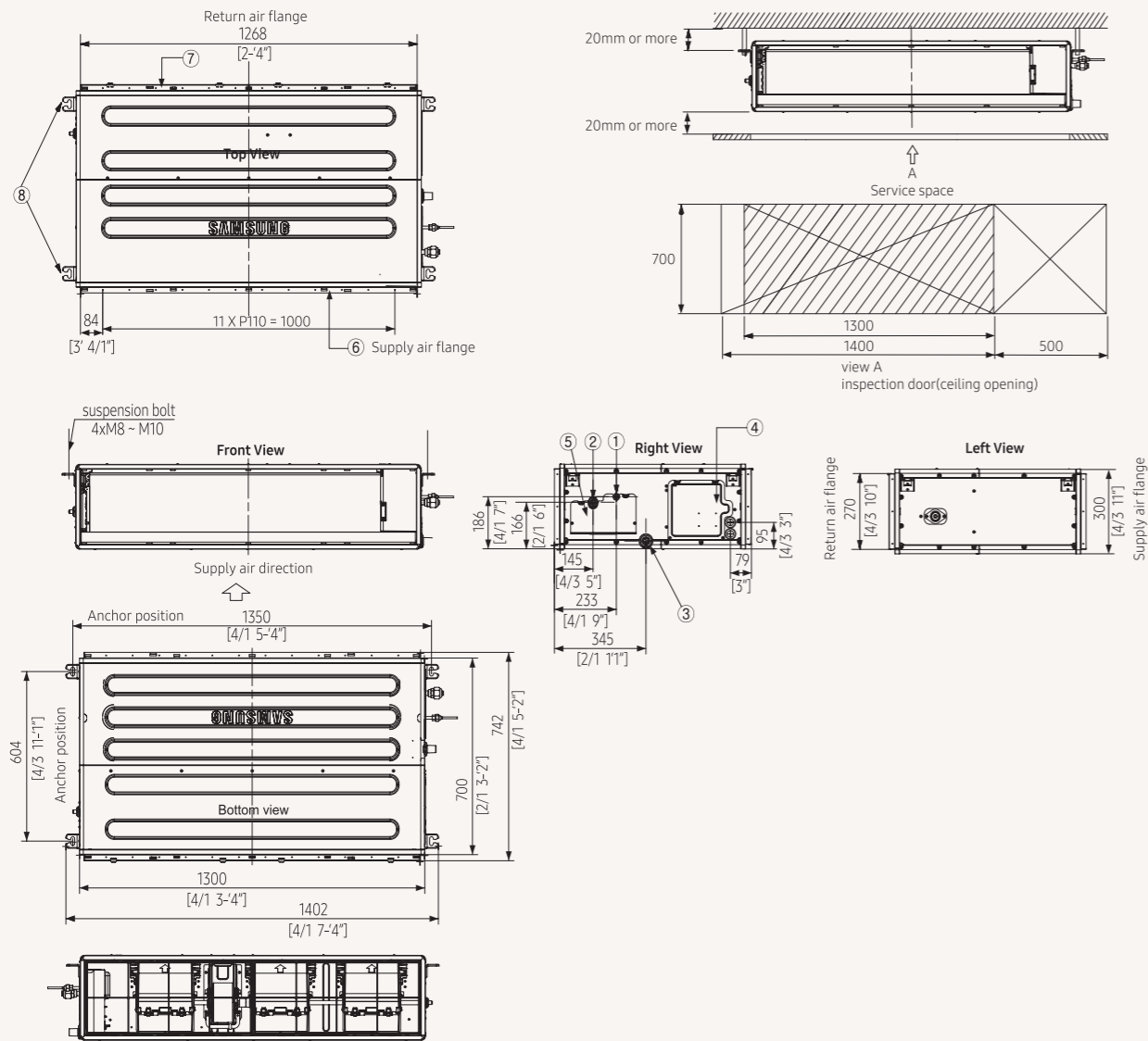


NO	Name	Description
1	Refrigerant liquid pipe	ø9.52 [3/8] Flare connection
2	Refrigerant gas pipe	ø15.88 [5/8] Flare connection
3	Condensate drain	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	
5	Refrigerant pipe conduits	
6	Supply air flange	
7	Return air flange	
8	Hook	

Technical Drawings

Duct S

AM112HNMPKH/EU, AM128HNMPKH/EU, AM140HNMPKH/EU, AM112HNHPKH/EU, AM128HNHPKH/EU, AM140HNHPKH/EU



NO	Name	Description
1	Refrigerant liquid pipe	ø9.52 [3/8] Flare connection
2	Refrigerant gas pipe	ø15.88 [5/8] Flare connection
3	Condensate drain	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	
5	Refrigerant pipe conduits	
6	Supply air flange	
7	Return air flange	
8	Hook	



Specifications

LSP Slim Duct (drain pump excluded)

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with one Sirocco fan direct driven by a single motor.
- Long-life washable HD 40 permanent filter is included.
- Auto Restart function.
- Optional condensate drain pump.



Model				AM017FNLDEH/EU	AM022FNLDEH/EU	AM028FNLDEH/EU	AM036FNLDEH/EU	
Power Supply		Φ, #, V, Hz		10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	1.7	2.2	2.8	3.6	
		Heating		1.9	2.5	3.2	4	
Power	Power Input (Nominal)	Cooling	W	55	55	60	65	
		Heating		55	55	60	65	
	Current Input (Nominal)	Cooling	A	0.30	0.30	0.32	0.33	
		Heating		0.3	0.3	0.32	0.33	
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	
		Number of fans	-	1	1	1	1	
	Airflow Rate		m ³ /min	5.5/4.3/3.2	7.0/6.1/5.3	7.5/6.6/5.6	7.5/6.6/5.6	
			H/M/L (UL)	l/s	91.67/71.67/53.33	116.67/101.67/88.33	125.00/110.00/93.33	125.00/110.00/93.33
	External Static Pressure	Min/Std/Max		mmAq	0.00/1.00/3.00	0.00/1.00/3.00	0.00/1.00/3.00	0.00/1.00/3.00
				Pa	0.00/9.81/29.42	0.00/9.81/29.42	0.00/9.81/29.42	0.00/9.81/29.42
			WG	0.000/0.039/0.118	0.000/0.039/0.118	0.000/0.039/0.118	0.000/0.039/0.118	
Piping Connections	Liquid Pipe		ø, mm	6.35	6.35	6.35	6.35	
			ø, inch	1/4	1/4	1/4	1/4	
	Gas Pipe		ø, mm	12.70	12.70	12.70	12.70	
			ø, inch	1/2	1/2	1/2	1/2	
	Drain Pipe		ø, 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	Below 20 m/over 20 m	mm ²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	
	Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type		-	R410A	R410A	R410A	R410A	
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	23/22/20	26/24/21	28/26/23	32/30/27	
Dimensions	Net Weight		kg	19.0	19.0	19.0	19.5	
	Net Dimensions (W x H x D)		mm	700 x 199 x 600	700 x 199 x 600	700 x 199 x 600	700 x 199 x 600	
Additional Accessories	Drain Pump	Drain Pump	-	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	
		Max. Lifting Height/ Displacement	mm / litres/h	750/24	750/24	750/24	750/24	
	Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	

	AM045FNLDEH/EU	AM056FNLDEH/EU	AM071FNLDEH/EU	AM090FNLDEH/EU	AM112FNLDEH/EU	AM128FNLDEH/EU	AM140FNLDEH/EU
	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz	10, 2, 220~240 V, 50 Hz
	4.5	5.6	7.1	9	11.2	12.8	14
	5	6.3	8	10	12.5	13.8	16
	90	95	120	170	170	200	220
	90	95	120	170	170	200	220
	0.52	0.53	0.60	0.96	0.96	1.28	1.43
	0.52	0.53	0.6	0.96	0.96	1.28	1.43
	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	1	1	1	1	1	1	1
	11.0/9.6/8.3	12.0/10.5/9.0	16.5/15.0/13.5	29.0/27.0/25.0	31.2/29.0/27.0	34.0/32.0/30.0	36.0/34.0/32.0
	183.33/160.00/138.33	200.00/175.00/150.00	275.00/250.00/225.00	483.33/450.00/416.67	520.00/483.33/450.00	566.67/533.33/500.00	600.00/566.67/533.33
	0.00/2.00/4.00	0.00/2.00/4.00	0.00/2.00/4.00	0.00/3.00/6.00	0.00/3.00/6.00	0.00/3.00/6.00	0.00/3.00/6.00
	0.00/19.61/39.23	0.00/19.61/39.23	0.00/19.61/39.23	0.00/29.42/58.84	0.00/29.42/58.84	0.00/29.42/58.84	0.00/29.42/58.84
	0.000/0.079/0.157	0.000/0.079/0.157	0.000/0.079/0.157	0.000/0.118/0.236	0.000/0.118/0.236	0.000/0.118/0.236	0.000/0.118/0.236
	6.35	6.35	9.52	9.52	9.52	9.52	9.52
	1/4	1/4	3/8	3/8	3/8	3/8	3/8
	12.70	12.70	15.88	15.88	15.88	15.88	15.88
	1/2	1/2	5/8	5/8	5/8	5/8	5/8
	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)
	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
	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
	R410A	R410A	R410A	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	35/31/26	36/34/31	38/36/33	37/36/34	37/36/34	37/36/34	39/38/36
	24.0	24.0	30.0	40.0	40.0	41.5	41.5
	900 x 199 x 600	900 x 199 x 600	1,100 x 199 x 600	1,300 x 295 x 690	1,300 x 295 x 690	1,300 x 295 x 690	1,300 x 295 x 690
	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D	MDP-E075SEE3D
	750/24	750/24	750/24	750/24	750/24	750/24	750/24
	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter

Accessories

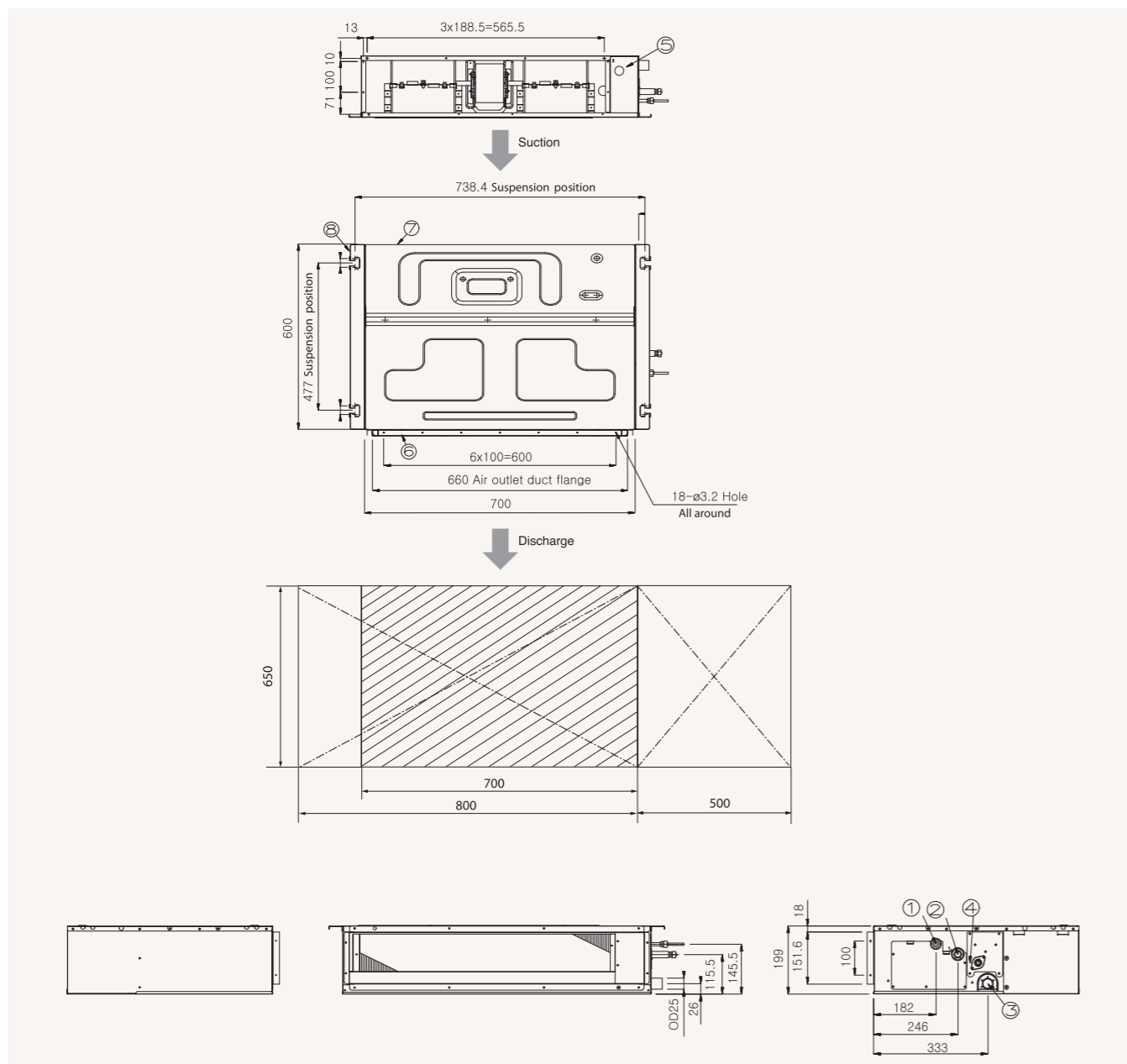


Drain Pump (optional)	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-E075SEE3D	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

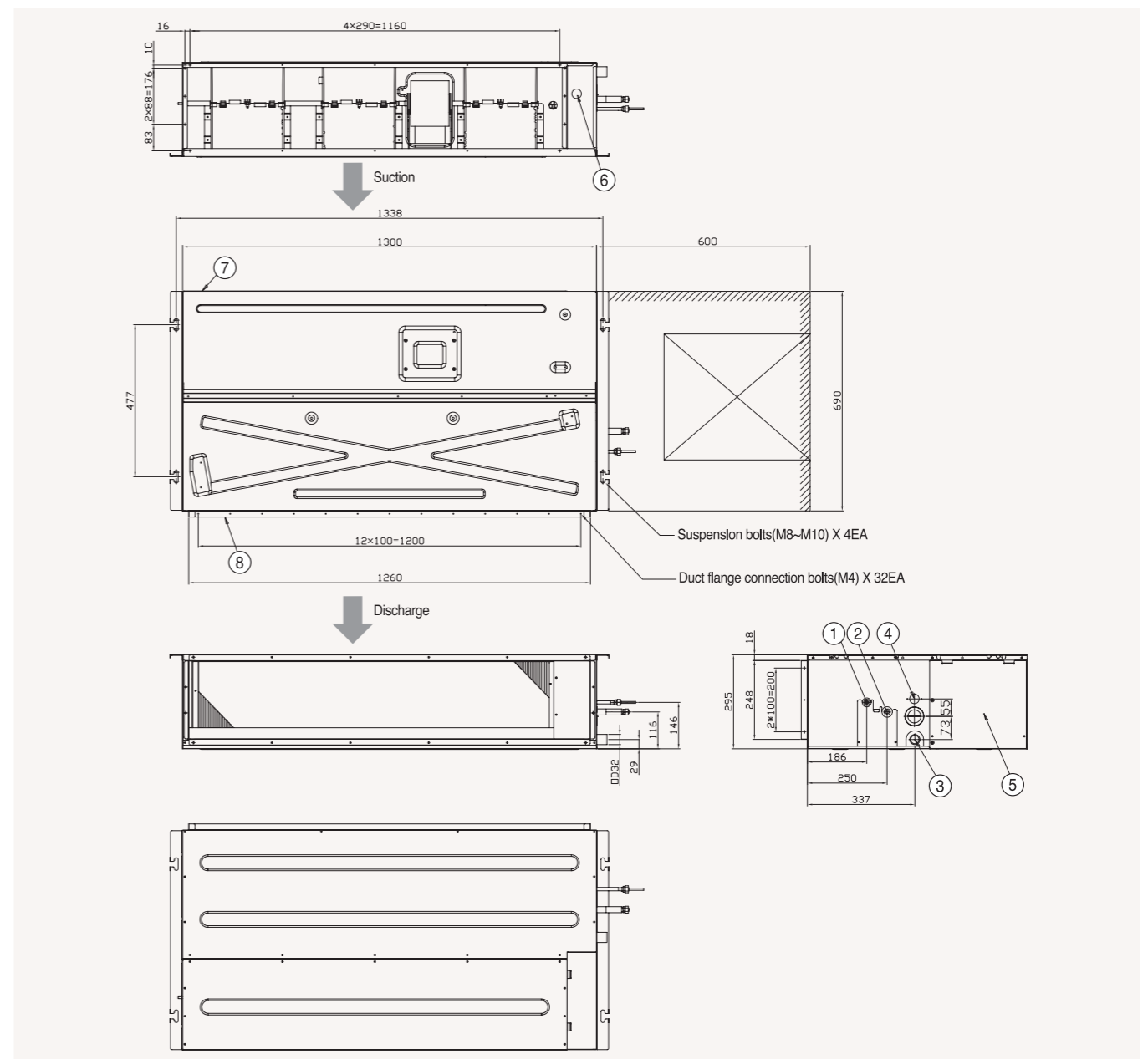
LSP Slim Duct (drain pump excluded)

AM017/022/028/036FNLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	ø9.52 or M10

AM090 /112/128/140*NLDEH/EU

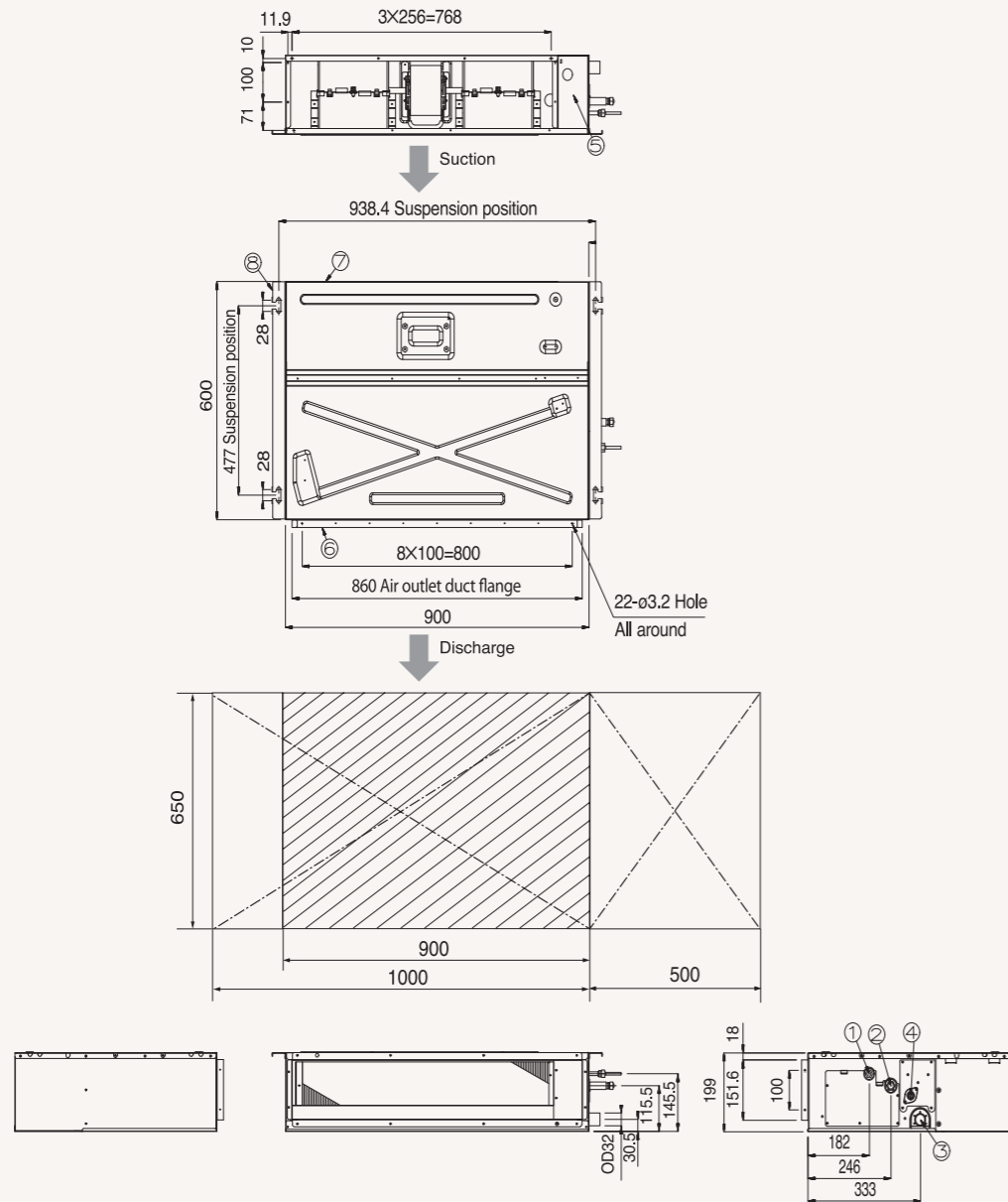


NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

Dimensional drawings

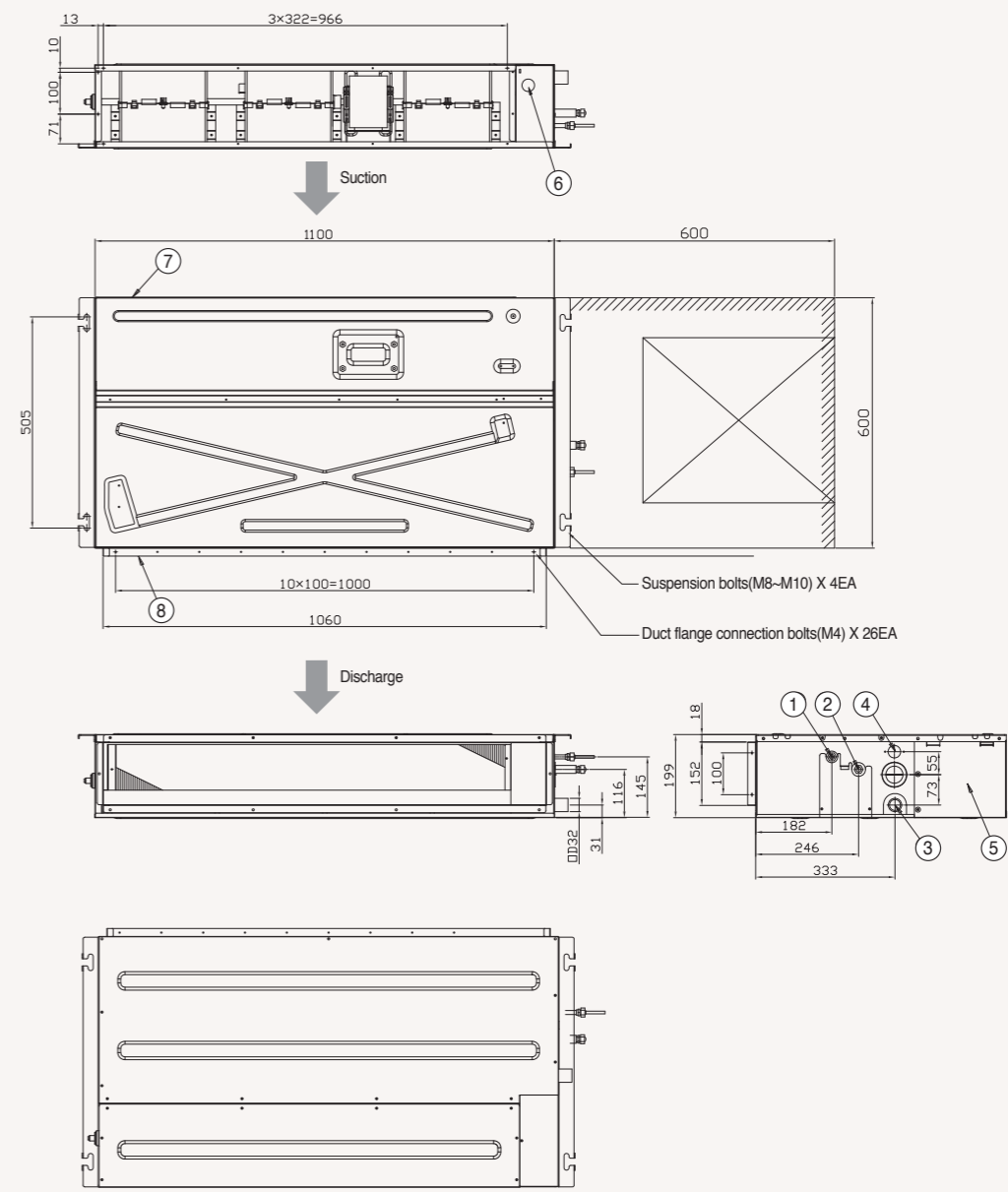
LSP Slim Duct (drain pump excluded)

AM045/056*NLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

AM071*NLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

Specifications

LSP Slim Duct (drain pump included)

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with one Sirocco fan direct driven by a single motor.
- Long-life washable HD 40 permanent filter is included.
- Auto Restart function.
- Built-in condensation drain pump.



Model			AM017KNLDEH/EU	AM022KNLDEH/EU	AM028KNLDEH/EU	AM036KNLDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	1.7	2.2	2.8	3.6
		Heating	kW	1.9	2.5	3.2	4.0
Power	Power Input (Nominal)	Cooling	W	28	30	34	40
		Heating	W	28	30	36	42
	Current Input (Nominal)	Cooling	A	0.23	0.25	0.28	0.33
		Heating	A	0.23	0.25	0.30	0.35
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Motor	Output x n	W	69 x 1	69 x 1	69 x 1	69 x 1
	Airflow Rate	H/M/L (UL)	m ³ /min	5.45/4.45/3.80	6.00/4.90/3.80	7.05/5.15/4.35	8.20/6.50/4.90
			l/s	90.83/74.17/63.33	100.00/81.67/63.33	117.50/85.83/72.50	136.67/108.33/81.67
External Static Pressure	Min/Std/Max	mmAq	0.00/1.00/3.00	0.00/1.00/3.00	0.00/1.00/3.00	0.00/1.00/3.00	
		Pa	0.00/9.81/29.42	0.00/9.81/29.42	0.00/9.81/29.42	0.00/9.81/29.42	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.70	12.70	12.70	12.70	
		ø, inch	1/2	1/2	1/2	1/2	
Drain Pipe	ø, 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	mm ²	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type		-	R410A	R410A	R410A	
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound ²	Sound Pressure	(H/M/L)	dB(A)	25/22/19	26/23/19	28/24/19	31/26/ 20
	Sound Power	Cooling	W	40	42	44	46
Dimensions	Net Weight		kg	15.3	15.3	15.3	15.7
	Net Dimensions (W x H x D)		mm	700 x 199 x 440	700 x 199 x 440	700 x 199 x 440	700 x 199 x 440
Additional Accessories	Drain Pump	Drain Pump	-	Included	Included	Included	Included
		Max. Lifting Height/ Displacement	mm / litres/h	750/24	750/24	750/24	750/24
	Air Filter			Filter Included	Filter Included	Filter Included	Filter Included

Model			AM045KNLDEH/EU	AM056KNLDEH/EU	AM071KNLDEH/EU	AM090KNLDEH/EU	AM112KNLDEH/EU	AM140KNLDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	4.5	5.6	7.1	9.0	11.2	14.0
		Heating	kW	5.0	6.3	8.0	10.0	12.5	16.0
Power	Power Input (Nominal)	Cooling	W	90	95	120	170	170	220
		Heating	W	90	95	120	170	170	220
	Current Input (Nominal)	Cooling	A	0.52	0.53	0.60	0.96	0.96	1.43
		Heating	A	0.52	0.53	0.60	0.96	0.96	1.43
Fan	Type		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Motor	Output x n	W	-	-	-	-	-	
	Airflow Rate	H/M/L (UL)	m ³ /min	11.00/9.60/8.30	12.00/10.50/9.00	16.50/15.00/13.50	29.00/27.00/25.00	31.20/29.00/27.00	36.00/34.00/32.00
			l/s	183.33/160.00/138.33	200.00/175.00/150.00	275.00/250.00/225.00	483.33/450.00/416.67	520.00/483.33/450.00	600.00/566.67/533.33
External Static Pressure	Min/Std/Max	mmAq	0.00/2.00/4.00	0.00/2.00/4.00	0.00/2.00/4.00	0.00/3.00/6.00	0.00/3.00/6.00	0.00/3.00/6.00	
		Pa	0.00/19.61/39.23	0.00/19.61/39.23	0.00/19.61/39.23	0.00/29.42/58.84	0.00/29.42/58.84	0.00/29.42/58.84	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	9.52	9.52	9.52	9.52	
		ø, inch	1/4	1/4	3/8	3/8	3/8	3/8	
	Gas Pipe	ø, mm	12.70	12.70	15.88	15.88	15.88	15.88	
		ø, inch	1/2	1/2	5/8	5/8	5/8	5/8	
Drain Pipe	ø, 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	mm ²	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	mm ²	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	
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	35/31/26	36/34/31	38/36/33	37/36/34	37/36/34	39/38/36
	Sound Power	Cooling	W	53	55	57	66	66	68
Dimensions	Net Weight		kg	24.5	24.5	30.5	40.5	40.5	42.0
	Net Dimensions (W x H x D)		mm	900 x 199 x 600	900 x 199 x 600	1,100 x 199 x 600	1,300 x 295 x 690	1,300 x 295 x 690	1,300 x 295 x 690
Additional Accessories	Drain Pump	Drain Pump	-	Included	Included	Included	Included	Included	
		Max. Lifting Height/ Displacement	mm / litres/h	750/24	750/24	750/24	750/24	750/24	750/24
	Air Filter			Filter Included	Filter Included	Filter Included	Filter Included	Filter Included	

Accessories

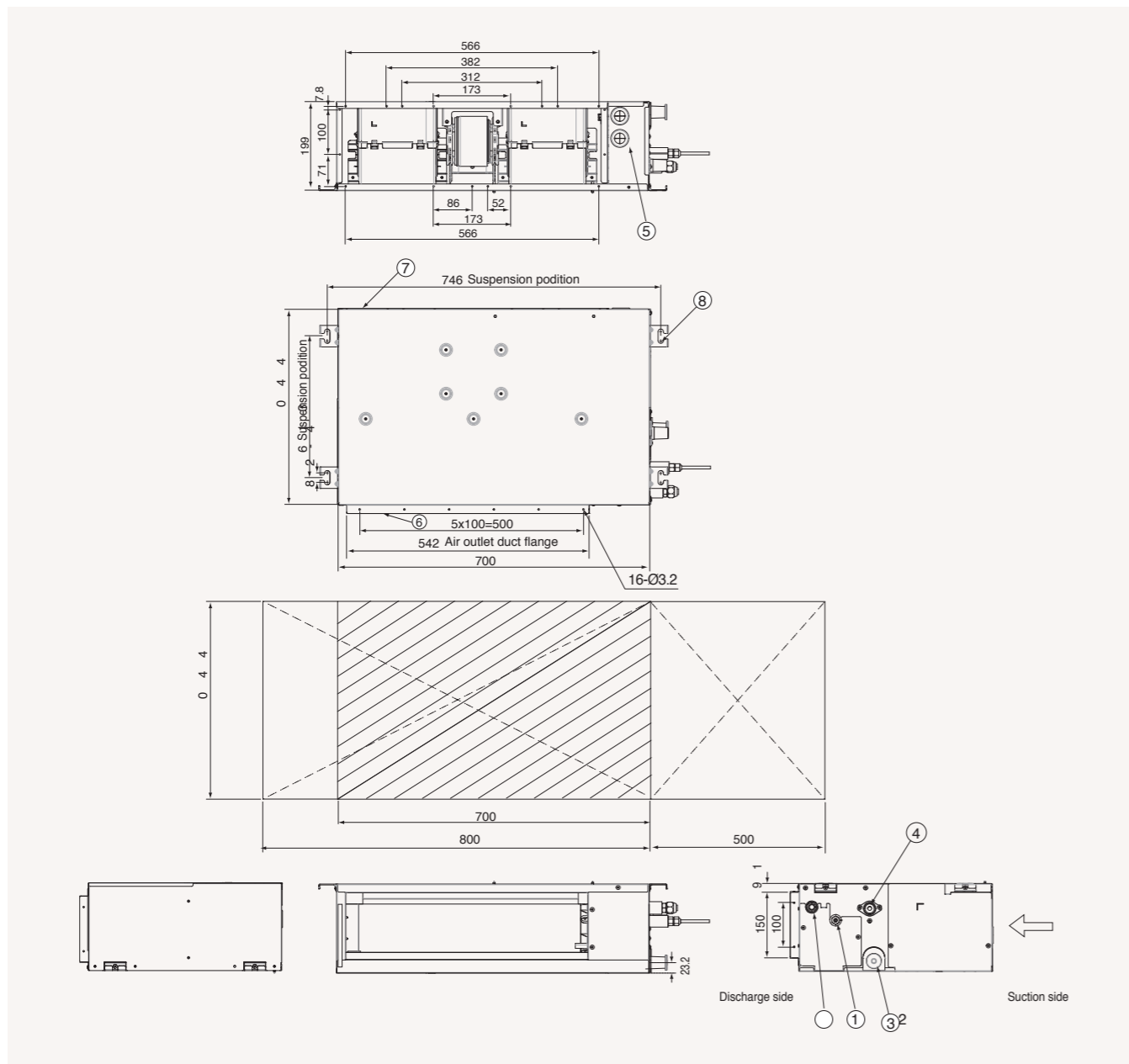


External Drain Pump	Built-in Drain Pump	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-G075SP	MDP-G075SQ	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

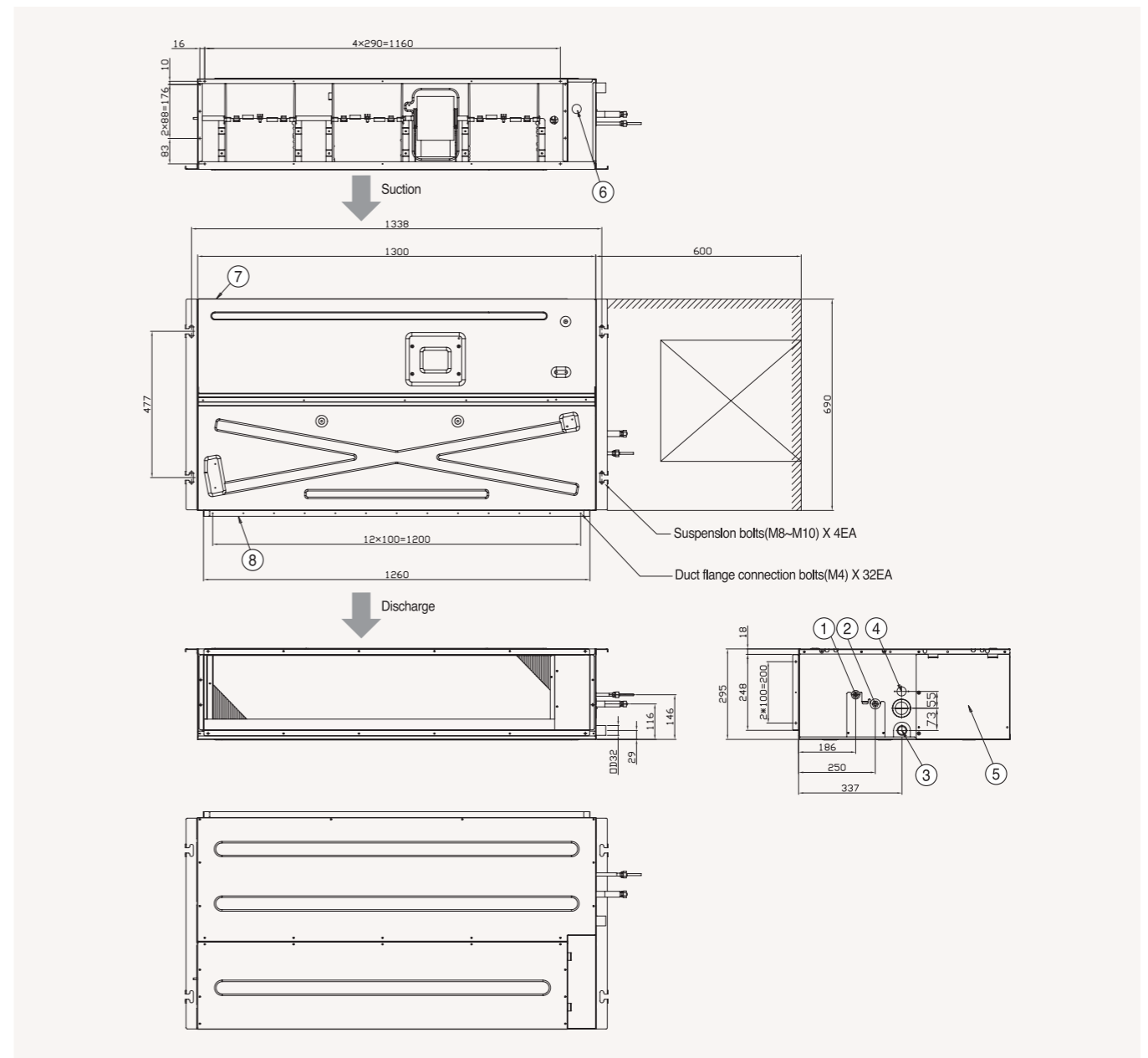
LSP Slim Duct (drain pump included)

AM017/022/028/036KNLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	ø9.52 or M10

AM090/112/128/140*NLDEH/EU

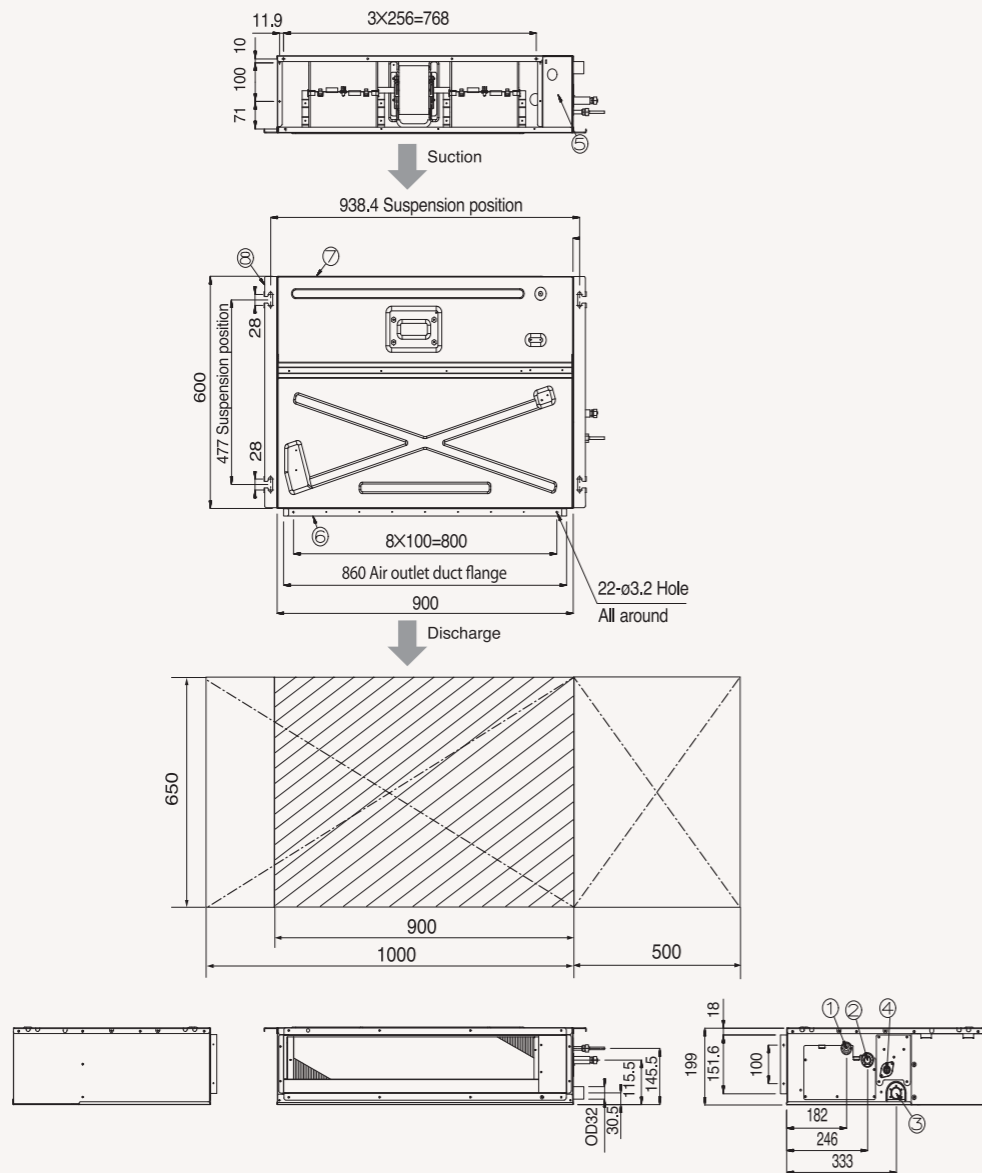


NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

Dimensional drawings

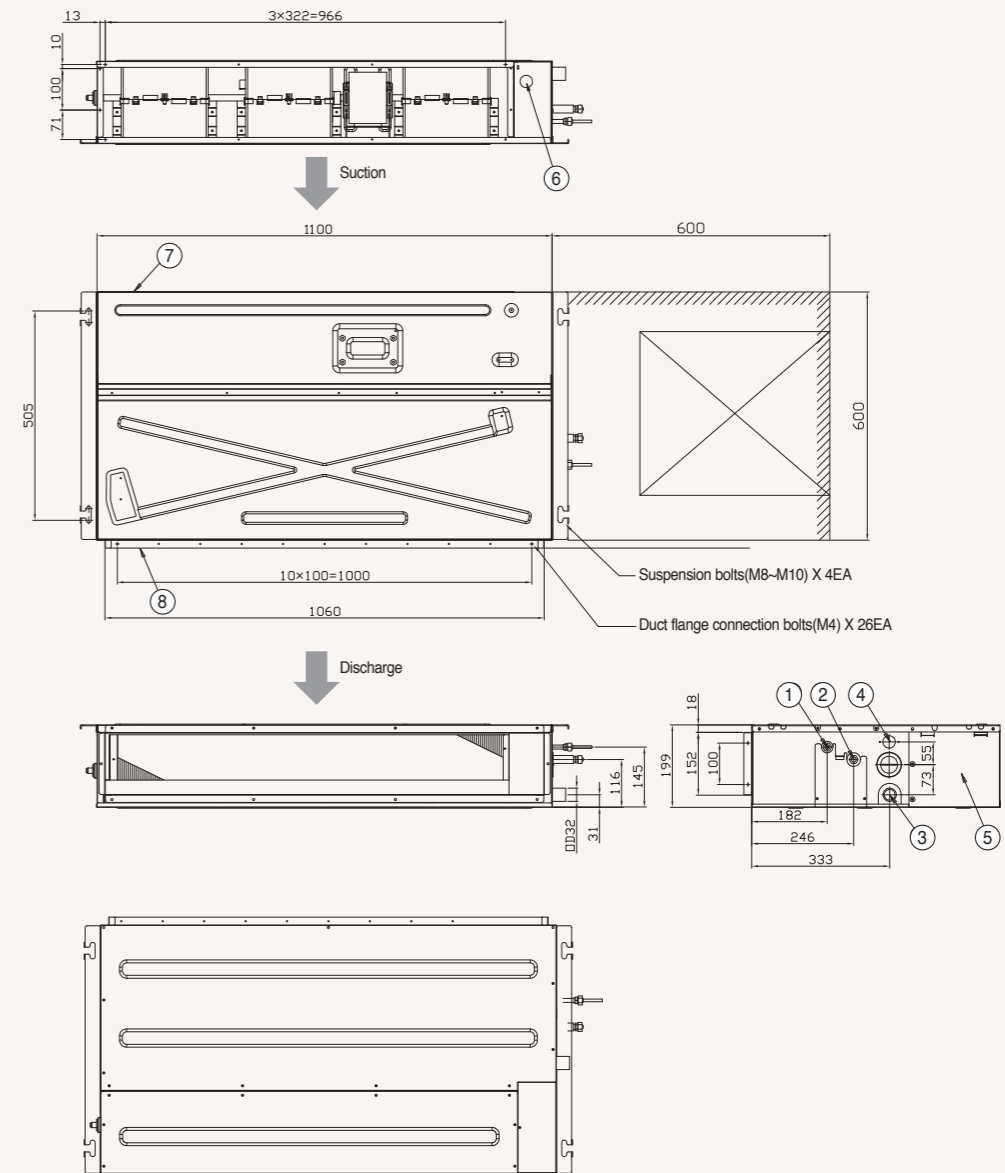
LSP Slim Duct (drain pump included)

AM045/056*NLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

AM071*NLDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook	

Specifications

MSP Duct (drain pump excluded)

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with one Sirocco fan direct driven by a single motor.
- Long-life washable permanent filter is included.
- Auto Restart function.
- Optional condensate drain pump.



Model			AM022FNMDHEH/EU	AM028FNMDHEH/EU	AM036FNMDHEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6
		Heating	kW	2.5	3.2	4
Power	Power Input (Nominal)	Cooling	W	80	80	85
		Heating	W	80	80	85
	Current Input (Nominal)	Cooling	A	0.40	0.40	0.55
		Heating	A	0.40	0.40	0.55
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Output x n	W	69 x 1	69 x 1	112 x 1
		Number of Fans	-	1	1	1
	Airflow Rate	H/M/L (UL)	m ³ /min	8.50/7.50/6.30	10.00/9.20/7.50	12.00/10.20/8.80
			l/s	141.67/125.00/105.00	166.67/153.33/125.00	200.00/170.00/146.67
External Static Pressure	Min/Std/Max	mmAq	0.00/2.00/6.00	0.00/2.00/6.00	0.00/2.00/6.00	
		Pa	0.00/19.61/58.84	0.00/19.61/58.84	0.00/19.61/58.84	
		WG	0.000/0.079/0.236	0.000/0.079/0.236	0.000/0.079/0.236	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.7	12.7	12.7	
		ø, inch	1/2	1/2	1/2	
	Drain Pipe	ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
Field Wiring	Power Source Wire	Below 20 m/over 20 m	mm ²	1.5/2.5	1.5/2.5	1.5/2.5
	Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	23/21/19	24/22/19	29/27/24
Dimensions	Net Weight		kg	23.5	23.5	23.5
	Net Dimensions (W x H x D)		mm	900 x 199 x 600	900 x 199 x 600	900 x 199 x 600
Additional Accessories	Drain Pump	Drain Pump	-	MDP-E07SSEE3D	MDP-E07SSEE3D	MDP-E07SSEE3D
		Max. Lifting Height/Displacement	mm / litres/h	750/24	750/24	750/24
	Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter

Model			AM045FNMDHEH/EU	AM056FNMDHEH/EU	AM071FNMDHEH/EU	AM090FNMDHEH/EU	AM112FNMDHEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	4.5	5.6	7.1	9	11.2
		Heating	kW	5	6.3	8	10	12.5
Power	Power Input (Nominal)	Cooling	W	125	85	190	240	260
		Heating	W	125	130	190	240	260
	Current Input (Nominal)	Cooling	A	1.15	1.10	1.25	1.30	1.17
		Heating	A	1.15	1.10	1.25	1.30	1.17
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Output x n	W	219 x 1	124 x 1	124 x 1	130 x 1	130 x 1
		Number of Fans	-	1	1	1	1	1
	Airflow Rate	H/M/L (UL)	m ³ /min	14.00/12.00/10.50	14.50/13.00/11.50	18.50/17.00/15.50	19.50/18.00/16.50	27.00/25.00/23.00
			l/s	233.33/200.00/175.00	241.67/216.67/191.67	308.33/283.33/258.33	325.00/300.00/275.00	450.00/416.67/383.33
External Static Pressure	Min/Std/Max	mmAq	0.00/4.00/8.00	0.00/4.00/8.00	0.00/4.00/8.00	4.00/6.00/8.00	4.00/8.00/12.00	
		Pa	0.00/39.23/78.45	0.00/39.23/78.45	0.00/39.23/78.45	39.23/58.84/78.45	39.23/78.45/117.68	
		WG	0.000/0.157/0.314	0.000/0.157/0.314	0.000/0.157/0.314	0.157/0.236/0.315	0.236/0.314/0.472	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	6.35	9.52	
		ø, inch	1/4	1/4	3/8	3/8	3/8	
	Gas Pipe	ø, mm	12.7	12.7	15.88	15.88	15.88	
		ø, inch	1/2	1/2	5/8	5/8	5/8	
	Drain Pipe	ø, 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	Below 20 m/over 20 m	mm ²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	
	Transmission Cable		mm ²	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 ²	Sound Pressure	(H/M/L)	dB(A)	32/30/28	35/33/31	39/35/31	40/37/34	41/40/38
Dimensions	Net Weight		kg	28.0	28.0	28.0	32.0	35.5
	Net Dimensions (W x H x D)		mm	900 x 260 x 480	900 x 260 x 480	900 x 260 x 480	1,150 x 260 x 480	1,150 x 320 x 480
Additional Accessories	Drain Pump	Drain Pump	-	MDP-M07SSGU3D	MDP-M07SSGU3D	MDP-M07SSGU3D	MDP-M07SSGU1D	MDP-M07SSGU1D
		Max. Lifting Height/Displacement	mm / litres/h	750/24	750/24	750/24	750/24	750/24
	Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter

Accessories



Drain Pump (excluded)	Drain Pump (excluded)	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-E07SSEE3D	MDP-N047SNC1D	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Specifications

MSP Duct (drain pump included)

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with one Sirocco fan direct driven by a single motor.
- Long-life washable permanent filter is included.
- Auto Restart function.
- Built-in condensation drain pump.



Model			AM022KNMDEH/EU	AM028KNMDEH/EU	AM036KNMDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6
		Heating		2.5	3.2	4.0
Power	Power Input (Nominal)	Cooling	W	80	80	85
		Heating		80	80	85
	Current Input (Nominal)	Cooling	A	0.40	0.40	0.55
		Heating		0.40	0.40	0.55
Motor	Type		Sirocco Fan	Sirocco Fan	Sirocco Fan	
	Output x n	W	69 x 1	69 x 1	112 x 1	
	Number of Fans	-	1	1	1	
Airflow Rate	H/M/L (UL)	m ³ /min	8.50/7.50/6.30	10.00/9.20/7.50	12.00/10.20/8.80	
		l/s	141.67/125.00/105.00	166.67/153.33/125.00	200.00/170.00/146.67	
External Static Pressure	Min/Std/Max	mmAq	0.00/2.00/6.00	0.00/2.00/6.00	0.00/2.00/6.00	
		Pa	0.00/19.61/58.84	0.00/19.61/58.84	0.00/19.61/58.84	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.70	12.70	12.70	
		ø, inch	1/2	1/2	1/2	
Drain Pipe	ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)		
Field Wiring	Power Source Wire	mm ²	1.5-2.5	1.5-2.5	1.5-2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	23/21/19	24/22/19	29/27/24
	Sound Power	Cooling		47	48	53
Dimensions	Net Weight	kg	24.0	24.0	24.0	
	Net Dimensions (W x H x D)	mm	900 x 199 x 600	900 x 199 x 600	900 x 199 x 600	
Additional Accessories	Drain Pump	Drain Pump	-	Included	Included	Included

	AM045KNMDEH/EU	AM056KNMDEH/EU	AM071KNMDEH/EU	AM090KNMDEH/EU	AM112KNMDEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	4.5	5.6	7.1	9.0	11.2
	5.0	6.3	8.0	10.0	12.5
	125	130	190	240	260
	125	130	190	240	260
	1.15	1.10	1.25	1.30	1.17
	1.15	1.10	1.25	1.30	1.17
	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	219 x 1	124 x 1	124 x 1	130 x 1	130 x 1
	1	1	1	1	1
	14.00/12.00/10.50	14.50/13.00/11.50	18.50/17.00/15.50	19.50/18.00/16.50	27.00/25.00/23.00
	233.33/200.00/175.00	241.67/216.67/191.67	308.33/283.33/258.33	325.00/300.00/275.00	450.00/416.67/383.33
	0.00/4.00/8.00	0.00/4.00/8.00	0.00/4.00/8.00	4.00/6.00/8.00	4.00/8.00/12.00
	0.00/39.23/78.45	0.00/39.23/78.45	0.00/39.23/78.45	39.23/58.84/78.45	39.23/78.45/117.68
	6.35	6.35	9.52	9.52	9.52
	1/4	1/4	3/8	3/8	3/8
	12.70	12.70	15.88	15.88	15.88
	1/2	1/2	5/8	5/8	5/8
	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)
	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5
	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50
	R410A	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	32/30/28	35/33/31	39/35/31	40/37/34	41/40/38
	54	57	61	63	66
	28.5	28.5	28.5	32.5	36.0
	900 x 260 x 480	900 x 260 x 480	900 x 260 x 480	1,150 x 260 x 480	1,150 x 320 x 480
	Included	Included	Included	Included	Included

Accessories

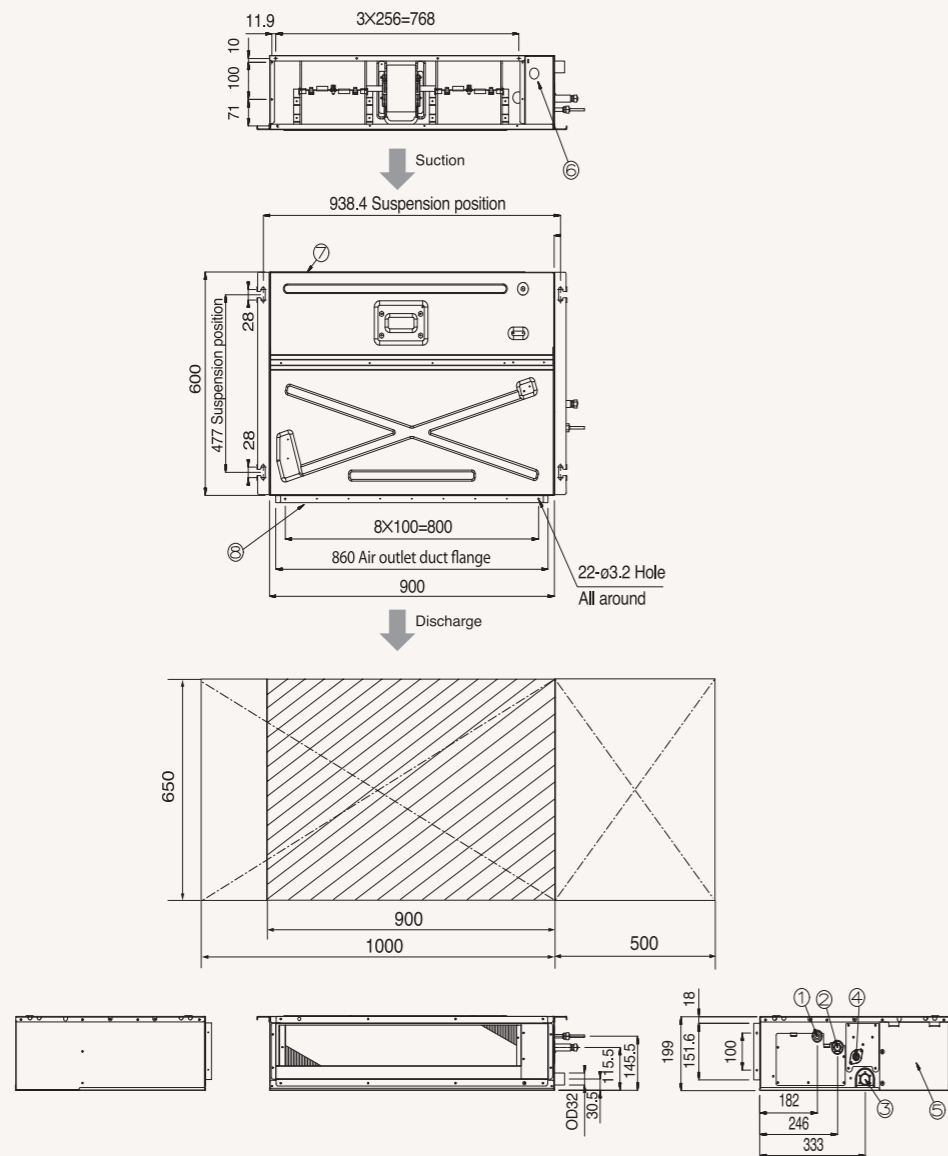


Drain Pump (included)	Drain Pump (included)	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-E075SEE3D	MDP-M075SGU1D	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

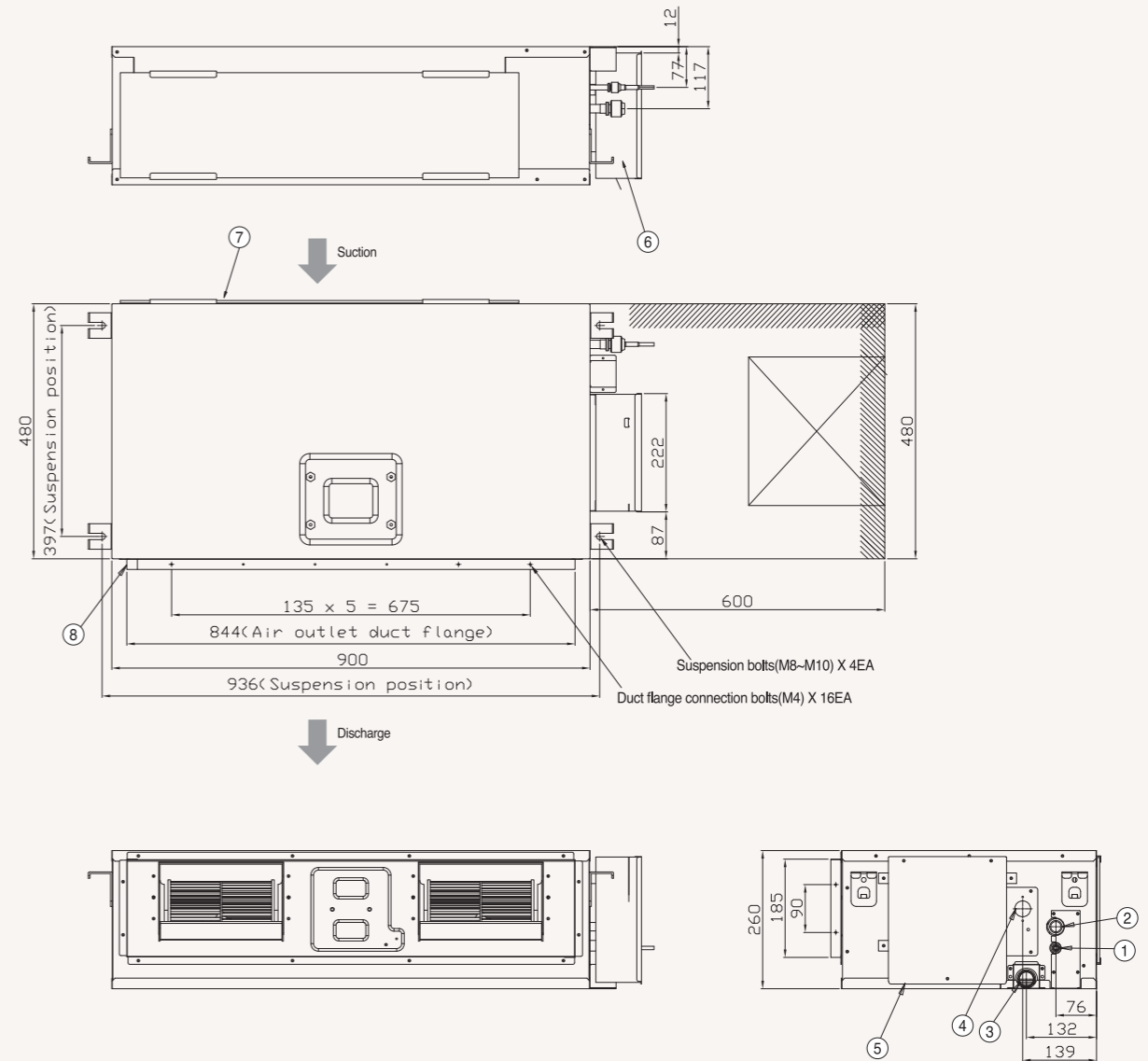
MSP Duct

AM022/028/036*NMDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Control unit	
6	Power supply/communication wiring conduits	
7	Return air side	
8	Air outlet duct flange	

AM045/056/071*NMDEH/EU

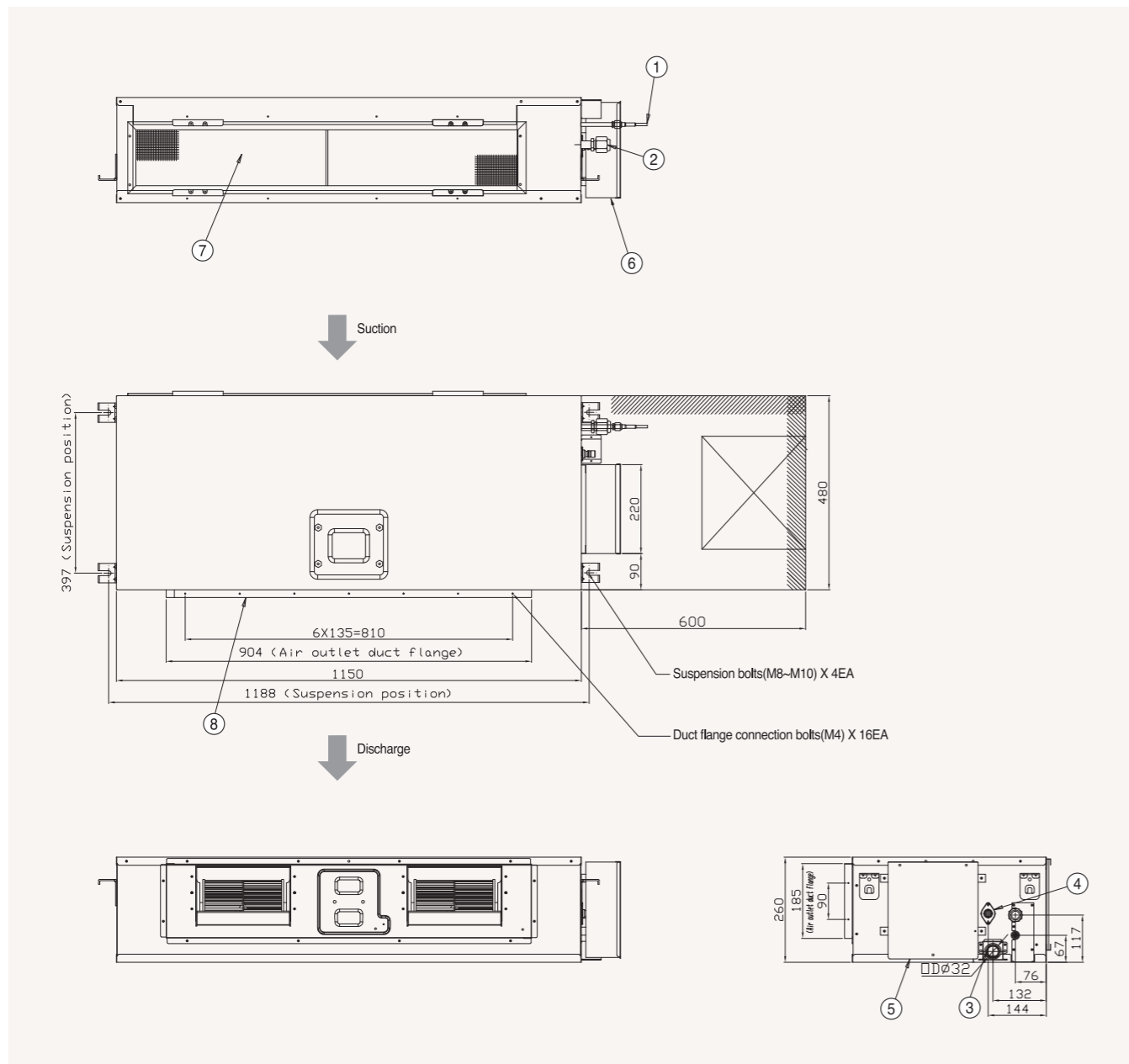


NO	Name	Description		
		4.5 kW	5.6 kW	7.1 kW
1	Liquid pipe connection	ø6.35 Flare		ø9.52 Flare
2	Gas pipe connection	ø12.70 Flare		ø15.88 Flare
3	Drain pipe connection without drain pump		VP25 (OD 32, ID 25)	
4	Drain pipe connection with drain pump		VP25 (OD 32, ID 25)	
5	Control unit			
6	Power supply/communication wiring conduits			
7	Return air side			
8	Air outlet duct flange			

Dimensional drawings

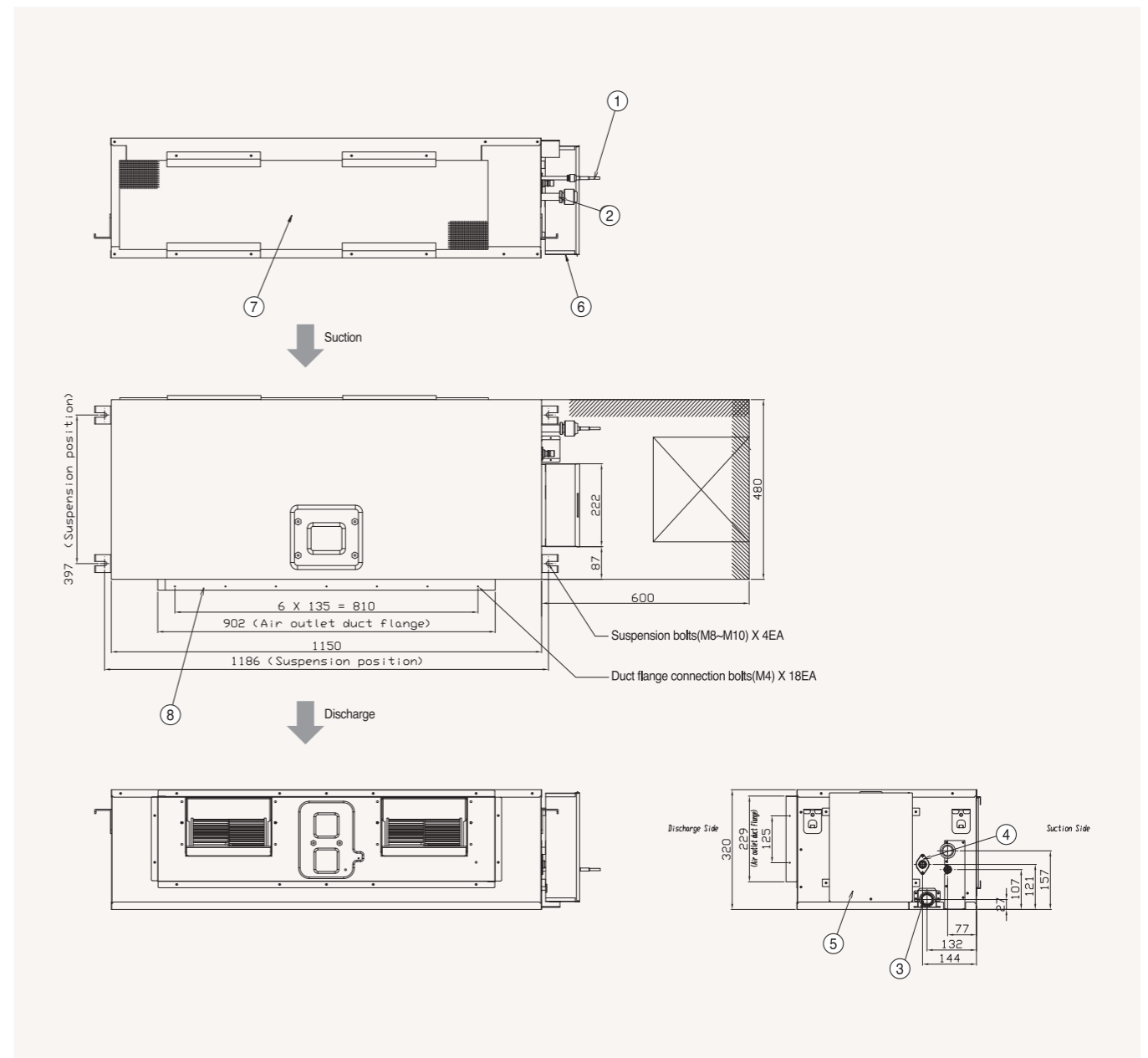
MSP Duct

AM090*NMDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Control unit	-
6	Power supply/communication wiring conduits	-
7	Return air side	-
8	Air outlet duct flange	-

AM112*NMDEH/EU

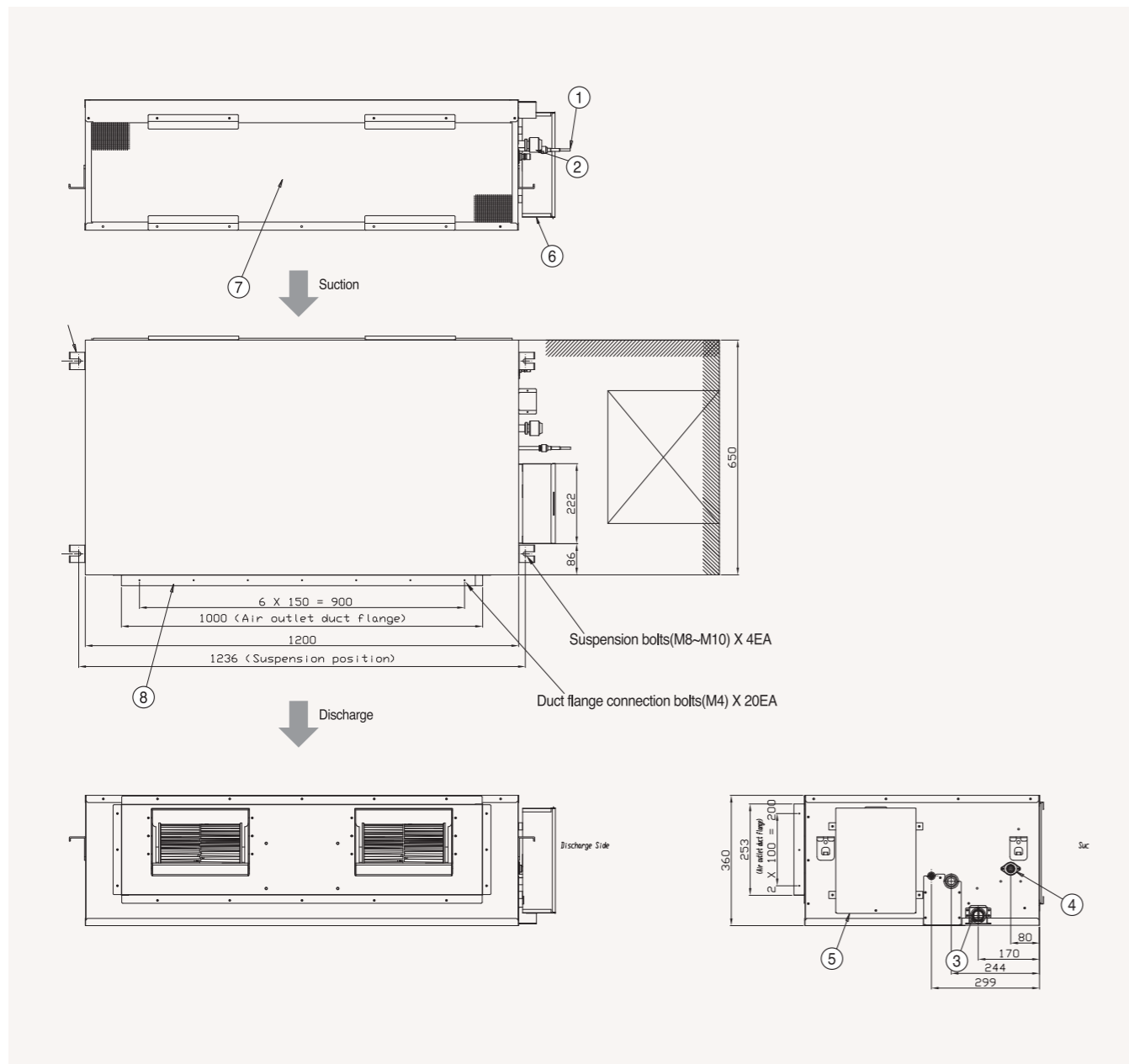


NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Control unit	-
6	Power supply/communication wiring conduits	-
7	Return air side	-
8	Air outlet duct flange	-

Dimensional drawings

MSP Duct

AM128/140/160*NMDEH*EU



NO	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø15.88 Flare
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Drain pipe connection with drain pump	VP25 (OD 32, ID 25)
5	Control unit	
6	Power supply/communication wiring conduits	
7	Return air side	
8	Air outlet duct flange	



Specifications

HSP Duct

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with two Sirocco fans direct driven by a single motor.
- Auto Restart function.
- Optional condensate drain pump.
- Long-life HD 40 permanent filter is included.



Model				AM112FNHDEH/EU	AM128FNHDEH/EU	AM140FNHDEH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	11.2	12.8	14
		Heating	kW	12.5	13.8	16.8
Power	Power Input (Nominal)	Cooling	W	510	560	625
		Heating	W	510	560	625
	Current Input (Nominal)	Cooling	A	3.60	3.75	3.90
		Heating	A	3.60	3.75	3.90
Fan	Motor	Type	-	Sirocco Fan/AC	Sirocco Fan/AC	Sirocco Fan/AC
		Output	W	-	-	-
		Number of Fans	-	2	2	2
	Airflow Rate	H/M/L (UL)	m ³ /min	32/27/23	35/31/26	39/33/28
			l/s	533.33/450.00/383.33	583.33/516.67/466.67	650.00/550.00/466.67
	External Static Pressure	Min/Std/Max	mmAq	5.00/10.00/20.00	5.00/10.00/20.00	5.00/10.00/20.00
Pa			49.00/98.10/196.10	49.00/98.10/196.10	49.00/98.10/196.10	
WG			-	-	-	
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
	Gas Pipe	ø, mm	15.88	15.88	15.88	
		ø, inch	5/8	5/8	5/8	
	Drain Pipe	ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
	Field Wiring	Power Source Wire	Below 20 m / over 20 m	mm ²	1.5/2.5	1.5/2.5
Transmission Cable			mm ²	0.75-1.50	0.75-1.50	0.75-1.50
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV	EEV	EEV	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	43/41/39	45/43/42	46/45/44
Dimensions	Net Weight		kg	57.0	57.0	57.0
	Net Dimensions (W x H x D)		mm	1,200 x 360 x 650	1,200 x 360 x 650	1,200 x 360 x 650
Additional Accessories	Drain Pump	Drain Pump	-	Optional/MDP-M075SGU2D	Optional/MDP-M075SGU2D	Optional/MDP-M075SGU2D
		Max. Lifting Height/Displacement	mm / litres/h	750/24	750/24	750/24
	Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter

	AM220FNHDEH/EU	AM280FNHDEH/EU
Power Supply	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	
Power	Power Input (Nominal)	
	Current Input (Nominal)	
	Motor	
	Airflow Rate	
External Static Pressure	Min/Std/Max	
	Field Wiring	
	Refrigerant	
Sound ²		
Dimensions	Net Dimensions (W x H x D)	
	Additional Accessories	
Drain Pump		
Air Filter		

Accessories

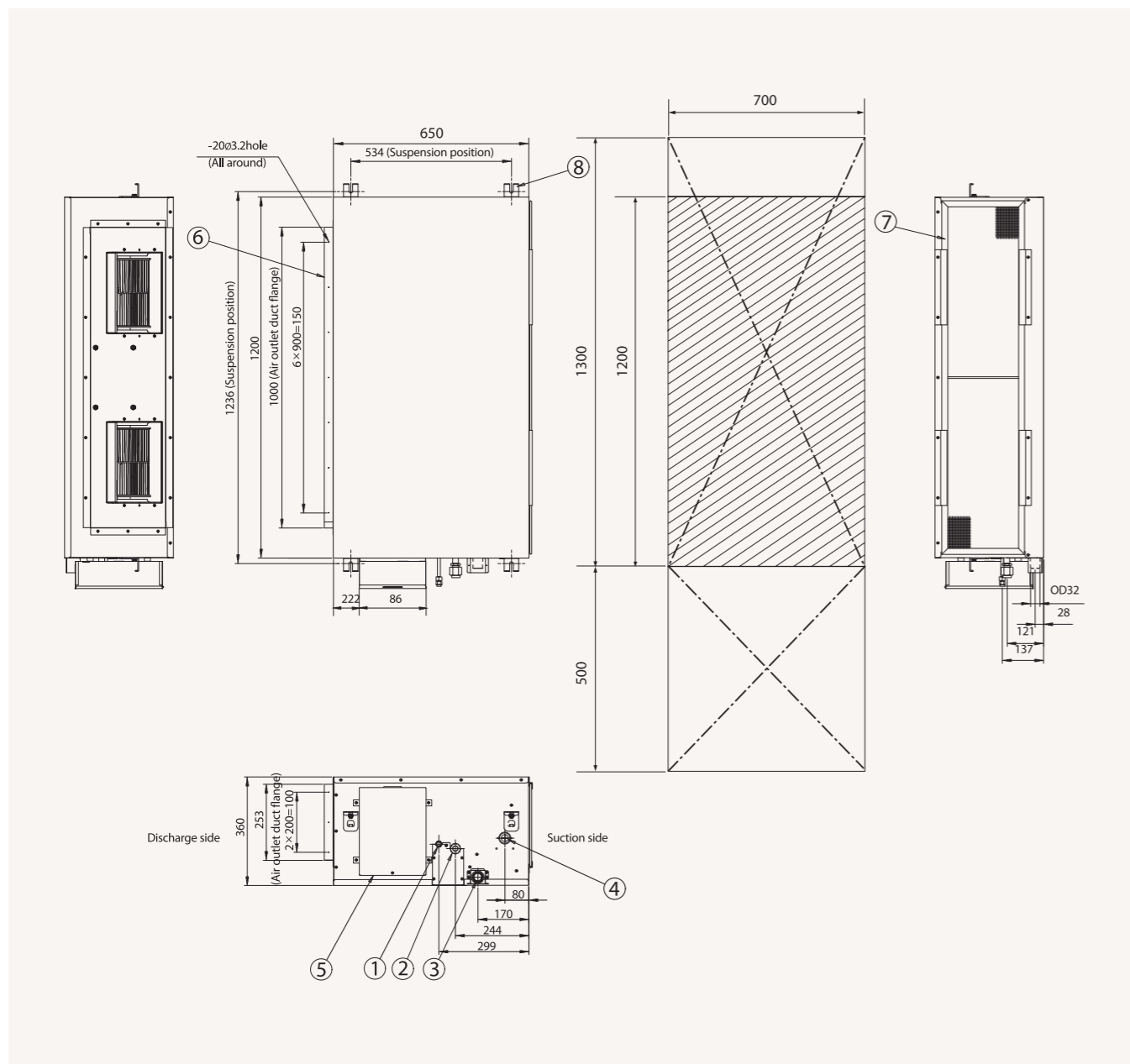


Drain Pump (optional)	Drain Pump (optional)	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-M075SGU2D	MDP-M075SGU1D	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

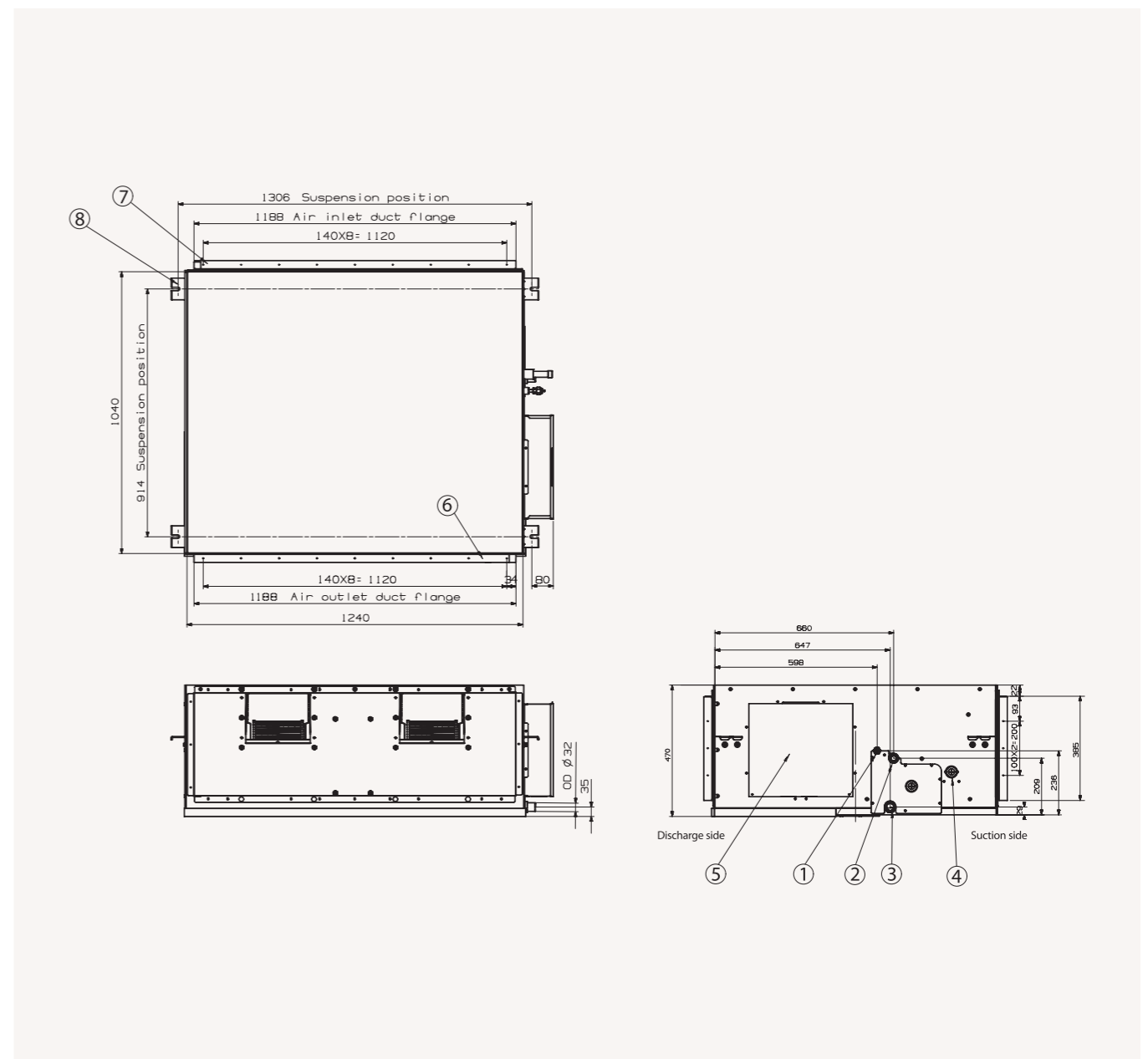
HSP Duct

AM112/128/140FNHDEH***



NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø15.88 (5/8)
3	Drain pipe connection without optional drain pump kits	VP25 (OD 32, ID 25)
4	Drain pipe connection with optional drain pump kits	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Suction flange	
8	Hook	3/8 or M10

AM220/280FNHDEH***

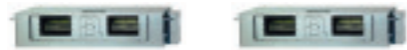


NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	AM220***: ø19.05 (3/4), AM280***: ø22.22 (7/8)
3	Drain pipe connection without optional drain pump kits	VP25 (OD 32, ID 25)
4	Drain pipe connection with optional drain pump kits	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Suction flange	
8	Hook	3/8 or M10

Specifications

Big Duct

- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Equipped with two Sirocco fans direct driven by a single motor.
- Auto Restart function.
- Optional condensate drain pump.
- Long-life HD 40 permanent filter is included.



Model				AM180JNHFKH/EU	AM224JNHFKH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	18	22.4
		Heating	kW	20	25
Power	Power Input (Nominal)	Cooling	W	340	530
		Heating	W	340	530
	Current Input (Nominal)	Cooling	A	1.90	2.90
		Heating	A	1.90	2.90
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
	Airflow Rate	Output x n	W	630 x 1	630 x 1
		H/M/L (UL)	m ³ /min		58.00/50.00/43.00
	External Static Pressure	Min/Std/Max	mmAq		5.00/7.34/20.00
		Pa		49.00/71.93/196.00	49.00/71.93/196.00
Piping Connections	Liquid Pipe	ø, mm		9.52	9.52
		ø, inch		3/8	3/8
	Gas Pipe	ø, mm		19.05	19.05
		ø, inch		3/4	3/4
	Drain Pipe	ø, mm		VP25 (OD 25, ID 20)	VP25 (OD 25, ID 20)
	Field Wiring	Power Source Wire	mm ²		-
Transmission Cable		mm ²		0.75-1.50	0.75-1.50
Refrigerant	Type	-		R410A	R410A
	Control Method	-		EEV(O)	EEV(O)
Sound ²	Sound Pressure	(H/M/L)	dB(A)	43/39/35	44/40/36
Dimensions	Net Weight		kg	82.5	82.5
	Net Dimensions (W x H x D)		mm	1,350 x 450 x 910	1,350 x 450 x 910
Additional Accessories	Drain Pump	Internal	-	MDP-G075SP	MDP-G075SP
		External	-	MDP-G075SQ	MDP-G075SQ

Accessories

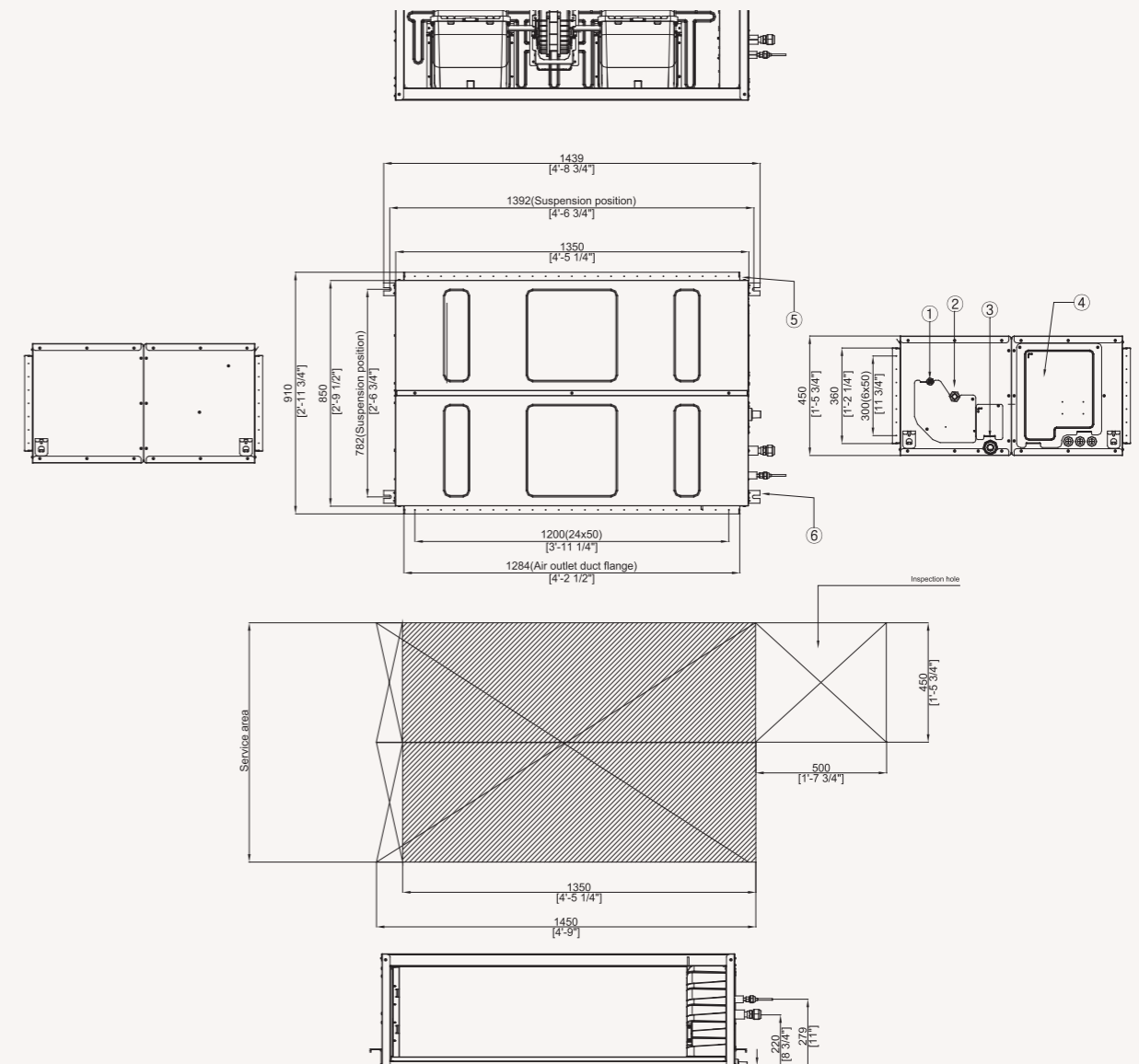


External Drain Pump	Built-in Drain Pump	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
MDP-G075SP	MDP-G075SQ	AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

Dimensional drawings

Big Duct

AM180JNHFKH/EU, AM224JNHFKH/EU



NO	Name
1	Liquid pipe connection
2	Gas pipe connection
3	Drain pipe connection
4	Power wiring conduits
5	Air discharge flange
6	Hook

Specifications

Console

- SPI Ioniser for air purification included as standard.
- Slim design: only 100 mm in width.
- Turbo fan with single-phase inverter motor.
- Two separate air outlets to avoid stratification.

- Long-life washable permanent filter.
- Compatible with Wi-Fi Kit controller.
- Auto Restart function.



Model			AM022KNJDEH/EU	AM028FNJDEH/EU	AM036FNJDEH/EU	AM045KNJDEH/EU	AM056FNJDEH/EU	
Power Supply	Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6	4.5	5.6
		Heating	kW	2.5	3.2	4	5	6.3
Power	Power Input (Nominal)	Cooling	W	16	30	35	36	62
		Heating	W	16	30	35	36	62
	Current Input (Nominal)	Cooling	A	0.13	0.25	0.29	0.30	0.49
		Heating	A	0.13	0.25	0.29	0.30	0.49
Fan	Motor	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
		Output x n	w	37 x 1	37	37	37 x 1	37
	Number of Fans		-	1	1	-	1	
	Airflow Rate	H/M/L (UL)	m ³ /min	6.30/5.40/4.90	7.00/6.00/5.00	8.50/7.50/6.50	11.30/9.80/8.20	13.00/11.50/10.00
			l/s	105.00/90.00/81.67	116.67/100.00/83.33	141.67/125.00/108.33	188.33/163.33/136.67	216.67/191.67/166.67
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.7	12.7	12.7	12.7	12.7	
		ø, inch	1/2	1/2	1/2	1/2	1/2	
Drain Pipe	ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE		
Field Wiring	Power Source Wire	mm ²	1.5-2.5	1.5/2.5	1.5/2.5	1.5-2.5	1.5/2.5	
	Transmission Cable	mm ²	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 ²	Pressure	(H/M/L)	34/32/30	38/36/34	39/37/34	42/39/36	43/40/37	
	Power	Cooling	52	58	59	63	64	
Dimensions	Net Weight	kg	15.5	16.0	16.0	16.0	16.0	
	Net Dimensions (W x H x D)	mm	720 x 620 x 199	720 x 620 x 199	720 x 620 x 199	720 x 620 x 199	720 x 620 x 199	
Additional Accessories	Air Filter	-	-	Long-life Filter	Long-life Filter	-	Long-life Filter	

Accessories

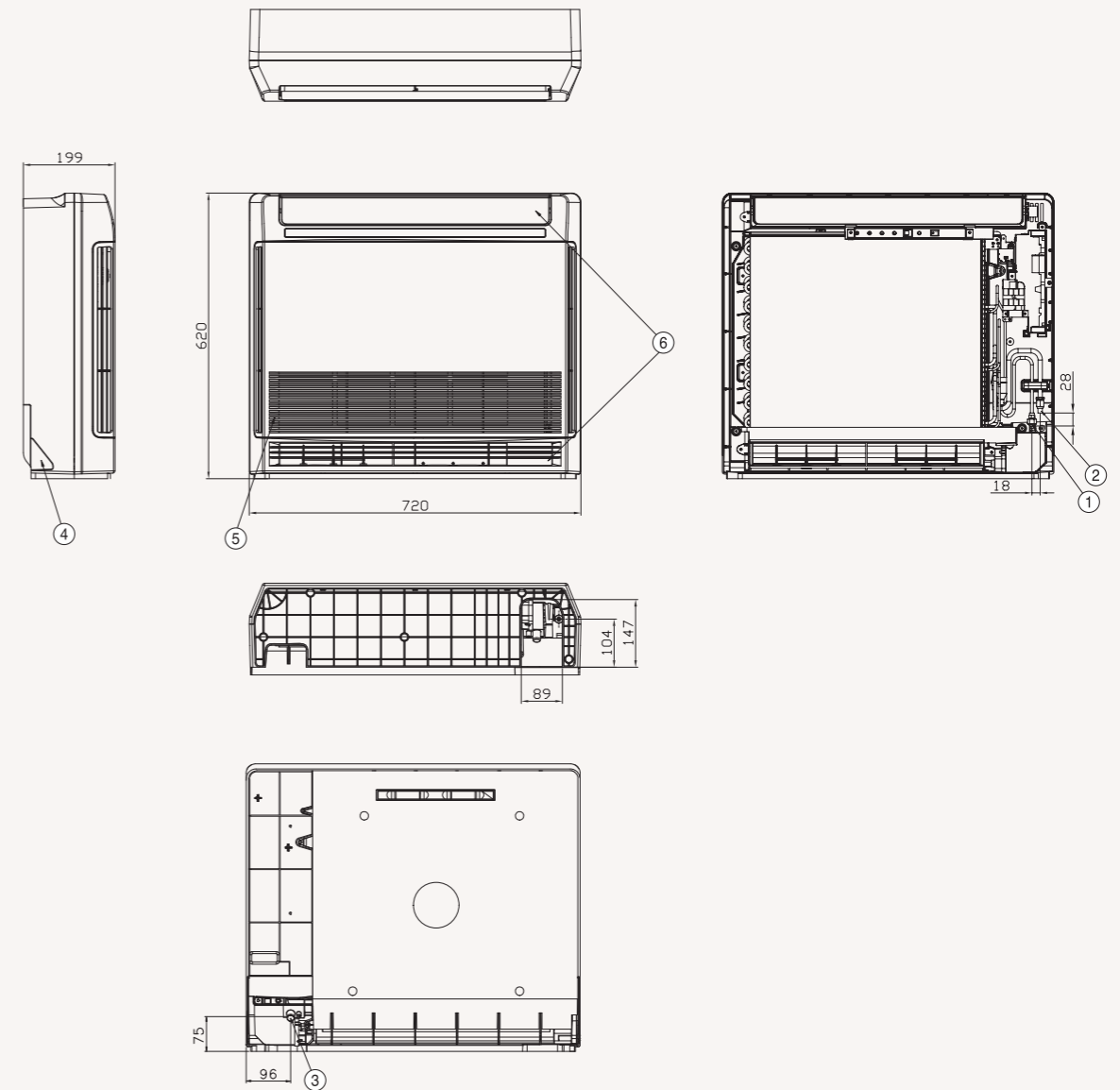


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Console

AM022/045KNJDEH/EU, AM028/036FNJDEH/EU

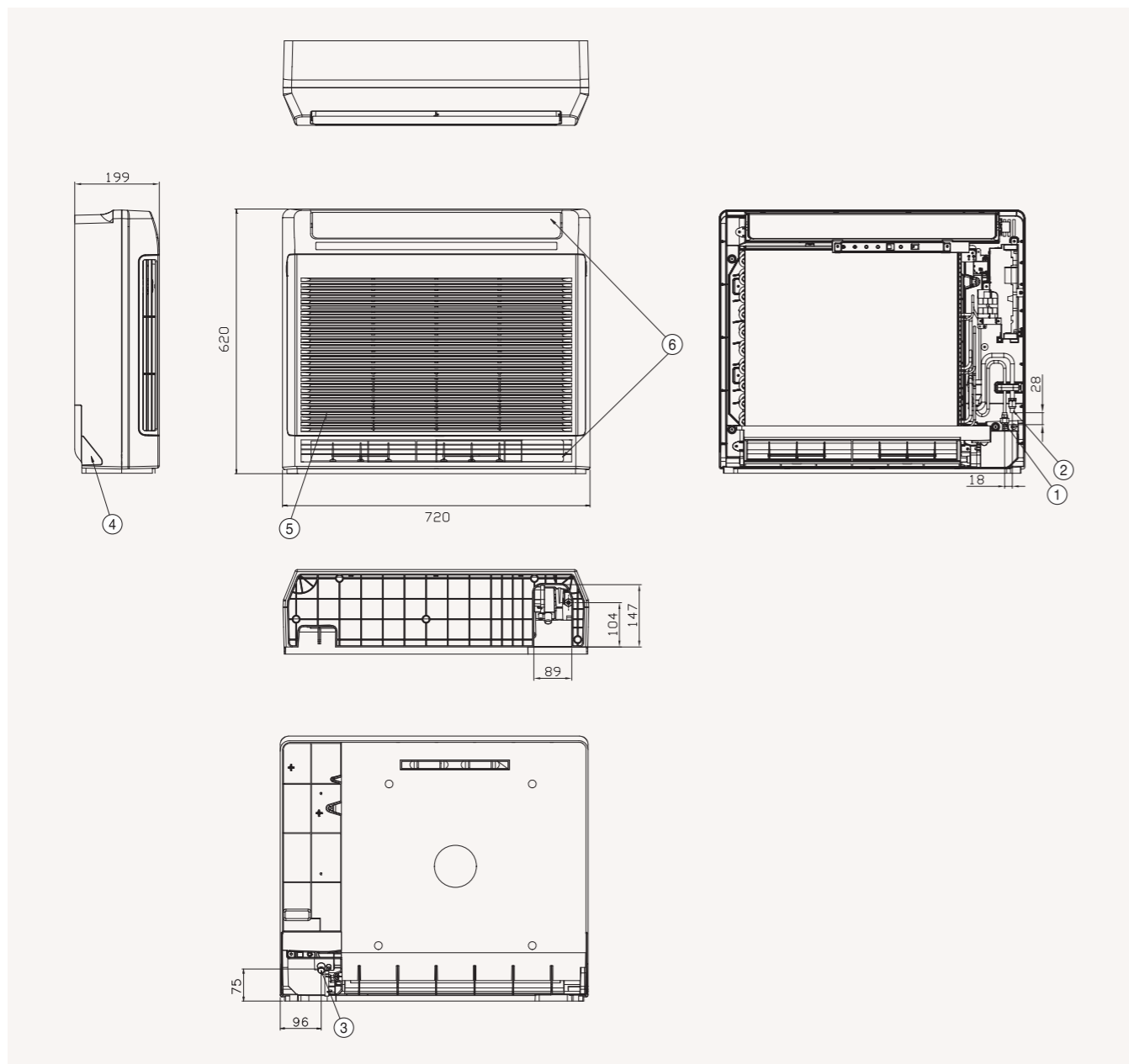


NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection	ID 18 Hose
4	Power supply/communication wiring conduits	
5	Air inlet grille	
6	Air outlet louvre	

Dimensional drawings

Console

AM056FNJDEH/EU



NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection	ID 18 Hose
4	Power supply/communication wiring conduits	
5	Air inlet grille	
6	Air outlet louvre	



Specifications

Floor/Ceiling

- Optional vertical or horizontal installation.
- Air supply by means of one adjustable blade.
- Reduced noise thanks to the remotely controlled optional EEV.
- Sirocco Fan direct driven by a single motor.
- Long-life washable HD 40 permanent filter is included.
- Compatible with Wi-Fi Kit controller.



Model			AM056FNCDEH/EU	AM071FNCDEH/EU	
Power Supply	Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	5.6	7.1
		Heating	kW	6.3	8.0
Power	Power Input (Nominal)	Cooling	W	72	80
		Heating	W	72	77
	Current Input (Nominal)	Cooling	A	0.33	0.35
		Heating	A	0.28	0.29
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
		Output	W	60	120
		Number of Fans	-	1	1
	Airflow Rate	H/M/L (UL)	m³/min	14.00/13.00/12.00	18.00/16.50/15.00
Piping Connections	Liquid Pipe	ø, mm	6.35	9.52	
		ø, inch	1/4	3/8	
	Gas Pipe	ø, mm	12.70	15.88	
		ø, inch	1/2	5/8	
Drain Pipe	ø, mm	ID 18 HOSE	ID 18 HOSE		
Field Wiring	Power Source Wire	Below 20 m/over 20 m	mm²	1.5/2.5	1.5/2.5
	Transmission Cable		mm²	0.75-1.50	0.75-1.50
Refrigerant	Type	-	-	R410A	R410A
	Control Method	-	-	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound ²	Sound Pressure	(H/M/L)	dB(A)	40/37/34	44/42/40
Dimensions	Net Weight		kg	21.0	21.0
	Net Dimensions (W × H × D)		mm	1,000 × 650 × 200	1,000 × 650 × 200
Additional Accessories	Air Filter		-	Long-life Filter	Long-life Filter

Accessories

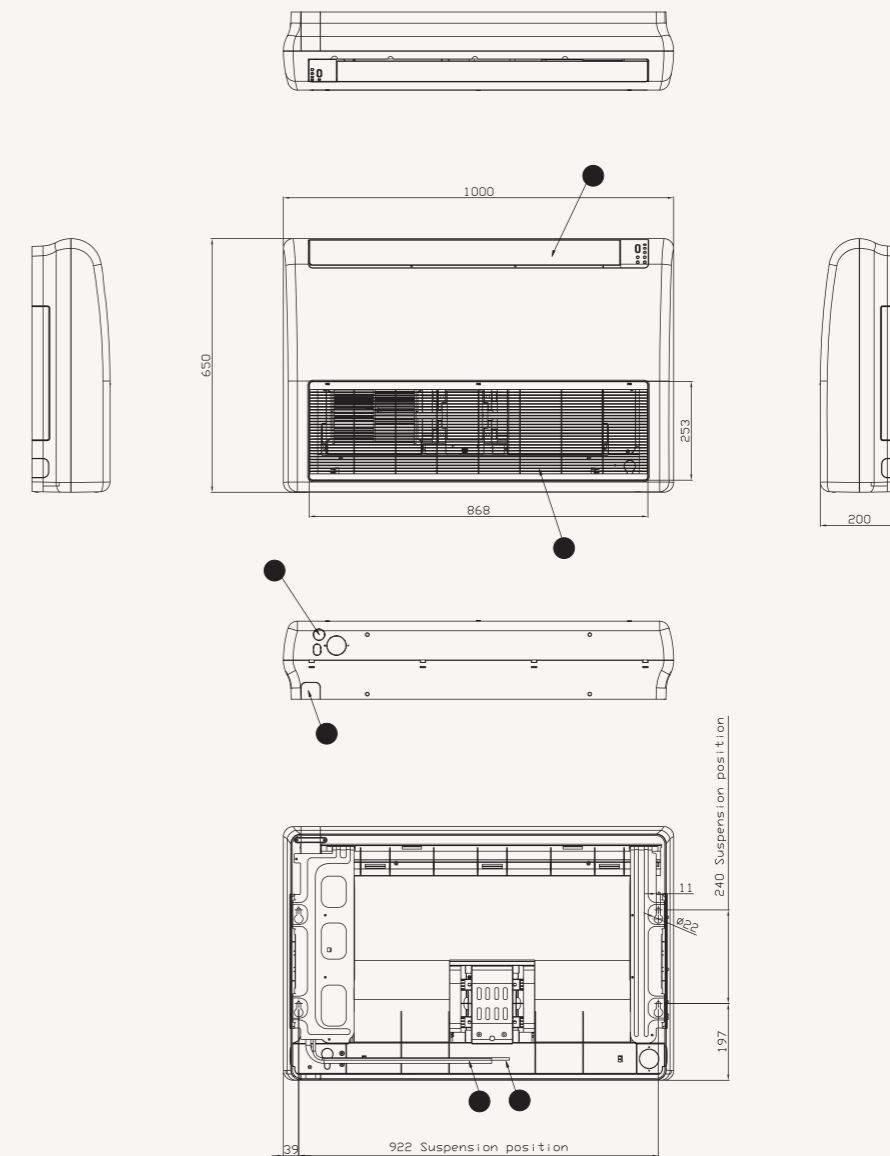


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Floor/Ceiling

AM***FNCDEH/EU



NO	Name	Description	
		5.6 kW	7.1 kW
1	Liquid pipe connection	ø6.35 Flare	ø9.52 Flare
2	Gas pipe connection	ø12.70 Flare	ø15.88 Flare
3	Drain pipe connection	ID 18 Hose	
4	Power supply/communication wiring conduits		
5	Air inlet grille		
6	Air outlet louvre		

Specifications

Big Ceiling

- Horizontal installation only.
- Air supply by means of one adjustable blade.
- Sirocco Fan direct driven by a single motor.
- Long-life washable HD 40 permanent filter is included.
- Compatible with Wi-Fi Kit controller.



Model				AM112JNCDKH/EU	AM140JNCDKH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	11.2	14.0
		Heating		12.5	16.0
Power	Power Input (Nominal)	Cooling	W	92.0	160.0
		Heating		80.0	160.0
	Current Input (Nominal)	Cooling	A	0.94	1.45
		Heating		0.83	1.45
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
		Output	W	260 x 1	260 x 1
	Airflow Rate	H/M/L (UL)	m ³ /min	29.30/23.90/18.50	36.40/30.80/26.00
			l/s	488.33/398.33/308.33	606.67/513.33/433.33
Piping Connections	Liquid Pipe	ø, mm		9.52	9.52
		ø, inch		3/8	3/8
	Gas Pipe	ø, mm		15.88	15.88
		ø, inch		5/8	5/8
	Drain Pipe	ø, mm		VP25 (OD 25, ID 20)	VP25 (OD 25, ID 20)
Field Wiring	Power Source Wire	Below 20 m/over 20 m	mm ²	1.5/2.5	1.5/2.5
	Transmission Cable		mm ²	0.75-1.50	0.75-1.50
Refrigerant	Type		-	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED
Sound ²	Sound Pressure	(H/M/L)	dB(A)	45/41/37	46/43/38
	Sound Power	Cooling		61	63
Dimensions	Net Weight		kg	33.5	42.5
	Net Dimensions (W × H × D)		mm	1,350 x 235 x 675	1,350 x 235 x 675

Accessories



Touch Controller

Wired Remote Controller

Wired Remote Controller

Wi-Fi Kit

External Thermostat

MWR-SH11N

MWR-WE13N

MWR-WG00*N

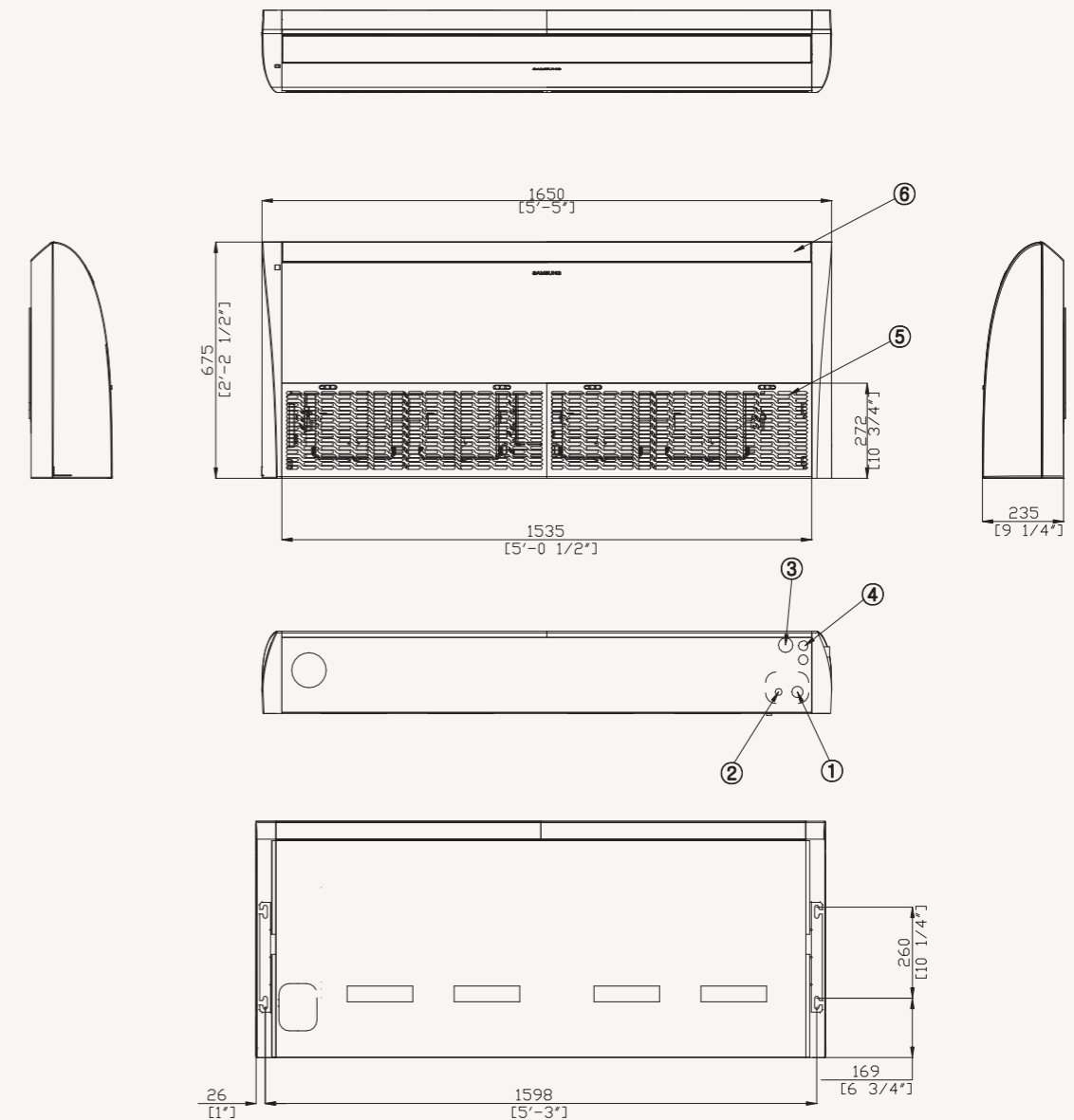
MIM-H04EN

MRW-TA

Dimensional drawings

Big Ceiling

AM***JNCDKH/EU



NO	Name
1	Refrigerant gas pipe
2	Refrigerant liquid pipe
3	Condensate drain
4	Power supply/communication wiring conduits
5	Air inlet grille
6	Air outlet grille

Specifications

Concealed Floor-Standing

- Silent operation.
- Sirocco fan driven by inverter motor.
- Compatible with Wi-Fi Kit controller.
- Long-life washable permanent filter.
- Auto Restart function.



Model				AM036FNFDEH/EU	AM056FNFDEH/EU	AM071FNFDEH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	3.6	5.6	7.1
		Heating		4.0	6.3	8.0
Power	Power Input (Nominal)	Cooling	W	50	110	110
		Heating		50	110	110
	Current Input (Nominal)	Cooling	A	0.24	0.53	0.53
		Heating		0.24	0.53	0.53
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Airflow Rate	H/M/L (UL)	m ³ /min	10.00/8.50/6.00	15.50/14.00/11.00	15.50/14.00/11.00
			l/s	166.67/141.67/100.00	258.33/233.33/183.33	258.33/233.33/183.33
Piping Connections	Liquid Pipe	ø, mm		6.35	9.52	9.52
		ø, inch		1/4	3/8	3/8
	Gas Pipe	ø, mm		12.70	15.88	15.88
		ø, inch		1/2	5/8	5/8
Drain Pipe	ø, mm		ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	
Field Wiring	Power Source Wire	Below 20 m/ over 20 m	mm ²	1.5/2.5	1.5/2.5	1.5/2.5
	Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50
Refrigerant	Type		-	R410A	R410A	R410A
	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound ²	Sound Pressure	(H/M/L)	dB(A)	37/32/27	40/36/32	40/36/32
Dimensions	Net Weight		kg	23.0	28.5	28.5
	Net Dimensions (W × H × D)		mm	945 × 600 × 220	1,225 × 600 × 220	1,225 × 600 × 220
Additional Accessories	Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter

Accessories

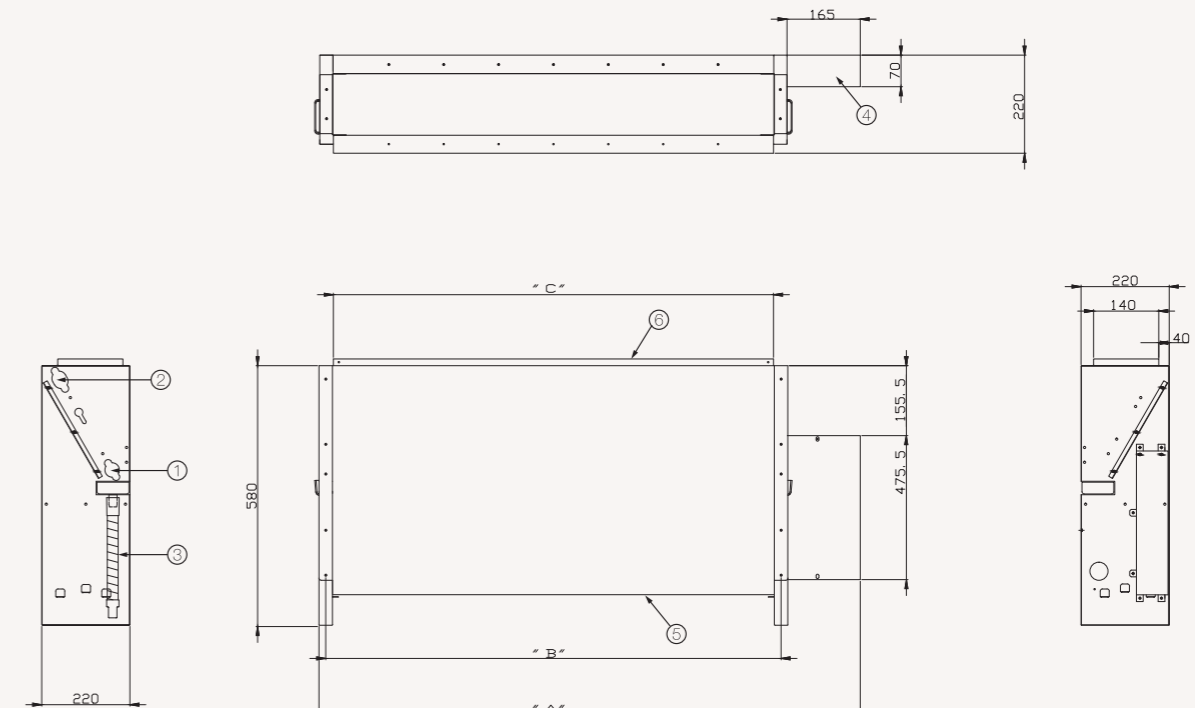


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Concealed Floor-Standing

AM036/056/071FNFDEH/**



Model	A	B	C
AM036FNFDEH/EU	945	730	700
AM056/071FNFDEH/EU	1,225	1,010	980

NO	Name	Description		
		3.6 kW	5.6 kW	7.1 kW
1	Liquid pipe connection	ø6.35 Flare	ø6.35 Flare	ø9.52 Flare
2	Gas pipe connection	ø12.70 Flare	ø12.70 Flare	ø15.88 Flare
3	Drain pipe connection		ID 18 Hose	
4	Power supply/communication wiring conduits			
5	Air inlet grille			
6	Air outlet louvre			

Specifications

Concealed Floor-Standing High Static Pressure

- Silent operation.
- Sirocco fan driven by inverter motor.
- Compatible with Wi-Fi Kit controller.
- Long-life washable permanent filter.
- Auto Restart function.



Model			AM036MNFDEH/EU	AM056MNFDEH/EU	AM071MNFDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	3.6	5.6	7.1
		Heating	kW	4.0	6.3	8.0
Power	Power Input (Nominal)	Cooling	kW	0.022	0.042	0.042
		Heating	kW	0.022	0.042	0.042
	Current Input (Nominal)	Cooling	A	0.20	0.37	0.37
		Heating	A	0.20	0.37	0.37
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	
		Output x n	W	100 x 1	100 x 1	100 x 1
	External Static Pressure	Min/Std/Max	mmAq	0.00/3.00/6.00	0.00/3.00/6.00	0.00/3.00/6.00
		Min/Std/Max	Pa	0.00/29.40/58.90	0.00/29.40/58.90	0.00/29.40/58.90
Airflow Rate	(H/M/L)	m ³ /h	600/510/360	930/840/660	930/840/660	
		ø, mm	6.35	6.35	9.52	
Piping Connections	Liquid Pipe		ø, mm	12.70	12.70	15.88
			ø, inch	1/2	1/2	5/8
	Gas Pipe		ø, mm	12.70	12.70	15.88
Field Wiring	Power Source Wire	mm ²	1.5-2.5	1.5-2.5	1.5-2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	GWP	-	2.088	2.088	2.088	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	37/32/27	40/36/32	40/36/32
	Sound Power		dB(A)	53.0	59.0	59.0
Dimensions	Net Weight	kg	22.0	27.0	27.0	
	Net Dimensions (W x H x D)	mm	945 x 600 x 220	1,225 x 600 x 220	1,225 x 600 x 220	
Additional Accessories	Air Filter	-	Long-life Filter	Long-life Filter	Long-life Filter	

Accessories

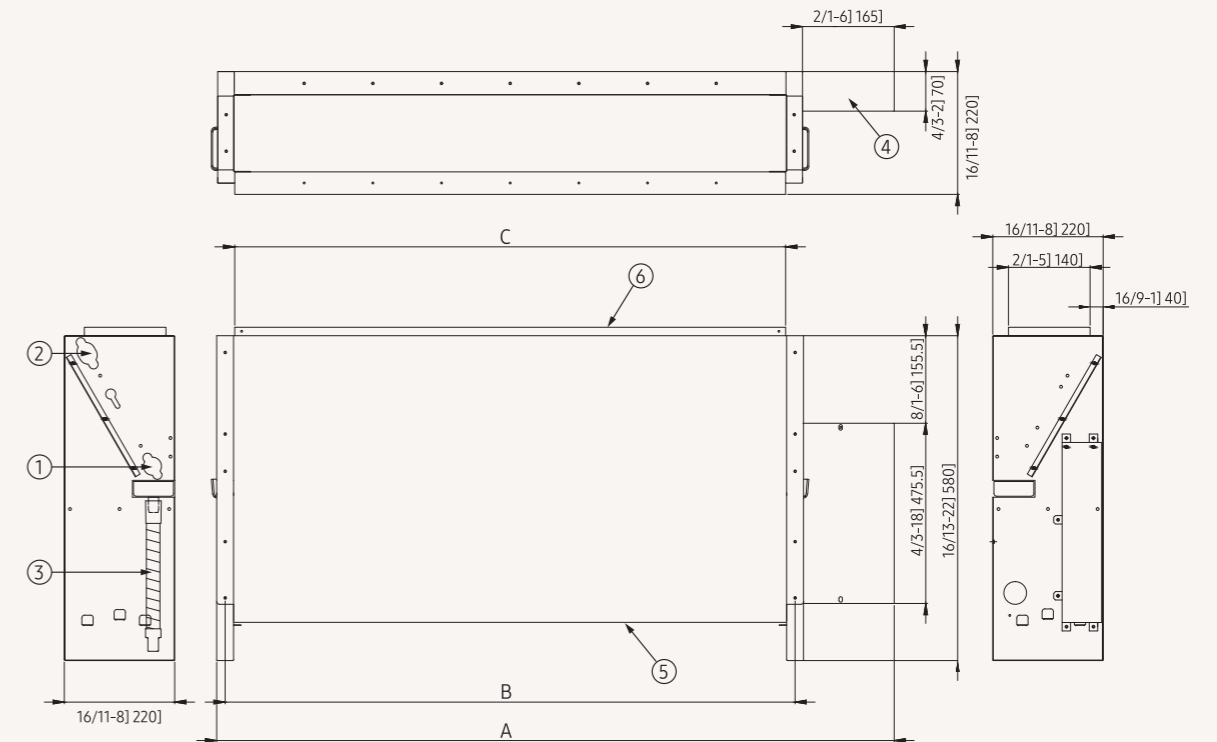


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Concealed Floor-Standing High Static Pressure

AM036/056/071MNFDEH/**



Model	A	B	C
AM036MNFDEH/EU	945	730	700
AM056/071MNFDEH/EU	1,225	1,010	980

NO	Name	Description		
		3.6 kW	5.6 kW	7.1 kW
1	Liquid pipe connection	ø6.35 Flare	ø6.35 Flare	ø9.52 Flare
2	Gas pipe connection	ø12.70 Flare	ø12.70 Flare	ø15.88 Flare
3	Drain pipe connection		ID 18 Hose	
4	Power supply/communication wiring conduits			
5	Air inlet grille			
6	Air outlet louvre			

Specifications

Packaged Floor-Standing

- Sirocco fan driven by inverter motor.
- Compatible with Wi-Fi Kit controller.



Model				AM140RNPDKH/EU	AM280RNPDKH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	14	28
		Heating		16	31.5
Power	Power Input (Nominal)	Cooling	W	190	955
		Heating		190	955
	Current Input (Nominal)	Cooling	A	0.90	4.73
		Heating		0.90	4.73
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan
		Output x n	w	154 x 1	700 x 1
	Airflow Rate	H/M/L (UL)	m ³ /min	35.00/30.50/27.50	70.00/60.00/50.00
		l/s	583.33/508.33/458.33	1,166.67/1,000.00/833.33	
Piping Connections	Liquid Pipe	ø, mm		9.52	9.52
		ø, inch		3/8	3/8
	Gas Pipe	ø, mm		15.88	22.22
		ø, inch		5/8	7/8
Drain Pipe	ø, mm		ID 18 HOSE	VP25 (OD 32, ID 25)	
Field Wiring	Power Source Wire	mm ²		2.5	2.5
	Transmission Cable	mm ²		VCTF 0.75-1.50	VCTF 0.75-1.50
Refrigerant	Type	-		R410A	R410A
	Control Method	-		EEV INCLUDED	EEV INCLUDED
Sound ²	Sound Pressure	(H/L)	dB(A)	54/47	58/54
	Sound Power	Cooling		-	-
Dimension	Net Weight	kg		48.0	115.0
	Net Dimensions (W x H x D)	mm		650 x 1,850 x 400	1,100 x 1,800 x 485

Accessories

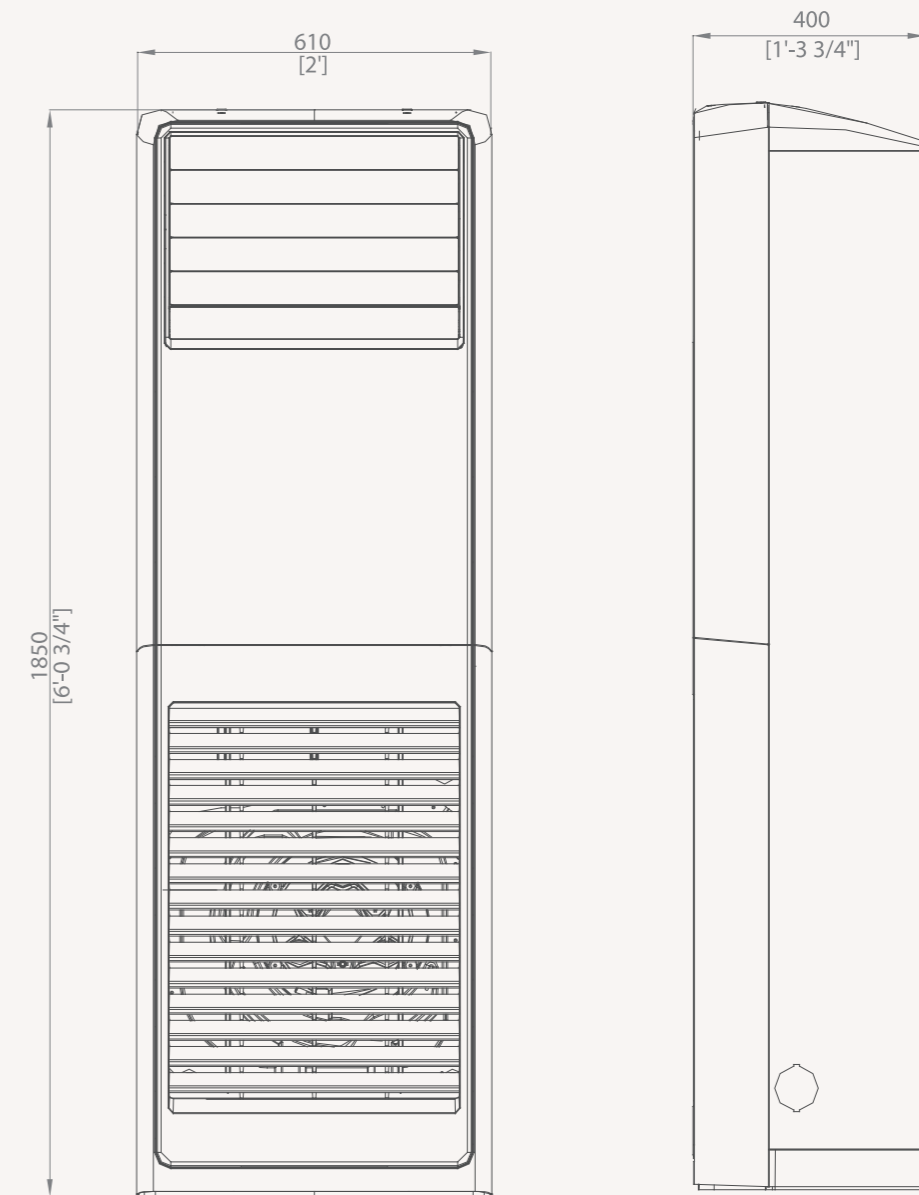


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Packaged Floor-Standing

AM140RNPDKH/EU

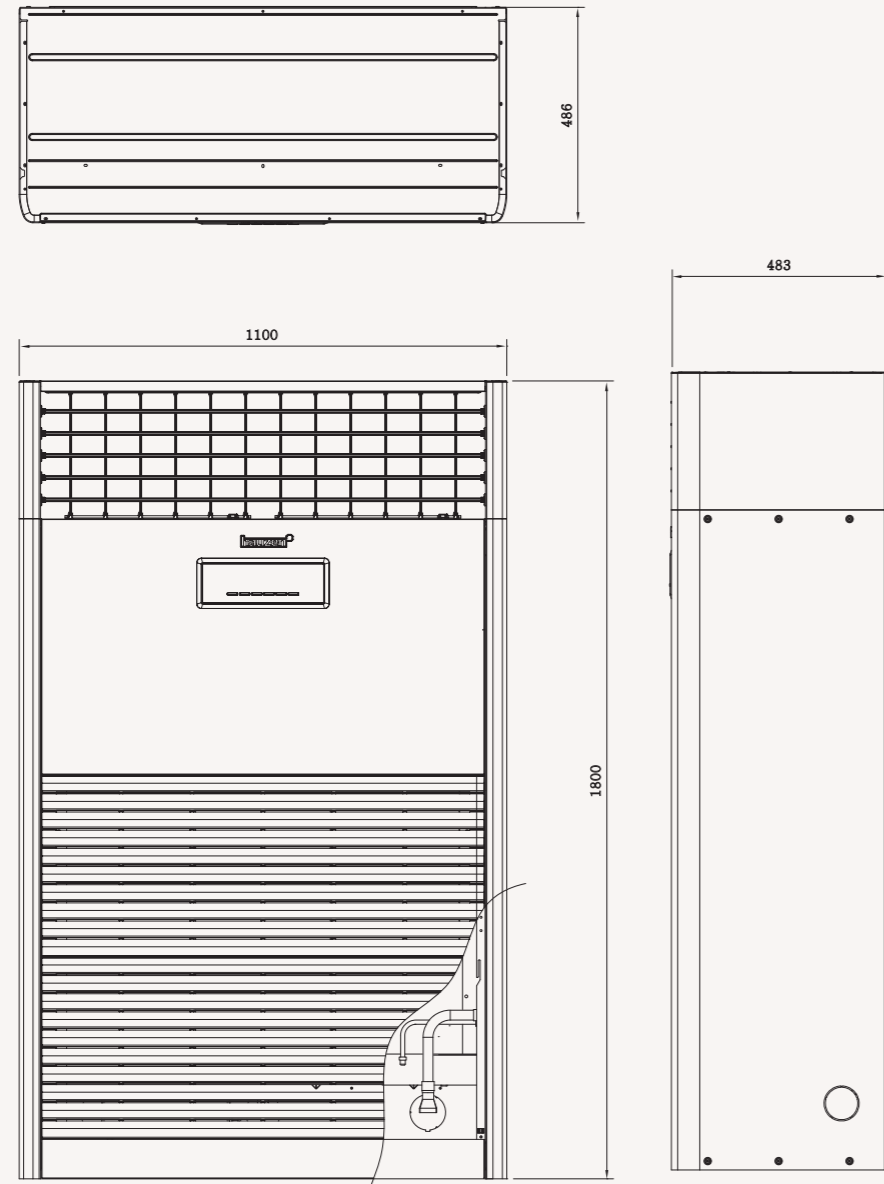


NO	Name	Description
1	Gas piping refrigerant	ø15.88 (5/8)
2	Liquid piping refrigerant	ø9.52 (3/8)
3	Condensation drain piping	-

Dimensional drawings

Packaged Floor-Standing

AM280RNPDKH/EU



NO	Name	Description
1	Refrigerant gas pipe	ø22.22 (7/8) Flare
2	Refrigerant liquid pipe	ø9.52 (3/8) Flare
3	Drain pipe connection	VP25 (OD 32, ID 25)



Specifications

Boracay Wall-Mounted (EEV excluded)

- Motorised louvre provides an automatic change in airflow by directing the air up and down.
- Manual adjustable guide vane allows users to change the airflow from side to side (left to right).
- Turbo function provides fast and powerful cooling.
- Cross-flow fan direct driven by a single motor.
- Washable Full HD 80 filter.
- Four-direction drain and refrigerant piping connection as standard.



Model			AM015KNTDEH/EU	AM022KNTDEH/EU	AM028KNTDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance		Cooling	kW	1.5	2.2	2.8
		Heating		1.7	2.5	3.2
Power	Power Input (Nominal)	Cooling	W	32.0	32.0	38.0
		Heating		34.0	35.0	39.0
	Current Input (Nominal)	Cooling	A	0.20	0.20	0.22
		Heating		0.20	0.20	0.22
	MCA			0.3	0.3	0.4
MFA			15.0	15.0	15.0	
Fan	Type	-	Crossflow Fan	Crossflow Fan	Crossflow Fan	
	Number of Fans	-	1	1	1	
	Airflow Rate	H/M/L (UL)	m ³ /min	6.2/5.7/5.1	6.6/5.7/5.1	7.0/6.2/5.5
Fan motor	Type	-	SSR Feedback	SSR Feedback	SSR Feedback	
	Output x n	W	19 x 1	19 x 1	19 x 1	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.7	12.7	12.7	
		ø, inch	1/2	1/2	1/2	
Drain Pipe	ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE		
Field Wiring	Power Source Wire	Minimum	mm ²	1.5	1.5	
	For connection with indoor	Minimum	mm ²	0.75	0.75	
	Remark	-		F1, F2	F1, F2	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED	
Sound ²	Sound Pressure	H/M/L	dB(A)	30/28/25	31/28/25	31/29/26
	Sound Power	Cooling		47	48	48
Dimensions	Net Weight		kg	8.0	8.0	8.5
	Net Dimensions (W × H × D)		mm	820 x 285 x 227	820 x 285 x 227	820 x 285 x 227

	AM036KNTDEH/EU	AM045KNTDEH/EU	AM056KNTDEH/EU	AM071KNTDEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	3.6	4.5	5.6	6.8
	4.0	5.0	6.3	7.0
	42.0	47.0	48.0	51.0
	42.0	47.0	48.0	53.0
	0.23	0.27	0.27	0.28
	0.23	0.27	0.27	0.28
	0.4	0.4	0.4	0.4
	15.0	15.0	15.0	15.0
	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	1	1	1	1
	8.5/7.5/6.6	13.9/12.4/11.2	14.4/12.9/11.2	15.7/14.1/12.9
	141.7/125.0/110.0	231.7/206.7/186.7	240.0/215.0/186.7	261.7/235.0/215.0
	SSR Feedback	SSR Feedback	SSR Feedback	SSR Feedback
	19 x 1	28 x 1	28 x 1	28 x 1
	6.35	6.35	6.35	9.52
	1/4	1/4	1/4	3/8
	12.7	6.35	6.35	9.52
	1/2	1/2	1/2	5/8
	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
	1.5	1.5	1.5	1.5
	0.75	0.75	0.75	0.75
	F1, F2	F1, F2	F1, F2	F1, F2
	R410A	R410A	R410A	R410A
	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
	36/33/29	38/35/33	39/36/33	40/38/35
	51	53	53	55
	8.5	12.0	12.0	12.0
	820 x 285 x 227	1,065 x 298 x 243	1,065 x 298 x 243	1,065 x 298 x 243

Accessories

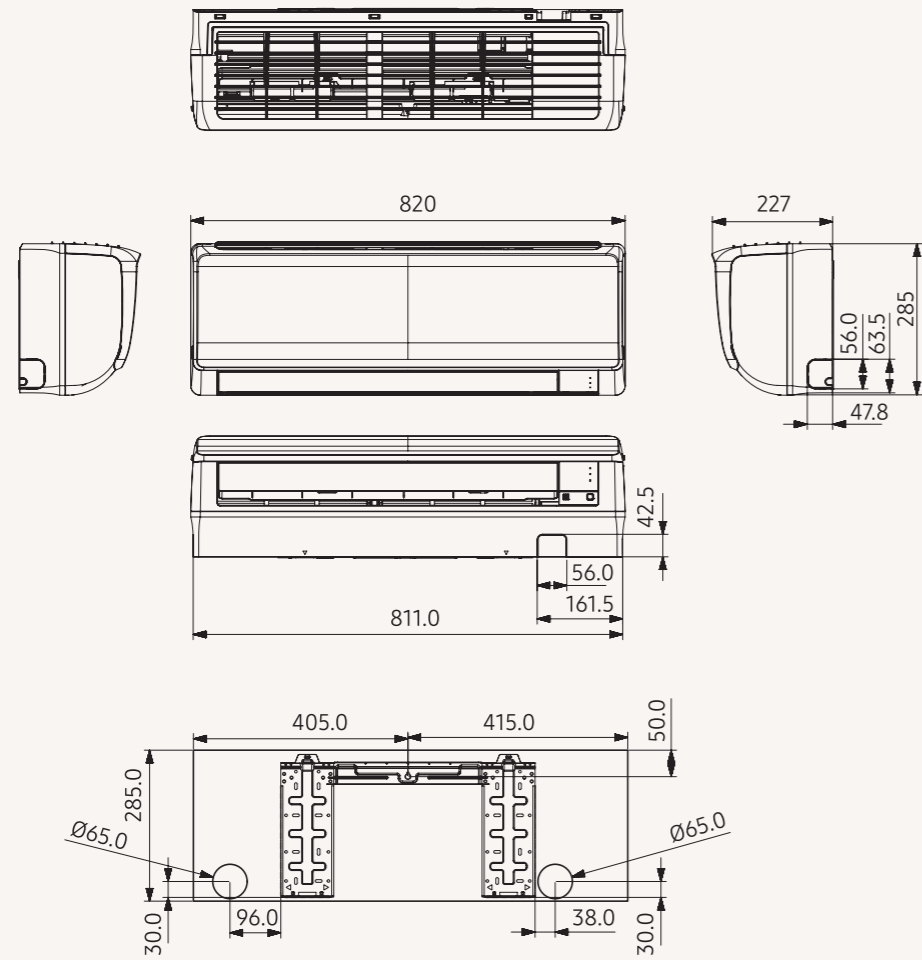


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

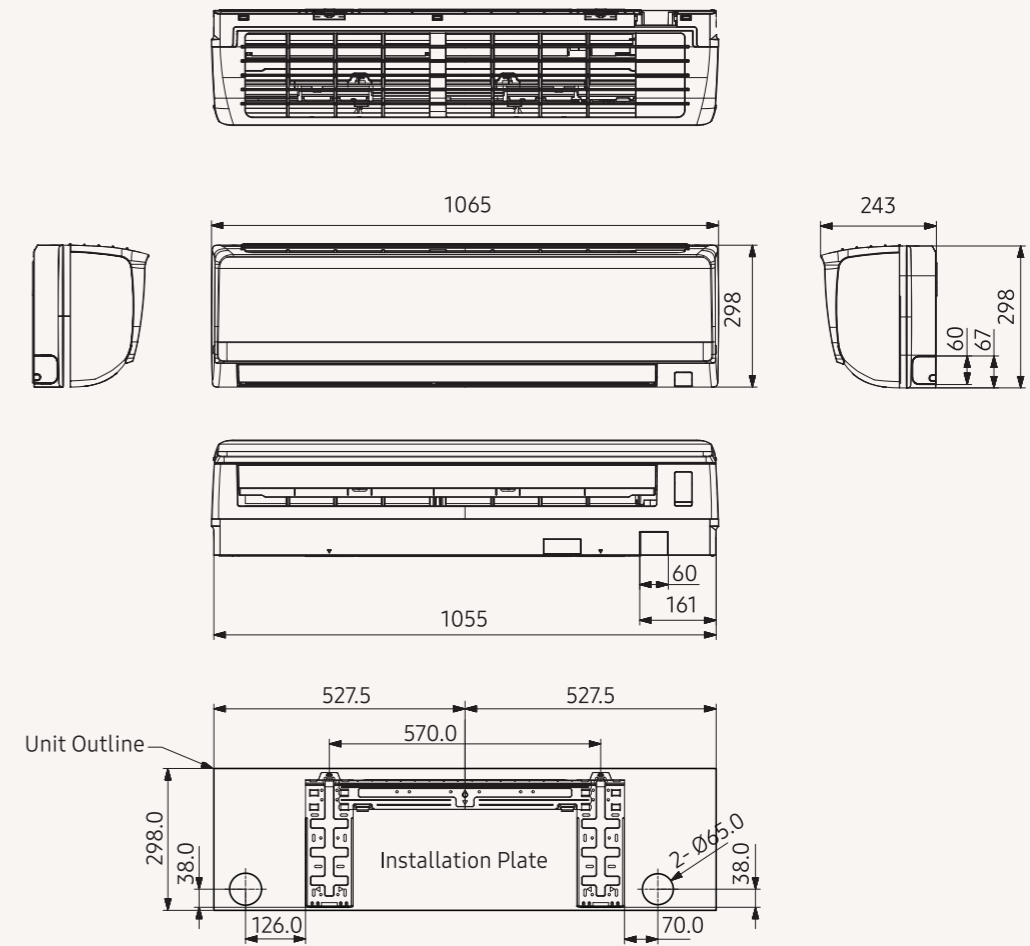
Boracay Wall-Mounted (EEV excluded)

AM015/022/028/036KNTD*****



NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits	-

AM045/056/071KNTD*****



NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits	-

Specifications

Boracay Wall-Mounted (EEV included)

- Motorised louvre provides an automatic change in airflow by directing the air up and down.
- Manual adjustable guide vane allows users to change the airflow from side to side (left to right).
- Turbo function provides fast and powerful cooling.
- Cross-flow fan direct driven by a single motor.
- Washable Full HD 80 filter.
- Four-direction drain and refrigerant piping connection as standard.



Model			AM015KNQDEH/EU	AM022KNQDEH/EU	AM028KNQDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Cooling	kW	1.5	2.2	2.8	
	Heating	kW	1.7	2.5	3.2	
Power	Power Input (Nominal)	Cooling	W	32.0	32.0	38.0
		Heating	W	34.0	35.0	39.0
	Current Input (Nominal)	Cooling	A	0.20	0.20	0.22
		Heating	A	0.20	0.20	0.22
	MCA		0.3	0.3	0.4	
	MFA		15.0	15.0	15.0	
Fan	Type	-	Crossflow Fan	Crossflow Fan	Crossflow Fan	
	Number of Fans	-	1	1	1	
	Airflow Rate	H/M/L (UL)	m ³ /min	6.2/5.7/5.1	6.6/5.7/5.1	7.0/6.2/5.5
Fan motor	Type	-	SSR Feedback	SSR Feedback	SSR Feedback	
	Output x n	W	19 x 1	19 x 1	19 x 1	
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.7	12.7	12.7	
		ø, inch	1/2	1/2	1/2	
	Drain Pipe	ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	
Heat Insulation	-	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes		
Field Wiring	Power Source Wire	Minimum	mm ²	1.5	1.5	
	For connection with indoor	Minimum	mm ²	0.75	0.75	
	Remark	-		F1, F2	F1, F2	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	H/M/L	dB(A)	30/28/25	31/28/25	31/29/26
	Sound Power	Cooling		47	48	48
Dimensions	Net Weight		kg	8.5	8.5	9.0
	Net Dimensions (W × H × D)		mm	820 x 285 x 227	820 x 285 x 227	820 x 285 x 227



	AM036KNQDEH/EU	AM045KNQDEH/EU	AM056KNQDEH/EU	AM071KNQDEH/EU
	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
	3.6	4.5	5.6	6.8
	4.0	5.0	6.3	7.0
	42.0	47.0	48.0	51.0
	42.0	47.0	48.0	53.0
	0.23	0.27	0.27	0.28
	0.23	0.27	0.27	0.28
	0.4	0.4	0.4	0.4
	15.0	15.0	15.0	15.0
	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	1	1	1	1
	8.5/7.5/6.6	13.9/12.4/11.2	14.4/12.9/11.2	15.7/14.1/12.9
	141.7/125.0/110.0	231.7/206.7/186.7	240.0/215.0/186.7	261.7/235.0/215.0
	SSR Feedback	SSR Feedback	SSR Feedback	SSR Feedback
	19 x 1	28 x 1	28 x 1	28 x 1
	6.35	6.35	6.35	9.52
	1/4	1/4	1/4	3/8
	12.7	12.7	12.7	15.88
	1/2	1/2	1/2	5/8
	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes	Both liquid and gas pipes
	1.5	1.5	1.5	1.5
	0.75	0.75	0.75	0.75
	F1, F2	F1, F2	F1, F2	F1, F2
	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	36/33/29	38/35/33	39/36/33	40/38/35
	51	53	53	55
	9.0	12.5	12.5	12.5
	820 x 285 x 227	1,065 x 298 x 243	1,065 x 298 x 243	1,065 x 298 x 243

Accessories

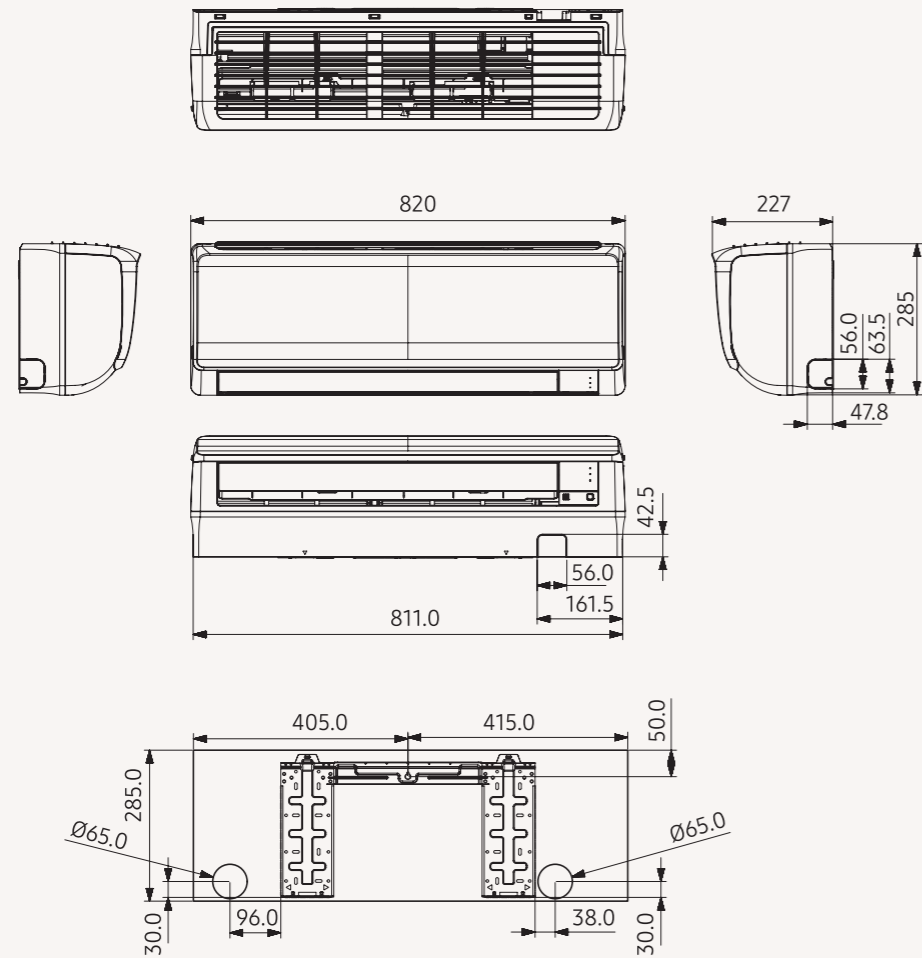


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

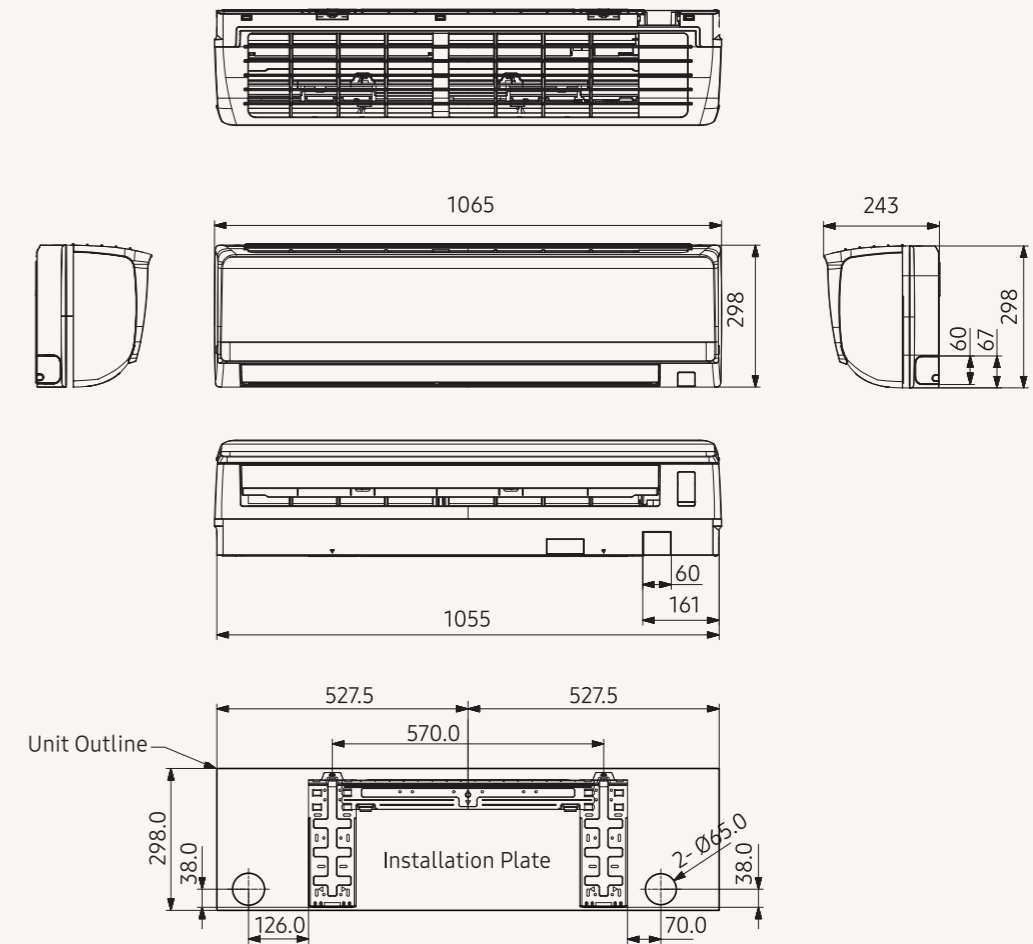
Boracay Wall-Mounted (EEV included)

AM015/022/028/036KNQD****



NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits	-

AM045/056/071KNQD****



NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits	-

Specifications

AR5000 Wall-Mounted (EEV included)


- Triangular Architecture which enlarges the air intake and air outlet areas, resulting in increased airflow.
- Motorised louvre provides an automatic change in airflow by directing the air up and down.
- Manual adjustable guide vane allows users to change the airflow from side to side (left to right).
- Cross-flow fan direct driven by a single motor.
- Wireless remote control is included.
- Compatible with Wi-Fi Kit controller.



Model			AM015JNVDKH/EU	AM022JNADKH/EU	AM028JNADKH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	
Performance	Capacity (Nominal)	Cooling	kW	1.5	2.2	2.8
		Heating		1.7	2.5	3.2
Power	Power Input (Nominal)	Cooling	W	14.0	15.0	16.0
		Heating		16.0	18.0	24.0
	Current Input (Nominal)	Cooling	A	0.12	0.13	0.13
		Heating		0.13	0.15	0.19
Fan	Motor	Type	-	Crossflow Fan	Crossflow Fan	
		Output	W	27 x 1	27 x 1	27 x 1
	Airflow Rate	H/M/L (UL)	m ³ /min	4.40/4.20/3.80	5.40/4.70/4.00	5.70/5.00/4.30
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	6.35	
		ø, inch	1/4	1/4	1/4	
	Gas Pipe	ø, mm	12.70	12.70	12.70	
		ø, inch	1/2	1/2	1/2	
	Drain Pipe	ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	
	Field Wiring	Power Source Wire	mm ²	1.5/2.5	1.5/2.5	1.5/2.5
Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound ²	Sound Pressure	(H/M/L)	dB(A)	28/25/24	33/29/25	36/31/25
	Sound Power	Cooling		44	50	53
Dimensions	Net Weight	kg	7.9	7.9	7.9	
	Net Dimensions (W x H x D)	mm	750 x 249 x 246	750 x 249 x 246	750 x 249 x 246	

	AM036JNADKH/EU	AM045JNADKH/EU	AM056JNADKH/EU	AM071JNADKH/EU	AM082JNADKH/EU
	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz
	3.6	4.5	5.6	7.1	8.2
	4.0	5.0	6.3	8.0	8.5
	20.0	31.0	27.0	41.0	55.0
	28.0	41.0	37.0	53.0	72.0
	0.15	0.24	0.21	0.31	0.42
	0.20	0.31	0.29	0.41	0.55
	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan	Crossflow Fan
	27 x 1	27 x 1	27 x 1	27 x 1	27 x 1
	7.10/5.70/4.60	8.90/7.50/6.00	11.80/10.00/8.20	14.80/12.40/10.00	16.70/14.30/12.40
	118.33/95.00/76.67	148.33/125.00/100.00	196.67/166.67/136.67	246.67/206.67/166.67	278.33/238.33/206.67
	6.35	6.35	6.35	9.52	9.52
	1/4	1/4	1/4	3/8	3/8
	12.70	12.70	12.70	15.88	15.88
	1/2	1/2	1/2	5/8	5/8
	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50
	R410A	R410A	R410A	R410A	R410A
	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
	37/34/30	41/38/34	39/36/33	44/41/36	47/43/40
	54	57	57	61	65
	9.6	9.6	14.5	14.5	14.5
	826 x 261 x 261	826 x 261 x 261	1,065 x 301 x 294	1,065 x 301 x 294	1,065 x 301 x 294

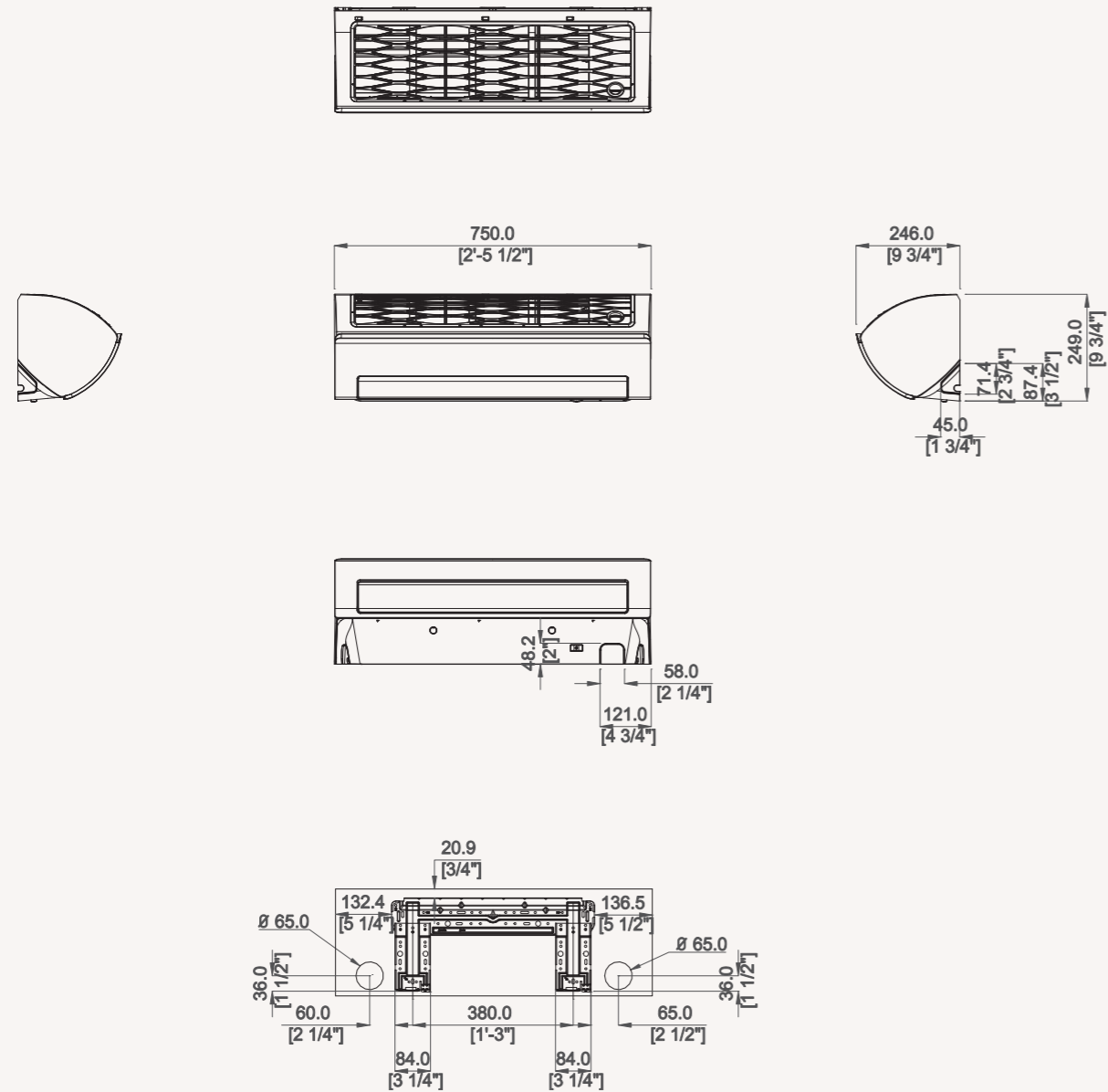
Accessories

					
Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
AR-EH03E	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

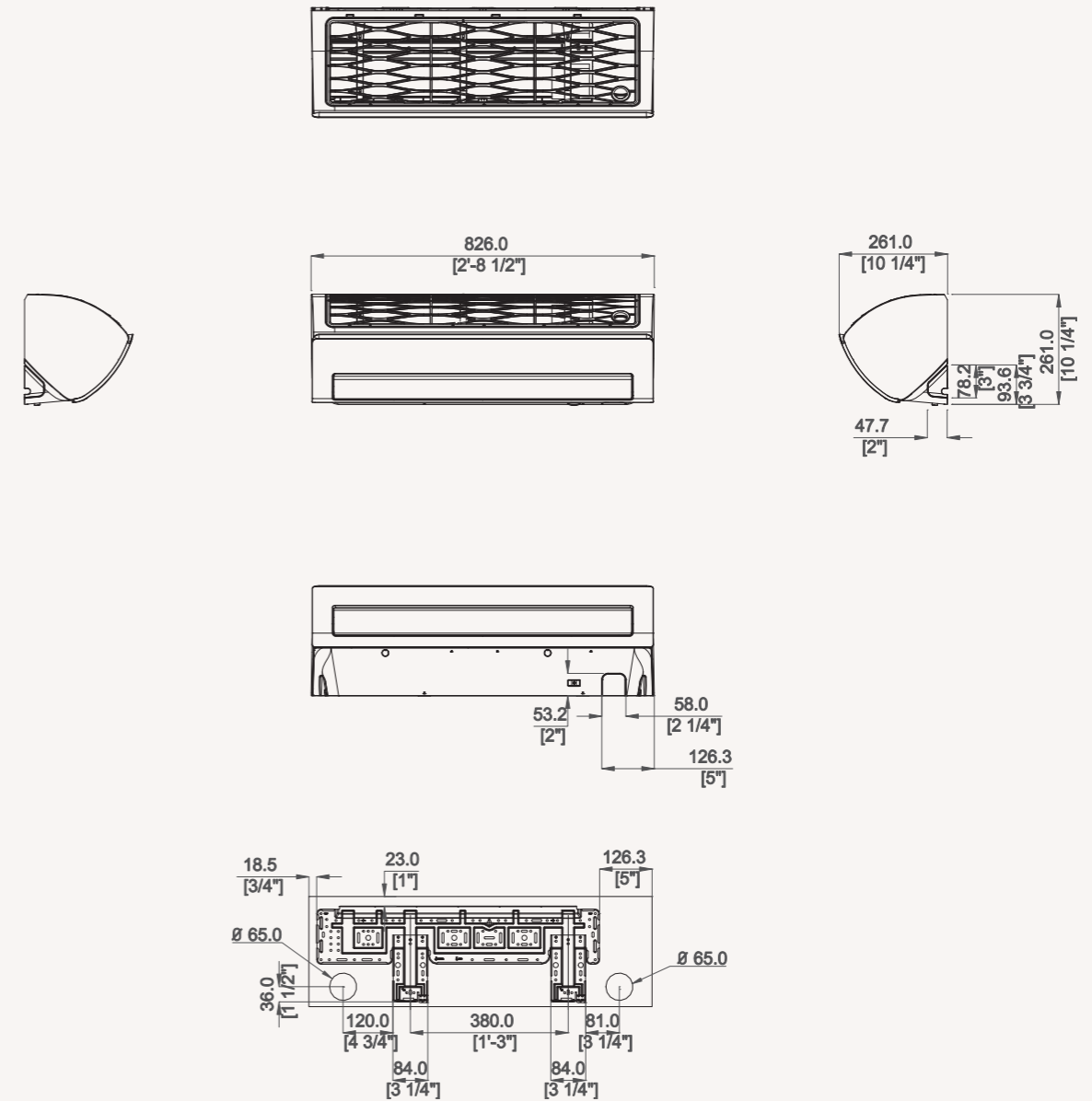
AR5000 Wall-Mounted (EEV included)

AM015JNVDKH/EU AM022JNADKH/EU AM028JNADKH/EU



NO	Name	Description
1	Refrigerant gas pipe	$\varnothing 12.70$ (1/2) Flare
2	Refrigerant liquid pipe	$\varnothing 6.35$ (1/4) Flare
3	Drain pipe connection	ID 18 Hose

AM036JNADKH/EU AM045JNADKH/EU



NO	Name	Description
1	Refrigerant gas pipe	$\varnothing 12.70$ (1/2) Flare
2	Refrigerant liquid pipe	$\varnothing 6.35$ (1/4) Flare
3	Drain pipe connection	ID 18 Hose

Specifications

Max Wall-Mounted

- Cross-flow fan direct driven by a single BLDC motor.
- Return air is filtered by means of an easily removable, washable Full HD 80 filter.
- Motorised louvre provides an automatic change in airflow by directing the air up and down.
- Manual adjustable guide vane allows users to change the airflow from side to side (left to right).



Model	AM093MNQDEH/EU				
Power Supply	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz			
Performance	Capacity	Cooling	kW	9.3	
		Heating		9.8	
Power	Power Input	Cooling	W	66	
		Heating		76	
	Current Input	Cooling	A	0.47	
		Heating		0.54	
Current	MCA	A	0.68		
Fan	Type	-	Crossflow Fan		
	Number of Fans	-	1		
	Airflow Rate	H/M/L	m ³ /min	23/20/17	
				L/s	383/333/283
Fan Motor	Type	-	BLDC Motor		
	Output x n	W	58 x 1		
Piping Connections	Liquid Pipe	ø, mm	9.52		
		ø, inch	3/8		
	Gas Pipe	ø, mm	15.88		
		ø, inch	5/8		
Drain Pipe	ø, mm	ID 18 HOSE			
Wiring Connections	Communication	Min.	mm ²	0.75	
		Remark	-	F1, F2	
Refrigerant	Type	-	R410A		
	Electronic Expansion Valve	-	EEV INCLUDED		
Sound ²	Sound Pressure	H/M/L	dB(A)	49/46/42	
		Cooling		66	
Dimensions	Net Weight	kg	18.5		
	Net Dimensions (W × H × D)	mm	1,280 x 345 x 253		

Accessories

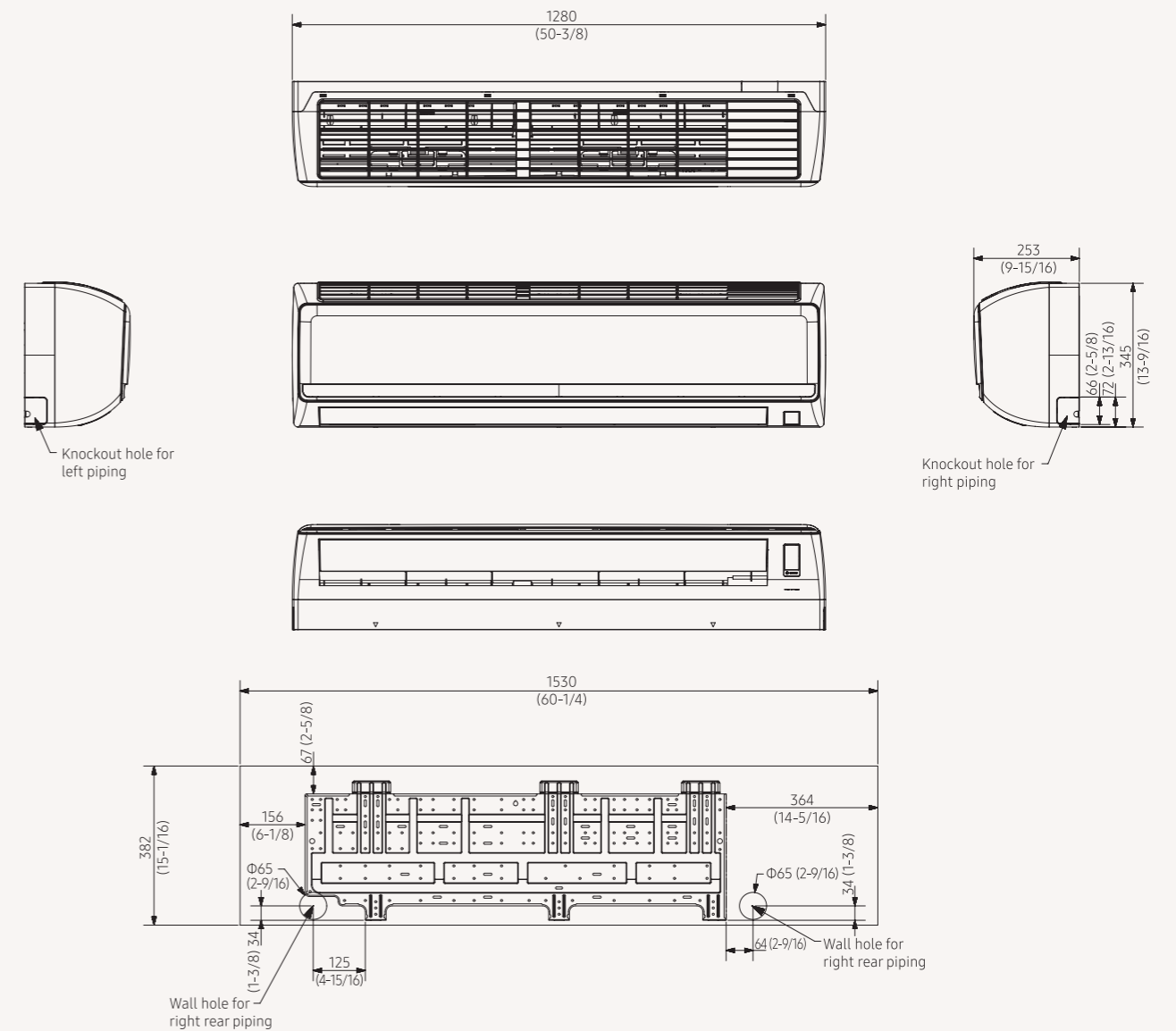


Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	External Thermostat
MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRW-TA

Dimensional drawings

Max Wall-Mounted

AM093MNQDEH**



NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø15.88 (5/8)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits	-

Specifications

Hydro Unit

- Production of low temperature hot water and chilled water.
- Hot water production to a maximum temperature of 50 °C.
- Two-way control: leaving water temperature and room temperature control.
- Connection to low temperature radiators and AHU water coils.
- Hot water production for sanitary use.
- Connectable to Heat Recovery DVM S systems.



Model (HE)			AM160FNBDEH/EU	AM320FNBDEH/EU	AM500FNBDEH/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	14.0	28.0	44.8
		Heating		16.0	31.5	50.4
Power	Power Input (Nominal)	Cooling	W	10	10	10
		Heating		10	10	10
	Current Input (Nominal)	Cooling	A	0.05	0.05	0.05
		Heating		0.05	0.05	0.05
MCA (Including External Contact)			2.2	2.2	2.2	
MFA		A	2.75	2.75	2.75	
Heat Exchanger	Type	-	PHE	PHE	PHE	
	Quantity	-	1	1	1	
	Pipe Size	ø, inch	PT1 (25A)	PT1 (25A)	PT1 1/4 (32A)	
	Water Flow Rate	l/min	48	92	150	
	Flow Switch	l/min	20	30	50	
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	12.70	
		ø, inch	3/8	3/8	1/2	
	Gas Pipe	ø, mm	15.88	22.20	28.58	
		ø, inch	5/8	7/8	1 1/8	
Field Wiring	Power Source Wire (L<10 m, Single Installation)	mm ²	2.5	2.5	2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	R410A	
	Control Method	-	EEV	EEV	EEV	
Sound ²	Sound Pressure	dB(A)	27	28	31	
Dimensions	Net Weight	kg	29.0	33.0	40.0	
	Net Dimensions (W x H x D)	mm	518 x 627 x 330	518 x 627 x 330	518 x 627 x 330	
Operating Temperature Range	Ambient	Cooling	°C	-5.0-48.0	-5.0-48.0	-5.0-48.0
		Heating	°C	-20.0-35.0	-20.0-35.0	-20.0-35.0
		Hot Water (Main Cooling, HR)	°C	-20.0-35.0 (43.0)	-20.0-35.0 (43.0)	-20.0-35.0 (43.0)
	Leaving Water	Cooling	°C	5.0-30.0	5.0-30.0	5.0-30.0
		Heating	°C	20.0-50.0	20.0-50.0	20.0-50.0



Model (HT)			AM160FNBFB/EU	AM160FNBFBG/EU	AM250FNBFB/EU	AM250FNBFBG/EU	
Power Supply		Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	3Φ, 4, 380-415 V, 50 Hz	
Performance	Capacity (Nominal)	Cooling	kW	-	-	-	-
		Heating		16	16	25	25
Power	Power Input (Nominal)	Cooling	W	-	-	-	-
		Heating		3,100	3,100	5,000	5,000
	Current Input (Nominal)	Cooling	A	-	-	-	-
		Heating		14.30	4.85	23.10	7.85
MCA (Including External Contact)			24.15	12.88	32.15	12.88	
MFA			30.19	16.10	40.19	16.10	
Heat Exchanger	Type	-	PHE	PHE	PHE	PHE	
	Quantity	-	2	2	2	2	
	Pipe Size	ø, inch	PT1 (25A)	PT1 (25A)	PT1 (25A)	PT1 (25A)	
	Water Flow Rate	l/min	23	23	36	36	
	Flow Switch	l/min	12	12	12	12	
Piping Connections	Liquid Pipe	ø, mm	9.52	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	3/8	
	Gas Pipe	ø, mm	15.88	15.88	15.88	15.88	
		ø, inch	5/8	5/8	5/8	5/8	
Field Wiring	Power Source Wire (L<10 m, Single Installation)	mm ²	4.0	2.5	4.0	2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R134A	R134A	R134A	R134A	
	Control Method	-	EEV	EEV	EEV	EEV	
Sound ²	Factory Charging	kg / tCO ₂ e	2.15/3.07	2.15/3.07	2.15/3.07	2.15/3.07	
	Sound Pressure	dB(A)	42	42	42	42	
Dimensions	Net Weight	kg	104.0	104.0	104.0	104.0	
	Net Dimensions (W x H x D)	mm	518 x 1,210 x 330	518 x 1,210 x 330	518 x 1,210 x 330	518 x 1,210 x 330	
Operating Temperature Range	Ambient	Cooling	°C	-	-	-	-
		Heating	°C	-20.0-35.0	-20.0-35.0	-20.0-35.0	-20.0-35.0
		Hot Water (Main Cooling, HR)	°C	-20.0-35.0 (43.0)	-20.0-35.0 (43.0)	-20.0-35.0 (43.0)	-20.0-35.0 (43.0)
	Leaving Water	Cooling	°C	25.0-80.0	25.0-80.0	25.0-80.0	25.0-80.0
		Heating	°C	25.0-80.0	25.0-80.0	25.0-80.0	25.0-80.0

Accessories

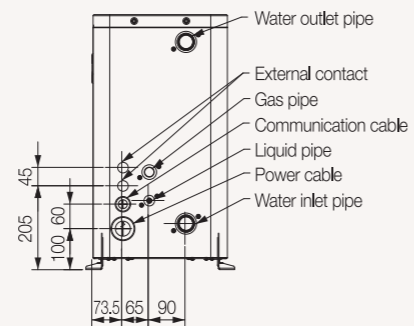
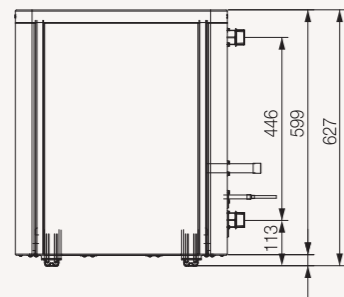
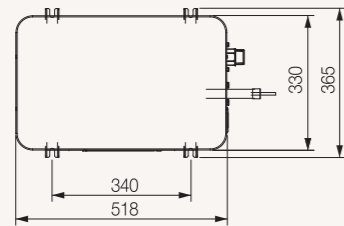


Wired Remote Controller	Wired Remote Controller
MWR-WW00N	MWR-WG00*N

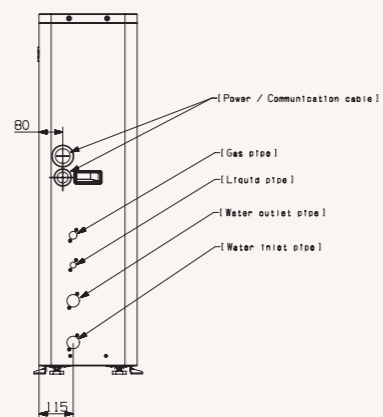
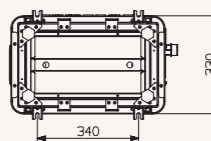
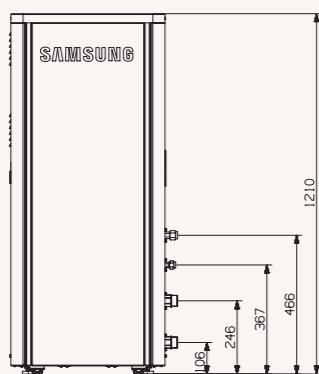
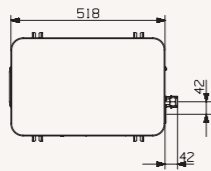
Dimensional drawings

Hydro Unit

AM***FNBDEH/EU



AM***FNBFEH/EU



Specifications

Mode Control Unit (MCU)

- Enable simultaneous heating and cooling for DVM Heat Recovery model.



Model		MCU-R4NEKON	MCU-S6NEK3N	
Type		HR Changer	MCU	
Power Supply	Φ, #, V, Hz	1Φ, 220~240 V, 50/60 Hz	1Φ, 220~240 V, 50/60 Hz	
Mode	-	Heat Recovery	Heat Recovery	
Max. number of indoor units	-	12	18	
Max. indoor units per port	-	3	3	
Number of ports	-	4	6	
Max. capacity of indoor units	kW	22.4	22.4	
Max. capacity of indoor units per port	kW	5.6	5.6	
	Y-Joint	14.0	14.0	
Refrigerant	Additional Refrigerant Charging	kg/unit	0.5	
Piping Connections	Outdoor Unit - Liquid Pipe	ø, mm	9.52	
		ø, inch	3/8	
		Gas Pipe (Low Pressure)	ø, mm	19.05
		ø, inch	3/4	
	Gas Pipe (High Pressure)	ø, mm	15.88	
		ø, inch	5/8	
		Indoor Unit - Liquid Pipe	ø, mm	6.35
			ø, inch	1/4
Gas Pipe	ø, mm	12.70		
	ø, inch	1/2		
External Dimensions	Net Weight	kg	21.3	
	Net Dimensions (W x H x D)	mm	728 x 199 x 469	
			728 x 199 x 469	
Operating Temperature Range	Cooling	°C	-5.0~48.0	
	Heating	°C	-25.0~26.0	
			-25.0~26.0	

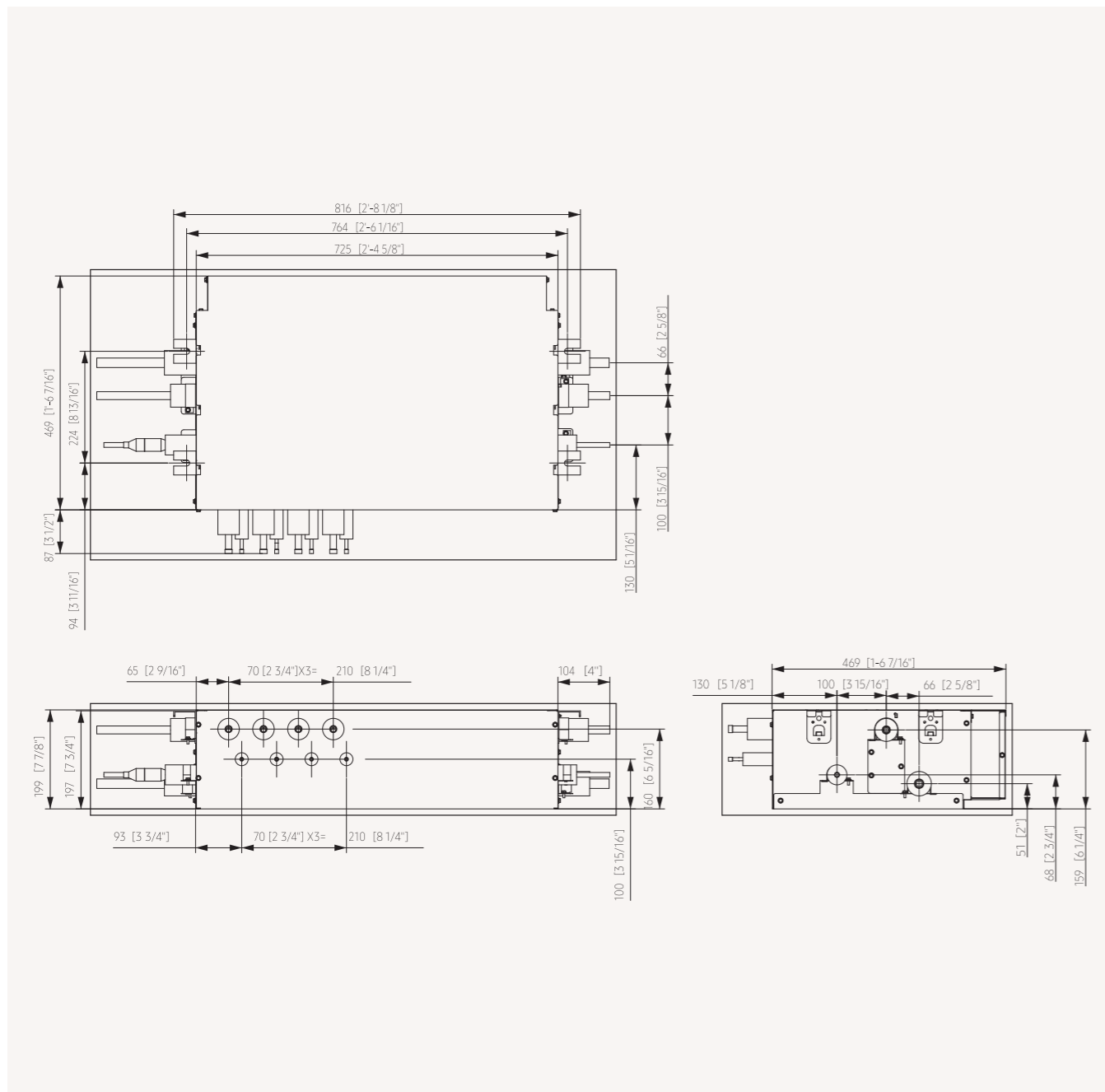


Model Name		MCU-S1NEK1N	MCU-S2NEK2N	MCU-S4NEK3N	MCU-S6NEK2N		
Power Supply	Φ, #, V, Hz	1Φ, 2, 220~240 V, 50 Hz, 1Φ, 2, 208~230 V, 60 Hz					
Power	Power Input (Nominal)	Cooling	W	19	25	40	55
		Heating	W	19	25	40	55
	Current Input (Nominal)	Cooling	A	0.20	0.20	0.20	0.30
		Heating	A	0.20	0.20	0.20	0.30
	MCA	A	2.0	2.0	2.0	2.0	
MFA (MOP)	A	15.0	15.0	15.0	15.0		
Max. number of connectable indoor units	-	8	16	32	32		
Max. number of connectable indoor units per branch	-	8	8	8	8		
Number of branches	-	1	2	4	6		
Max. capacity of connectable indoor units	kW	16.0	32.0	61.6	61.6		
Max. capacity of connectable indoor units per branch	-	kW	16.0	16.0	16.0	16.0	
	Y-Joint	kW	-	32.0	32.0	32.0	
Field Wiring	Power Source Wire	mm ²	2.5	2.5	2.5	2.5	
	Transmission Cable	mm ²	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50	
Sound Pressure	Stable Cooling Operation	dB(A)	33	34	36	36	
	Heating-to-Cooling Changeover	dB(A)	50	50	50	50	
Additional Refrigerant Charging		kg/unit	0.5	0.5	0.5	0.5	
Piping Connections	Outdoor Unit	Liquid Pipe	ø, mm	9.52	15.88	15.88	15.88
			ø, inch	3/8	5/8	5/8	5/8
		Gas Pipe	ø, mm	22.22	28.58	28.58	28.58
			ø, inch	7/8	11/8	11/8	11/8
		Discharge Gas	ø, mm	19.05	28.58	28.58	28.58
			ø, inch	3/8	11/8	11/8	11/8
	Indoor Unit	Liquid Pipe	ø, mm	9.52	9.52	9.52	9.52
			ø, inch	3/8	3/8	3/8	3/8
		Gas Pipe	ø, mm	15.88	15.88	15.88	15.88
			ø, inch	5/8	5/8	5/8	5/8
External Dimensions	Net Weight	kg	11.0	21.0	24.5	28.5	
	Net Dimensions (W x H x D)	mm	338 x 409 x 199	728 x 469 x 199	728 x 469 x 199	728 x 469 x 199	
Operation Limit	Cooling	°C (°F)	-15.0~48.0 (5.0~118.4)	-15.0~48.0 (5.0~118.4)	-15.0~48.0 (5.0~118.4)	-15.0~48.0 (5.0~118.4)	
	Heating	°C (°F)	-25.0~24.0 (-13.0~75.2)	-25.0~24.0 (-13.0~75.2)	-25.0~24.0 (-13.0~75.2)	-25.0~24.0 (-13.0~75.2)	

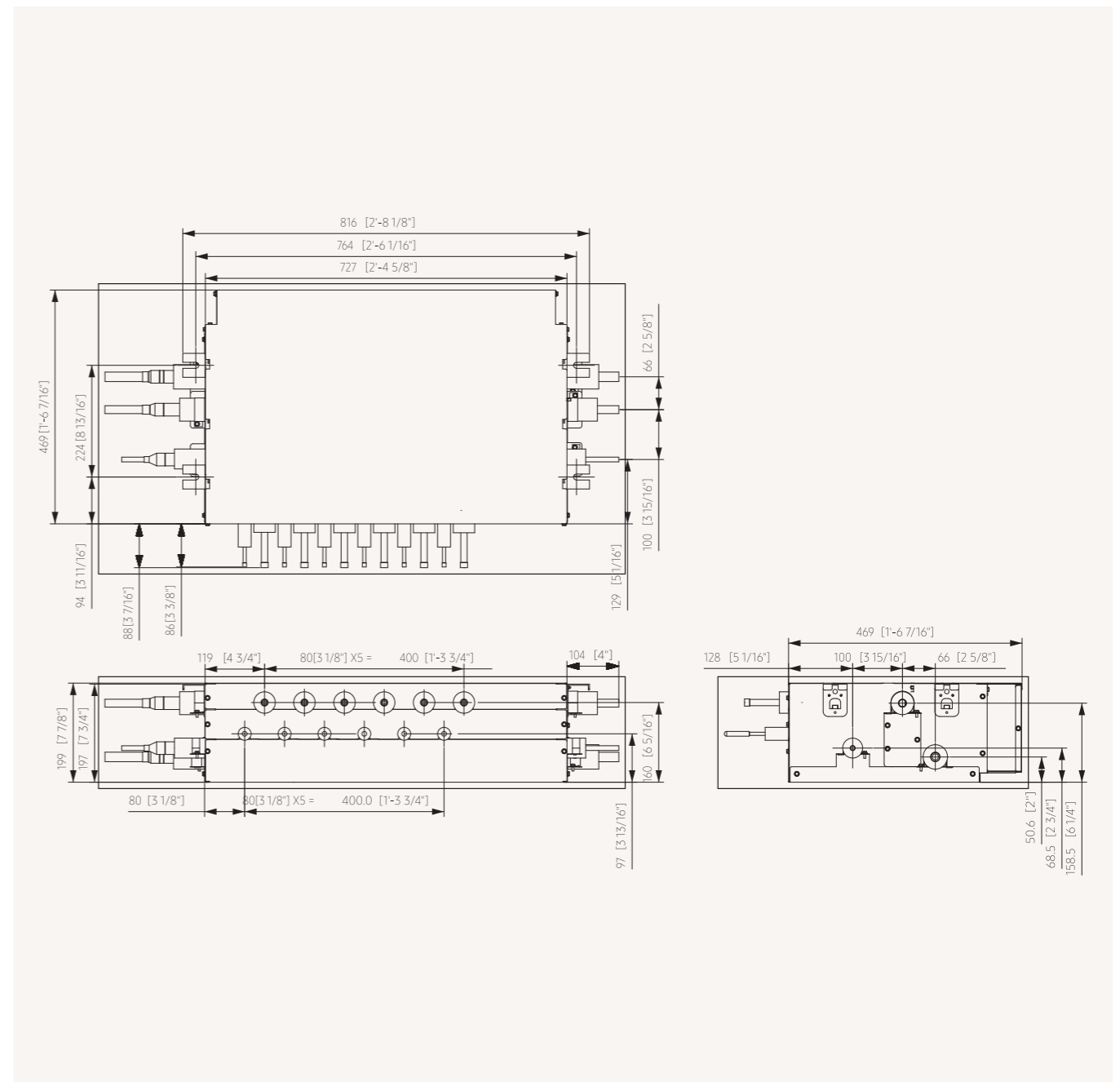
Dimensional drawings

Mode Control Unit (MCU)

MCU-R4NEKON



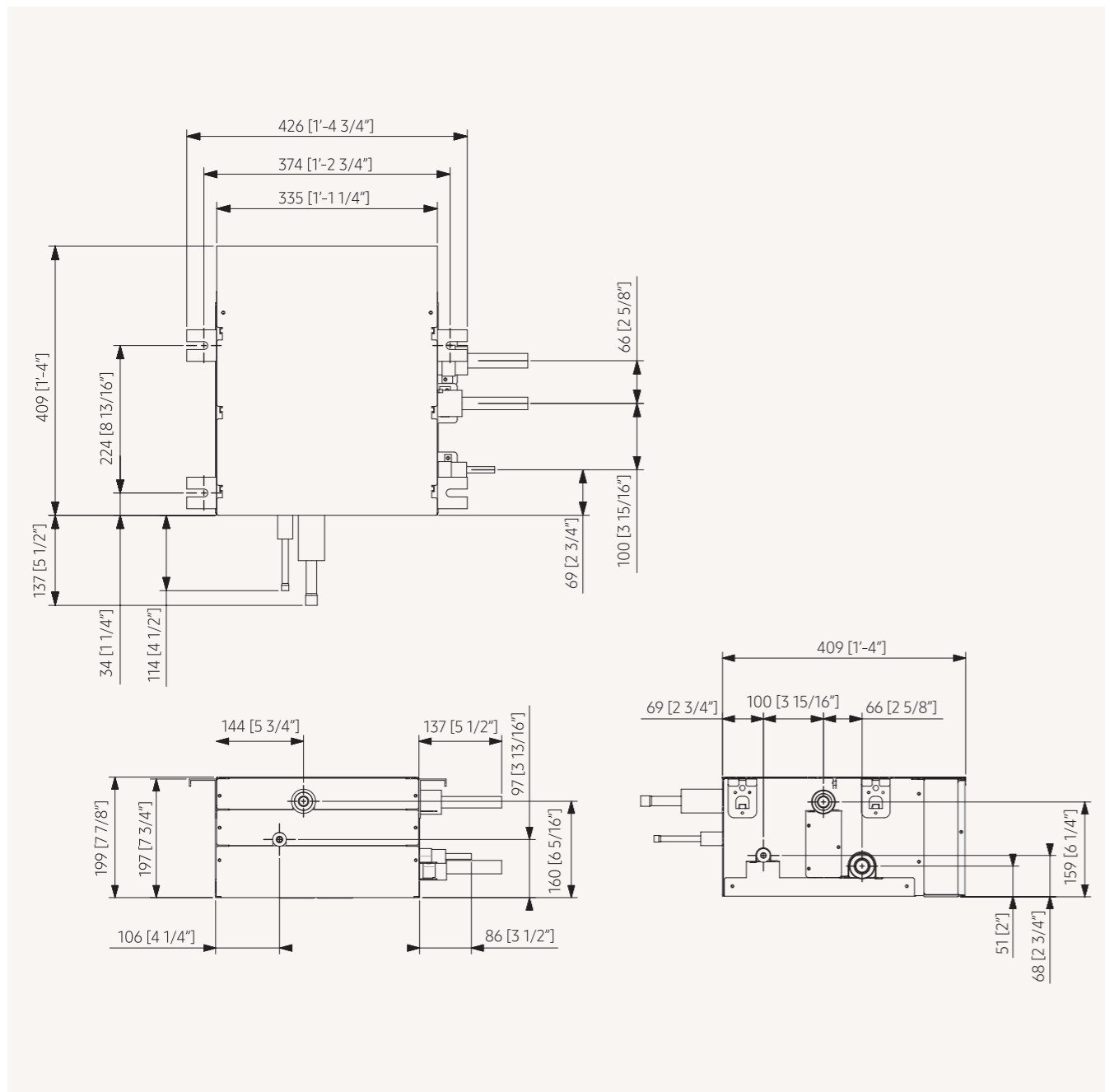
MCU-S6NEK3N



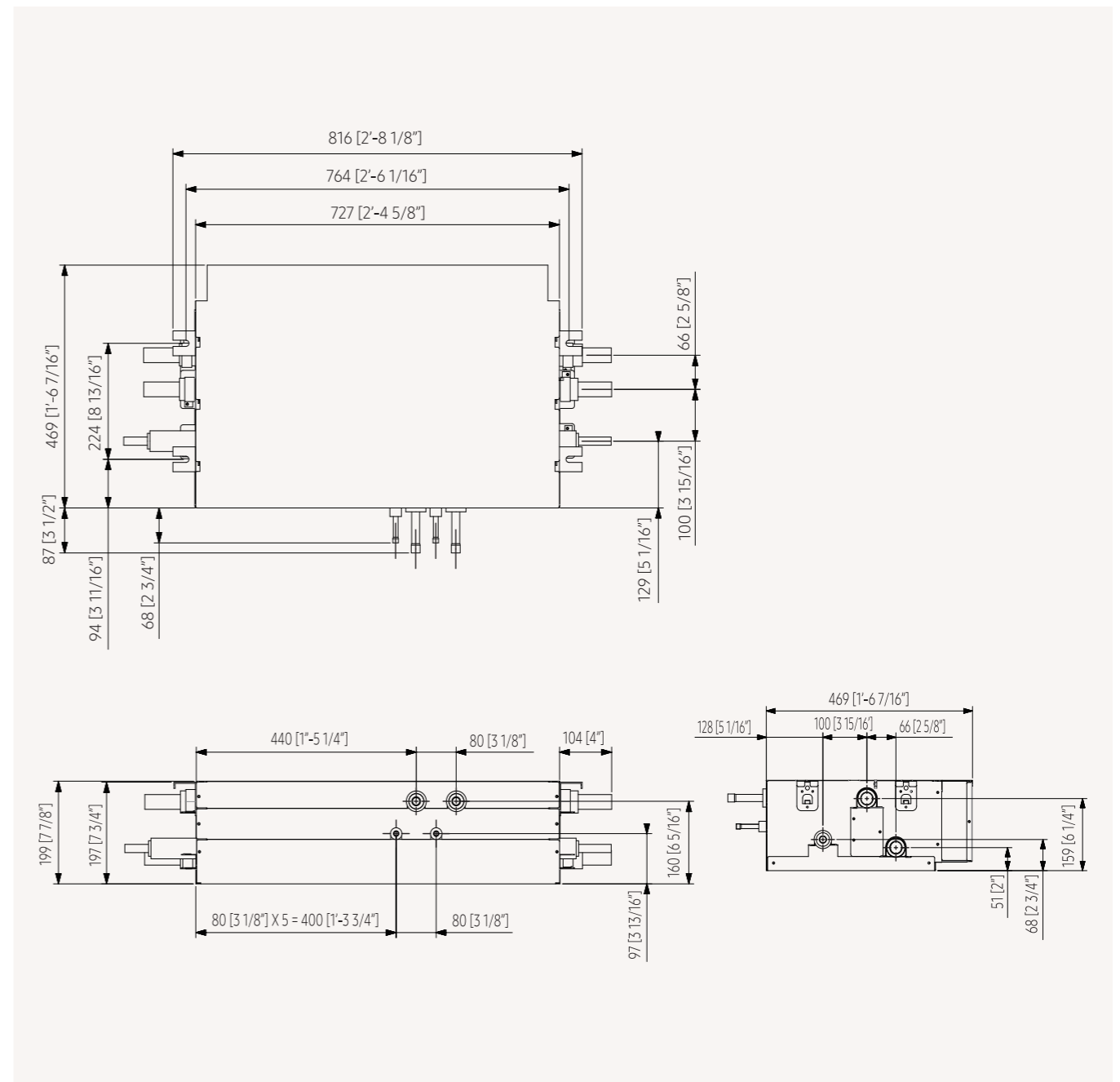
Dimensional drawings

Mode Control Unit (MCU)

MCU-S1NEK1N



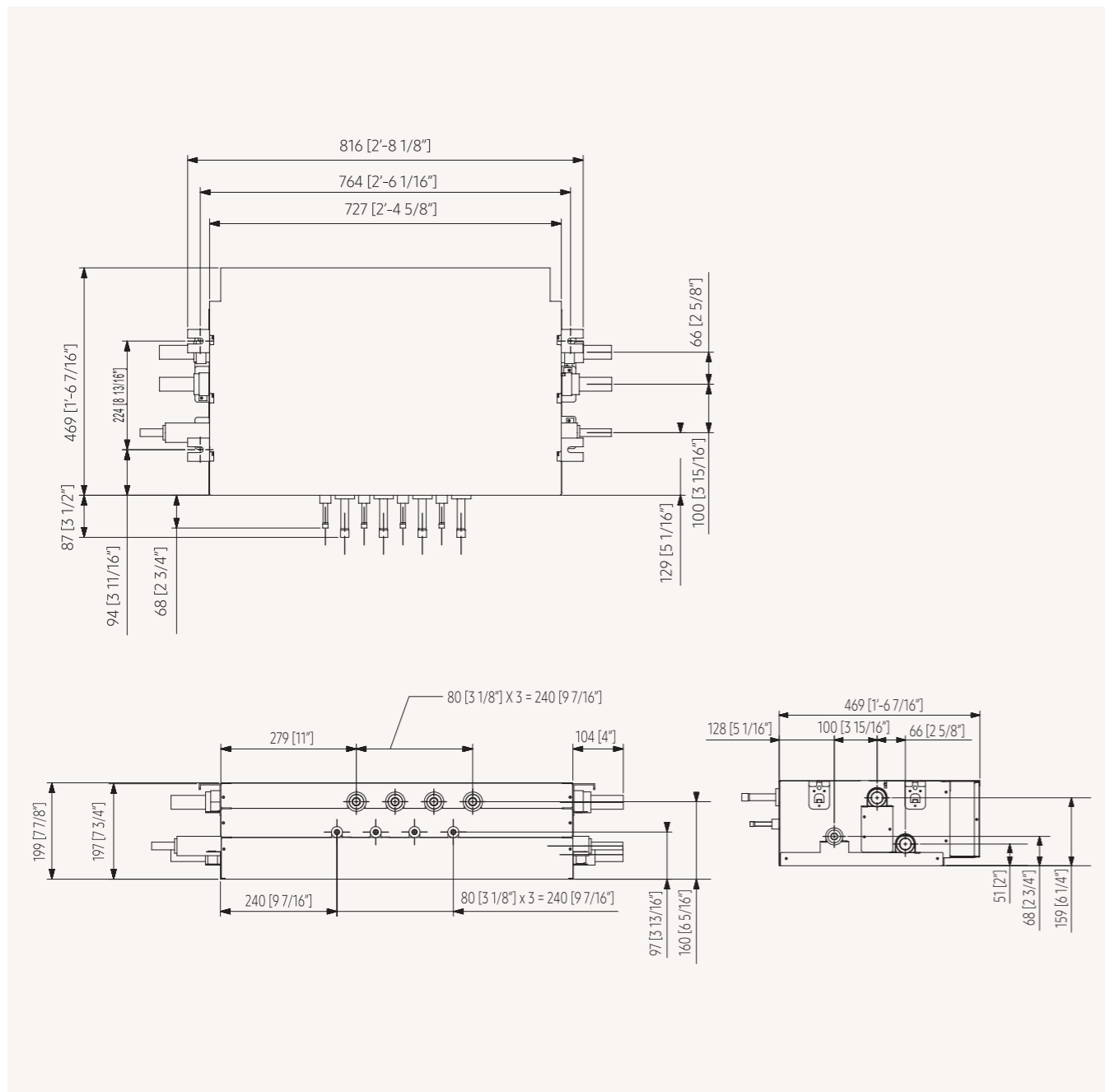
MCU-S2NEK2N



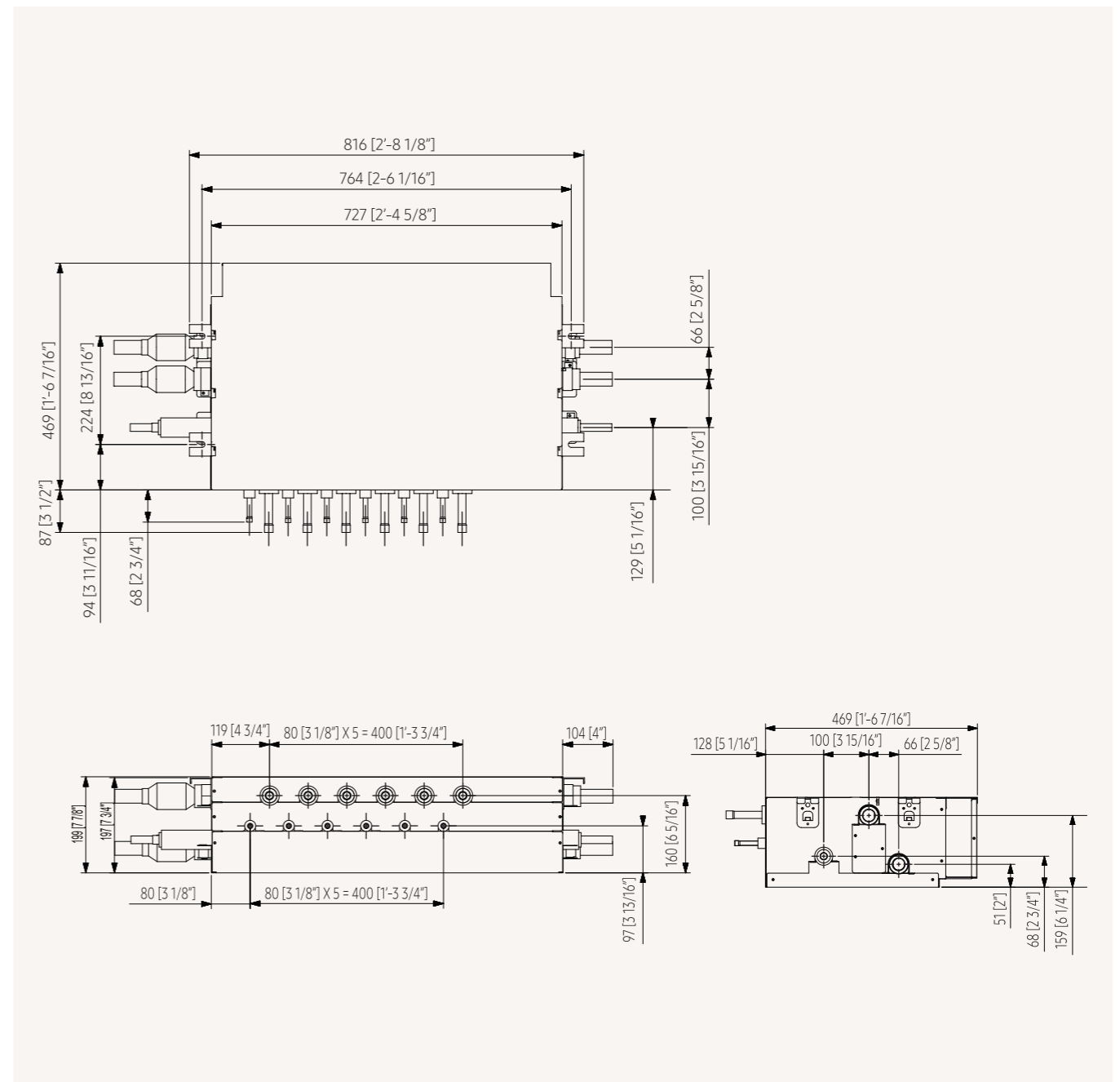
Dimensional drawings

Mode Control Unit (MCU)

MCU-S4NEK3N



MCU-S6NEK2N



Specifications

AHU Kit for Outdoor Unit

- Provide the benefits of the AHU and DVM systems at the same time.
- Centralised air conditioning system.
- The AHU kit can provide cooling, heating, ventilation and humidity in one package.



Model				AHU Kit		
				MXD-K025AN	MXD-K050AN	MXD-K075AN
Connectable Outdoor				HP/HR	HP/HR	HP/HR
Power Supply				1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz
Design Recommendation	AHU Capacity Allowance	Max.	kW	8.8	17.5	24.9
			MBH	30	60	85
	Min.	kW	6.3	12.6	18.9	
		MBH	21.6	43.2	64.8	
AHU Internal Heat Exchanger Volume Allowance	Max.	cm ³	2.0	4.0	6.0	
	Min.	cm ³	1.2	2.4	4.1	
Piping Connections (EEV Kit)	High pressure pipe from outdoor unit	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
	High pressure pipe to AHU	ø, mm	9.52	9.52	9.52	
		ø, inch	3/8	3/8	3/8	
Sensor	EVA_IN	Type/Φ	103HW/6Φ	103HW/6Φ	103HW/6Φ	
		m/mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	
	EVA_OUT	Type/Φ	103HW/7Φ	103HW/7Φ	103HW/7Φ	
		m/mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	
	Room	Type/Φ	103HW/Moulding	103HW/Moulding	103HW/Moulding	
		m/mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	
	Discharge	Type/Φ	103HW/7Φ	103HW/7Φ	103HW/7Φ	
		m/mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	10 m/2*0.75 mm ²	
Refrigerant	Type	R410A	R410A	R410A		
EEV Kit	Type	INCLUDED	INCLUDED	INCLUDED		
	EEV Wire Length	m	2	2	7	
		ft	6.6	6.6	23.0	
External Dimensions	EEV Kit	(W x H x D)	mm	415 x 102 x 170	415 x 102 x 170	415 x 102 x 170
	Control Box	(W x H x D)	mm	380 x 130 x 280	380 x 130 x 280	380 x 130 x 280

AHU Kit	Control Kit	EEV Kit (Optional)
HP/HR	HP	HP
1Φ, 2, 220-240 V, 50/60 Hz	1Φ, 2, 220-240 V, 50/60 Hz	-
35.0	35.0/70.0/105.0/140.0	35.0
120	119/239/358/478	119
25.2	25.2/50.4/75.6/100.8	25.2
86.4	86.4/172.8/259.2/345.6	86.4
8.0	8.0/16.0/24.0/32.0	8.0
6.1	6.1/12.2/18.3/24.4	6.1
9.52	-	12.70
3/8	-	1/2
9.52	-	12.70
3/8	-	1/2
103HW/6Φ	103HW/6Φ	-
10 m/2*0.75 mm ²	7 m/2*0.75 mm ²	-
103HW/7Φ	103HW/7Φ	-
10 m/2*0.75 mm ²	7 m/2*0.75 mm ²	-
103HW/Moulding	PT1000Ω/4-20 mA Field Supply	-
10 m/2*0.75 mm ²	-	-
103HW/7Φ	PT1000Ω/4-20 mA Field Supply	-
10 m/2*0.75 mm ²	-	-
R410A	R410A	R410A
INCLUDED	NOT INCLUDED	-
7	-	7
23.0	-	23.0
415 x 102 x 170	-	Accessory for MCM-D201N, ordered separately (1 per 10HP)
380 x 130 x 280	385 x 53 x 275	-




VRF Chiller



VRF Chiller

Line-up outdoor

Model Type	Image	42 kW	56 kW	65 kW
Non-Pump Model		AG042KSVANH/EU	AG056KSVANH/EU	AG070KSVANH/EU

Combining modules allows each product to work at high capacity. You can combine up to 16 modules.






Combination guide - outdoor

Modulation guide

Total Capacity (kW)	Model			Suggested ø water type controller piping
	AG042	AG056	AG070	
42	1			40
56		1		40
65			1	50
84	2			50
112		2		65
126	3			65
130			2	80
168		3		80
168 (high efficiency)	4			80
195			3	80
210	5			80
224		4		100
252	6			100
260			4	100
280		5		100
294	7			100
325			5	100
336		6		100
336 (high efficiency)	8			100
378	9			100
390			6	100
392		7		100
420	10			100
448		8		125

Total Capacity (kW)	Model			Suggested ø water type controller piping
	AG042	AG056	AG070	
455			7	125
462	11			125
504		9		125
504 (high efficiency)	12			125
520			8	125
546	13			125
560		10		125
585			9	125
588	14			125
616		11		125
630	15			125
650			10	125
672		12		125
672 (high efficiency)	16			125
715			11	150
728		13		125
780			12	150
784		14		150
840		15		150
845			13	150
896		16		150
910			14	150
975			15	150
1,040			16	150

Line-up indoor

Model Type	Image	1.9 kW	2.6 kW	3.0 kW	4.2 kW	6.0 kW	7.2 kW	7.8 kW	9.0 kW	10.0 kW
1-Way Cassette FCU			•	•	•					
4-Way Cassette FCU						•	•		•	•
360 Cassette FCU						•	•		•	•
Concealed FCU		•		•	•		•	•		
Cased FCU		•		•	•		•	•		

Wind-Free™ 1-Way Cassette FCU is scheduled to be available by mid-2020.

Selection guide

Cassette



Feature	1-Way Cassette FCU	4-Way Cassette FCU	360 Cassette FCU
Cooling capacity range (nominal)	2.6–4.15 kW	6.0–10.0 kW	6.0–10.0 kW
Heating capacity range (nominal)	2.9–5.0 kW	7.3–10.7 kW	7.3–10.7 kW
Fan motor type	AC/BLDC	BLDC	BLDC
Drain Pump	Built-in	Built-in	Built-in
Filter	Microfibrous filter	Microfibrous filter	Microfibrous filter
3-Way Valve	Optional	Optional	Optional
2-pipe	●	●	●
4-pipe (optional)			
Installation	Horizontal	Horizontal	Horizontal

Concealed and Cased



Feature	Concealed FCU	Cased FCU
Cooling capacity range (nominal)	1.9–7.8 kW	1.9–7.8 kW
Heating capacity range (nominal)	2.1–8.4 kW	2.1–8.4 kW
Fan motor type	3-step AC	3-step AC
Drain Pump	Optional	Optional
Filter	Polypropylene washable	Polypropylene washable
3-Way Valve	Built-in	Built-in
2-pipe	●	●
4-pipe (optional)	●	●
Installation	Horizontal/vertical	Horizontal/vertical

Nomenclature

Indoor units

AG 072 M N 4 P K H
1 2 3 4 5 6 7 8

1	Classification	AG	Chiller/Fan Coil Unit (FCU)
2	Capacity	x1/10 kW (3 digits)	
3	Version	K	2016
		M	2017
		N	2018
4	Product Type	N	Indoor Unit
5	Product Notation	1	1-Way Cassette
		4	4-Way Cassette, 360 Cassette
6	Feature	D	Deluxe
		P	Premium
7	Voltage Rating	E	1Φ, 220~240 V, 50 Hz
		K	1Φ, 220~240 V, 50/60 Hz
8	Mode	H	Heat Pump

Indoor units (third party)

ACL 65 D F
1 2 3 4

1	Classification	ACL	Chiller/Fan Coil Unit (FCU)
2	Capacity	x1/10 kW (3 digits)	
3	Product Notation	D	2-Pipe FCU
		Q	4-Pipe FCU
		A	Accessory
4	Product Type	F	Concealed
		G	Cased

Outdoor units

AG 070 K S V A N H
1 2 3 4 5 6 7 8

1	Classification	AG	Chiller (HVM Chiller)
2	Capacity	kW (3 digits)	
3	Version	K	2016
		M	2017
		N	2018
4	Product Type	S	SETHVM Chiller
5	Product Notation	V	Inverter
6	Feature	A	Non-pump
7	Voltage Rating	N	3Φ, 380~415 V, 50/60 Hz
8	Mode	H	Heat Pump

Specifications

HVM Chiller

- Air-cooled HVM Chiller Heat Pump.
- Option of connecting up to 16 modules for a total capacity of more than 1 MW.
- Capacity modulation between 15% and 100%.
- Each unit houses 2 Inverter Scroll compressors, all equipped with Flash Injection technology.



Model Name		AG042KSVANH/EU		AG056KSVANH/EU		AG070KSVANH/EU	
Power Supply		Φ, #, V, Hz	3Φ, 4, 380-415 V, 50/60 Hz	3Φ, 4, 380-415 V, 50/60 Hz	3Φ, 4, 380-415 V, 50/60 Hz		
Performance	Capacity (Nominal)	Cooling	kW	42	56	65	
		Heating	kW	42	56	70	
Power	Power Input (Nominal)	Cooling	kW	12.4	18.7	26.0	
		Heating	kW	11.83	17.50	24.39	
	Current Input (Nominal)	Cooling	A	19.6	29.6	41.2	
		Heating	A	18.8	27.8	38.7	
	Current	MCA	A	32	46	58	
		MFA	A	40	60	75	
Efficiency	EER Nominal Cooling (pump input is not included)	W/W	3.4	3.0	2.5		
	COP Nominal Heating (pump input is not included)	W/W	3.6	3.2	2.9		
	ESEER (Pump input is not included)	W/W	5.7	5.4	5.0		
Fan	Type		Axial Fan	Axial Fan	Axial Fan		
	Number of Fans		2	2	2		
	Airflow Rate	m ³ /min	364 (182 x 2)	364 (182 x 2)	392 (196 x 2)		
		l/s	6,067	6,067	6,535		
	External Static Pressure	Max.	mmAq	8.00	8.00	8.00	
		Pa	78.5	78.5	78.5		
Fan Motor	Type		BLDC Motor	BLDC Motor	BLDC Motor		
	Output x n	W	630 x 2	630 x 2	630 x 2		
Water Side Heat Exchanger	Type		Brazing Plate	Brazing Plate	Brazing Plate		
	Water Flow Rate (Cooling/Heating)	l/min	120/120	160/160	186/200		
	Pressure Drop (Set. Nominal)	kPa	60	100	120		
	Max. Operating Pressure	MPa	1	1	1		
	Connection Type		FLANGE	FLANGE	FLANGE		
	Pipe Connection (Inlet/Outlet)	ø, mm	40	40	50		
	ø, inch	1 1/2	1 1/2	2			
	Quantity		2	2	2		
Wiring Connections	Communication	Min.	mm ²	0.75	0.75	0.75	
	Remark			F1, F2	F1, F2	F1, F2	
Refrigerant	Type		-	R410A (GWP=2,088) which is a fluorinated greenhouse gas			
	Factory Charging	kg/tCO ₂ e	18/37.58	18/37.58	18/37.58		
Sound 2	Sound Pressure	Cooling	dB(A)	60	62	63	
		Heating	dB(A)	57	59	64	
	Sound Power	dB(A)	80	83	85		
External Dimensions	Net Weight	kg	446.0	446.0	465.0		
	Net Dimensions (W x H x D)	mm	1,795 x 1,695 x 765	1,795 x 1,695 x 765	1,795 x 1,695 x 765		
Operating Water Temperature Range	Cooling	°C	5.0-25.0	5.0-25.0	5.0-25.0		
	Cooling (if using brine)	°C	-10.0-25.0	-10.0-25.0	-10.0-25.0		
	Heating	°C	25.0-55.0	25.0-55.0	25.0-55.0		
Operating Water Flow Range	Water Flow Rate	l/min	60-240	80-320	93-400		
	Minimum Water Storage in the System	L	294	392	490		
Operating Ambient Temperature Range	Cooling	°C	-15.0-48.0	-15.0-48.0	-15.0-48.0		
	Heating	°C	-25.0-43.0	-25.0-43.0	-25.0-43.0		

Accessories

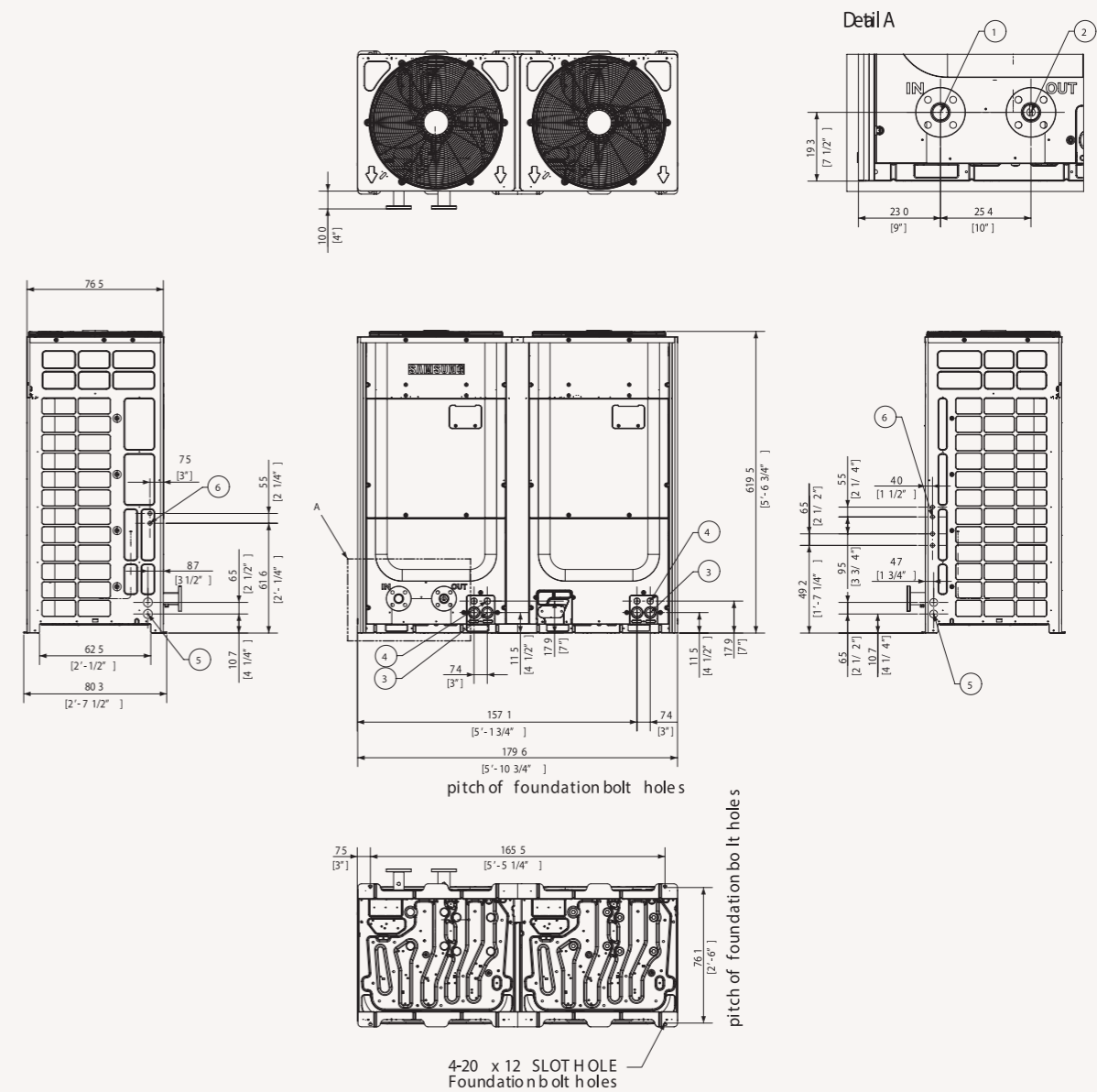


Module Controller	DMS2.5	BACnet Gateway	Touch Centralised Controller
MCM-A00N	MIM-D01AN	MIM-B17BN	MCM-A300N

Dimensional drawings

HVM Chiller

AG042/056/070KSVANH/EU



NO	Name	Description
1	Inlet water flange	15/20 hp 40A Din Flange, 25 hp: 50A Din Flange
2	Outlet water flange	15/20 hp 40A Din Flange, 25 hp: 50A Din Flange
3	Power wiring conduits	Knock-out hole (front)
4	Communication wiring conduits	Knock-out hole (front)
5	Power wiring conduits	Knock-out hole (side)
6	Communication wiring conduits	Knock-out hole (side)

Specifications

1-Way Cassette FCU

- One-way air supply by means of a 100 mm wide blade.
- Cross-flow fan direct driven by a BLDC motor.
- Built-in condensation drain pump
- 3-Way valve kit (optional).
- Compatible with Wi-Fi Kit controller.



Model		AG026MN1DEH/EU	AG032MN1DEH/EU	AG042MN1DEH/EU		
Power Supply	Φ, V, Hz	1Φ, 220-240 V, 50 Hz	1Φ, 220-240 V, 50 Hz	1Φ, 220-240 V, 50 Hz		
Mode	-	HP	HP	HP		
Performance	Capacity (Nominal)	Cooling	kW	2.60	3.00	4.15
		Heating	kW	2.90	3.35	5.00
Power	Power Input (Nominal)	Cooling	W	47	50	55
		Heating	W	47	50	55
	Current Input (Nominal)	Cooling	A	0.24	0.26	0.29
		Heating	A	0.24	0.26	0.29
Heat Exchanger	Type	-	Fin & tube	Fin & tube	Fin & tube	
Fan	Type	-	Crossflow fan	Crossflow fan	Crossflow fan	
	Number of Fans	-	1	1	1	
Fan Motor	Airflow Rate	H/M/L	m ³ /min	6.8/5.8/4.9	7.8/6.8/4.9	14.6/12.6/10.7
	Type	-	AC	AC	BLDC	
Water	Water Flow Rate	Cooling	L/min	12 x 1	12 x 1	54 x 1
		Heating	L/min	7.5	9.6	11.9
	Pressure Drop	Cooling	kPa	23.0	34.5	45.0
		Heating	kPa	28.0	35.8	64.6
Piping Connections	Liquid Pipe (IN)	Type	PF MALE	PF MALE	PF MALE	
	Liquid Pipe (OUT)	ø, mm (inch)	20A (3/4)	20A (3/4)	20A (3/4)	
		Type	PF MALE	PF MALE	PF MALE	
	Heat Insulation	ø, mm (inch)	20A (3/4)	20A (3/4)	20A (3/4)	
		-	Both inlet/outlet pipes	Both inlet/outlet pipes	Both inlet/outlet pipes	
Drain Pipe	ø, mm	VP20 (OD 26, ID 20)	VP20 (OD 26, ID 20)	VP25 (OD 32, ID 25)		
Sound	Sound Pressure	(H/M/L)	dB(A)	32/30/28	37/33/28	40/37/33
	Sound Power	Cooling	dB(A)	49	52	58
Dimensions	Net Weight	kg	10.5	10.5	14.0	
	Net Dimensions (W x H x D)	mm	970 x 135 x 410	970 x 135 x 410	1,200 x 138 x 450	
Casing	Material	-	Plastic	Plastic	Plastic	
Panel	Panel Model	-	PCINUSMAN	PCINUSMAN	PCIBWSMAN	
Additional Accessories	Drain Pump	Type	-	Built-in	Built-in	
	3-Way Valve Kit (optional)	Max. Lifting Height/Displacement	mm/(cc/min)	750/400	750/400	750/400
		ACL-A60V3	ACL-A60V3	ACL-A60V3		
	Filter	-	Microfibrous filter	Microfibrous filter	Microfibrous filter	

Accessories



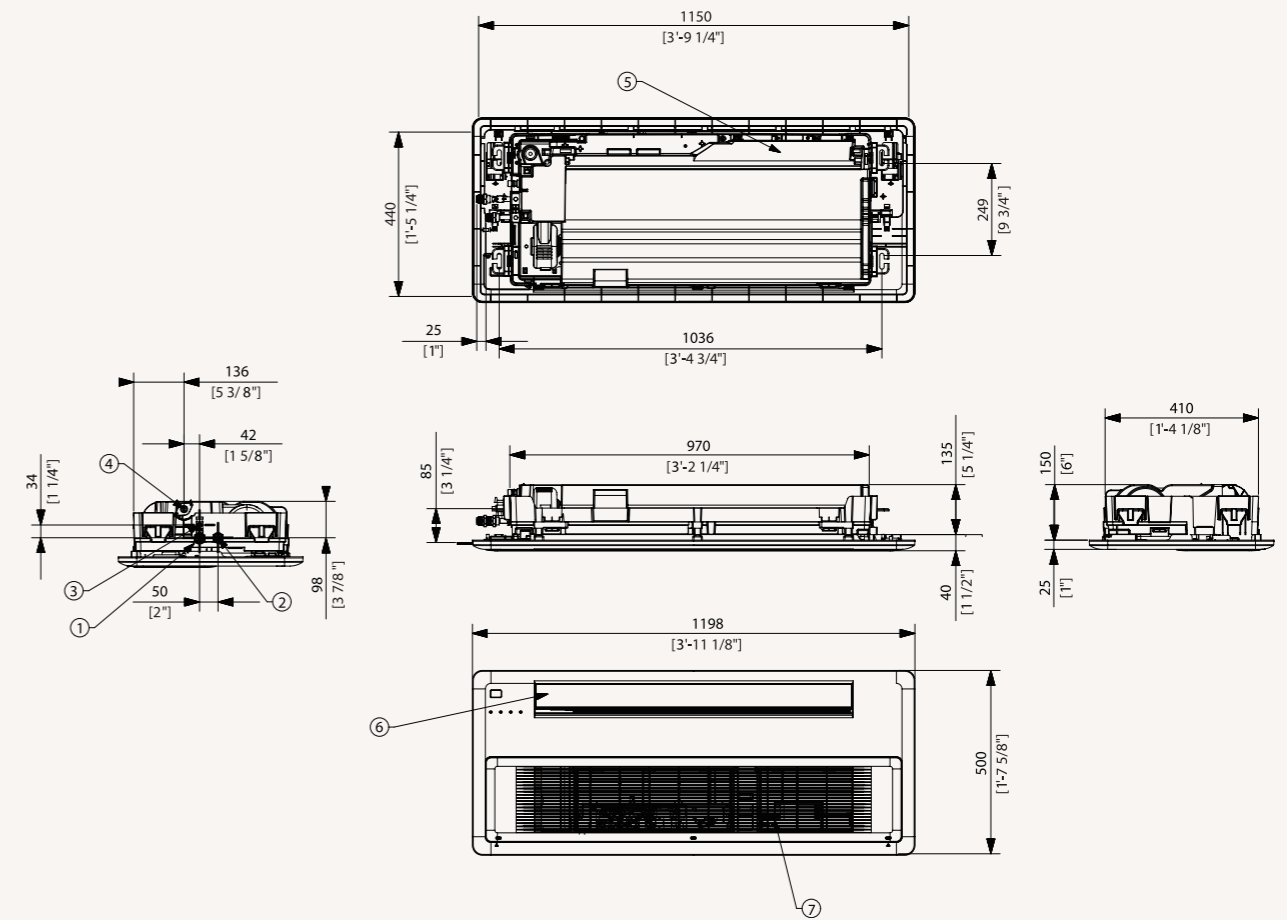
Panel (Optional)	Panel (Optional)	FCU Interface Module	FCU Kit	Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller
PCIBWSMAN	PCINUSMAN	MIM-F10N	MIM-F00N	AR-EH03E	MWR-SH00N	MWR-SH11N	MWR-WE13N	MWR-WG00*N

Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C.
 Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 Specifications may be subject to change without prior notice.
 Select wire size based on the MCA value.

Dimensional drawings

1-Way Cassette FCU

AG026/032MN1DEH/EU

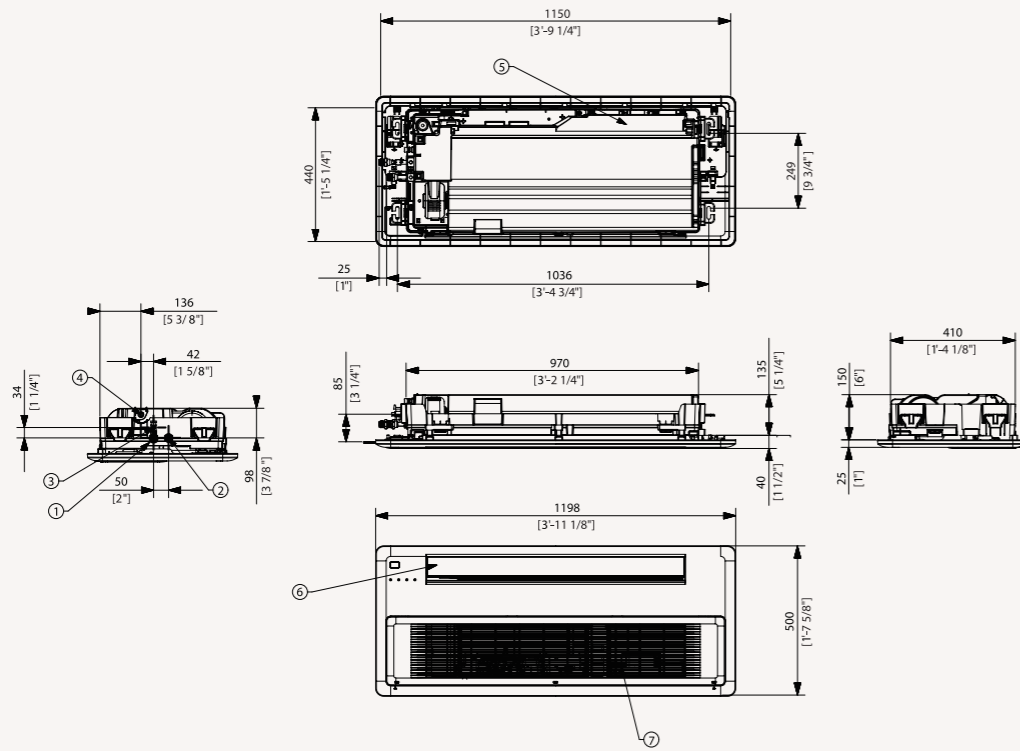


NO	Name	Description
1	Water pipe connection out	PF Male 3/4 (20A)
2	Water pipe connection in	PF Male 3/4 (20A)
3	Air vent valve	
4	Drain hose	VP20 (OD 26, ID 20)
5	Power supply/communication wiring conduits	
6	Air discharge part	
7	Air suction part	

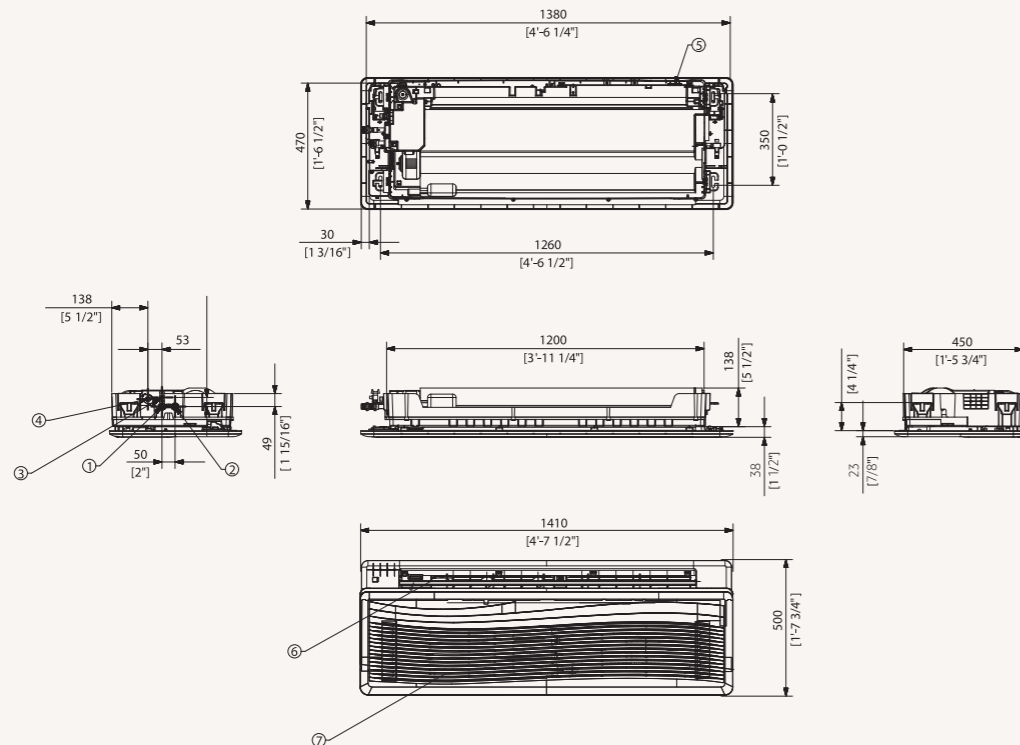
Dimensional drawings

1-Way Cassette FCU

AG026/032MN1DEH/EU



AG042MN1DEH/EU



Specifications

4-Way Cassette FCU

- Four-way air supply via independently adjustable blades.
- Direct drive fan powered by a BLDC motor.
- Built-in condensation drain pump.
- 3-Way valve kit (optional).
- Compatible with Wi-Fi Kit controller.
- Motion Detect Sensor (optional).



Model			AG060MN4DKH/EU	AG072MN4DKH/EU	AG090MN4DKH/EU	AG105MN4DKH/EU	
Power Supply		Φ, V, Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	
Mode			HP	HP	HP	HP	
Performance	Capacity (Nominal)	Cooling	kW	6.0	7.2	9.0	10.0
		Heating	kW	7.3	8.5	10.0	10.7
Power	Power Input (Nominal)	Cooling	W	50	73	82	99
		Heating	W	50	73	82	99
	Current Input (Nominal)	Cooling	A	0.37	0.50	0.58	0.79
		Heating	A	0.37	0.5	0.58	0.79
Fan	Type		Fin & tube	Fin & tube	Fin & tube	Fin & tube	
	Type		Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	
	Number of Fans		1	1	1	1	
	Airflow Rate	H/M/L	m ³ /min	18.9/16.5/13.6	21.3/18.2/13.6	23.3/21.3/19.4	30.1/26.2/19.4
Fan Motor	Type		BLDC	BLDC	BLDC	BLDC	
	Output x n		W	65 x 1	65 x 1	65 x 1	97 x 1
Water	Water Flow Rate	Cooling	l/min	17.5	20.8	26.0	28.9
	Water Flow Rate	Heating	l/min	21.1	24.5	28.9	30.9
	Pressure Drop	Cooling	kPa	27.0	36.0	46.8	56.3
	Pressure Drop	Heating	kPa	37.3	48.6	56.3	63.4
Piping Connections	Liquid Pipe (IN)	Type		PF MALE	PF MALE	PF MALE	PF MALE
		ø, mm (inch)		20A (3/4)	20A (3/4)	20A (3/4)	20A (3/4)
	Liquid Pipe (OUT)	Type		PF MALE	PF MALE	PF MALE	PF MALE
		ø, mm (inch)		20A (3/4)	20A (3/4)	20A (3/4)	20A (3/4)
Heat Insulation			Both inlet/outlet pipes	Both inlet/outlet pipes	Both inlet/outlet pipes	Both inlet/outlet pipes	
Drain Pipe		ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
Sound	Sound Pressure	(H/M/L)	dB(A)	37/33/30	41/35/30	42/38/35	45/40/35
	Sound Power	Cooling	dB(A)	56	60	58	60
Dimensions	Net Weight		kg	15.5	15.5	18.0	18.0
	Net Dimensions (W x H x D)		mm	840 x 204 x 840	840 x 204 x 840	840 x 246 x 840	840 x 246 x 840
Panel	Panel Model			PC4NUSKAN PC4NUSKEN	PC4NUSKAN PC4NUSKEN	PC4NUSKAN PC4NUSKEN	PC4NUSKAN PC4NUSKEN
				PC4NBSKAN	PC4NBSKAN	PC4NBSKAN	PC4NBSKAN
Additional Accessories	Drain Pump	Type		Built-in	Built-in	Built-in	Built-in
		Max. Lifting Height/ Displacement	mm/cc/min	750/400	750/400	750/400	750/400
	3-Way Valve Kit (optional)			ACL-A60V3	ACL-A60V3	ACL-A60V3	ACL-A60V3
	Filter			Microfibrous filter	Microfibrous filter	Microfibrous filter	Microfibrous filter

Accessories

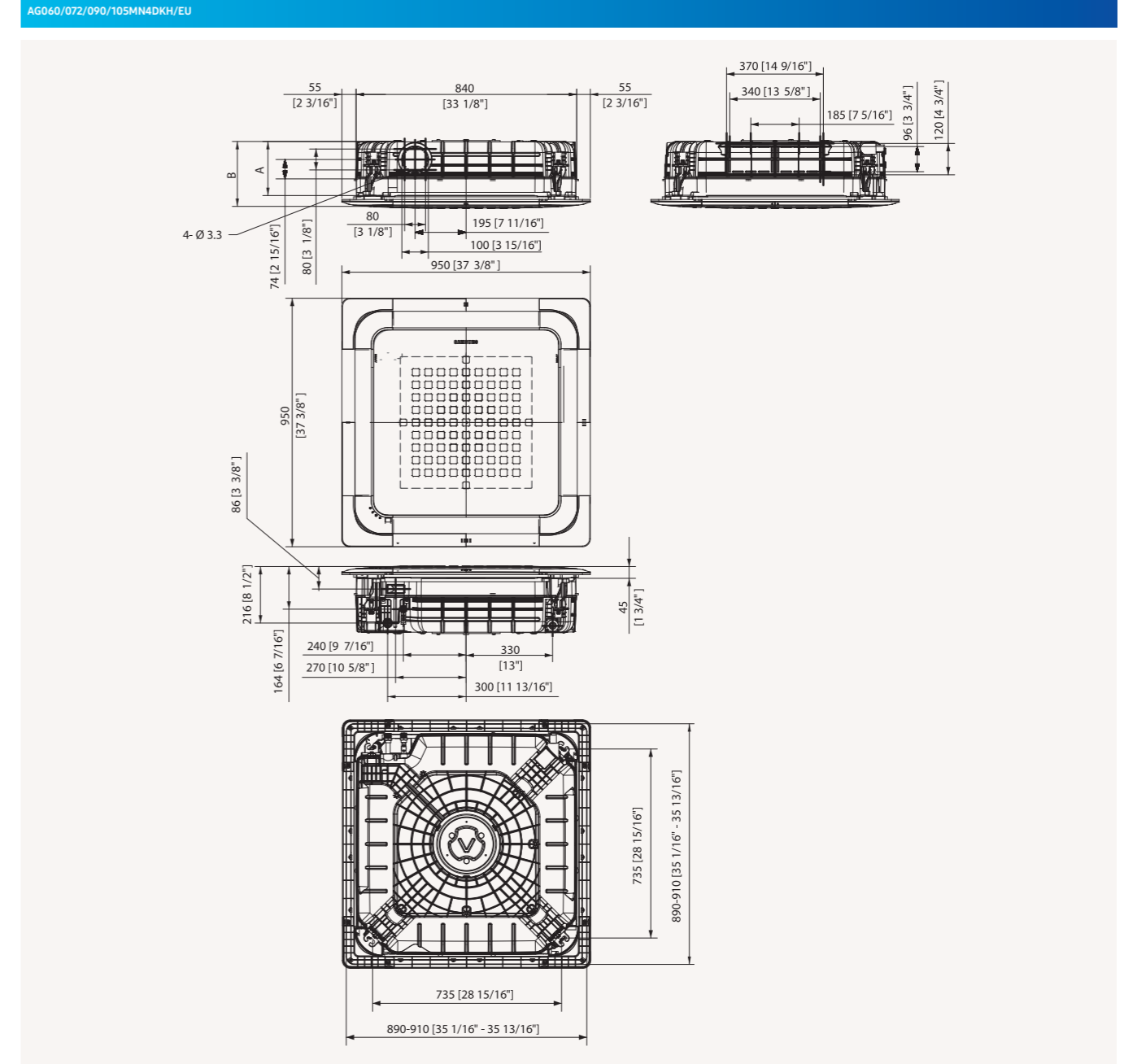


Panel (Optional)	Panel (Optional)	Panel (Optional)	FCU Interface Module	FCU Kit	Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller
PC4NBSKAN	PC4NUSKAN	PC4NUSKEN	MIM-F10N	MIM-F00N	AR-EH03E	MWR-SH00N	MWR-SH11N	MWR-WE13N	MWR-WG00*N

Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C.
 Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 Specifications may be subject to change without prior notice.
 Select wire size based on the MCA value.

Dimensional drawings

4-Way Cassette FCU



Pos.	Name	Description
Model	AG060MN4DKH/EU	AG090MN4DKH/EU
	AG072MN4DKH/EU	AG105MN4DKH/EU
A	204 [8 1/16"]	246 [9 11/16"]
A	253 [9 15/16"]	295 [11 5/8"]
A	205	289
Pipe connection		PF 3/4 Male
Drain pipe connection		VP25 (OD 32, ID 25)

Specifications

360 Cassette FCU

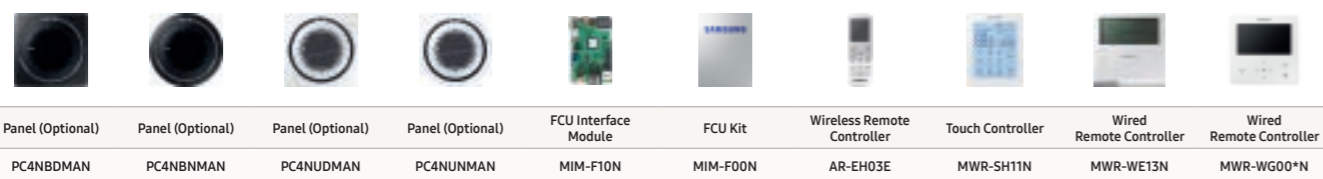
- 360 degree air supply.
- Bladeless discharge. Booster fans can be individually controlled, allowing for completely horizontal flow discharge. Coandă effect is created even without ceiling.
- 3-Way valve kit (optional).

- Built-in condensation drain pump.
- Predisposition of the air inlet to let fresh air in.
- Compatible with Wi-Fi Kit controller.
- Circular or square cassette panel.



Model		AG060MN4PKH/EU	AG072MN4PKH/EU	AG090MN4PKH/EU	AG105MN4PKH/EU
Power Supply	Φ, V, Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz
Mode	-	HP	HP	HP	HP
Performance	Capacity (Nominal)				
	Cooling kW	6.0	7.2	9.0	10.0
Power	Power Input (Nominal)				
	Cooling W	58	58	77	100
Heat Exchanger	Type	-	Fin & tube	Fin & tube	Fin & tube
	Number of Fans	-	1	1	1
Fan	Type	-	Turbo Fan	Turbo Fan	Turbo Fan
	Airflow Rate	H/M/L	m ³ /min	21.0/17.5/15.0	25.5/22.0/19.8
Fan Motor	Type	-	BLDC	BLDC	BLDC
	Output x n	W	65 x 1	97 x 1	97 x 1
Water	Water Flow Rate	Cooling	l/min	17.5	20.8
	Water Flow Rate	Heating	l/min	21.1	24.5
Piping Connections	Liquid Pipe (IN)	Type	PF MALE	PF MALE	PF MALE
	Liquid Pipe (OUT)	Type	PF MALE	PF MALE	PF MALE
Sound	Sound Pressure	(H/M/L)	dB(A)	40/37/32	39/35/33
	Sound Power	Cooling	dB(A)	57	58
Dimensions	Net Weight	kg	21.0	25.0	25.0
	Net Dimensions (W x H x D)	mm	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947
Additional Accessories	Drain Pump	Type	-	Built-in	Built-in
	3-Way Valve Kit	(optional)	ACL-A60V3	ACL-A60V3	ACL-A60V3
Filter	-	Microfibrous filter	Microfibrous filter	Microfibrous filter	Microfibrous filter

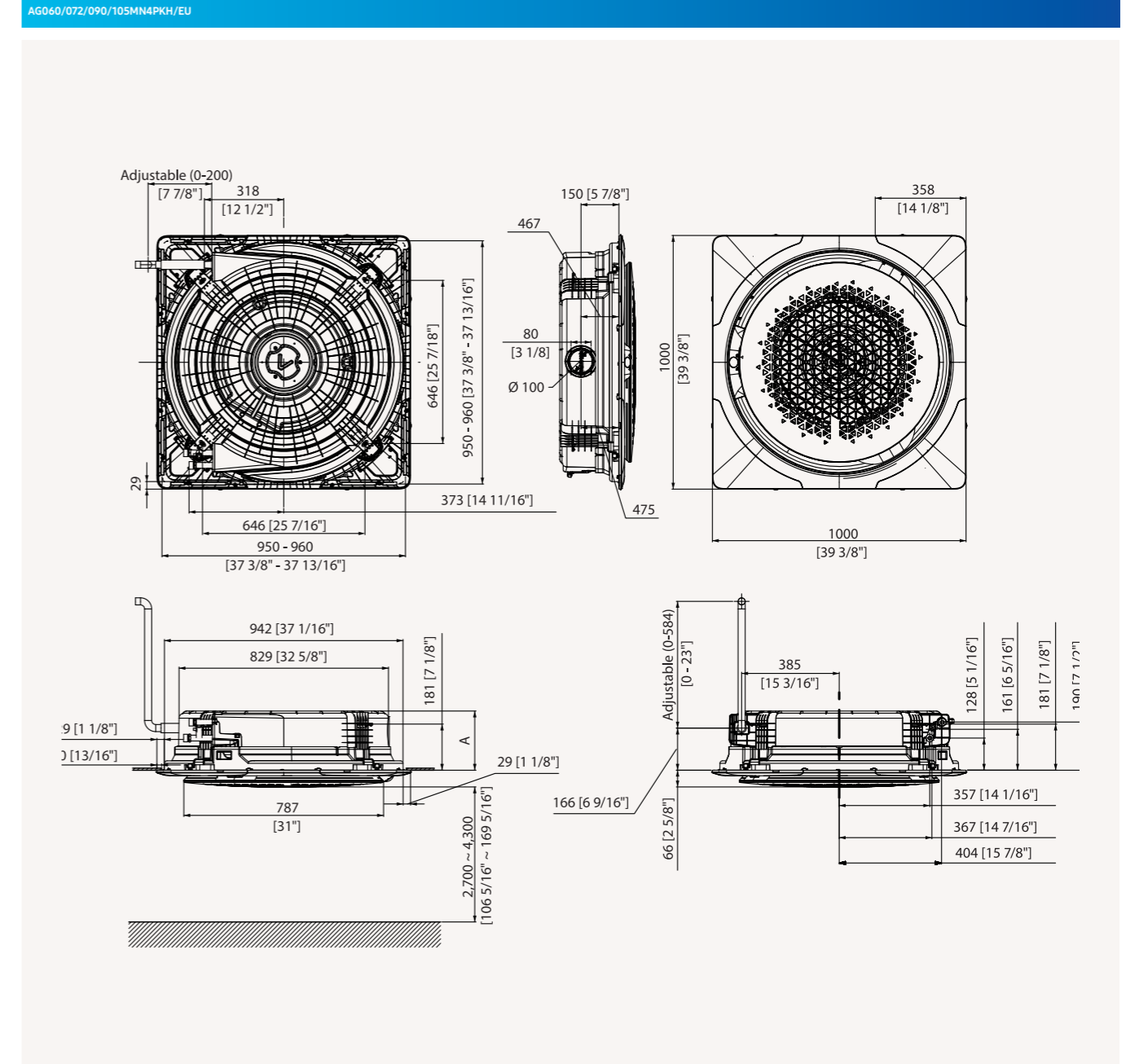
Accessories



Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C.
 Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 Specifications may be subject to change without prior notice.
 Select wire size based on the MCA value.

Dimensional drawings

360 Cassette FCU

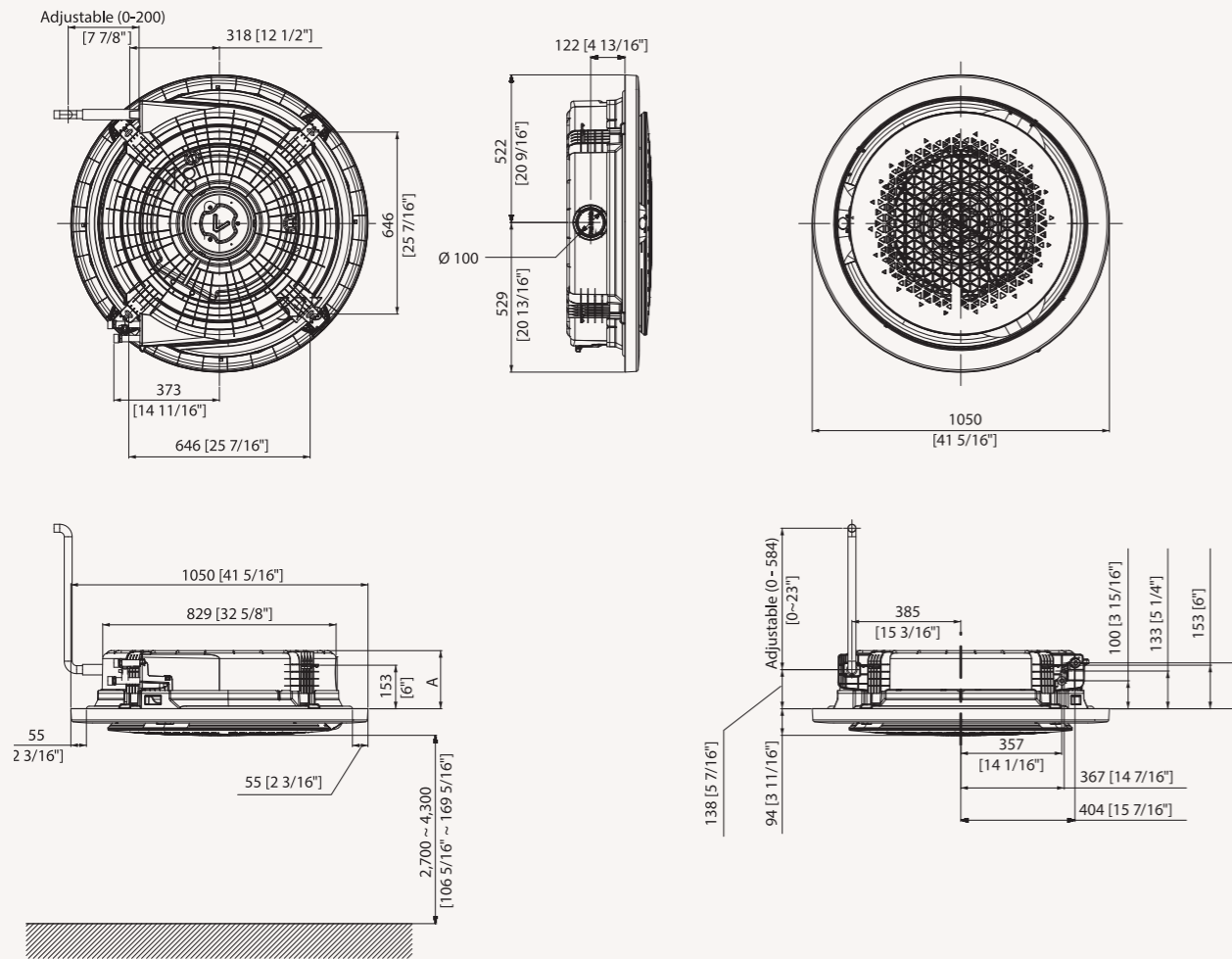


Pos.	A Type	B Type
Model	AG060MN4PKH/EU	AG072MN4PKH/EU AG090MN4PKH/EU AG105MN4PKH/EU
A	233 [9 3/16"]	317 [12 1/2"]
Pipe connection	PF 3/4 Male	
Drain pipe connection		VP25 (OD 32, ID 25)

Dimensional drawings

360 Cassette FCU

AG060/072/090/105MN4PKH/EU



Pos.	A Type	B Type
Model	AG060MN4PKH/EU	AG072MN4PKH/EU AG090MN4PKH/EU AG105MN4PKH/EU
A	205	289
Pipe connection		PF 3/4 Male
Drain pipe connection		VP25 (OD 32, ID 25)



Specifications

Concealed FCU

- Plug & play solution in combination with HVM Chiller.
- Optional vertical or horizontal installation
- 3-Way valve kit included as standard.



Model			ACL-18DF	ACL-25DF	ACL-35DF	
Power Supply	Φ, V, Hz		1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	
Mode			HP	HP	HP	
Performance	Capacity (Nominal)	Cooling (H/M/L)	kW	1.91/1.66/1.34	2.87/2.34/1.73	4.24/3.20/2.47
		Heating (H/M/L)	kW	2.15/1.81/1.50	2.91/2.35/1.73	4.24/3.24/2.47
Power	Power Input (Nominal)	Cooling (H/M/L)	W	53/36/24	56/43/29	90/50/40
		Heating (H/M/L)	W	53/36/24	56/43/29	90/50/40
	Current Input (Nominal)	Cooling	A	0.26	0.28	0.45
		Heating	A	0.26	0.28	0.45
Heat Exchanger	Type		Fin & tube	Fin & tube	Fin & tube	
Fan	Type		Double suction centrifugal fan	Double suction centrifugal fan	Double suction centrifugal fan	
	Number of Fans		2	2	2	
	Airflow Rate	H/M/L	m ³ /min	5.7/4.5/3.5	7.6/5.7/4.0	11.7/8.3/6.0
Fan Motor	Type		3-step AC	3-step AC	3-step AC	
	Output x n		W	53/36/24	56/43/29	90/50/40
	Water Flow Rate	Cooling	l/min	5.6	8.4	12.4
Water	Pressure Drop	Heating	l/min	6.2	8.4	12.4
		Cooling	kPa	17	24	35
	Heat Exchanger	Heating	kPa	20	24	35
		Cooling	kPa	17	24	35
Piping Connections	Liquid Pipe (IN)	Type		Female	Female	Female
		Dimension	ø, mm (inch)	1/2	1/2	1/2
	Liquid Pipe (OUT)	Type		Female	Female	Female
		Dimension	ø, mm (inch)	1/2	1/2	1/2
	Heat Insulation		-	-	-	
	Drain Pipe		ø, mm	-	-	-
Sound	Sound Pressure	(H/M/L)	dB(A)	42/36/32	40/34/28	45/35/27
	Sound Power	(H/M/L)	dB(A)	50/44/40	48/42/36	53/43/35
Dimensions	Net Weight		kg	18.0	23.0	27.0
	Net Dimensions (W × H × D)		mm	725 × 224 × 535	935 × 224 × 535	1,145 × 224 × 535
Casing	Material		-	-	-	
Panel	Panel Model		-	-	-	
Additional Accessories	Drain Pump	Type	optional	ACL-ADP	ACL-ADP	ACL-ADP
		Max. Lifting Height/Displacement	mm/(cc/min)	750/133	750/133	750/133
	Heating Coil	4-pipe	optional	ACL-A018HC	ACL-A025HC	ACL-A035HC
	3-Way Valve	4-pipe	optional	ACL-A018V3	ACL-A018V3	ACL-A018V3
	Auxiliary Drain Pan	Vertical	optional	ACL-ADV	ACL-ADV	ACL-ADV
		Horizontal	optional	ACL-ADH	ACL-ADH	ACL-ADH
	Filter			Polypropylene washable	Polypropylene washable	Polypropylene washable

ACL-55DF	ACL-65DF
1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz
HP	HP
7.19/5.69/4.32	7.78/6.07/4.00
7.19/5.69/4.32	8.37/6.53/4.39
182/127/86	244/169/109
182/127/86	244/169/109
0.90	1.20
0.90	1.20
Fin & tube	Fin & tube
Double suction centrifugal fan	Double suction centrifugal fan
3	3
16.8/12.8/9.5	23.2/17.0/10.7
3-step AC	3-step AC
182/127/86	244/169/109
21.1	22.9
20.2	24.2
39	42
35	47
Female	Female
3/4	3/4
Female	Female
3/4	3/4
53/46/39	59/52/41
61/54/47	67/60/49
370	370
1,355 × 249 × 535	1,355 × 249 × 535
ACL-ADP	ACL-ADP
750/133	750/133
ACL-A055HC	ACL-A055HC
ACL-A055V3	ACL-A055V3
ACL-ADV	ACL-ADV
ACL-ADH	ACL-ADH
Polypropylene washable	Polypropylene washable

Accessories



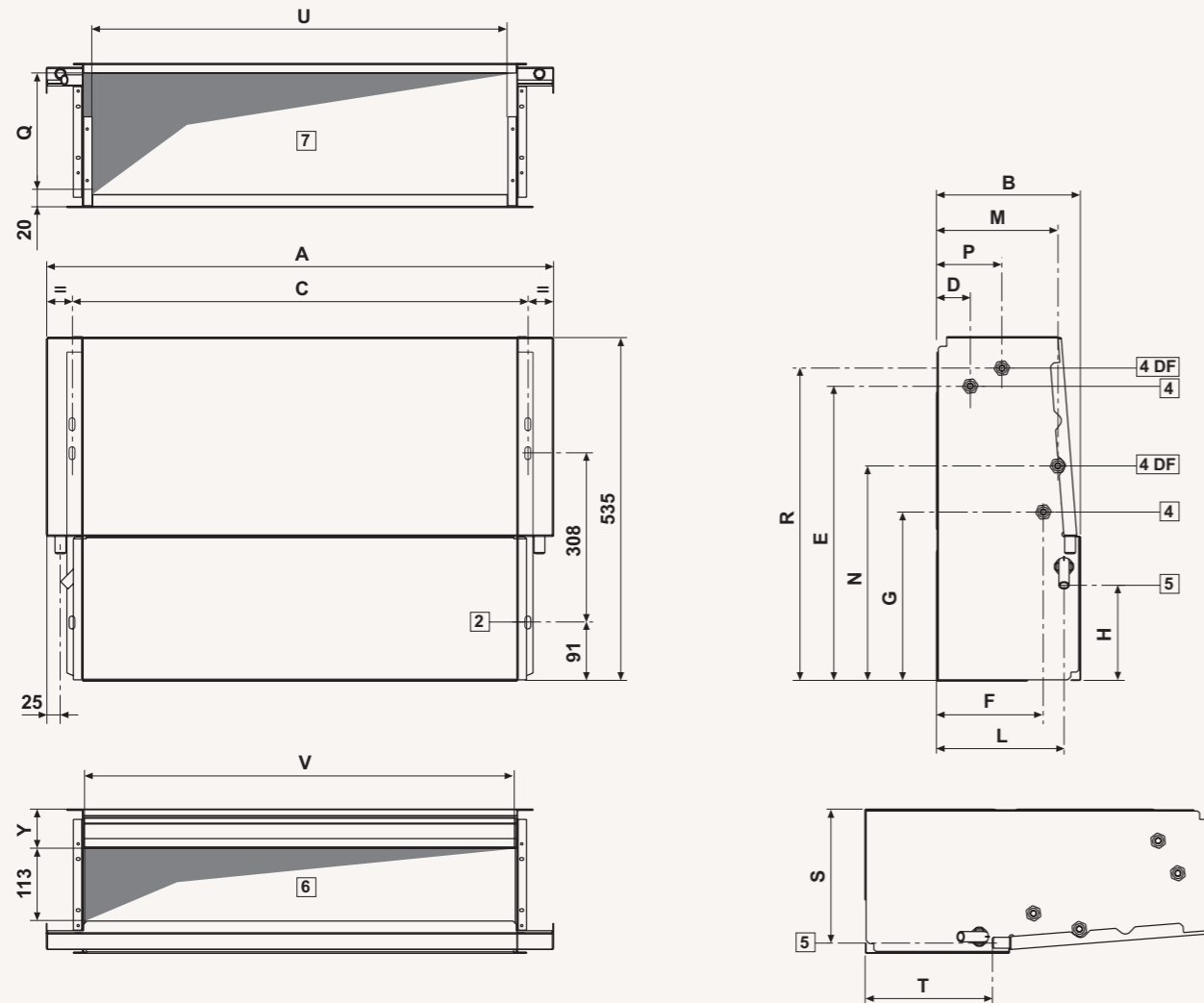
FCU Interface Module	FCU Kit	Touch Controller	Wired Remote Controller	Wired Remote Controller
MIM-F10N	MIM-F00N	MWR-SH11N	MWR-WE13N	MWR-WG00*N

Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C.
 Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 Specifications may be subject to change without prior notice.
 Select wire size based on the MCA value.

Dimensional drawings

Concealed FCU

ACL-***DF



NO	Name	Description
1	Water pipe connection out	PF Male 3/4 (20A)
2	Water pipe connection in	PF Male 3/4 (20A)
3	Air vent valve	
4	Drain hose	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge part	
7	Air suction part	

MODEL	A	B	C	H	L	S	T	Y
ACL-18DH	584	224	498	149	198	208	198	61
ACL-25DH	794	224	708	149	198	208	198	61
ACL-35DH	1004	224	918	149	198	208	198	61
ACL-55DH	1214	249	1128	155	220	234	208	67
ACL-65DH	1214	249	1128	155	220	234	208	67



Specifications

Cased FCU

- Plug & play solution in combination with HVM Chiller.
- Optional vertical or horizontal installation
- 3-Way valve kit included as standard.



Model				ACL-18DG	ACL-25DG	ACL-35DG
Power Supply	Φ, V, Hz			1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz
Mode				HP	HP	HP
Performance	Capacity (Nominal)	Cooling (H/M/L)	kW	1.91/1.66/1.34	2.87/2.34/1.73	4.24/3.20/2.47
		Heating (H/M/L)	kW	2.15/1.81/1.50	2.91/2.35/1.73	4.24/3.24/2.47
Power	Power Input (Nominal)	Cooling (H/M/L)	W	53/36/24	56/43/29	90/50/40
		Heating (H/M/L)	W	53/36/24	56/43/29	90/50/40
	Current Input (Nominal)	Cooling	A	0.26	0.28	0.45
		Heating	A	0.26	0.28	0.45
Heat Exchanger	Type	-			Fin & tube	Fin & tube
Fan	Type	-			Double suction centrifugal fan	Double suction centrifugal fan
	Number of Fans	-			2	2
	Airflow Rate	H/M/L	m ³ /min	5.7/4.5/3.5	7.6/5.7/4.0	11.7/8.3/6.0
Fan Motor	Type	-			3-step AC	3-step AC
	Output x n	-			53/36/24	56/43/29
	Water	Water Flow Rate	Cooling	l/min	5.6	8.4
Water	Pressure Drop	Heating	l/min	6.2	8.4	12.4
		Cooling	kPa	17	24	35
	Piping Connections	Heating	kPa	20	24	35
		Liquid Pipe (IN)	Type	-		
Piping Connections	Liquid Pipe (IN)	Dimension	ø, mm (inch)	1/2	1/2	1/2
		Type	-			Female
	Liquid Pipe (OUT)	Dimension	ø, mm (inch)	1/2	1/2	1/2
		Type	-			Female
Piping Connections	Heat Insulation	-			-	-
	Drain Pipe	-			-	-
Sound	Sound Pressure	(H/M/L)	dB(A)	42/36/32	40/34/28	45/35/27
	Sound Power	(H/M/L)	dB(A)	50/44/40	48/42/36	53/43/35
Dimensions	Net Weight	-			22.0	35.0
	Net Dimensions (W x H x D)	-			774x564x226	984x564x226
Casing	Material	-			-	-
Panel	Panel Model	-			-	-
Additional Accessories	Drain Pump	Type	optional	ACL-ADP	ACL-ADP	ACL-ADP
		Max. Lifting Height/Displacement	mm / (cc/min)	750/133	750/133	750/133
	Heating Coil	4-pipe	optional	ACL-A018HC	ACL-A025HC	ACL-A035HC
		3-Way Valve	4-pipe	optional	ACL-A018V3	ACL-A018V3
	Auxiliary Drain Pan	Vertical	optional	ACL-ADV	ACL-ADV	ACL-ADV
	Auxiliary Drain Pan	Horizontal	optional	ACL-ADH	ACL-ADH	ACL-ADH
	Filter	-			Polypropylene washable	Polypropylene washable

ACL-55DG	ACL-65DG
1Φ, 220-240 V, 50/60 Hz	1Φ, 220-240 V, 50/60 Hz
HP	HP
7.19/5.69/4.32	7.78/6.07/4.00
7.19/5.69/4.32	8.37/6.53/4.39
182/127/86	244/169/109
182/127/86	244/169/109
0.90	1.20
0.90	1.20
Fin & tube	Fin & tube
Double suction centrifugal fan	Double suction centrifugal fan
3	3
16.8/12.8/9.5	23.2/17.0/10.7
3-step AC	3-step AC
182/127/86	244/169/109
21.1	22.9
20.2	24.2
39	42
35	47
Female	Female
3/4	3/4
Female	Female
3/4	3/4
-	-
-	-
53/46/39	59/52/41
61/54/47	67/60/49
45.0	45.0
1,404x564x251	1,404x564x251
-	-
-	-
ACL-ADP	ACL-ADP
750/133	750/133
ACL-A055HC	ACL-A055HC
ACL-A055V3	ACL-A055V3
ACL-ADV	ACL-ADV
ACL-ADH	ACL-ADH
Polypropylene washable	Polypropylene washable

Accessories



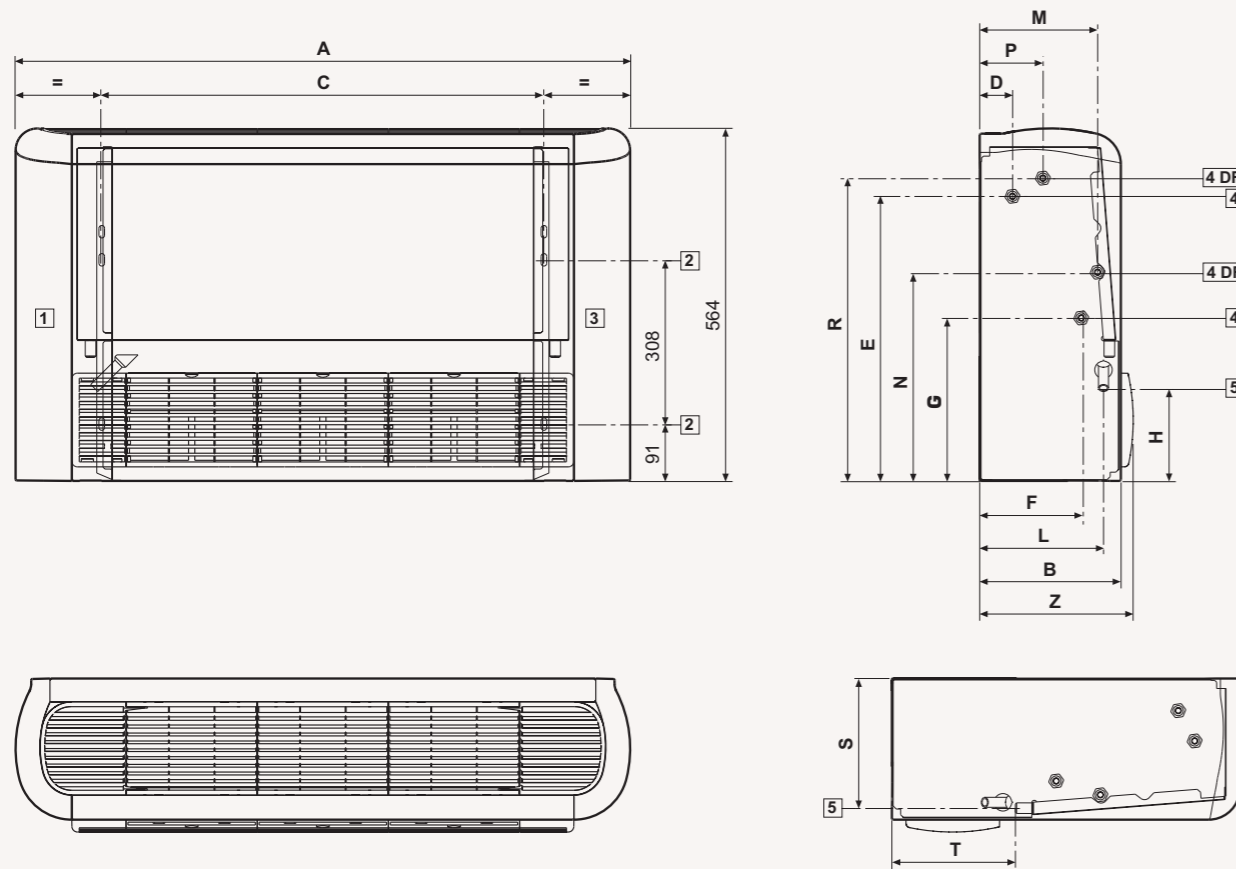
FCU Interface Module	FCU Kit	Touch Controller	Wired Remote Controller	Wired Remote Controller
MIM-F10N	MIM-F00N	MWR-SH11N	MWR-WE13N	MWR-WG00*N

Cooling: Indoor temperature 27 °C DB, 19 °C WB/Water In/Out temperature 7 °C, 12 °C Heating: Indoor temperature 20 °C DB, 15 °C WB/Water In/Out temperature 45 °C, 40 °C.
 Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
 Specifications may be subject to change without prior notice.
 Select wire size based on the MCA value.

Dimensional drawings

Cased FCU

ACL-**DG



NO	Name	Description
1	Water pipe connection out	PF Male 3/4 (20A)
2	Water pipe connection in	PF Male 3/4 (20A)
3	Air vent valve	
4	Drain hose	VP25 (OD 32, ID 25)
5	Power supply/communication wiring conduits	
6	Air discharge part	
7	Air suction part	

MODEL	A	B	C	H	L	S	T	Z
ACL-18DG	774	226	498	149	198	208	198	246
ACL-25DG	984	226	708	149	198	208	198	246
ACL-35DG	1194	226	918	149	198	208	198	246
ACL-55DG	1404	251	1128	155	220	234	208	271
ACL-65DG	1404	251	1128	155	220	234	208	271



Ventilation



Specifications

ERV

- Energy recovery ventilation unit.
- Optional vertical or horizontal installation.
- Cellulose heat exchanger element.
- F7 class air filter.
- Optional CO₂ sensor for automatic regulation.
- Bypass operation mode when there's a small temperature difference between indoor and outdoor environment (automatically or manually operated).
- Interlocking with DVM S indoor units.
- Frost formation prevention without electric heater.



Model Name			AN026JSKLN/EU	AN035JSKLN/EU	AN050JSKLN/EU	AN080JSKLN/EU	AN100JSKLN/EU	
Power Supply			Ø, #, V, Hz	10, 2, 220-240 V, 50/60 Hz	10, 2, 220-240 V, 50/60 Hz	10, 2, 220-240 V, 50/60 Hz	10, 2, 220-240 V, 50/60 Hz	10, 2, 220-240 V, 50/60 Hz
Performance	Air Volume		m ³ /h	260	350	500	800	1,000
	Temperature Exchange Efficiency	Cooling	Turbo/High/Low %	70/70/74	70/70/74	70/70/74	70/70/74	70/70/74
		Heating	Turbo/High/Low %	74/74/75	78/78/79	74/74/75	77/77/78	74/74/75
	Effective Enthalpy Exchange Efficiency	Cooling	Turbo/High/Low %	50/50/55	50/50/55	50/50/55	50/50/55	50/50/55
Heating		Turbo/High/Low %	70/70/76	70/70/76	70/70/76	70/70/76	70/70/76	
Power	Power Input		Turbo/High/Low W	115/80/45	115/80/50	175/120/65	330/230/125	450/280/155
	Current Input		Turbo A	0.7	0.7	1.1	2.1	2.9
Fan	Airflow Rate		Turbo/High/Low m ³ /h	260/250/180	350/350/256	500/500/360	800/800/560	1,000/1,000/690
	External Static Pressure		Turbo/High/Low Pa	100/65/55	155/100/83	165/100/85	155/90/80	155/90/75
Noise Level	Sound Pressure ¹		Turbo/High/Low/ Quiet dB(A)	31/28/25/22	32/29/26/23	35/32/28/24	36/33/29/25	37/34/30/26
	Sound Power		dB(A)					
Field Wiring	Power Source Wire		mm ²	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5	1.5-2.5
	Transmission Cable		mm ²	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50	0.75-1.50
Dimensions	Net Weight		kg	28.5	42.5	42.5	67.0	67.0
	Net Dimensions (W x H x D)		mm	600 x 350 x 660	1,012 x 270 x 1,000	1,012 x 270 x 1,000	1,220 x 340 x 1,135	1,220 x 340 x 1,135
	Supply/Return/Exhaust/Outside Duct Flange (ø)		mm	150	200	200	250	250

Accessories

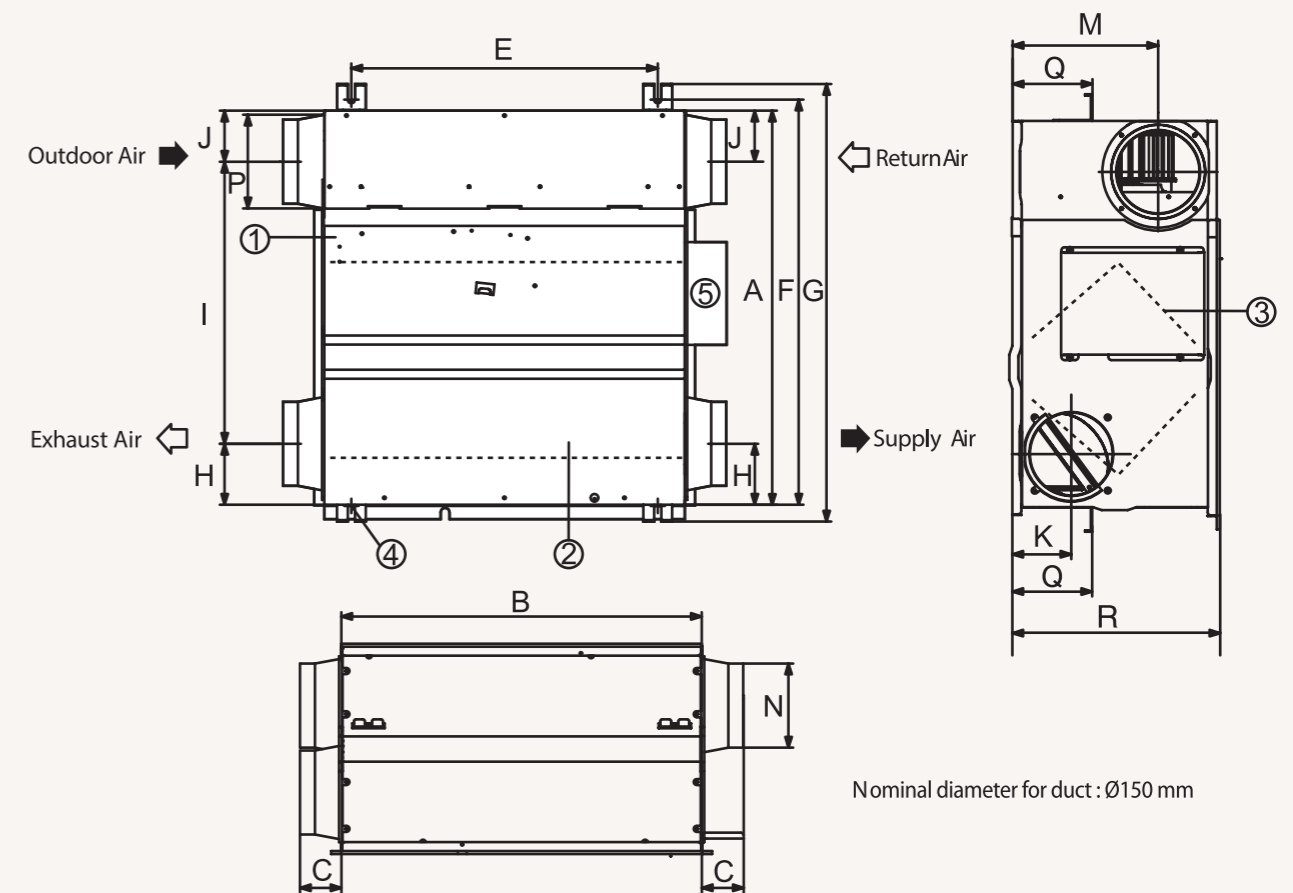


CO ₂ Sensor	ERV Wired Remote Controller	Wired Remote Controller	Wired Remote Controller
MOS-C1	MWR-VH12N	MWR-WE13N	MWR-WG00*N

Dimensional drawings

ERV

AN026JSKLN/EU



NO	Name	Description
1	Maintenance cover	1
2	Heat exchange element	1
3	Dust filter	2
4	Hanger	4
5	Electrical component box	1

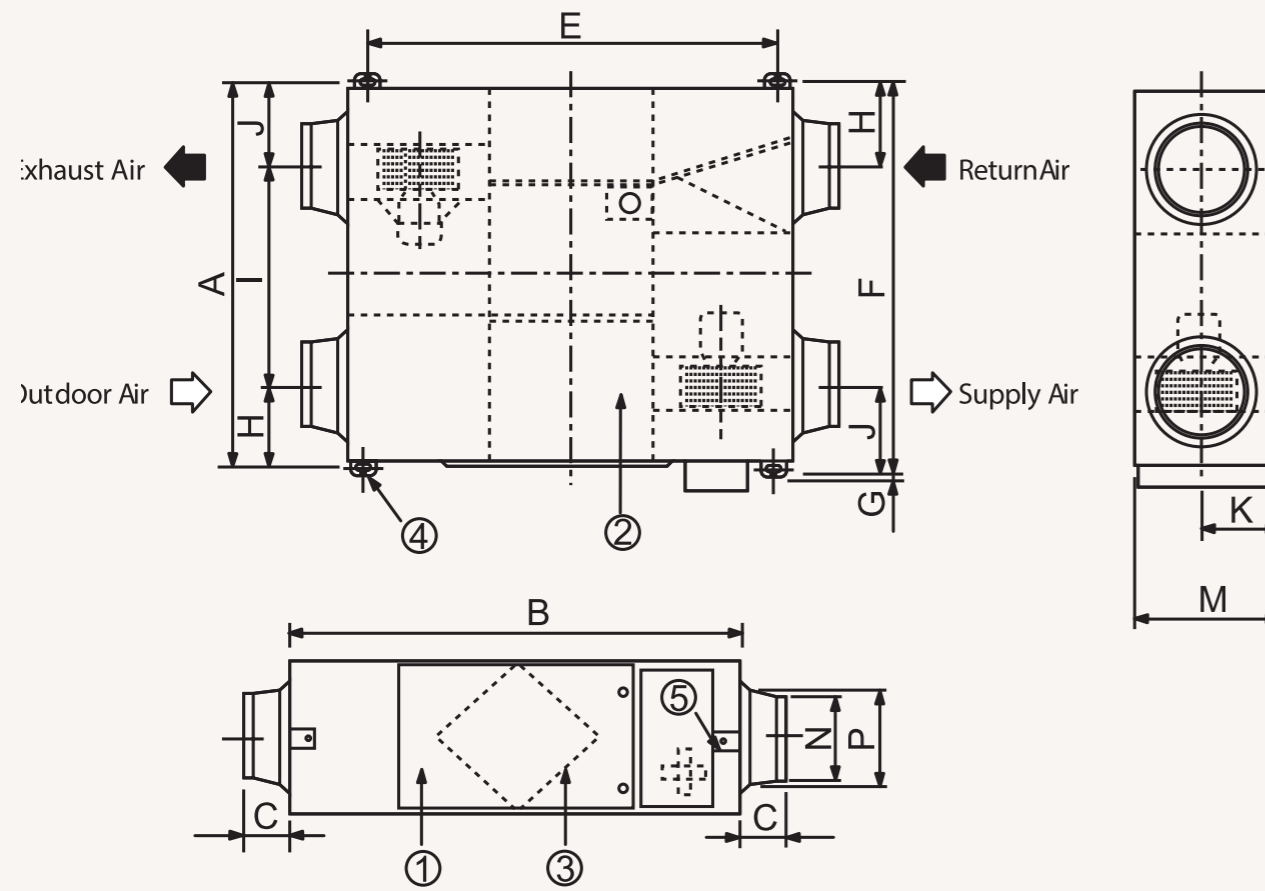
Model	A	B	C	E	F	G	H	I	J	K	M	N	P	Q	R
	Length (mm)										Diameter (mm)		Length (mm)		
026	600	660	70	510	675	729	102	470	85	98	242	140	156	133	350

¹ Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.
² Please order MOS-P1050 separately. Differential pressure switch (model code: MOS-P1050) is a mandatory accessory for all ERV and ERV Plus units in EU countries according to Ecodesign Directive 1253/2014.

Dimensional drawings

ERV

035/050 - 080/100



NO	Name	Description
1	Maintenance cover	1
2	Heat exchange element	2
3	Dust filter	4
4	Hanger	4
5	Electrical component box	1

Model	Nominal diameter for duct (mm)
035/050	200
080/100	250

Model	Length (mm)									Diameter (mm)		Length (mm)			
	A	B	C	E	F	G	H	I	J	K	M	N	P	Q	R
035/050	1,000.00	1,012.00	99.00	940.60	1,036.40	26.00	130.00	617.00	253.00	135.00	270.00	194.00	241.50	133.00	350.00
080/100	1,135.00	1,220.00	84.00	1,110.00	1,183.00	25.00	184.00	613.25	387.75	170.00	340.00	244.00	270.00		



Specifications

ERV Plus for DVM S

- Energy recovery ventilation unit with built-in direct expansion coil.
- Cellulose heat exchanger element.
- F7 class air filter.
- Two centrifugal fans direct driven by electric BLDC motor.
- Optional CO₂ sensor for automatic regulation.
- "Natural evaporating" humidifier type and humidity sensor optional.
- Bypass operation mode when there's a small temperature difference between indoor and outdoor environment (automatically or manually operated).
- Frost formation prevention without electric heater.
- Auto Restart function.



Model Name		AN026JSKLN/EU	AN035JSKLN/EU		
Power Supply	Φ, #, V, Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz		
Performance	Temp. Exchange Efficiency	Cooling Turbo/High/Low	- / 70/70/74	70/70/74	
		Heating Turbo/High/Low	- / 75/75/79	75/75/79	
	Effective Enthalpy Exchange Efficiency	Cooling Turbo/High/Low	- / 60/60/66	62/62/68	
		Heating Turbo/High/Low	- / 73/73/79	75/75/81	
Outside Air Processing Capacity	Cooling (DX Coil/Element)	- / 5.1 (3.6/1.5)	10.5 (7.1/3.4)		
	Heating (DX Coil/Element)	- / 6.5 (4.0/2.5)	13.2 (8.0/5.2)		
Fan	Airflow Rate	Turbo/High/Low (UL)	m ₃ /hr	500/500/360	1,000/1,000/690
			l/s	138.9/138.9/100.0	277.8/277.8/191.7
	External Static Pressure	Turbo/High/Low	mmAq	16.30/10.20/8.70	15.30/9.20/7.60
			Pa	160.00/100.00/85.00	150.00/90.00/75.00
	Motor	Type	-	BLDC	BLDC
		Output	W	180	70
Quantity		-	2	2	
Power	Power Input	Turbo/High/Low	W	220/140/90	510/350/235
	Current Input	Turbo/High/Low	A	1.7/1.0/0.6	3.7/2.4/1.6
Piping Connections	Liquid Pipe	ø, mm	6.35	6.35	
		ø, inch	1/4	1/4	
	Gas Pipe	ø, mm	12.70	12.70	
		ø, inch	1/2	1/2	
	Drain Pipe	ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
		ø, inch	VP25 (OD 1-1/4", ID 1")	VP25 (OD 1-1/4", ID 1")	
Water Supply	ø, mm	12.70	12.70		
	ø, inch	1/2	1/2		
Field Wiring	Power Source Wire	mm ²	1.5/2.5	1.5/2.5	
	Transmission Cable	mm ²	0.75-1.50	0.75-1.50	
Refrigerant	Type	-	R410A	R410A	
	Control Method	-	EEV	EEV	
Sound Pressure	Sound Level	Turbo/High/Low	dB(A)	36/32/28	36/33/31
Dimensions	Net Weight	kg	61.0	90.0	
	Net Dimensions (W x H x D)	mm	1,553 x 270 x 1,000	1,763 x 340 x 1,135	
	Supply/Return/Exhaust/Outside Duct Flange (ø)	mm	200	250	
Accessory	Air Filter	-	High Efficiency Filter (PP)	High Efficiency Filter (PP)	
Accessory	SPI Ioniser	-	MSD-EAN1	MSD-EAN1	
	CO ₂ Sensor	-	MOS-C1	MOS-C1	
Ambient Conditions	Around Unit	-	0-40 °C DB, 80 % RH or less	0-40 °C DB, 80 % RH or less	
	Outdoor Air	-	-15-40 °C DB, 80 % RH or less	-15-40 °C DB, 80 % RH or less	
	Return Air	-	0-40 °C DB, 80 % RH or less	0-40 °C DB, 80 % RH or less	

Accessories



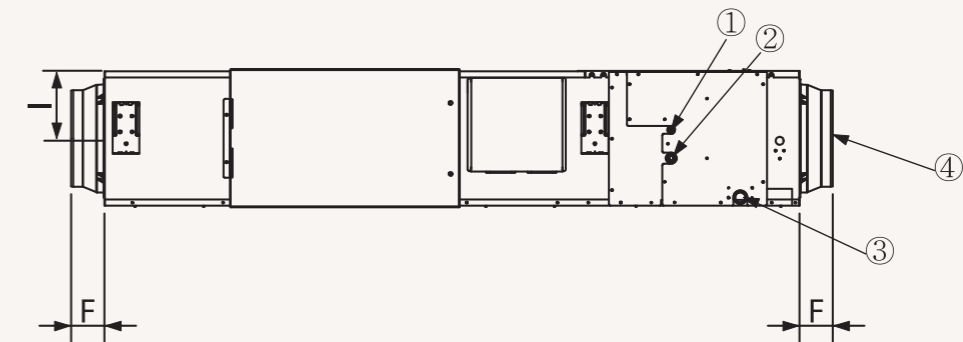
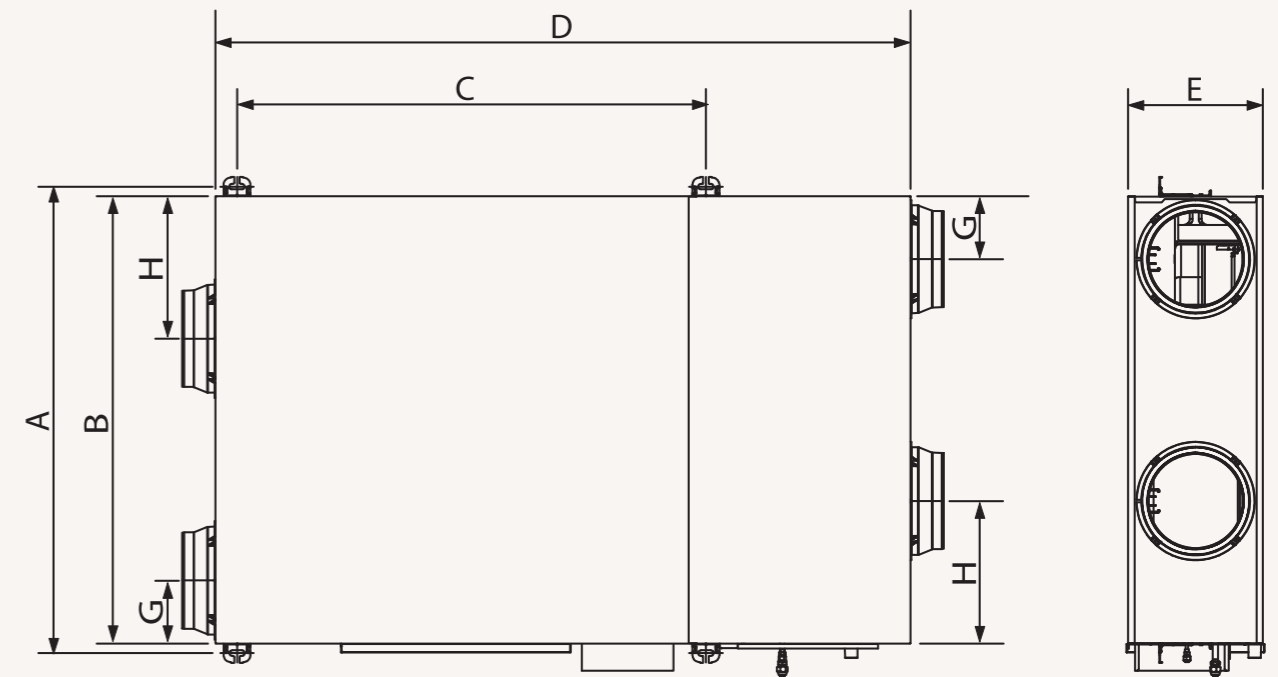
Wired Remote Controller	Wired Remote Controller	CO ₂ Sensor	SPI Ioniser
MWR-WE13N	MWR-WG00*N	MOS-C1	MSD-EAN1

¹ Please order MOS-P1050 separately. Differential pressure switch (model code: MOS-P1050) is a mandatory accessory for all ERV and ERV Plus units in EU countries according to Ecodesign Directive 1253/2014.

Dimensional drawings

ERV Plus for DVM S

AM***FNKDEH/EU



NO	Name	Description
		AM050FNKDEH
		AM100FNKDEH
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection	VP25 (OD 32, ID 25)
4	Nominal diameter for duct	ø200

Model	A	B	C	D	E	F	G	H	I
RHF050KHEA	1,036	1,000	987	1,553	270	99	130	253	135
RHF100KHEA	1,183	1,135	1,189	1,763	340	84	160	362	170

Specifications

OAP Duct for DVM S

- 100% Fresh Air unit.
- Equipped with two Sirocco fans direct driven by a single motor.
- Discharge temperature control.
- No limitation in OAP Duct quantity for one system.
- HD 40 permanent filter is included.
- Auto ESP function: the fan speed is adjustable according to ductwork external static pressure.
- Can be combined with other DVM indoor units to form one system.



Model				AM140MNEPH/EU	AM220MNEPH/EU	AM280MNEPH/EU
Power Supply		Φ, #, V, Hz		1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	kW	14.0	22.4	28.0
		Heating		8.9	13.9	17.4
Power	Power Input (Nominal)	Cooling	W	300	450	600
		Heating		300	450	600
	Current Input (Nominal)	Cooling	A	2.2	3.5	4.6
		Heating		2.2	3.5	4.6
Heat Exchanger	Type			Fin & tube	Fin & tube	Fin & tube
	Material		Fin	Al	Al	Al
			Tube	Cu	Cu	Cu
Fan	Motor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
		Output x n	W	183 x 1	630 x 1	630 x 1
		Number of Fans	-	2	2	2
	Airflow Rate	H/M/L	m ³ /min	18	28	35
			l/s	300.0	466.7	583.3
	External Pressure	Min/Std/Max	mmAq	15.30/20.40/25.50	18.40/23.40/29.60	20.40/25.50/30.60
		Pa	150.00/200.00/250.00	180.00/230.00/290.00	200.00/250.00/300.00	
Piping Connections	Liquid Pipe	ø, mm		9.52	9.52	9.52
		ø, inch		3/8	3/8	3/8
	Gas Pipe	ø, mm		15.88	19.05	22.22
		ø, inch		5/8	3/4	7/8
	Drain Pipe	ø, mm		VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
Field Wiring	Transmission Cable	Min.	mm ²	0.75	0.75	0.75
Refrigerant	Type			R410A	R410A	R410A
	Control Method			EEV (INCLUDED)	EEV (INCLUDED)	EEV (INCLUDED)
Noise Level	Sound Pressure ¹	H/M/L	dB(A)	42	46	47
	Sound Power	Cooling	dB(A)	65	66	69
Dimensions	Net Weight		kg	49.0	81.5	81.5
	Net Dimensions (W x H x D)		mm	1 210 x 370 x 656	1,360 x 460 x 910	1,360 x 460 x 910
Additional Accessories	Drain Pump	Drain Pump	-	MDP-N047SNC0D	MDP-N047SNC1D	MDP-N047SNC1D
		Max. Lifting Height/Displacement	mm / litres/h	750/24	750/24	750/24
	Air Filter			Removable/ Washable	Removable/ Washable	Removable/ Washable

Accessories



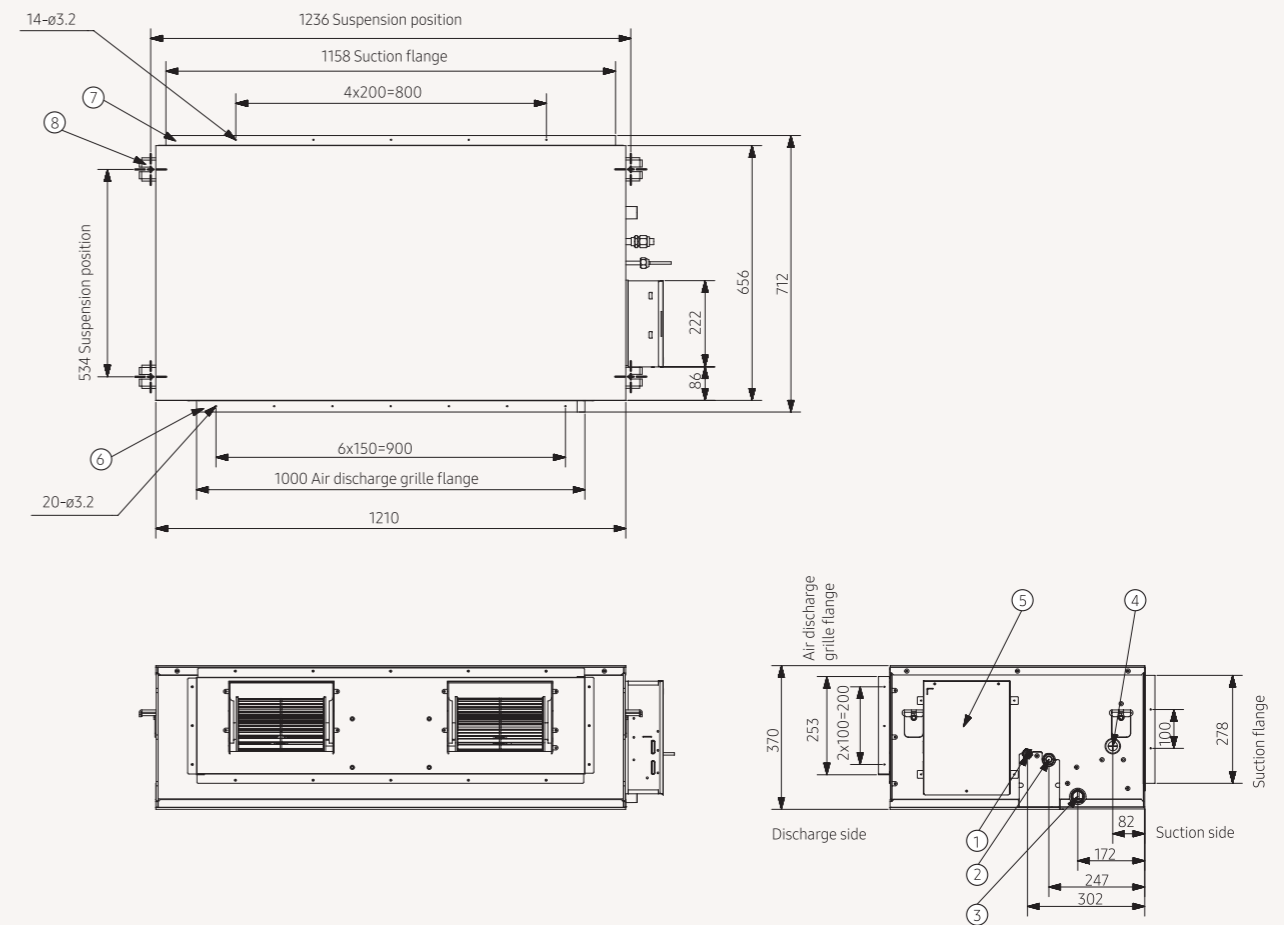
Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit	Wireless Receiver Kit	External Thermostat
AR-EH03E (to be matched with MRK-A10N)	MWR-SH11N	MWR-WE13N	MWR-WG00*N	MIM-H04EN	MRK-A10N (to be matched with AR-EH03E)	MRW-TA

¹ Sound level was acquired in an anechoic room. Thus actual noise level may be different depending on the installation conditions.

Dimensional drawings

OAP Duct for DVM S

AM140MNEPH*H

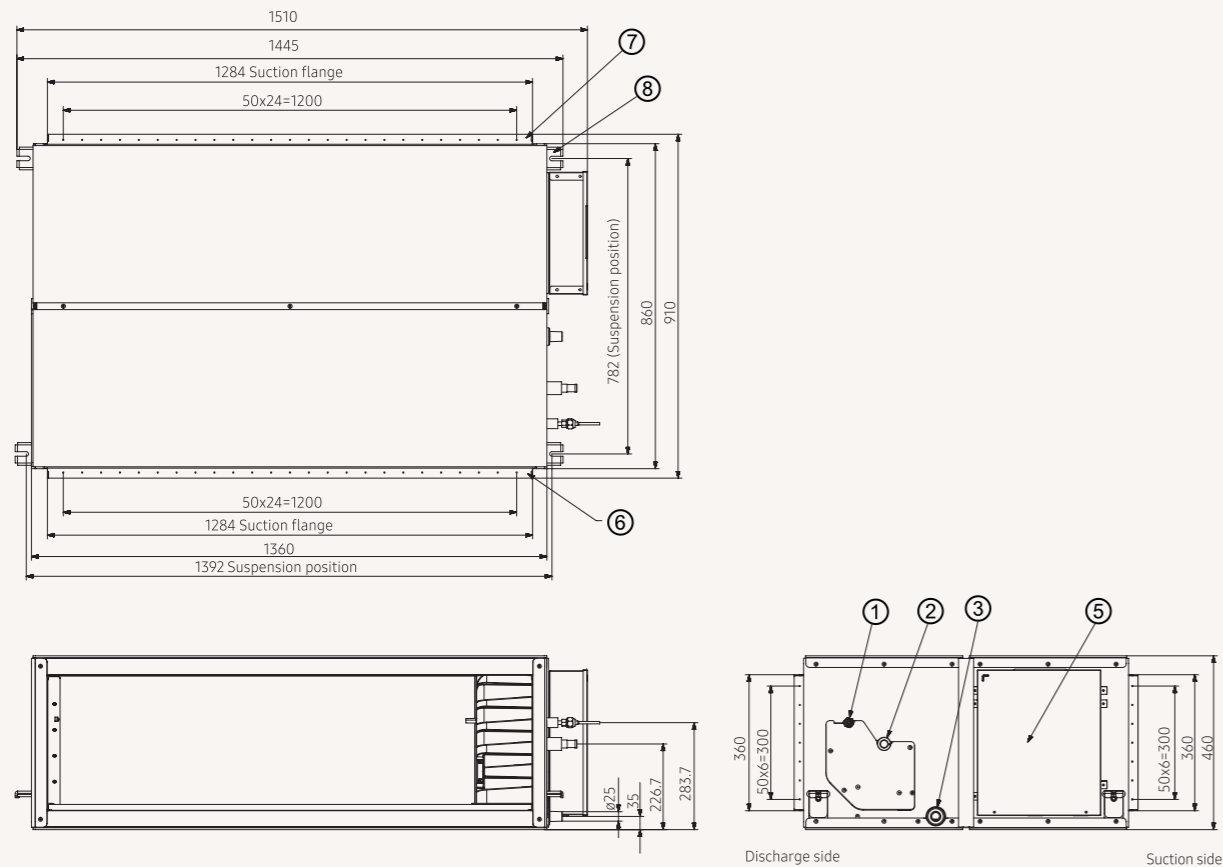


NO	Name	Description
1	Diameter of liquid pipe	ø9.52
2	Diameter of air pipe	ø15.88
3	Diameter of drain pipe	OD ø25, ID ø20
4	Diameter of drain pipe (Optional drain pump)	OD ø25, ID ø20
5	Power supply/Communication wiring conduit	
6	Air discharge grille flange	
7	Suction flange	
8	Hook	ø9.52 or M10

Dimensional drawings

OAP Duct for DVM S

AM140MNEP*H



NO	Name	Description
1	Diameter of liquid pipe	ø9.52
2	Diameter of air pipe	ø15.88
3	Diameter of drain pipe	OD ø25, ID ø20
4	Diameter of drain pipe (Optional drain pump)	OD ø25, ID ø20
5	Power supply/Communication wiring conduit	
6	Air discharge grille flange	
7	Suction flange	
8	Hook	ø9.52 or M10














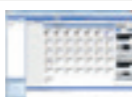




Controls



Line-up

	Product	Model	Image	Matchable Products
Individual Control System	Wireless Remote Controller	AR-EH03M AR-EH03E		DVM, FJM, CAC
	Wireless Remote Controller	AR-KH03E		CAC, DVM *only for 360 Cassette
	Wired Remote Controller	MWR-WE13N		DVM, CAC, FJM
	Wired Remote Controller	MWR-WG00*N		DVM, CAC, FJM, ERV
	Simple Type Controller	MWR-SH00N		DVM, CAC
	Touch Type Controller	MWR-SH11N		DVM, CAC (with Wind-Free™ function)
	ERV Wired Remote Controller	MWR-VH12N		ERV
	Wireless Receiver Kit	MRK-A10N		DVM, CAC (only duct models)
Centralised Control System	ON/OFF Controller	MCM-A202DN		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	Touch Centralised Controller	MCM-A300N		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	Wi-Fi Kit	MIM-H04EN		All
	Module Controller	MCM-A00N		DVM Chiller
Integrated Management System	DMS2.5	MIM-D01AN		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	S-NET3	MST-P3P		

	Product	Model	Image	Matchable Products
Gateway System	BACnet Gateway	MIM-B17BN		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	LonWorks Gateway	MIM-B18BN		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	External Contact Interface Module	MIM-B14		DVM, RAC, FJM, CAC, EHS
	PIM (Pulse Interface Module)	MIM-B16N		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	Interface Module (Converter RS485 to NASA)	MIM-N01		FJM, CAC, EHS
	ERV Interface Module (Converter RS485 to NASA)	MIM-N10		ERV
	FCU Interface Module	MIM-F10N		Chiller
	Installation/ Test Run Solution	S-Converter	MIM-C02N	
Others	External Room Sensor	MRW-TA		DVM, FJM, CAC
	Operation Mode Selection Switch	MCM-C200		
	MTFC (Multi-Tenant Function Controller)	MCM-C210N		
Integrated Management System	DMS2.5	MIM-D01AN		DVM, FJM, CAC, ERV Plus, EHS Split/Mono
	S-NET3	MST-P3P		

Compatibility guide

Classification	Product	Model	Image	Compatibility		
				DVM	HVM Chiller	Water FCU
Individual Control System	Wireless Remote Controller	AR-EH03M AR-EH03E		•		•
	Wireless Remote Controller (360 Cassette only)	AR-KH03		•		•
	Wired Remote Controller	MWR-WE13N		•		•
	Wired Remote Controller	MWR-WG00*N		•		•
	Simple Type Controller	MWR-SH00N		•		•
	Touch Controller	MWR-SH11N		•		•
	ERV Wired Remote Controller	MWR-VH12N				
	Wireless Receiver Kit	MRK-A10N		•		
Centralised Control System	Touch Centralised Controller	MCM-A300N		•	•	•
	ON/OFF Controller	MCM-A202DN		•	•	•
	Wi-Fi Kit	MIM-H04EN		•		•
	Module Controller	MCM-A00N			•	
Integrated Management System	DMS 2.5	MIM-D01AN		•	•	•
	S-NET3	MST-P3P		•		•
Gateway System	BACnet Gateway	MIM-B17BN		•	•	•
	Lonworks Gateway	MIM-B18BN		•	•	•
	Modbus Interface Module	MIM-B19N		•	•	•
	PIM (Pulse interface module)	MIM-B16N		•	•	•
	External Contact Interface Module	MIM-B14		•	•	•
		MIM-B14A (refrigerant leakage detector)		•		
	Interface Module Converter (RS485-NASA)	MIM-N01		•		•
	ERV Interface Module Converter (RS485-NASA)	MIM-N10			•	
	FCU Interface Module	MIM-F00N				•
MIM-F10N					•	
Installation/ Test Run Solution	S-Converter	MIM-C02N		•	•	•
Others	External Room Sensor	MRW-TA		•		•
	Operation Mode Selection Switch	MIM-C200		•		
	MTFC (Multi-Tenant Function Controller)	MCM-210N		•		

Compatibility					
FCU Kit	ERV	ERV Kit	ERV Plus	PAC	AHU Kit
•					•
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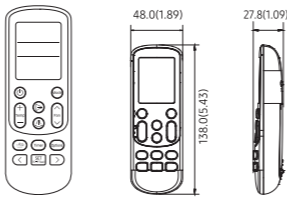

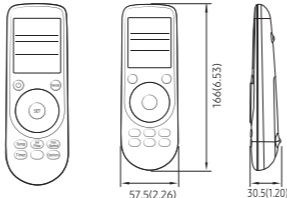

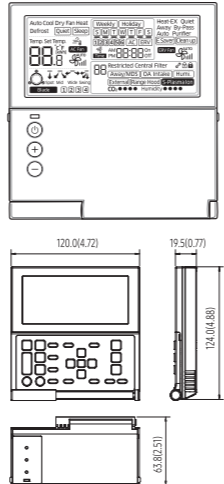

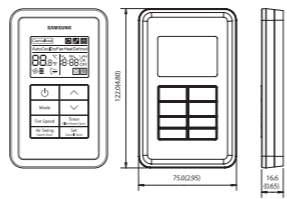
Selection guide


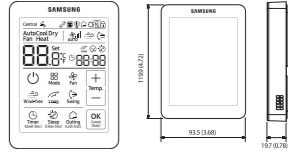

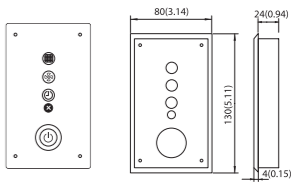

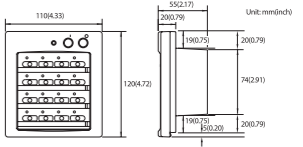

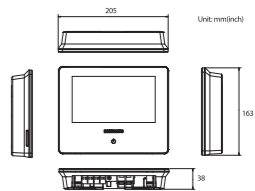


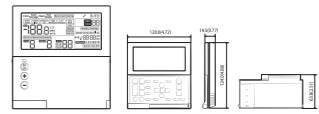


Model		MWR-WG00*N	MWR-WE13N	MWR-SH11N	MWR-VH12N
Appearance	Dimensions	120.0 x 120.0 x 19.0	120.0 x 124.0 x 19.5	94.2 x 122.0 x 19.5	75.0 x 122.0 x 16.6
Connection	Indoor units control	●	●	●	
	ERV control	●	●		●
	Maximum connectable indoor units	16	16	16	6
Control & monitoring	ON/OFF	●	●	●	●
	Operation mode	●	●	●	●
	Fan speed	●	●	●	●
	Air swing	●	●	●	
	Room temperature display	●			
	°C convertible	●	●	●	
	Filter cleaning alarm reset	●	●	●	
	Air quality display	●			
	Purification display	●			
	Display indoor model number	●			
	Error display	●	●	●	●
Error list	●				
Schedule	Weekly schedule	●	●		
	Simple ON/OFF timer			●	●
Convenient function	Dual set point	●			
	Multiple languages	●			
	Built-in room sensor	●	●	●	
	LCD backlight	●	●	●	
	Wireless RC restriction	●	●	●	
	Child lock	●	●	●	●
	Partial button lock	●	●	●	●
	Quiet mode	●	●	●	
	Sleep mode	●	●	●	
	Away mode (SAC)	●		●	
	Away mode (ERV)				●
	IR receiver	●		●	
	Real-time clock		●		
	Daylight saving time	●	●		
	Individual blade control	●	●		
	CO ₂ display	○ ERV	○ ERV		●
	Humidity display	○ ERV	○ ERV		
	Purification mode	○ ERV	○ ERV		
Energy saving	Temperature range limit	●	●	●	
	Automatic operation stop	●	●		
	Operation time limit	●			
	Energy consumption monitoring	●			
	Energy saving mode with ERV	●	●		
Maintenance	SD slot	●			



Features and Dimensional drawings

Individual Control System		
<p>Wireless Remote Controller AR-EH03E / AR-EH03M</p> <ul style="list-style-type: none"> • Operation ON/OFF control • Fan speed control • Operation temperature setting • Wind-Free™ Cooling function • Filter replacement alarm reset • Air swing control • Simple ON/OFF timer • Indoor unit option code setting • Option/Setting selection 		
<p>Wireless Remote Controller AR-KH03E</p> <ul style="list-style-type: none"> • 360 Cassette airflow direction control • Operation ON/OFF control • Fan speed control • Operation temperature setting • Filter replacement alarm reset • Simple ON/OFF timer • Indoor unit option code setting 		
<p>Wired Remote Controller MWR-WE13N / MWR-WG00*N</p> <p>Air conditioner/ERV control</p> <ul style="list-style-type: none"> • AC control: ON/OFF, operation mode, temperature setting, fan speed, airflow direction • ERV control: ON/OFF, operation mode, fan speed • AC/ERV error monitoring • Filter cleaning alert and reset alert time • Control a maximum of 16 "Indoor unit + ERV" in a group with a single wired controller <p>Energy saving operation</p> <ul style="list-style-type: none"> • Upper/lower temperature limit setting • Automatically stops operating when not used for certain period of time as set by user <p>Weekly operation schedule setting</p> <ul style="list-style-type: none"> • Weekly operating schedule (A/C only, ERV only, A/C+ERV) • Set desired AC operation mode, temperature and fan speed to operate based on a weekly schedule • Apply schedule exception day • Energy consumption monitoring (MWR-WG00*N) • Operation time limit (MWR-WG00*N) <p>User convenience function</p> <ul style="list-style-type: none"> • Child lock • Different button permission levels • Room temperature display (MWR-WG00*N) • Dual set point (MWR-WG00*N) • Built-in room temperature sensor • Real-time clock: displays current time and day (summer time support) • Multiple language support • Service mode support <ul style="list-style-type: none"> - Indoor unit cycle data monitoring - Indoor unit option code setting and monitoring - Indoor unit address setting and monitoring (MWR-WG00*N) - SD card slot (MWR-WG00*N) 		
<p>Simple Type Controller MWR-SH00N</p> <ul style="list-style-type: none"> • Simplified wired remote controller • AC operation ON/OFF control • Fan speed control • Setting operation mode and temperature • Reset filter cleaning alert indicator • Adjust airflow direction • Operation ON/OFF timer function 		

Centralised Control System		
<p>Touch Controller MWR-SH11N</p> <ul style="list-style-type: none"> • Bigger display: clear & bright backlight screen with big fonts • Wind-Free™ button: control Wind-Free™ function with just one click • Room temperature monitor and room temperature display thanks to the built-in temperature sensor • Icon/Function Lock: option of restricting icon/function on the display • Sleep Mode: help users to sleep better by controlling temperature • Outing Feature: keep room temperature above/below specific set value when the user is out of the room 		
<p>Wireless Receiver Kit MRK-A10N</p> <ul style="list-style-type: none"> • 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) 		
<p>ON/OFF Controller MCM-A202DN</p> <ul style="list-style-type: none"> • Maximum 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 		
<p>Touch Centralised Controller MCM-A300N</p> <ul style="list-style-type: none"> • 7-inch touch LCD controller • Controls a maximum of 128 indoor units • Controls a maximum of 12 zones • Schedule control, indoor unit usage restriction, View indoor unit error history 		
<p>Wi-Fi Kit Replace with: MIM-H04EN</p> <ul style="list-style-type: none"> • Controls and monitoring system air conditioner by mobile phone. (Max. 16 units) • Weekly schedule setting • Group control and monitoring (ON/OFF) • Current/daily/weekly/monthly energy usage data of outdoor unit. (This function is available in certain outdoor unit models) 		
<p>Module Controller MCM-A00N</p> <ul style="list-style-type: none"> • DVM CHILLER ON/OFF control (Module/Group) • Operation mode, water outlet temperature setting • Optional operation setting • Module/Group setting • Weekly operation schedule setting 		

Gateway System		
<p>BACnet Gateway MIM-B17BN</p> <p>With the BMS control and monitoring function, BACnet gateway makes it easy to control the air conditioning network in various ways. BACnet gateway can control up to 256 indoor units, used in combination with S-NET 3.</p> <ul style="list-style-type: none"> Interface for BACnet management system Maximum of 256 indoor units plus ERVs, supported by a maximum of 80 interface modules Includes DMS 2.5 functions 		
<p>LonWorks Gateway MIM-B18BN</p> <p>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.</p> <ul style="list-style-type: none"> Exclusive use for DMS 2.5 power distribution Connection with up to eight watt-hour meters Pulse interface with watt-hour meters Watt-hour meter - by third party 		
<p>External Contact Interface Module MIM-B14</p> <p>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. The module also generates indoor unit operation/error state output through relay contacts.</p> <ul style="list-style-type: none"> 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 		
<p>PIM (Pulse Interface Module) MIM-B16N</p> <ul style="list-style-type: none"> 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 eight watt-hour meters Pulse interface with watt-hour meters Watt-hour meter - by third party 		
<p>Interface Module MIM-N01</p> <ul style="list-style-type: none"> Communication interface module between outdoor units and the upper level controller which makes use of a different type of communication Connect one interface module to one outdoor unit Individual control - maximum of 48 indoor units Group control - maximum of 16 groups Automatic detection of communication type: determine the communication type used by the upper level controller according to the communication type used by the outdoor unit Supported communication type <ul style="list-style-type: none"> Conventional outdoor unit communication ↔ New upper level controller communication New outdoor unit communication ↔ Conventional upper level controller communication 		

<p>Interface Module (Converter RS485 to NASA) MIM-N10</p> <ul style="list-style-type: none"> Communication interface module between new communication ERV and controller Connect one ERV interface module to a maximum of 16 ERVs Individual control - maximum of 16 ERVs Group control - maximum of 16 groups Supported communication type <ul style="list-style-type: none"> Conventional ERV communication ↔ New upper level controller communication New ERV communication ↔ Conventional upper level controller communication New ERV communication ↔ New upper level controller communication 		
<p>FCU Interface Module MIM-F10N</p> <ul style="list-style-type: none"> Communication interface module Connect one FCU interface module to a maximum of 16 FCU Kits. Supports FCU Kit only 		

Installation/Test Run Solution		
<p>S-Converter MIM-C02N</p> <ul style="list-style-type: none"> Communication converting module to connect Samsung system air conditioner to a PC. Main purpose for use <ul style="list-style-type: none"> To connect with test run programme [Test run programme] S-NET Pro: Conventional communication S-NET Pro2: New communication 		

Others		
<p>External Room Sensor MRW-TA</p> <ul style="list-style-type: none"> Indoor unit is operated by MRW-TA instead of its own sensor. Wire length: 12 m (39 ft) 		
<p>Operation Mode Selection Switch MCM-C200</p> <ul style="list-style-type: none"> Outdoor unit operation mode selection (Cooling, Heating or Auto) Mixed operation mode protection 		
<p>MTFC (Multi-Tenant Function Controller) MCM-C210N</p> <ul style="list-style-type: none"> Multi-tenant function controller is an auxiliary power supply device which allows the indoor unit to turn off (close EEV) normally and maintain communication when the mains power supply is cut. It is used on sites such as hotels, where individual power is supplied to the indoor unit 		



Accessories

Line-up

Classification	Image	Model DVM S (New Communication Protocol)	Application
Drain Pump		MDP-E075SEE3D	Slim Duct (2.0-14.0 kW)
		MDP-M075SGU1D	MSP Duct (9.0/11.2 kW)
		MDP-M075SGU2D	MSP Duct (12.8/14.0 kW) HSP Duct (11.2/14.0 kW)
		MDP-M075SGU3D	MSP Duct (5.6/7.1 kW)
		MDP-N047SNCOD	Fresh Air Intake Duct (14.0 kW)
	MDP-N047SNCID	HSP Duct (22.4/28.0 kW) Fresh Air Intake Duct (14.0 kW)	
		-	Global Duct (External Type)
	-	Global Duct (Internal Type)	
AHU Kits		MXD-K025AN	7.00-8.75 kW AHU
		MXD-K050AN	14.00-17.50 kW AHU
		MXD-K075AN	21.00-26.25 kW AHU
		MXD-K100AN	28.00-35.00 kW AHU
		MXD-A64K100E	AHU EEV Kit (10 hp)
	MCM-D201N	Control Kit (PBA, 10 hp-40 hp)	
Humidifier		MVO-VA050100	500 m3/hr (ERV Plus)
		MVO-VA100100	1,000 m3/hr (ERV Plus)
360 Cassette Front Panel		PC4NUDMAN	NASA, Square
		PC4NBDMAN	NASA, Square - Black
		PC4NUNMAN	NASA, Circle (exposed installation)
		PC4NBMA	NASA, Circle (exposed installation) - Black
Wind-Free™ 4-Way Cassette Front Panel		PC4NUFMAN	Wind-Free™ 4-Way Cassette
4-Way Cassette Front Panel		PC4NUSKAN	4-Way Cassette S - Waffle
		PC4NUSKEN	4-Way Cassette S - Classic
		PC4NBSKAN	4-Way Cassette S - Black
		PC4SUFMAN	Wind-Free™ 4-Way Cassette (600 x 600)
Wind-Free™ 1-Way Cassette Front Panel		PC1NWFMAN	
1-Way Cassette Front Panel		PC1BWSMAN	1-Way Cassette (New Air Fluid Design) (1.7-2.2 kW)
		PC1NUSMAN	Slim 1-Way Cassette (2.2-3.5 kW)
		PC1NUPMAN	Slim 1-Way Cassette Z-Sliding (2.2-3.5 kW)
SPI Ioniser		MSD-CAN1	Big Ceiling, 360 Cassette, Wind-Free™ 4-Way Cassette
		MSD-EAN1	Duct S, ERV (Plus)
Motion Detect Sensor		MCR-SMA	4-Way Cassette S (600 x 600)
		MCR-SMC	Wind-Free™ 4-Way Cassette
		MCR-SMD	Small chassis Wind-Free™ 4-Way Cassette

Classification	Image	Model	Application
Y-joint		MXJ-YA1509M	15.0 kW and below
		MXJ-YM1206M	Over 6.0 kW-14.0 kW and below
		MXJ-YM1509M	Over 16.0 kW-28.0 kW and below
		MXJ-YA2512M	Over 15.0 kW-40.0 kW and below
		MXJ-YA2812M	Over 40.0 kW-45.0 kW and below
		MXJ-YA2815M	Over 45.0 kW-70.3 kW and below
		MXJ-YA3419M	Over 70.3 kW-98.4 kW and below
		MXJ-YA4119M	Over 98.4 kW-135.2 kW and below
MXJ-YA4422M	Over 135.2 kW		
Y-Joint (HR Only)		MXJ-YM1206R	Over 6.0 kW-14.0 kW and below
		MXJ-YA1500M	22.4 kW and below
		MXJ-YA2500M	Over 22.4 kW-70.3 kW and below
		MXJ-YA3100M	Over 70.3 kW-135.2 kW and below
MXJ-YA3800M	Over 135.2 kW		
Y-Joint (Outdoor Unit)		MXJ-TA3419M	135.2 kW and below
		MXJ-TA4122M	140.2 kW and over
Y-Joint (HR Outdoor Unit)		MXJ-TA3100M	135.2 kW and below
		MXJ-TA3800M	140.2 kW and over
Distribution Header		MXJ-HA2512M	45.0 kW and below (for 4 rooms)
		MXJ-HA3115M	70.3 kW and below (for 8 rooms)
		MXJ-HA3819M	Over 70.3 kW-135.2 kW and below (for 8 rooms)
Heat Recovery Changer		MCU-R4NEK0N	
		MCU-S6NEK3N	
MCU		MCU-S6NEK2N	6 ports, max 61.6 kW (~16 kW/port)
		MCU-S4NEK3N	4 ports, max 61.6 kW (~16 kW/port)
		MCU-S2NEK2N	2 ports, max 32.0 kW (~16 kW/port)
		MCU-S1NEK1N	1 ports, max 16.0 kW (~16 kW/port)
EEV Kit		MXD-E24K132A	
		MXD-E24K200A	2 Indoor
		MXD-E32K200A	
		MXD-E24K232A	
		MXD-E24K300A	3 Indoor
		MXD-E32K224A	
MXD-E32K300A			
MEV		MEV-E24SA	1 Indoor
		MEV-E32SA	
		MEV-E24SA	
PDM (Pressure Drop Modulation) Kit		MXD-A38K2A	8-12 hp
		MXD-A12K2A	14-16 hp
		MXD-A58K2A	18-26 hp

Design and support

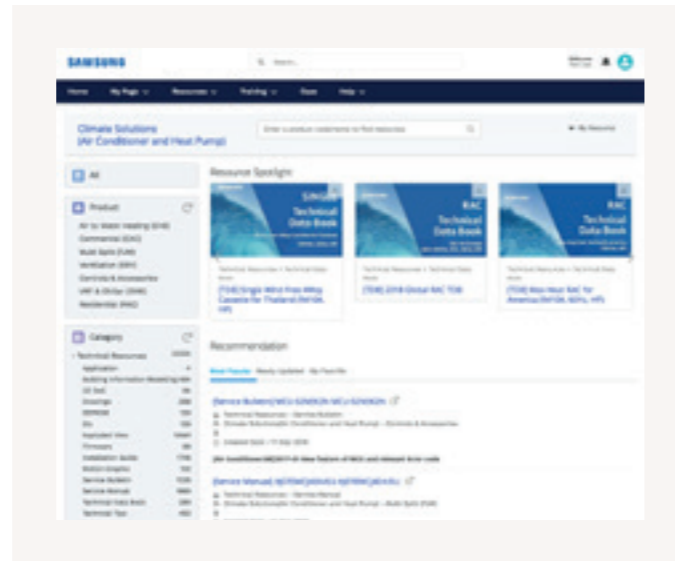


Samsung Climate Solutions Partner Portal

As one of Samsung's registered Climate Solutions partners, you will have access to our Partner Portal and its many benefits. Whether you are looking for marketing materials or technical product documentation, requesting technical support or registering for training, the Samsung Climate Solutions Partner Portal offers you everything you need to consistently deliver the best results.

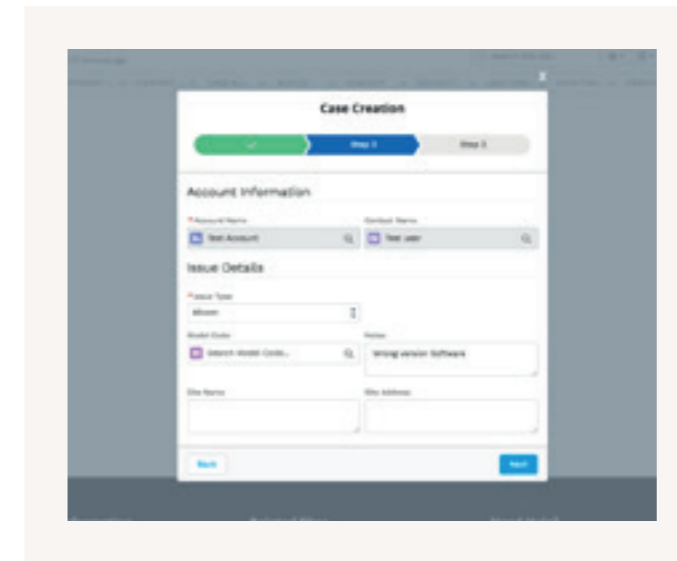
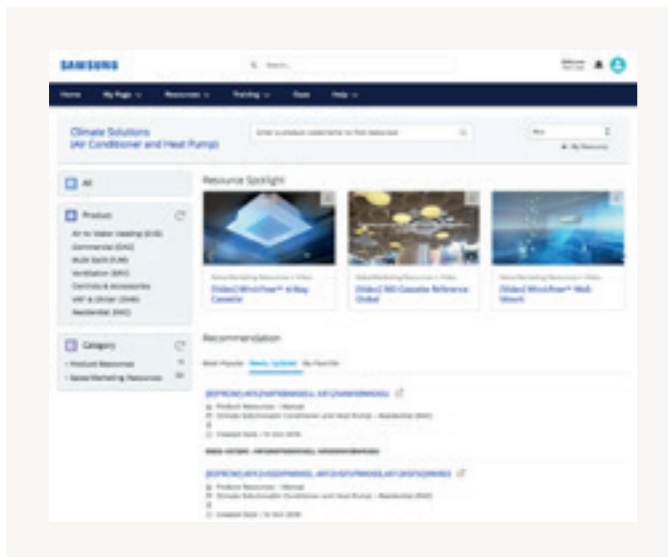
Access technical resources

The Technical Resources section provides you with all of the relevant information you need to understand the product's functionality and to prepare and design projects. A library full of technical information is at your fingertips, ranging from technical data books, BIM files and certificates to exploded views, drawings and different kinds of manuals.



Obtain marketing resources

Potential buyers like to know that you are on the cutting edge of Samsung's latest innovations. To enable you to align with Samsung's marketing initiatives, the Partner Portal provides you with useful downloadable assets such as images and videos, designed to make your marketing activities easy and effective.



Request technical support

You can easily request technical support through the Samsung Partner Portal by reporting your case using our built-in ticketing system. You can rest assured that our well-trained technical experts will work to solve your issue as soon as possible.

Register for training

If you are dedicated to becoming a Samsung climate solutions expert, you can access Samsung's educational portal for training sessions provided by experienced trainers. The portal allows you to search for online courses and materials, test your climate solutions knowledge, and more. The Samsung Business Academy is here to help you succeed.¹

¹The registration process for and availability of training courses may vary per country. Please contact your direct Samsung contact person for more information.



How to access

- 1  Register
- 2  Access
- 3  Manage account
- 4  Search and download

To register for the Samsung Climate Solutions Partner Portal, open your web browser¹ and go to partnerhub.samsung.com/climate to complete the registration form.

Your information will be verified and your account will be activated. You will receive your personal login details.

Keep your account details up to date and invite your colleagues to join.

Access a full library of resources, request technical support, or sign up for a Climate Solutions Academy training session.

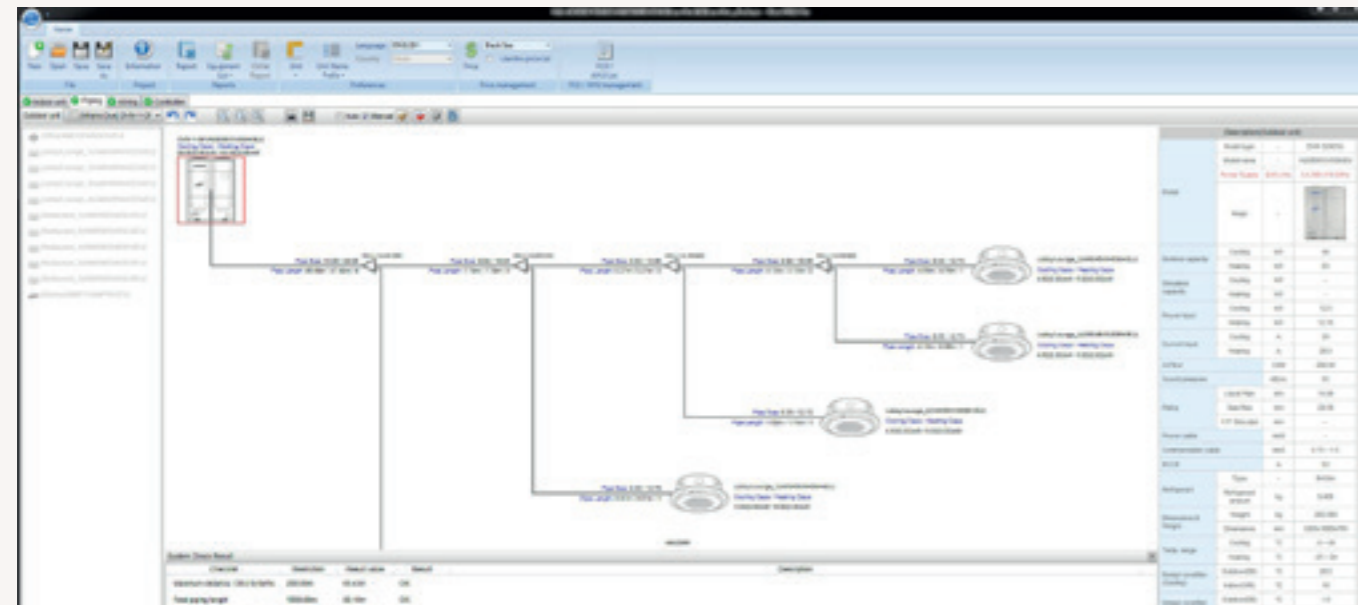
¹Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.

Samsung DVM-Pro

Samsung DVM-Pro is an advanced design automation programme which helps you to select the most suitable equipment for easily and precisely designing your air conditioning system. It helps to ensure that the system's design falls within Samsung's engineering guidelines. With its reports, pipe and wire diagrams, additional refrigerant values and other information, Samsung DVM-Pro is a powerful tool for engineers, designers or installers.

Sales mode

Sales Mode enables users to define their requirements and select air conditioning products quickly and easily.



Product selection
List of equipment, including indoor units, outdoor units, controls and accessories

Reports
Specifications, diagrams in DWG & BMP format, quotations

Wiring schematics
Automatic diagrams including communication wiring for indoor/outdoor/control units and electric power meters

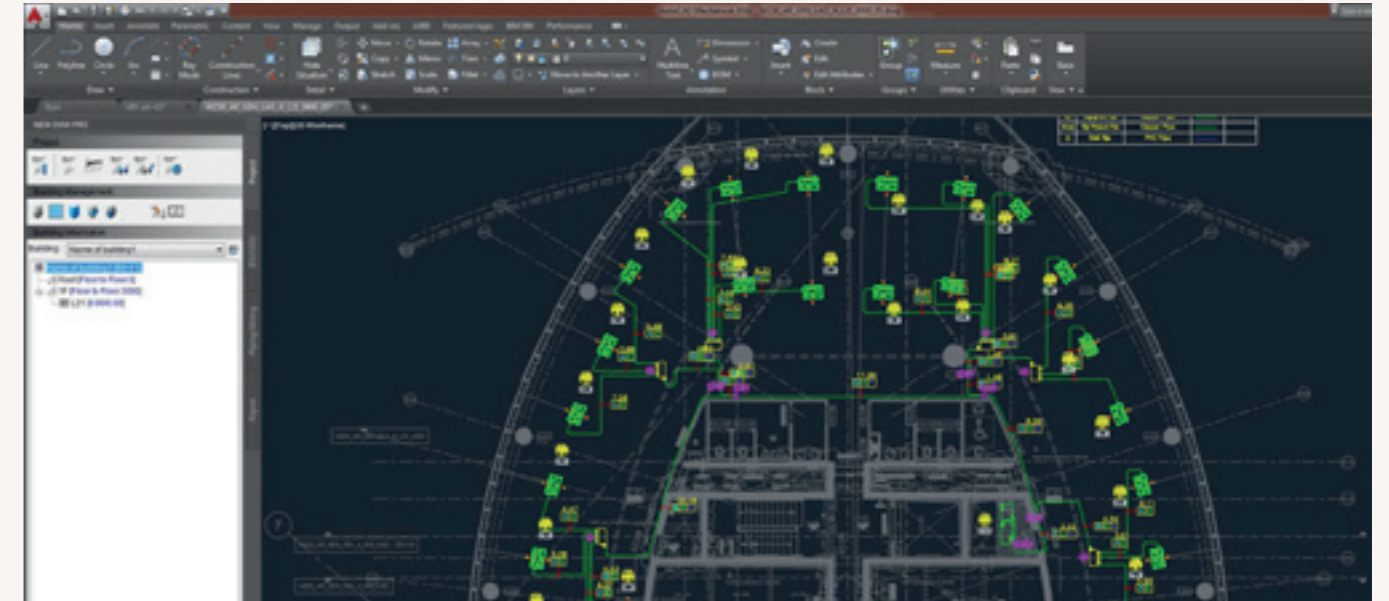
Piping schematics
Basic or manual selection with system check and capacity simulation

Control systems
Automatic control unit selection

CAD mode

CAD Mode is an in-depth and precise design tool that enables users to design their air conditioning systems using AutoCAD software¹.

¹Sourced separately.



Pipe sizing & lengths
Refrigerant & drain pipe sizing

Automatic selection
Refnet joint, header & distributor kit

Automatic report
Piping installation

System check
Installation regulation & refrigerant charging

Performance simulation
Capacity correction tool against specific design conditions

How to access



Register

Go to partnerhub.samsung.com/climate to access the Samsung Climate Solutions Partner Portal¹. If you do not have access yet, simply complete the registration process and you will be sent access details.



Select tools

Go to Technical Resources via the main menu and select the option Design Tools from the sub menu.



Download

Download the DVM-Pro installation file, view the user manuals, and start designing your project.

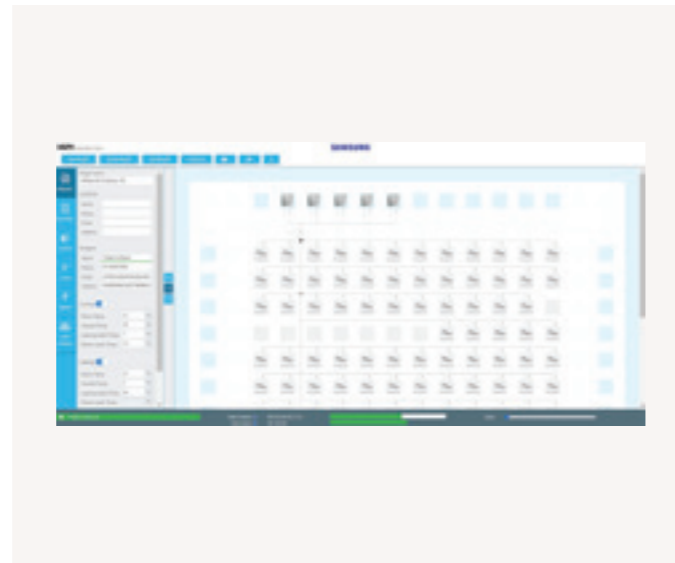
¹Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.

Samsung HVM Selection Tool

To support engineers in designing a Samsung HVM water-based VRF system, Samsung has created an easy-to-use selection tool with convenience in mind. This tool will help you design your whole system in a modular way, simplifying and speeding up the process. The Samsung HVM Selection Tool does not require any software installation and is freely accessible online, giving you a head start in creating and designing your projects for tomorrow.

Easy system configuration

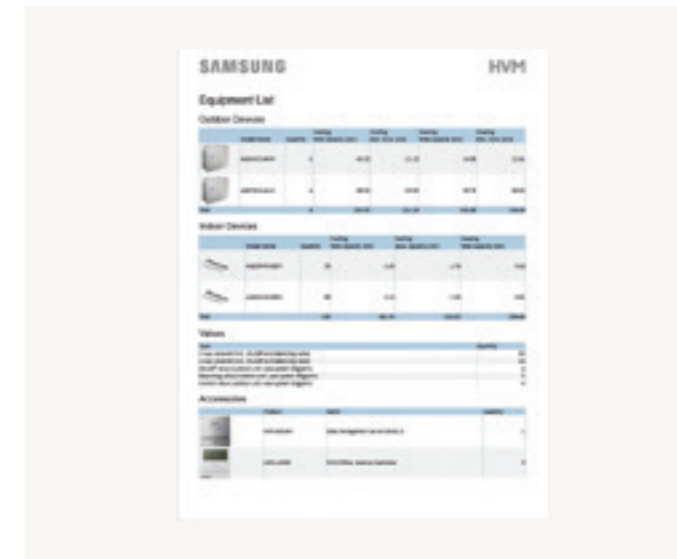
The drag and drop interface of the HVM Selection Tool enables you to configure the HVM system easily and quickly. Based on the configuration selected, the tool generates information such as total water flow and total system pressure drop, enabling you to select the appropriate water pump and piping. Values for cooling and heating are calculated automatically based on the design conditions selected for the project (room temperature, outside temperature, water temperature).



Complete technical information

The HVM Selection Tool includes a detailed list of available outdoor Samsung HVM chiller units and indoor FCU units. It also includes an overview of accessories and essential hydronic components, and features the required efficiency data (SCOP, COP, SEER and EER). To enable the preadjustment of balancing valves, the detailed list of indoor units shows the water flow, pressure drop and pressure difference data for the water line holding the highest pressure drop.

Model	Capacity (kW)	Capacity (RT)	SEER	SCOP	COP	EER
AV1000	100	30	14.5	4.5	4.5	12.5
AV1200	120	36	14.5	4.5	4.5	12.5
AV1500	150	45	14.5	4.5	4.5	12.5
AV1800	180	54	14.5	4.5	4.5	12.5
AV2000	200	60	14.5	4.5	4.5	12.5



Automated project report

You can opt for a comprehensive annual energy consumption simulation, based on a fixed set of parameters and the climate zone selected for the heating mode (warm, average, cold). High resolution PDF documents can be generated showing the wiring diagrams and hydraulic diagrams for indoor units and outdoor units, including the pipe dimensions. The detailed project report is presented in a layout that is easy to understand.

Tender specifications file

A tender specifications file can be generated that includes full product descriptions, feature explanations and complete technical data. You can also personalise the document by including additional information about the customer and the designer.



How to access



Access

To access the HVM Selection Tool, open your web browser¹ and go to hvm.openforce.com. No additional software installation is required.



Design

Create your project, design the HVM system and generate an automated report and tender specifications file online.



Support

If you require support, please consult the manual that can be downloaded directly from the HVM selection tool.

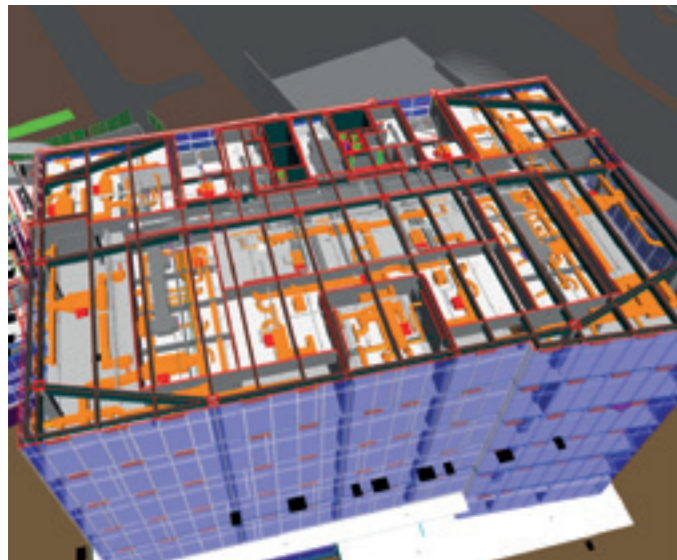
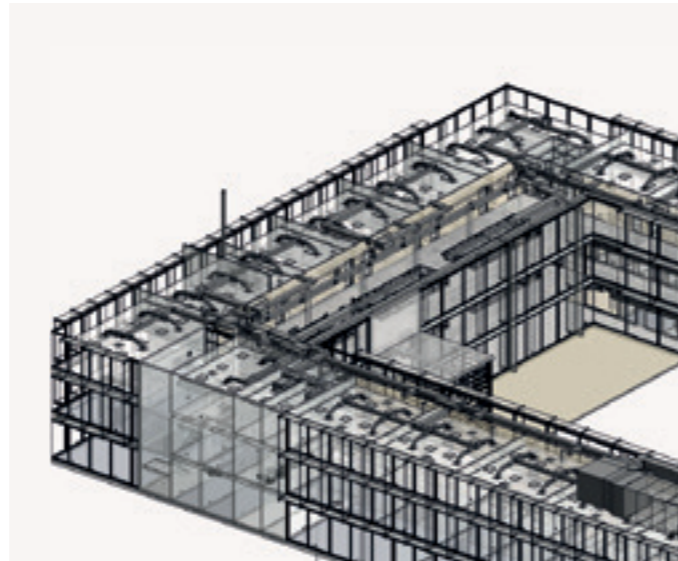
¹ Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.

Samsung specialist design support

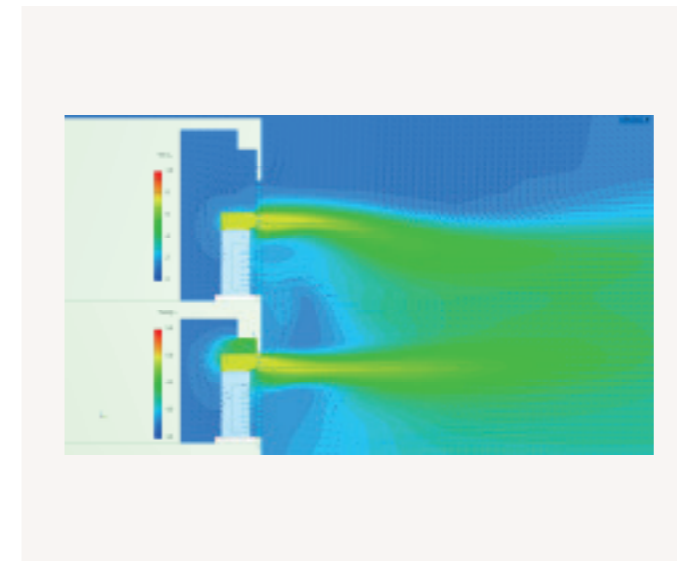
Bringing together technical expertise and practical experience in climate system design, Samsung provides a single point of contact for the design and management of cooling and heating installations in buildings. With assistance ranging from 3D visualisations with BIM support to CFD analysis to optimise indoor thermal conditions and BREEAM assessments to achieve the best environmental performance, Samsung's specialist engineers are ready to support you in making your project a success.

BIM support

Building Information Modelling (BIM) is an intelligent 3D model-based process for creating and managing information on the physical and functional characteristics of a building, across the project lifecycle and covering all parties involved, including the supply chain. BIM gives architects, engineers and construction professionals the insights and tools necessary to efficiently plan, design, construct and manage buildings and infrastructure.



To support you as one of our Climate Solutions partners, Samsung has developed a full range of BIM models for all VRF and VRF Chiller products. You can download these 3D models directly from the BIM object library to start planning your project design. Alternatively, you can call on our qualified Samsung engineering team for dedicated project design support, using Revit® software to create 3D plans of the building including Samsung air conditioner installations.



CFD analysis

Computational Fluid Dynamics (CFD) uses numerical analysis and data structures to analyse thermal conditions in buildings. It allows the virtual testing and optimisation of various climate system configurations in the context of occupant comfort, energy efficiency and running cost. Samsung can offer you specialist CFD support that includes analyses such as indoor temperature profiling, airflow distribution and sound simulation.

BREEAM evaluations

BREEAM (BRE¹ Environmental Assessment Method) is one of the most widely used environmental assessment methods and rating systems for buildings. It sets the standard for best practice in sustainable design and has become the de facto measure used to describe a building's environmental performance. Samsung's Accredited Professionals (APs) can support you in assessing the optimal installation for achieving a high certification score to match your green building programme.

¹BRE (Building Research Establishment) is a leading, multidisciplinary building science centre based in the United Kingdom.



How to obtain support



BIM support

To download Samsung BIM models, go to the Technical Resources on partnerhub.samsung.com/climate¹. To request dedicated project design support from Samsung, please contact your Samsung representative.



CFD analysis

To obtain CFD analysis support from Samsung, please contact your Samsung representative. Certain conditions may apply, subject to the project.



BREEAM evaluations

Please contact your Samsung representative to request a BREEAM evaluation by one of Samsung's Accredited Professionals (APs).

¹ Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.

Samsung Climate Solutions Academy

Samsung Climate Solutions Academy is committed to providing engineers with the technical skills required to install a Samsung product efficiently, and to help relay necessary information to users. All courses are designed to provide attendees with the opportunity to develop both theoretical and practical knowledge of Samsung's vast range of equipment and solutions.

Samsung training centres in Europe



Available training modules

Essential courses: Basic commercial training

- The product line-up, accessories and available controls
- The unique features of Samsung products
- Installation considerations

Advanced courses: Technical training

- How to correctly install and configure a system
- Commissioning: common issues during commissioning and how to resolve any challenges
- Troubleshooting and fault-finding (by use of E-codes)
- Control logic
- Case studies

Advanced courses: Design training

- Understanding customers' needs and offering possible solutions
- DVM-Pro - Samsung's advanced design tool
- Case studies

Note: the registration process for and availability of training courses may vary per country. Please contact your Samsung representative for more information.

How to register for training



Search

To check for available training courses, go to Samsung Business Academy (SBA) via the Samsung Climate Solutions Partner Portal¹: partnerhub.samsung.com/climate. Search the online event calendar and select the training course you would like to attend.



Register

After identifying the training course you would like to attend, follow the registration process. Once you have registered successfully you will receive a confirmation e-mail.



Get certified

Following confirmation of your registration, we will invite you to one of our training centres. You will be trained by one of our specialised Master Trainers or Product Specialists, and receive a Certificate of Completion.

¹ Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.



Learn more about Samsung Climate Solutions at:
www.samsung.com/climate

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Samsung Electronics Co., Ltd. participates in the Eurovent Certification Programme (ECP) for Air Conditioners (AC), Variable Refrigerant Flow (VRF) and Liquid Chilling Packages Heat Pump (LCP-HP). To check the ongoing validity of certification, please visit: www.eurovent-certification.com

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