

# Samsung Climate Solutions help people find their flow

Samsung Climate Solutions aims to help people find their flow, so they may feel and live their best life – be it at work, play or rest. We are committed to offering more energy-efficient solutions with innovative cooling, heating, domestic hot water, refrigeration and smart building solutions. For every space where people create memorable experiences together, be it commercial spaces or residential homes.

#### We offer:



Ventilation



Hot water



Cooling



Heating

## Services we provide to empower our partners:



Expert training



Project design



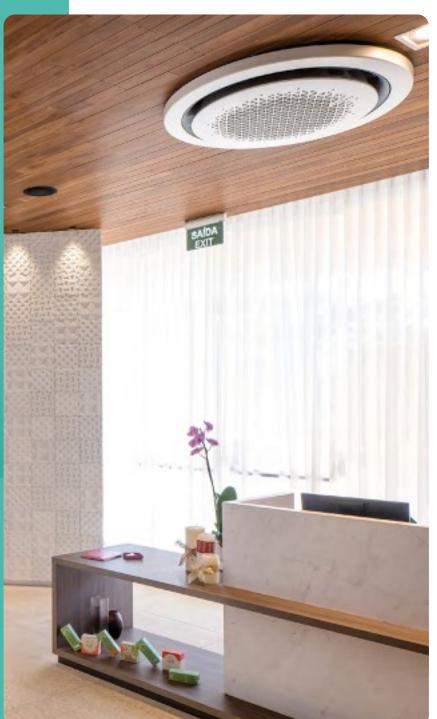
Technical support



Marketing platforms

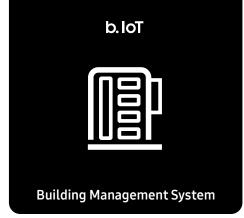


Spare parts







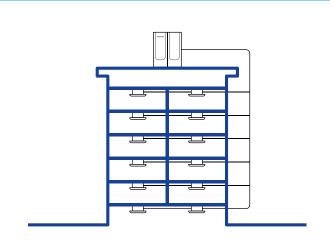


# Our flagship innovations that enrich people's lives

# Product overview

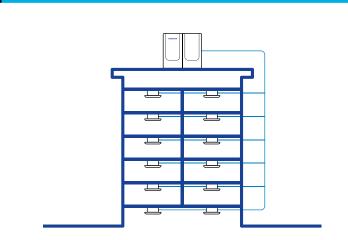
#### VRF (DVM)

A Samsung VRF air conditioning system offers high installation flexibility with the new DVM S2 platform outdoor units, which can connect to up to 64 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.



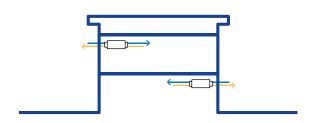
#### VRF Chiller (HVM)

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.

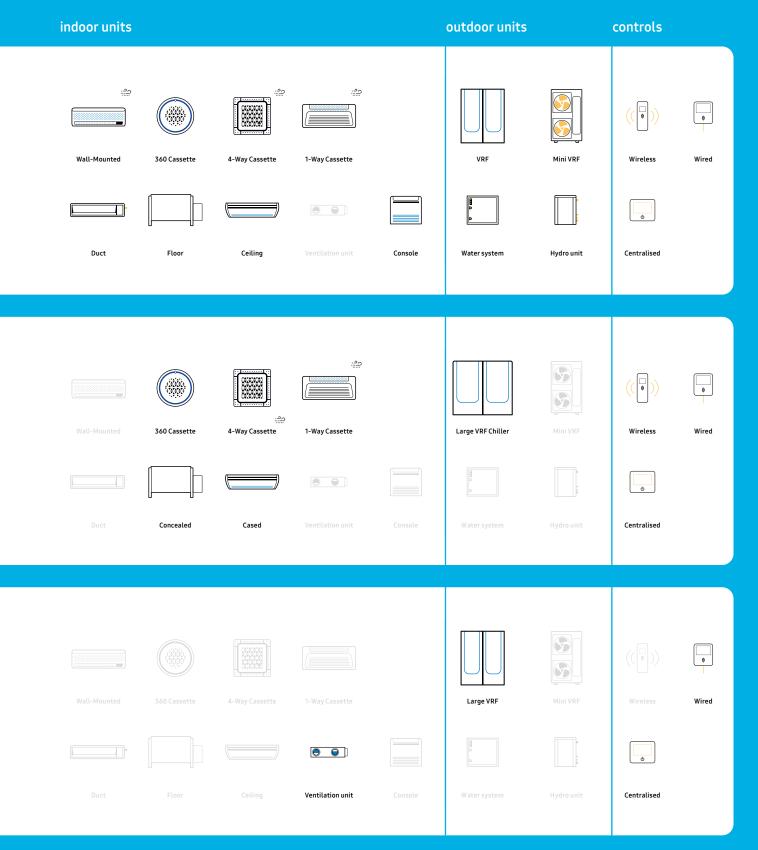


#### Ventilation (ERV)

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.



#### Available Samsung product range



# Table of contents



#### Introduction

Samsung Climate Solutions Product overview Milestones Highlights Airzone b.IoT Lite Reference Projects Regulations Certifications



#### **VRF**

Line-up outdoor

Selection guide
Nomenclature
DVM S Mini NEW
DVM S
DVM S2
Heat Recovery for DVM
DVM S Water



#### Indoor Units VRF

Line-up indoor NEW
WindFree™ 4-Way Cassette UNIQUE
WindFree™ 1-Way Cassette UNIQUE
360 cassette
LSP Slim Duct
MSP/HSP Duct S
WindFree™ Deluxe UNIQUE
DVM Hydro Unit
Air Handling Unit (AHU) Kit
Drawings



#### **VRF Chillers**

Line-up Combination guide Selection guide Nomenclature HVM Chiller WindFree™ 1&4-Way Cassette Drawings



ERV (Plus) Drawings



#### **Controls**

Touch Centralized Controller 2.0 Line-up Compatibility guide Selection guide Features and dimensional drawings

# 288 Accessories

Line-up NEW



# Design and support

Climate Solutions Partner Portal DVM Pro 2.0 HVM Selection Tool Specialist design support 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.

# Corporate and Technology milestones that make us proud

1974

Samsung introduces its first air conditioner.



2005

Samsung Electronics enters the European market for commercial air conditioning.

2015

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



2014

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



# Our market-centric product ranges

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

### 2017

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



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



2021

Samsung launches the sixth generation of its Digital Variable Multi the DVM S2 equipped with AI technology, enhanced energy efficiency performance, easier installation and serviceability.

## 2025

The introduction of Samsung's DVM S Mini, an advanced heating and cooling system that has a smaller environmental footprint thanks to the use of the new generation R32 refrigerant.



# Our European footprint with the locations from which we operate

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



Highlights | DVM S Mini

Safety, durability and innovation

# The new DVM S Mini R32 has it all

The DVM S Mini with R32 refrigerant is an advanced heating and cooling system that is not only efficient, but also adaptive to the evolving demands of industry. It has a lower Global Warming Potential (GWP) compared to the previous refrigerant R410A<sup>1</sup>. Its small footprint, light weight and unimposing design make it ideal for residential and light commercial environments.



A stand-out feature is its seamless integration of artificial intelligence (AI) and the compatibility with Samsung building management software b.IoT. At the heart of its innovation is Active AI. One of the features is AI Refrigerant Analysis, which harnesses the power of deep learning to monitor and analyze operational data in real-time and proactively alerts its users if a discrepancy occurs. The system is also equipped with AI Pressure Control<sup>4</sup>, which learns usage patterns from recent operations and the surrounding conditions.

Each indoor cassette unit comes with a factory-integrated Wi-Fi kit (MIM-H14EN) for effortless management through the intuitive SmartThings App5.



VIDEO **DVM S Mini High Pressure Control** 



VIDEO **DVM S Mini Low Pressure Control** 







The system combines maximum flexibility with adherence to IEC 60335-2-40 safety standards. The outdoor unit is equipped with a shut-off valve and battery pack, while the indoor unit features a built-in R32 refrigerant leak detect sensor. The wireless remote controller<sup>2</sup> has an audible and visible alarm system to alert users in the event of leakage.



VIDEO **DVM S Mini Emergency** 

GWP R32: 675 GWP R410A: 2088 R32 refrigerant charge 2.2kg tCO2e=1.49 R410A refrigerant charge 2.00 & 2.5 kg tCO2e=4.18 & 5.22

Only available for model codes: MWR-WG01JN and MWR-WG01KN

Based on internal testing of the cooling operation, with the temperature set at 22°C and using Auto mode for 4 hours, at a room temperature of 33°C and an external temperature of 35°C. The tested model was an AM080AXVG0HZU connected to AM083NAVDBH1 and AM145NN4DBH1 indoor units with 25m of piping. The elapsed times were measured when the room temperature reached 25°C

Samsung SmartThings application account and internet connection are required. Requires iOS 10.0 or later & Android 5.0 or later.



#### **Smart Control**

The DVM S Mini R32 enhances the user experience with Wi-Fi-enabled control, thanks to the factory-integrated Single Wi-Fi kit (MIM-H14EN). This allows for effortless management through the intuitive SmartThings App¹ and empowers users to monitor energy usage and adjust settings on-the-go, ensuring a harmonious balance between comfort and energy usage².

- Samsung SmartThings application account and internet connection are required. Requires iOS 10.0 or later & Android 5.0 or later.
   Available in selected models only.

#### Samsung b.IoT Lite ready

Samsung b.IoT (building Internet of Things) is a building management solution that can efficiently manage and help to save energy. It's an open platform with expandability and compatibility options that enable integrated control of the facility's major systems. The synergy between the DVM S Mini R32 and b.IoT Lite paves the way for streamlined installations, optimised energy management, and efficient operations, all while maintaining comprehensive oversight of integrated systems.

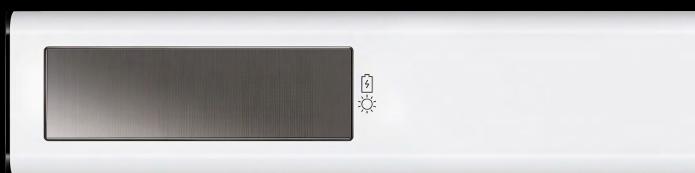


## SolarCell Remote Controller

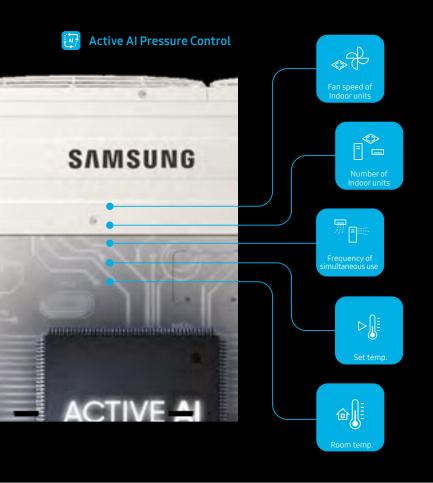
Samsung introduces the SolarCell Remote controller to its commercial air conditioning line-up. The new SolarCell remote controller focuses on innovative charging, slim design and easy usability features. The SolarCell remote controller does not need batteries; instead a solar panel is integrated on the back of the remote controller that allows charging by exposing it under direct light. A single, fully charged battery can last up to two years, making it an economical alternative to disposable batteries. In addition, there is also a USB-C port on the bottom of the remote control for fast charging. It has better grip, easier button controls, large OLED display and it is lightweight.



 $<sup>^{\</sup>rm 1}$   $\,$  Compared to the conventional infrared remote controller for example, the AR-EH03.

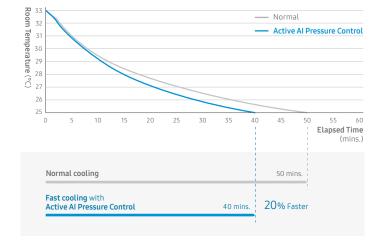


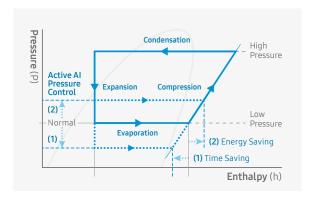
# Active Al



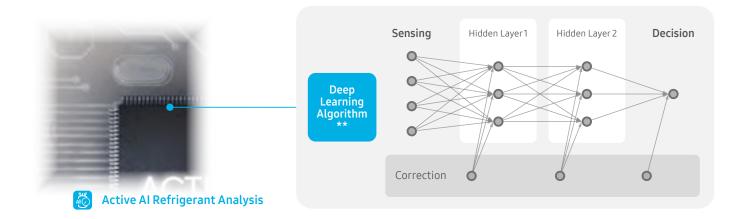
# Optimal cooling by learning usage patterns

By learning usage patterns from recent cooling operations and the surrounding conditions, the DVM S2 and DVM S Mini proactively create the optimal cooling environment to suit users' general requirements. For example: (1) If a user frequently lowers the room temperature when turning on the air conditioner, the Active AI Pressure Control recognizes this pattern. So, when the air conditioner is turned on again, it automatically lowers the pressure of the inflow refrigerant by up to 33% and cools up to 20% faster\*. (2) However, if there's no need for fast cooling, it saves energy by adjusting the refrigerant pressure to be higher than normal.





<sup>\*</sup> Based on internal testing of the cooling operation, with the temperature set at 22°C and using Auto mode for 4 hours, at a room temperature of 33°C and an external temperature of 35°C. The tested model was an AM060DXMDKG/EU connected to AM140DN4DKG/EU indoor unit with 25m of piping. The elapsed times were measured when the room temperature reached 25°C.

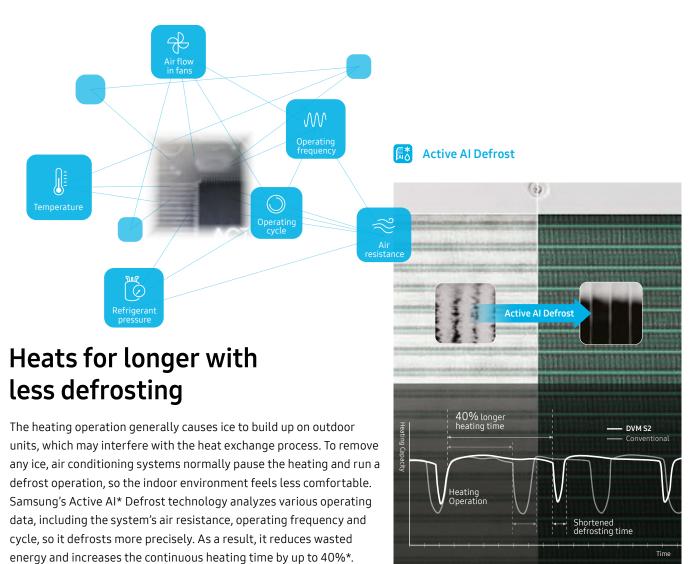


#### Maintains the optimal amount of refrigerant to ensure the best performance

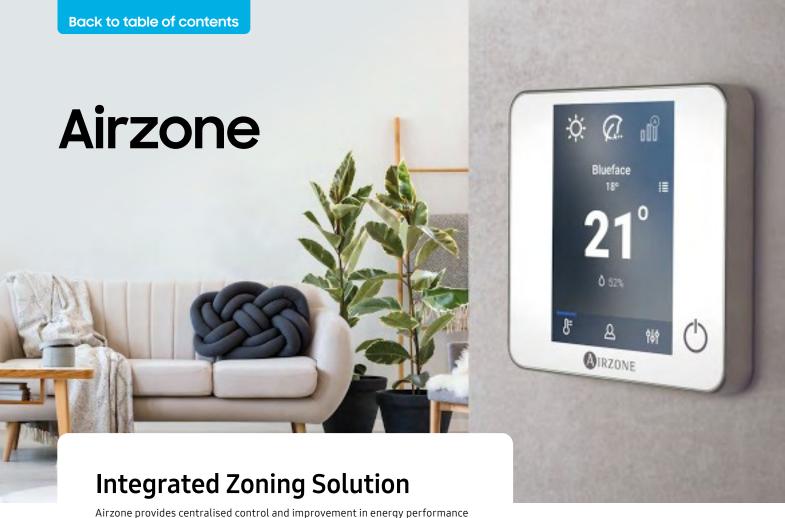
Shortage of refrigerant hinders the outdoor unit's cooling and heating performance as well as its energy efficiency. And, if refrigerant leaks out, due to any error in installation, operation or maintenance, it also impacts global warming and may even cause the system to stop working. Using Deep Learning

technology\*, the Active AI Refrigerant Analysis of the DVM S2 and DVM S Mini collects and analyzes various operational data in real time, and proactively alerts you with an error message if the amount of refrigerant is too low. So, an installer or a service engineer can maintain the optimal level of refrigerant.

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



<sup>\*</sup> Only available for DVM S2



Airzone provides centralised control and improvement in energy performance to Samsung ducted applications. This third party solution offers the possibility to control the temperature of up to 8 zones or rooms separately. The Airzone plenum with dampers determines the required airflow to each room to meet the desired temperature.

Airzone's multiple zoning control solution can be easily connected to Samsung's ducted systems and allows for a reduction in maintenance operations and refrigerant charge compared to installing separate AC units for each zone. Unlike other third party solutions, Airzone uses Samsung's communication protocol to control the needed airflow. If there is no demand, the indoor unit is stopped. This avoids unwanted operation; therefore increases the energy efficiency of the system.

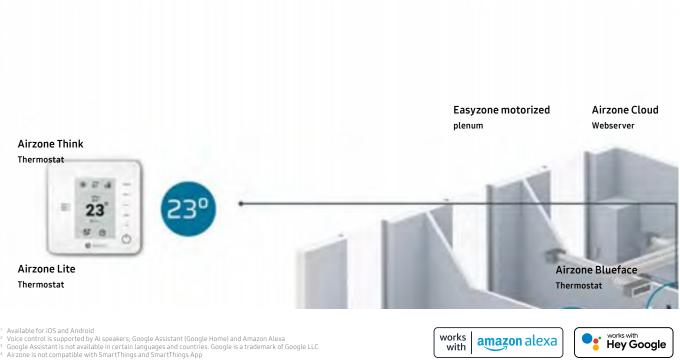
#### Flexibility and Smart Operation

The integrated zoning system from Airzone with smart control allows for optimized energy efficiency, as temperatures in the different zones can be independently



controlled. This translates into energy efficiency since the AC unit will not unnecessarily cool or heat unoccupied zones.

Each damper is controlled by an Airzone room controller either wired or wireless. In addition, Airzone also allows controlling the room temperature remotely with the Airzone Cloud App¹, Google Assistant<sup>2,3</sup> and Amazon Alexa<sup>2,4</sup>.

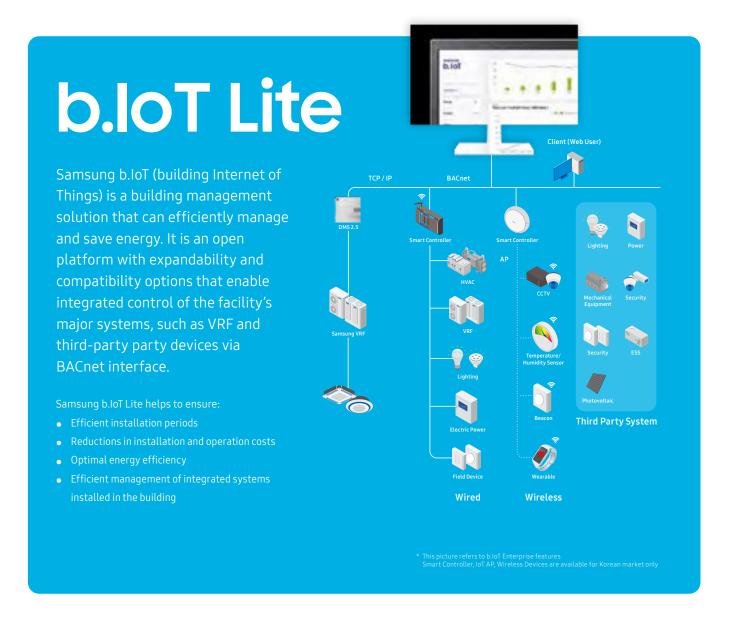


#### Airzone<sup>5</sup> compatible models

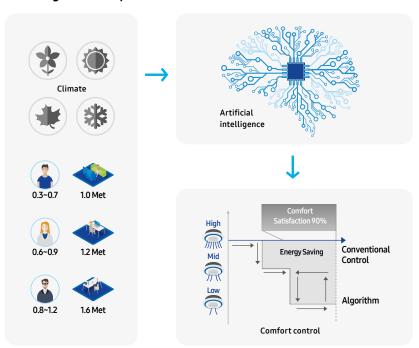
		<b></b>	_					
Product Group	Samsung Model Code	Detail	Dimensions (W×H×D)	3 Port	4 Port	5 Port	6 Port	8 Port
DVM	AM017ANLDKH/EU	DUCTLSP1.7kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM022ANLDKH/EU	DUCT LSP 2.2kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM028ANLDKH/EU	DUCT LSP 2.8kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM036ANLDKH/EU	DUCT LSP 3.6kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM045ANLDKH/EU	DUCT LSP 4.5kW	900×199×440	AZEZOSAMSEOSSS	AZEZ8SAMSL03M4			
DVM	AM056ANLDKH/EU	DUCT LSP 4.5kW	900×199×440 900×199×440		AZEZ8SAMSLU3M4 AZEZ8SAMSLU3M4			
					AZEZ8SAMSLUSM4	A 7 F 7 O C A NACI O 7 I F		
DVM	AM071ANLDKH/EU	DUCT LSP 7.1kW	1100×199×440			AZEZ8SAMSL03L5	A7570CAN45TO 41 /	475705414570410
DVM	AM090ANLDKH/EU	DUCT LSP 9kW	1300×295×690			AZEZ8SAMST04L5	AZEZ8SAMST04L6	AZEZ8SAMST04L8
DVM	AM017DNLDKG/EU	DUCT LSP1.7kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM022DNLDKG/EU	DUCT LSP 2.2kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM028DNLDKG/EU	DUCTLSP2.8kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM036DNLDKG/EU	DUCT LSP 3.6kW	700×199×440	AZEZ8SAMSL03S3				
DVM	AM045DNLDKG/EU	DUCT LSP 4.5kW	900×199×440		AZEZ8SAMSL03M4			
DVM	AM056DNLDKG/EU	DUCT LSP 5.6kW	900×199×440		AZEZ8SAMSL03M4			
DVM	AM071DNLDKG/EU	DUCT LSP 7.1kW	1100×199×440			AZEZ8SAMSL03L5		
DVM	AM022DNMDKG/EU	DUCT MSP 2.2kW	850×250×700	AZEZ8SAMST06XS3				
DVM	AM028DNMDKG/EU	DUCT MSP 2.8kW	850×250×700	AZEZ8SAMST06XS3				
DVM	AM036DNMDKG/EU	DUCT MSP 3.6kW	850×250×700	AZEZ8SAMST06S3	AZEZ8SAMST06S4			
DVM	AM045DNMDKG/EU	DUCT MSP 4.5kW	850×250×700	AZEZ8SAMST06S3	AZEZ8SAMST06S4			
DVM	AM056DNMDKG/EU	DUCT MSP 5.6kW	850×250×700	AZEZ8SAMST06S3	AZEZ8SAMST06S4			
DVM	AM071DNMDKG/EU	DUCT MSP 7.1kW	850×250×700	AZEZ8SAMST06M3	AZEZ8SAMST06M4	AZEZ8SAMST06M5	AZEZ8SAMST06M6	
DVM	AM090DNMDKG/EU	DUCT MSP 9kW	1200×250×700			AZEZ8SAMST06L5	AZEZ8SAMST06L6	AZEZ8SAMST06L8
DVM	AM112DNMDKG/EU	DUCT MSP11.2kW	1300×300×700					AZEZ8SAMST06XL8
DVM	AM128DNMDKG/EU	DUCT MSP12.8kW	1300×300×700					AZEZ8SAMST06XL8
DVM	AM140DNMDKG/EU	DUCT MSP14kW	1300×300×700					AZEZ8SAMST06XL8

#### Communication gateway for all models: AZX6GTCSA2

Airzone is a third party and not part of Samsung. Airzone Plenum with damper, wired & wireless thermostats and gateway, can be purchased directly from Airzone website: https://www.airzonecontrol.com/ or contacting the Airzone sales team at marketing@airzonecontrol.com



#### Samsung b.IoT Lite provides:



## Intelligent energy saving algorithms

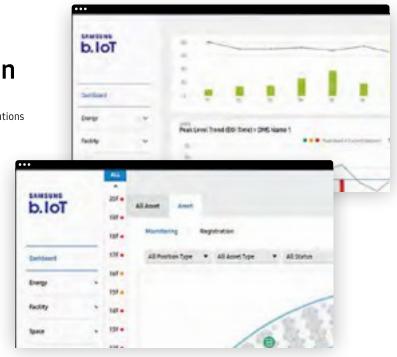
- Data-Based Comfort Control
   Comfort based on user-specific algorithms
- Learning-Based Control
   Optimised control by artificial intelligence (AI)
- Occupancy-Based Control
   Lighting, humidity & temperature
- Inefficient Operation Detection
   Time, space & temperature

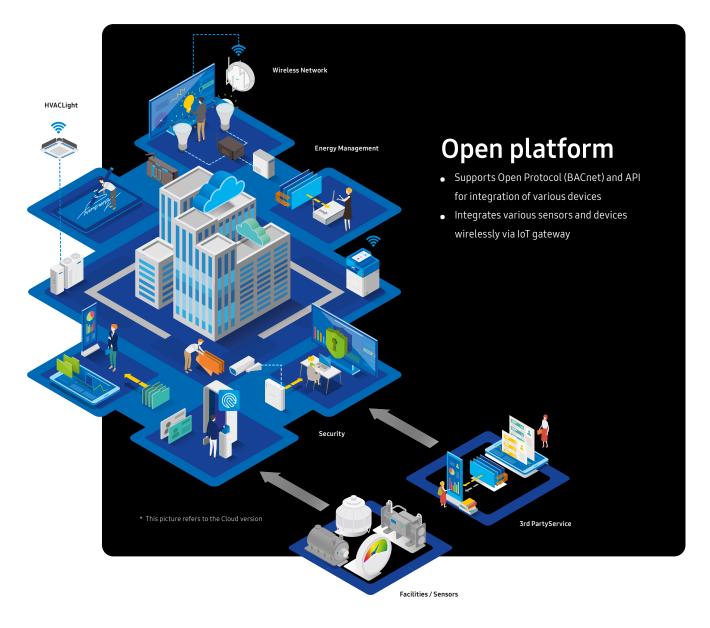
#### Easy and smart operation

- 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
- Energy consumption distribution





Reference Project | Smart Home powered by SmartThings

# Woodland Houses Warsaw Poland

A new collaboration with Woodland Houses, located near Warsaw, Poland, offers a unique blend of comfort and modernity. This partnership establishes a residential estate of single-family homes, surrounded by over 200 hectares of forest. Each homeowner can connect through the Samsung's SmartThings app¹ on their mobile device, which serves as a central hub for managing multiple devices, home appliances, and climate control systems.

Samsung has implemented advanced technologies such as the EHS SPLIT R32 ClimateHub Set, Recuperator 350m3h, DVM S Mini 4HP unit, and QMD WindFree™ air conditioners. The all-in-one integrated EHS SPLIT R32 ClimateHub combines heating, cooling, and domestic hot water. The Recuperator 350m3h maintains a fresh airflow by exchanging indoor air with fresh outdoor air, while the DVM S Mini 4HP unit and QMD WindFree™ air conditioners offer climate control with smart features for easy management. These technologies ensure a high standard of living.

The SmartThings app¹ app allows residents to set home routines, enabling automatic adjustments. This project showcases One Samsung, where various Samsung products and technologies work together for a seamless home experience. This integration makes managing home appliances and climate control easy, convenient and enhanced comfort.

1 Available on Android and iOS devices. Requires iOS 10.0 or later & Android 5.0 or later. A Wi-Fi connection, Samsung account and an optional Wi-Fi Kit (MIM-H04N) are required.

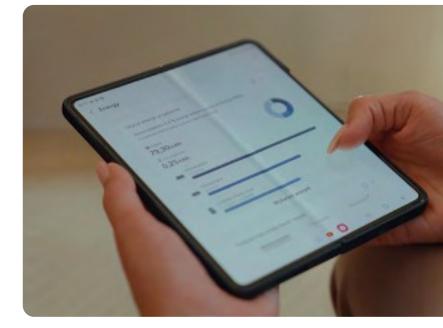












#### **Reference Project**

### Meadow Herent

The challenge in this 68-apartment sized residential new development project was to find a central heating system that is sustainable, silent, performant and small in size due to limited space. Thanks to our partnership with Samsung we were able to provide our client a cascade construction of high efficiency outdoor units and low temperature hydro units. Now all apartments receive comfortable heating without inconveniences. The low sound pressure and the high available static pressure that allows channeling the outdoor units' air makes this a unique solution.



#### Jeroen Vercammen

Project manager at Belcotec

#### **Application**

Residential New Development

#### Samsung products installed







DVM S2 High efficiency outdoor units DVM Hydro Low Temperature BACnet











# Regulations and standards

Samsung is committed to delivering innovative products and technology that enhance customer experiences while adhering to relevant regulations. Our ongoing research and development efforts span across all phases of product development, from design and production to distribution, use and disposal.

#### **Ecodesign legislation**

The Ecodesign Directive is a key regulatory framework aimed at reducing the energy consumption of energy-related products, while encouraging manufacturers to bring the most efficient technologies to market. The Directive applies to a broad range of cooling and heating products, which are categorized into different product groups known as Ecodesign Lots.

**Ecodesign Lot 10** has been applicable since 2013 and covers air conditioners with a capacity less or equal than 12 kW, typically used in residential or light commercial applications. Products within this Lot need to meet certain energy efficiency requirements and display an energy label to inform consumers of their performance.

**Ecodesign Lot 1 & 2** have been applicable since 2015 and include residential air-to-water heat pumps designed for space heating and domestic hot water, with a capacity up to 400 kW. Products up to 70 kW are required to have an energy label.

**Ecodesign Lot 21** has been applicable since 2018. Lot 21 covers larger commercial cooling and heating products with capacities beyond 12kW. Energy labels are not required for these products, but the energy performance data should be made available online.

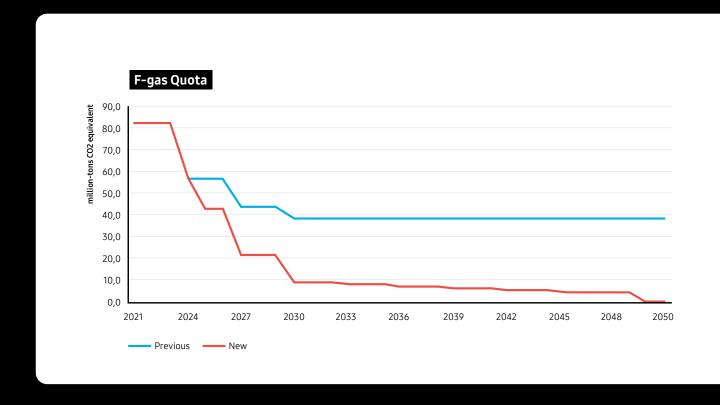
LOT 1/2	LOT 10	LOT 21				
2015	2013	2018				
A/W heat pumps ≤ 400 kW	Air conditioners ≤ 12 kW	Air conditioners > 12 kW				
~	<b>~</b>					
	2015	A/W heat pumps < 400 kW  Air conditioners < 12 kW				

#### F-Gas regulation

Since March 2024, the new F-gas Regulation (EU) 2024/573 has taken effect. The F-gas Regulation aims to control the emissions of F-gases used as refrigerants to reduce their impact on global warming. The revision brings new rules, including future bans on certain types of F-gases in products and a quota system to limit the total amount of F-gases placed on the market in Europe. Due to these changes, the industry will invest the coming years in new technologies to use refrigerants with lower Global Warming Potential (GWP) and in some applications use only non-fluorinated refrigerants. Samsung is contributing to the transition towards

lower GWP refrigerants, such as R290, and will continue to invest in alternatives.

From 2025 onwards, the phase-down of F-gas quota will speed up, gradually reducing the amount that can be used in applications in Europe. By 2050, there will be no F-gas quota to place new products on the market, resulting in a complete phase-out of such refrigerants for new installations. In parallel, products bans will start from 2025 and 2027 for split and monoblock heat pumps and air conditioning systems.



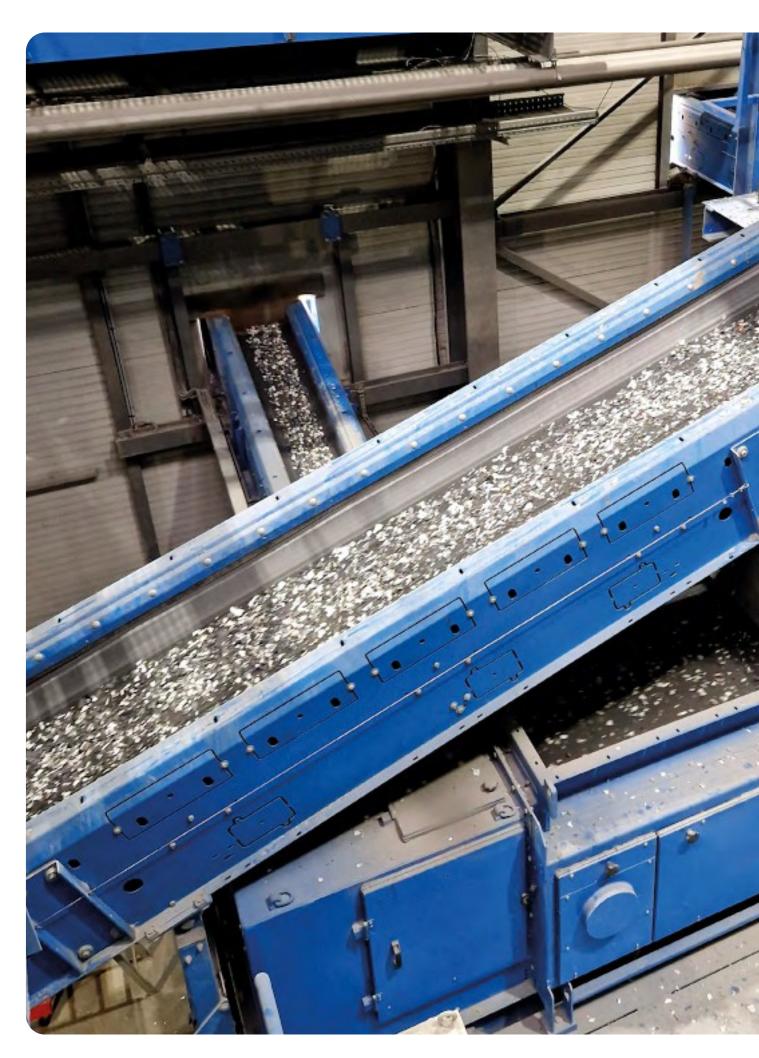
#### EN378 standard

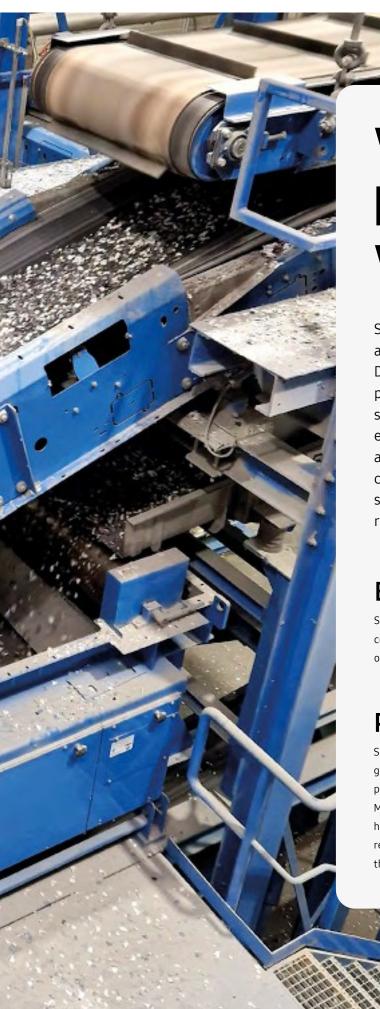
Effective since 31 May 2017, the European EN378 standard provides guidance for companies who design, install, operate and maintain air conditioners, heat pumps and similar systems that use refrigerants. Based on the access characteristics of occupied spaces into which a refrigerant could leak, and an 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. This Directive applies to the principles of extended producer responsibility. It stipulates the safe collection, treatment, recycling and environmentally sound disposal of all electrical and electronic equipment. By 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 recycle 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.

### Certifications

#### Intertek

Intertek is a leading Total Quality Assurance provider to industries worldwide verifying air quality. To deliver credibility, Intertek maintains extensive global accreditations and recognitions for testing and certification services. Working with Intertek helps showcase and maintain products' safety and performance attributes. Intertek's expertise in regulatory standards and certifications keeps you ahead of changes and challenges.

Intertek offers certification programmes that achieve market entry into a variety of global destinations, programmes for a more eco-friendly environment and also programmes to verify social accountability compliance for both manufacturers and suppliers. Samsung's Tri-Care Filter, Air Purification Panels for WindFree™ 1-Way Cassette, WindFree™ 4-Way Cassette and 360 Cassette have been verified by Intertek.

To check the ongoing validity of the Intertek certified products from Samsung, please visit: **www.intertek.com** 



#### **Eurovent**

Eurovent is globally known for its quality mark 'Eurovent Certified Performance' which certifies performance ratings of air-conditioning and refrigeration products according to European and international standards. The 'Eurovent Certified Performance' mark indicates that the prescribed quality requirement has been fulfilled and should not require the need to be proven after the customer's decision and after the manufacturer's production process.

Eurovent is an accredited third-party certification body. It builds customer confidence by leveling the competitive playing field for all manufacturers and by increasing the integrity and accuracy of the industrial performance ratings. Thus providing

trustworthy services to the entire ecosystem. Samsung air conditioning products ranging from the Single Split (RAC), Multi Split (FJM), Commercial Split (CAC), Variable Refrigerant Flow (VRF) and EHS line-up in the 'Air-to-Water' (A2W) heat pump category are all Eurovent certified.

To check the ongoing validity of the Eurovent certified products from Samsung, please visit: **www.eurovent-certification.com** 







# **VRF**

## Complete and cost-effective climate control with VRF

Variable Refrigerant Flow (VRF) systems – or Digital Variable Multi (DVM) systems – provide reliable, efficient, comfortable, and flexible climate control for large commercial applications. They are easy to install and offer capacities of up to 98 HP.

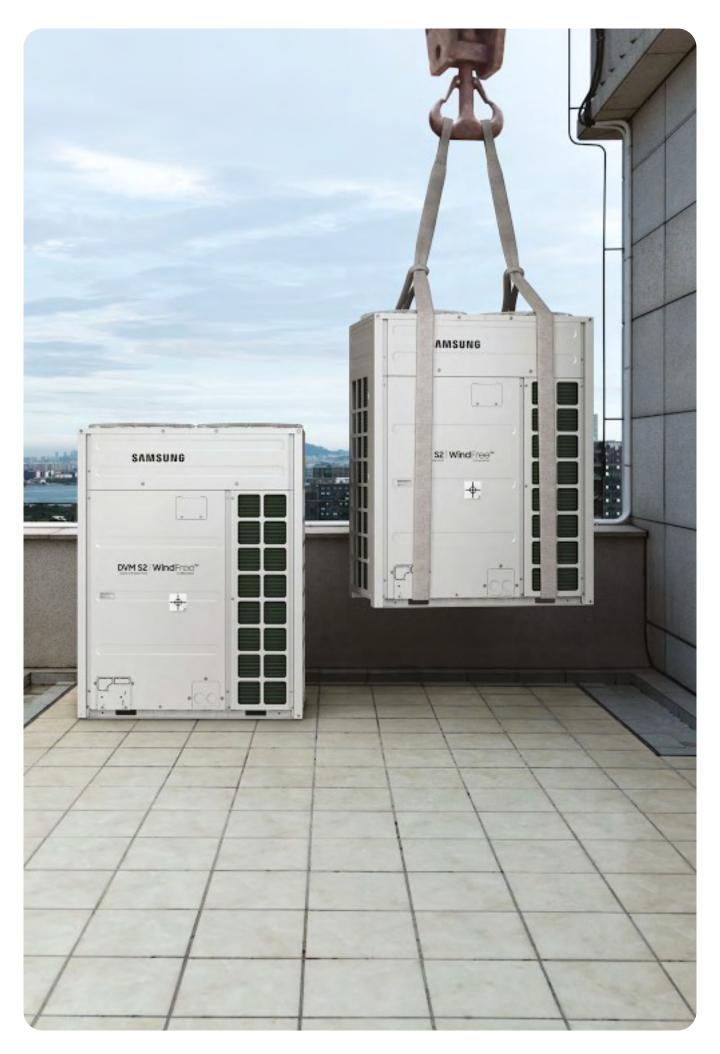
A VRF system connects one outdoor unit to up to 64 indoor units via refrigerant piping for heating, air-conditioning, ventilation, and heat recovery in individual zones. Capacity is modulated based on the requirements of the zones, which saves energy and improves climate comfort.





# Line-up outdoor

Model	Image					Capac	Capacity (HP)								
		4	5	6	8	10	12	14	16	18	20	22	24	26	30
Heat Pump															
DVM S Mini Heat Pump															
(R32)	NEW	•	•	•											
DVM S Heat Pump		•	•		•	•	•								
DVM S2 Essential Heat Pump (2-Pipe)						•	•	•	•	•					
DVM S2 Standard Heat Pump (2-Pipe)					•	•	•	•	•	•	•	•	•	•	
DVM S2 High Efficiency Heat Pump (2-Pipe)					•	•	•	•	•	•	•	•	•	•	
Heat Recovery															
DVM S Heat Recovery (With Heat Recovery Changer Kit)		•	•	•											
DVM S2 High Efficiency Heat Recovery (3-Pipe)					•	•	•	•	•	•	•	•	•	•	
Water to Air/Water															
DVM S Water	SAM: SAM:				•	•	•				•				•







## Selection guide

#### **Heat pump**







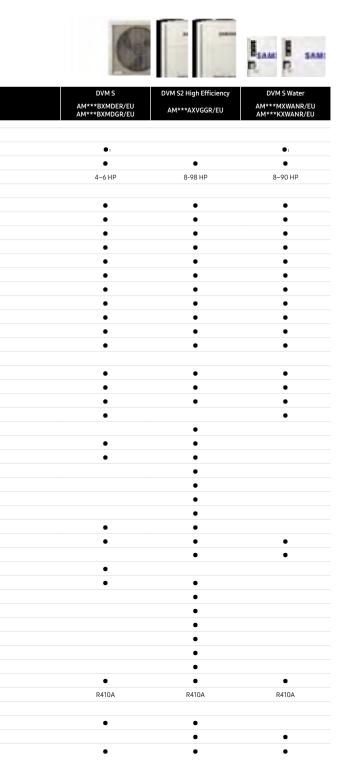


Model	DVM S Mini AM***DXMDKG/EU AM***DXMDNG/EU	DVM S  AM***BXMDEH/EU AM***BXMDGH/EU  AM***BXMDGH/EU		DVM S2 Essential  AM***AXVDGH/EU	DVM S2 Standard AM***AXVAGH/EU	DVM S2 High Efficiency  AM***AXVGGH/EU	
Туре							
Heat Pump	•	•	•	•	•	•	
Heat Recovery	-		•			•	
Capacity range	4-6 HP	4-8 HP	8-12 HP	10-40 HP	8-98 HP	8-98 HP	
Connectability	4 0111	4 0111	0 12111	10 40111	0 70111	0 70111	
WindFree™ Cassette	•	•	•	•	•	•	
360 Cassette	•	•	•	•	•	•	
LSP Duct	•	•	•	•	•	•	
MSP Duct	•	•	•	•	•	•	
HSP Duct	•	•	•	•	•	•	
ERV Plus/OAP Duct	-	•	•	•	•	•	
Wall-Mounted	•	•	•	•	•	•	
Ceiling/Concealed/Floor-Standing	•	•	•	•	•	•	
Hydro unit HE/HT		•	•	•	•	•	
MCU Kit		•	•	•	•	•	
AHU Kit		•	•	•	•	•	
Features		•	•	•		•	
Refrigerant check mode	•	•	•	•	•	•	
Simultaneous cooling and heating	•		•	•	•	•	
7-Segment display	•	•	•	•	•	•	
Four-way direction piping connection	•	•	•	<u> </u>	•	•	
Advanced Flash Injection™	-		•	•	•	•	
Cooling @ 50°C				•	•	•	
Heating @ -25 °C²			•	•	•	•	
Max. External Static Pressure 110Pa <sup>2</sup>			•	•	•	•	
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	•	•	•	•	•	•	
Multi-serration Fan <sup>2</sup>		-	•	•	•	•	
Active AI Pressure Control	•			•	•	•	
Active Al Defrost				•	•	•	
Active Al Refrigerant Analysis	•			•	•	•	
On-device Inverter Checker™				•	•	•	
Durafin™ Ultra Heat Exchanger Fin	•	•	•	•	•	•	
Slimmer Liquid Line <sup>3</sup>				•	•	•	
Refrigerant type	R32	R410A	R410A	R410A	R410A	R410A	
Smart Protection Technology							
Adaptive Sine Wave	•	•	•	•	•	•	
Refrigerant cooled PCB				•	•	•	
Resonance Avoidance Technology	•	•	•	•	•	•	

<sup>&</sup>lt;sup>1</sup> Can be connected as a 2-pipe system. <sup>2</sup> Model specific. <sup>3</sup> Optional.

### Selection guide

#### **Heat recovery**



### Selection guide

#### Cassette







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

#### **Others**





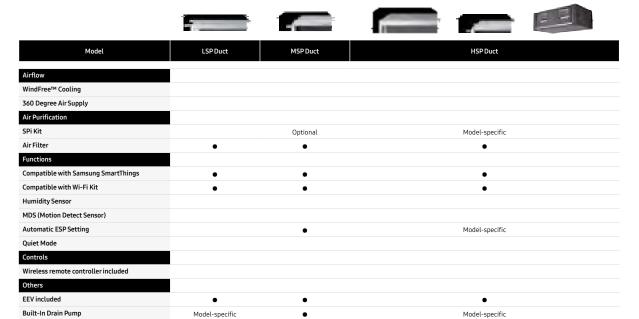






Model	Console	Floor/Ceiling	Big Ceiling	Concealed Floor-Standing	Packaged Floor-Standing
Airflow					
WindFree™ Cooling					
360 Degree Air Supply					
Air Purification					
SPi loniser			Optional		
Air Filter	•	•	•	•	•
Functions					
Compatible with Samsung SmartThings	•	•	•	•	•
Compatible with Wi-Fi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

#### **Duct**

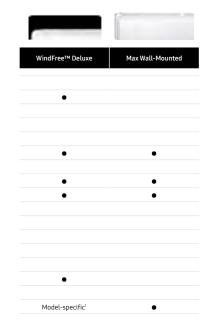






Model	Hydro Unit HE	Hydro Unit HT
Airflow		
WindFree™ Cooling		
360 Degree Air Supply		
Air Purification		
SPi Ioniser		
Air Filter		
Functions		
Compatible with Samsung SmartThings		
Compatible with Wi-Fi Kit		
Humidity Sensor		
MDS (Motion Detect Sensor)		
Automatic ESP Setting		
Quiet Mode		
Controls		
Wireless remote controller included		
Others		
EEV included	•	•
Built-In Drain Pump		

#### Wall-mounted







### Nomenclature

#### **Indoor units**



		AM	VRF (DVM)
1	Classification	AN	Ventilation (ERV)
2	Canacity	AIN	
	Capacity	_	x 1/10 kW (3 digits)
		F	2013
		Н	2014
		J	2015
		К	2016
3	Version	М	2017
		N	2018
		R	2019
		Т	2020
		А	2021
		В	2022
		С	2023
		D	2024
		N	Indoor Unit (NASA)
4	Product Type		
		S	ERV
		1	WindFree™ 1-Way Cassette
		4	360 Cassette & WindFree™ 4-Way Cassette
		6	360 Cassette Universal
		N	WindFree™ 4-Way 600 x 600 Cassette
		L	Low Static Pressure Duct (Slim Duct)
		М	Medium Static Pressure Duct
		Н	High Static Pressure Duct
_		E	Outdoor Air Processing Duct
5	Product Notation	С	Ceiling
		J	Console
		F	Floor-Standing
		Р	Packaged Floor-Standing
		Α	AR5000 Wall-Mounted (EEV excluded)
		v	AR5000 Wall-Mounted (EEV included)
		В	Hydro Unit
		K	ERV (Plus)
		F	Flagship
		P	Premium
6	Feature	D	Deluxe
		S	Standard
		E	1Ф, 220~240 V, 50 Hz
7	Voltage Rating	К	1Ф, 220~240 V, 50/60 Hz
		G	3Ф, 220~240 V, 50 Hz
		G	Heat Pump (R32)
		Н	Heat Pump (R410A)
8	Mode	В	Heat Pump (R134A)
		N	ERV

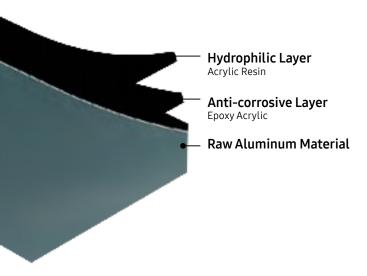
### Nomenclature

#### **Outdoor units**



1	Classification	АМ	VRF (DVM)
2	Capacity		x 1/10 HP (3 digits)
		K	2016
		М	2017
		N	2018
3	Version	R	2019
3	version	T	2020
		Α	2021
		В	2022
		D	2024
4	Product Type	X	Outdoor Unit
	5 Product Notation	V	DVM S Essential/Standard/High Efficiency
5		W	DVM S Water
		М	DVM S / DVM S Mini
		Α	Standard + General Temperature + Module
6	Feature	Н	High EER + Low Temperature + Module
0	reature	G	High EER + General Temperature + Module
		D,W	Standard + General Temperature + Non-Module
		E	1Ф, 220~240 V, 50 Hz
7	Voltage Rating	K	1Ф, 220~240 V, 50/60 Hz
	voltage Rating	G	3Ф, 380~415 V, 50 Hz
		N	3Ф, 380~415 V, 50/60 Hz
		G	Heat Pump R32
8	Mode	Н	Heat Pump R410A
		R	Heat Recovery

### **DVM S Mini**



#### Durafin<sup>™</sup> Ultra Technology

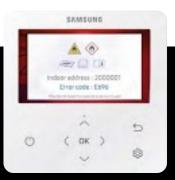
The Durafin™ Ultra¹ technology shields the heat exchanger with a dual-layer defence: an epoxy acrylic anti-corrosive layer coupled with a hydrophilic acrylic resin layer. This repels water and prevents corrosion from forming on the heat exchanger, to maintain optimal performance and efficiency.

#### Silent Mode

Combined with specially shaped fans and compact, unimposing design it creates a more pleasant residential and working environment. The Silent Mode function<sup>2</sup> creates a restful environment with a reduced noise level.







#### **Meeting Safety Requirements**

The safety devices integrated in DVM S Mini R32 guarantee maximum flexibility with the IEC 60335-2-40 standard. The outdoor unit is equipped with a shut-off valve and battery pack, while the indoor units connected have a built-in R32 refrigerant leak detect sensor. The remote controller<sup>3</sup> has an audible and visible alarm system to alert users in the event of R32 leakage.



VIDEO DVM S Mini Emergency

#### Samsung b.IoT Lite ready

Samsung b.IoT (building Internet of Things) is a building management solution that can efficiently manage and help to save energy. It's an open platform with expandability and compatibility options that enable integrated control of the facility's major systems. The synergy between the DVM S Mini R32 and b.IoT Lite paves the way for streamlined installations, optimised energy management, and efficient operations, all while maintaining comprehensive oversight of integrated systems.

#### Smart Control

The DVM S Mini R32 enhances the user experience with Wi-Fi-enabled control, thanks to the factory-integrated Single Wi-Fi kit (MIM-H14EN). This allows for effortless management through the intuitive SmartThings App<sup>4</sup> and empowers users to monitor energy usage and adjust settings on-the-go, ensuring a harmonious balance between comfort and energy usage<sup>5</sup>.

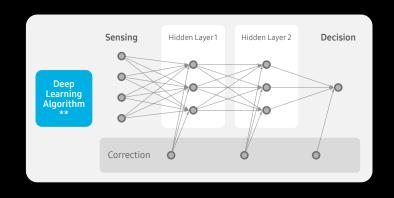
#### **Active Al**

The DVM S Mini R32 is equipped with multiple Active AI features designed to enhance efficiency and user comfort:

Al Refrigerant Analysis uses Deep Learning technology to collect and analyse various operational data in real time, proactively alerting users if the refrigerant level is too low, ensuring optimal performance.

Active AI High Pressure Control adjusts high pressure based on piping length and elevation differences, using an Al learning algorithm to reduce unnecessary high pressure, thereby improving power consumption and efficiency.

Active AI Low Pressure Control<sup>6</sup> learns cooling operation patterns to quickly reach the target low pressure, saving energy by preventing over-cooling and enhancing comfort by speeding up the cooling process.





VIDEO **DVM S Mini High Pressure** Control



VIDEO **DVM S Mini Low Pressure** Control

Available in selected models only.

Based on internal testing of the cooling operation, with the temperature set at 22°C and using Auto mode for 4 hours, at a room temperature of 33°C and an external temperature of 35°C
The tested model was an AM060DXMDKG/EU connected to AM140DN4DKG/EU indoor unit with 25m of piping. The elapsed times were measured when the room temperature reached 25

#### DVM S Mini R32

- Horizontal discharge and rear suction one propeller BLDC Inverter fan (4~6 HP).
- Safety devices integrated (standard IEC 60335-2-40):
  - shut-off valve and battery pack (outdoor unit)
  - R32 refrigerant leak detector sensor (indoor unit)
  - audible & visible alarm system (wired control)
- Active AI Pressure Control.
- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Night Silent Mode available.
- Eurovent certified and ErP (Ecodesign) compliant.
- Four-way direction piping connection.
- Indoor Cassettes with Wi-Fi embedded.
- b.IoT Lite ready.







			-	-	-	
Model			AM040DXMDKG/EU	AM050DXMDKG/EU	AM060DXMDKG/EU	
Power Supply		Φ, #, V, Hz	10, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	
Performance			.,, , ,	,, , , , , , , , , , , , , , , , , , , ,	.,, ,	
HP		HP	4	5	6	
Capacity	Cooling	kW	12,1	14	15,5	
Maximum number of connectable indoor units	Heating	kW ea	12,1 8	14 9	15,5 10	
Total capacity of the connected indoor units	Min.	kW	6	7	7,8	
,	Max.	kW	15,7	18,2	20,2	
Power			·	·		
Power Input	Cooling	kW	3,73	4,83	5,62	
	Heating (max)	kW	2.75 (3.55)	3.37 (4.10)	3.78 (5.00)	
Current Input	Cooling	A	17,1	22,1	25,7	
Current	Heating (max) MCA	A	12.6 (16.2)	15.4 (18.8)	17.3 (22.9)	
Current	MFA	A A	22 25	24 32	32 40	
Energy Efficiency 1		A	23	32	40	
EER (Nominal Cooling)		W/W	3,24	2,9	2,76	
COP (Nominal Heating)		W/W	4,4	4,15	4,1	
SEER (Cassette)		W/W	8.50/7.90	8.20/7.40	8.00/7.20	
SCOP (Cassette)		W/W	5.10/4.80	5.10/4.70	5.10/4,60	
ηs,c% - ηs,h % Cassette		%	337%-201%	325%-201%	317%-201%	
ηs,c% - ηs,h % Ducted		%	313%-189%	293%-185%	285%-181%	
Compressor Type		_	Twin PLDC Potary	Twin BLDC Rotary	Twin BLDC Betary	
Output		-	Twin BLDC Rotary 4,35	4,35	Twin BLDC Rotary 4,35	
Oil	Туре	-	POE	POE	POE	
	Initial Charge	сс	1,5	1,5	1,5	
Fan						
Type & Discharge direction		-	Propeller	Propeller	Propeller	
		-	Horizontal	Horizontal	Horizontal	
Number of Fans		ea	1	1	1	
Airflow Rate		m³/min	69	77	80	
Fan Motor Model		_	BLDC Motor	BLDC Motor	BLDC Motor	
Output x n		w	122 x 1	122 x 1	122 x 1	
Piping Connection			TEE X I	ILL AT	ILL X I	
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	
Pictor I would (ODII IP)	M /F	ø, inch	5/8	5/8	3/4	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.) Max.	m	80 (100)	80 (100)	80 (100)	
Piping length (1st Branch - IDU) <sup>3</sup> Total piping length (System)	Max.	m m	40 150	40 150	40 150	
Level Difference (Outdoor in highest position)	Max.	m m	30	30	30	
Level Difference (Indoor in highest position)	Max.	m	25	25	25	
Level Difference (IDU-IDU) <sup>3</sup>	Max.	m	15	15	15	
Wiring Connection						
Communication	Min.	mm²	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant						
Type		1 (1.00		2(Fluorinated greenhouse gas, GWP=6		
Factory Charging Sound <sup>2</sup>		kg / tCO₂e	2.20/1.49	2.20/1.49	2.20/1.49	
Sound Pressure	Cooling	dB(A)	55	57	58	
	Heating	dB(A)	57	59	60	
Sound Power	Cooling	dB(A)	68	70	71	
	Heating	dB(A)	72	74	76	
External Dimensions						
Net Weight		kg	90	90	90	
Net Dimensions (W x H x D)		mm	940 x 840 x 460	940 x 840 x 460	940 x 840 x 460	
Operating Temperature						
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	







AM040DXMDNG/EU	AM050DXMDNG/EU	AM060DXMDNG/EU	
3Ф, 4, 380–415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz	
4	5	6	
12,1	14	15,5	
12,1	14	15,5	
8	9	10	
6	7	7,8	
		20,2	
15,7	18,2	20,2	
3,73	4,83	5,62	
2.75 (3.55)	3.37 (4.10)	3.78 (5.00)	
5,9	7,6	8,8	
4.3 (5.6)	5.3 (6.4)	5.9 (7.8)	
16,1	16,1	16,1	
20	20	20	
3,24	2,9	2,76	
4,4	4,15	4,1	
8.50/7.90	8.20/7.40	8.00/7.20	
5.10/4.80	5.10/4.70	5.10/4.60	
337%-201%	325%-201%	317%-201%	
313%-189%	293%-185%	285%-181%	
10770 - 10770	27370-10370	203/0-10170	
Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
4,35	4,35	4,35	
POE	POE	POE	
1,5	1,5	1,5	
Dron-II	Dron-II	Propeller	
Propeller	Propeller Horizontal		
Horizontal		Horizontal	
1 68	1 77	1 80	
BLDC Motor	BLDC Motor	BLDC Motor	
122 x 1	122 x 1	122 x 1	
9.52	9.52	9.52	
3/8	3/8	3/8	
15,88	15,88	19.05	
		3/4	
5/8 80 (100)	5/8 80 (100)	80 (100)	
40	40		
150	150	40 150	
30	30	30	
25 15	25 15	25 15	
•	·	•	
0.75	0.75	0.75	
F1, F2	F1, F2	F1, F2	
D.Z.	2(Fluorinated greenhouse gas, GWP=67	5)	
2.20/1.49	2.20/1.49	2.20/1.49	
L.LU/ 1.47	L.LU/ 1.47	2.20/ 1.47	
55	57	58	
57	59	60	
68	70	71	
72	74	76	
00	00	00	
90	90 940 x 840 x 460	90 940 x 840 x 460	
940 x 840 x 460	740 X 840 X 400	940 X 840 X 400	
940 x 840 x 460 -5.0~48.0	-5.0~48.0	-5.0~48.0	

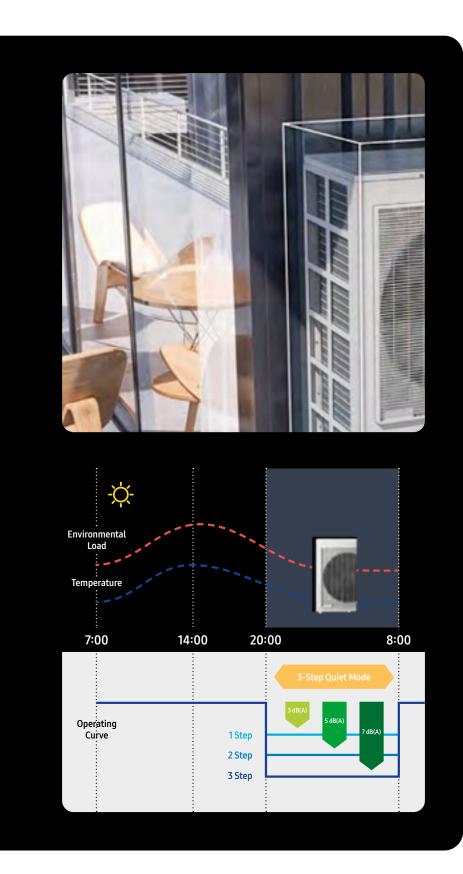
Performances are based on the following test conditions:
Cooling: Indoor temperature: 27 °C DB, 19 °C WB,
Outdoor temperature: 55 °C DB, 24 °C WB
Heating: Indoor temperature: 20 °C DB, 15 °C WB,
Outdoor temperature: 7 °C DB, 6 °C WB

Squivalent refrigerant piping: 7.5 m, Level differences: 0 m

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".

ODU: Outdoor Unit, IDU: Indoor Unit

#### **DVMS**



### High capacity in a compact design

DVM S combines a high capacity up to 12 HP. It is one of the most compact air conditioner units in its class today, making the DVM S very easy and economical to install and operate without compromising on performance. It makes good use of valuable space with a compact design. With a height of just 1210 mm and only 0.318m², its overall volume is 5% less than competing models¹. It makes it a convenient space-saving option in offices and can be installed easily in a wide range of locations.

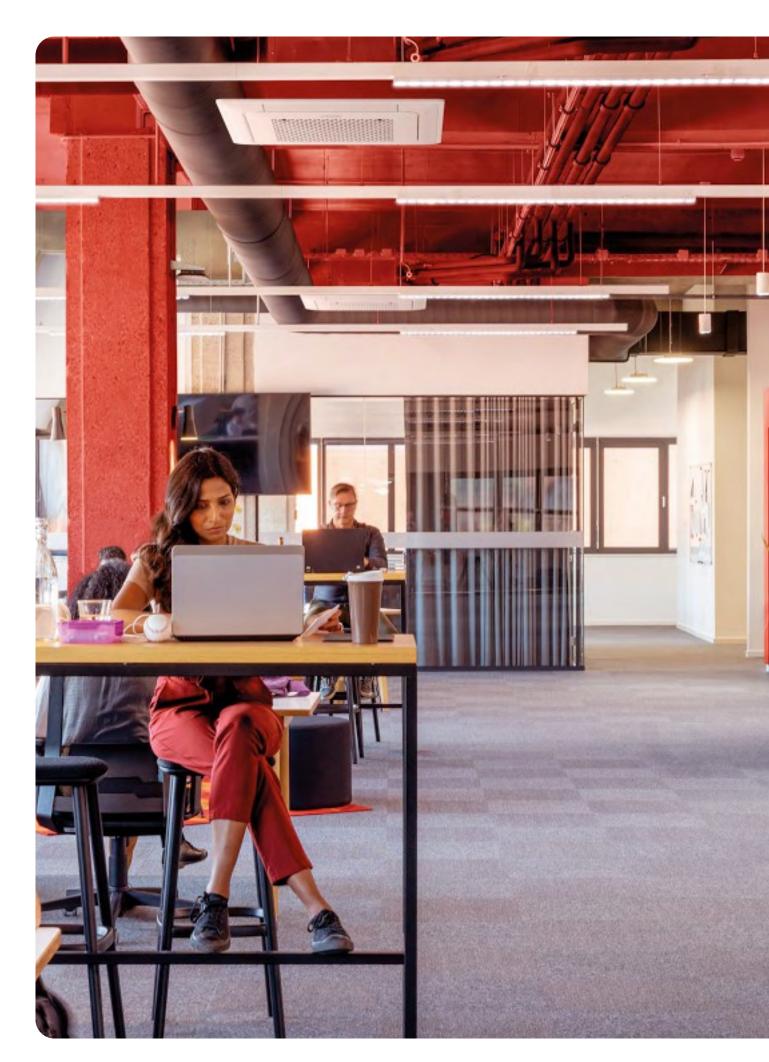
Based on internal testing. Height comparison in 6HP models: Samsung DVM S = 1210mmm vs. Model of a competing brand = 1380mm.

#### Silent mode

By producing less noise than conventional Samsung models, the DVM S imposes fewer distractions on residential and working environments. Its compact, unimposing design and specially shaped fan blades help reduce sound levels in 3 steps, creating a more pleasant environment.

Additionally, its quiet operation during the night creates a restful environment with a reduced noise level of 3–7 dB(A)<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Based on internal testing comparing silent mode with regular operating mode. Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions. Silent mode is available by option setting.



#### DVM S Heat Pump (R410A)

- 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.







			and the same	100		
Model			AM040BXMDEH/EU	AM050BXMDEH/EU	AM080BXMDGH/EU	
Power Supply		Φ, #, V, Hz	1Ф, 2, 220–240 V, 50 Hz	1Ф, 2, 220-240 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	
Performance Performance		Ψ, #, ۷, 112	1Φ, 2, 220-240 V, 30 Hz	14, 2, 220-240 4, 30 112	34, 4, 380-413 V, 30 Hz	
НР		НР	4	5	8	
Capacity	Cooling	kW	12.1	14	22.4	
	Heating	kW	12.1	14	22.4	
Maximum number of connectable indoor units		ea	6	8	13	
Total capacity of the connected indoor units	Min.	kW	5.6	7	11.2	
	Max.	kW	15.7	18.2	29.1	
Power						
Power Input	Cooling	kW	3.9	5.19	10.98	
	Heating	kW	3.23	4.12	6.4	
Current Input	Cooling	Α	17.8	23.8	17.2	
_	Heating	Α	14.8	18.9	10	
Current	Minimum SSC value	MVA	-	-	3.4	
	MCA	A	24	27	18.4	
	MFA	Α	32	40	25	
Energy Efficiency <sup>1</sup> EER (Nominal Cooling)						
COP (Nominal Heating)		W/W	3.1	2.7 3.4	2.04	
SEER (Cassette)		W/W W/W	3.75 7.6	7.35	3.5 6	
SCOP (Cassette)		W/W	4.2	4.4	4.25	
Compressor		VV/ VV	4.2	4.4	4.23	
Type			Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
Output		kW × n	4.04 x 1	4.04 x 1	4.78 x 1	
Oil	Туре	-	PVE	PVE	PVE	
	Initial Charge	СС	1,700	1,700	1,700	
Fan	-		,	,	,	
Type & Discharge direction		-	Propeller	Propeller	Propeller	
		-	Horizontal	Horizontal	Horizontal	
Number of Fans		ea	1	1	2	
Airflow Rate		m³/min	64	70	135	
External Static Pressure	Max.	mmAq	3	3	3	
		Pa	29.4	29.4	29.4	
Fan Motor						
Model		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output x n		W	125 x 1	139 x 1	139 x 2	
Piping Connection						
Liquid Pipe		ø, mm	9.52	9.52	9.52	
Gas Pipe		ø, inch	3/8	3/8	3/8	
das ripe		ø, mm	15.88	15.88 5/8	19.05	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.)	ø, inch m	5/8 50 (65)	50 (65)	3/4 100 (130)	
Piping length (1st Branch - IDU) <sup>3</sup>	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) <sup>3</sup>	Max.	m	15	15	30	
Wiring Connection						
Communication	Min.	mm²	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant						
Туре			R410A	(Fluorinated greenhouse gas, GWP=2	088)	
Factory Charging		kg/tCO₂e	2.00/4.18	2.50/5.22	3.70/7.73	
Sound <sup>2</sup>						
Sound Pressure	Cooling	dB(A)	53	56	58	
	Heating	dB(A)	56	58	59	
Sound Power		dB(A)	70	73	73	
External Dimensions						
Net Weight		kg	79	84	115	
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		96	E 0 400	FO 100	E 0 40 0	
Operating Temperature Cooling Heating		°C °C	-5.0~48.0 -20.0~24.0	-5.0~48.0 -20.0~24.0	-5.0~48.0 -20.0~24.0	







AM080BXMWGH/EU	AM100BXMWGH/EU	AM120BXMWGH/EU	
3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	
8	10	12	
22.4	28	33.6	
22.4	28	33.6	
13	18 14	21	
11.2 29.1	36.4	16.8 43.6	
29.1	30.4	43.0	
9.96	12.73	14.3	
5.89	7.78	9.21	
15.6	20	22.4	
9.2	12.2	14.4	
3.4	4.6	5.1	
18	21.5	23.5	
25	30	30	
2.25	2.2	2.35	
3.8	3.6	3.65	
6.3	6.4	6.5	
4.25	4.15	4.5	
Scroll Inverter	Scroll Inverter	Scroll Inverter	
5.18 x 1	6.39 x 1	6.39 x 1	
PVE	PVE 1100	PVE 1100	
1,100	1,100	1,100	
Propeller	Propeller	Propeller	
Horizontal	Horizontal	Horizontal	
2	2	2	
135	165	166	
3	3	3	
29.4	29.4	29.4	
BLDC Motor	BLDC Motor	BLDC Motor	
139 x 2	244 x 2	244 x 2	
137 X Z	244 % 2	244 % 2	
9.52	9.52	12.70	
3/8	3/8	1/2	
19.05	22.22	28.58	
3/4	7/8	11/8	
100 (130)	160 (185)	160 (185)	
40	40	40	
300	300	300	
50	50	50	
40	40	40	
50	50	50	
0.75	0.75	0.75	
F1, F2	F1, F2	F1, F2	
R410, 3.70/7.73	A(Fluorinated greenhouse gas, GWP=2, 4.30/8.98	4.80/10.02	
3.10/1.13	7.50/0.70	7.00/10.02	
58	58	60	
59	64	64	
73	74	76	
135	155	162	
940 x 1,420 x 330	940 x 1,630 x 460	940 x 1,630 x 460	
-5.0~48.0	-5.0~52.0	-5.0~52.0	
-20.0~24.0	-25.0~24.0	-25.0~24.0	

Performances 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: 27 °C DB, 19 °C WB,
Outdoor temperature: 7 °C DB, 6 °C WB
Equivalent refrigerant piping: 7.5 m, Level differences: 0 m

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".

ODU: Outdoor Unit, IDU: Indoor Unit

### DVM S2

# Higher Energy Efficiency

The DVM S2 is equipped with four innovative technology components that together result in the DVM S2 delivering greater energy efficiency.





#### The 7th Generation of IGBT

The High-efficiency IGBT (Insulated Gate Bipolar Transistor) reduces the loss of conducted electricity.





#### **Enlarged Heat Exchanger**

The enlarged Heat Exchanger can transfer more energy at once, and its optimized refrigerant path maximizes the transfer rate while minimizing any loss. These heat exchanger allow for 36.2 % greater heat transfer area on the smaller platform<sup>1</sup> and 23.7 % greater heat transfer on the larger platform<sup>2</sup>. The power module which is an integral part of the inverter system is improved as it lowers heat dissipation and saves energy.

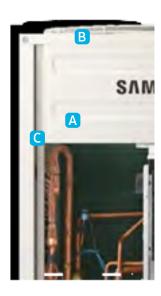
- DVMS2 equipped with larger heat exchanger than conventional model AM100JXVAGH/E1. HX Length: 1,700 mm  $\rightarrow$  1,910 mm. Platform Width: 880  $\rightarrow$  930 [mm]. DVMS2 equipped with larger heat exchanger than conventional model AM200KXVAGH/ET. HX Length: 2,100 mm  $\rightarrow$  2,600 mm.

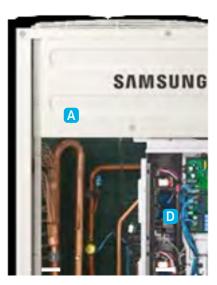


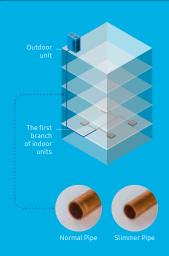
#### **Multi-serration Fan**

The aerodynamic Multi-serration Fan minimizes the turbulence of the air vortex, which reduces the air resistance. The high efficiency Multi-Serration fan lowers power consumption by 32 % while providing more airflow<sup>1</sup>. The unit uses a superior Samsung scroll compressor which makes the unit more energy efficient compared to the current DVM S range.

Multi serration fan adopted for small platform. Based on 12 HP models comparison.







#### Slimmer Liquid Line

(Optional Diameter Reduction)

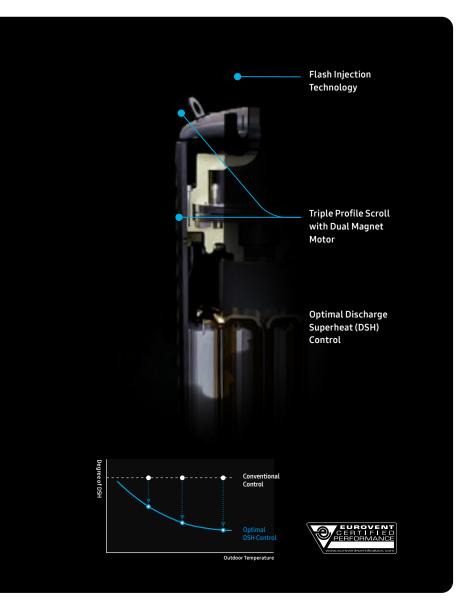
The DVM S2 requires less refrigerant as it can use a slimmer liquid line<sup>1</sup>. So, it saves costs on the installation and maintenance of refrigerant and piping materials. In addition, the decreasing of pipes can result in refrigerant reduction by 28 %<sup>2</sup>. As long as the maximum piping length is met it is possible to install a liquid line pipe with a diameter that is one level smaller for the main run. This allows you to save on pipe and

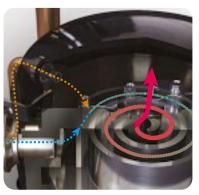
#### AFI (Advanced Flash Injection) Compressor™

The Samsung AFI Compressor™ combines Flash Injection Technology with a strengthened Triple Profile Wrap and Optimal Discharge Superheat Control technology. It delivers a new level of comfort by maintaining pleasantly cool or warm conditions in every corner of a building all year round.

Flash Injection Technology increases the flow of refrigerant. So, the compressor continues working reliably, improving the heating performance even at low temperatures. Triple Profile Scroll creates a much larger chamber and can withstand higher pressure while rotating reliably at high speed. Combining it with a Dual Magnet Motor, which increases the rotary power, creates the world's largest displacement volume<sup>1</sup>.

Optimal Discharge Superheat (DSH) Control automatically adjusts the degree of discharge superheat to heat more efficiently and effectively compared to the previous generation of DVM S.









Samsung circulates 14,400 cc/sec refrigerant (= 90 cc (displacement volume) x 160 rps (revolutions per second)), while Company A circulates 12,480cc/sec (= 96cc x 130 rps), Company B circulates 14,080 cc/sec (= 88cc x 160 rps) and Company C circulates 12,320 cc/sec (= 88cc x 140 rps).

#### **Enhanced Emergency Operation**

When the air conditioning system consists of multiple Samsung DVM S2 outdoor units, its refrigerant regulating control technology ensures that you can continue working using only one compressor in an emergency.

So, if every unit except one is not working or getting serviced and any compressor on the remaining one is working properly, it will keep cooling or heating for up to 8 hours. It ensures that you can maintain a comfortable indoor environment until the whole system is functioning properly again.

#### Conventional

Available when one or more compressors is working on every unit in the whole system.





#### DVM S2

Available when any compressor is working in the whole system.

#### Improved >

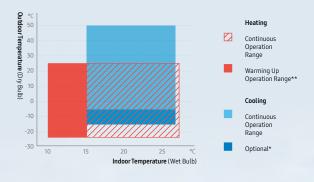


_	Emergency Operation			
Exampl	e Cases of Malfunction	Conventional	DVM S2	
	When there are 2 or more units in a system, and one of the two compressors on a unit is not working.	Yes	Yes	
	When there are 2 or more units in a system, and one of the two compressors on each unit is not working.	Yes	Yes	
	When there are 2 or more units in a system, and all of the compressors on a unit are not working.	Not Available	Yes	
	When there are 2 or more units in a system, and a compressor on a low capacity unit is not working.	Not Available	Yes	
	When there are 2 or more units in a system, and a compressor on a low capacity unit and one of the two compressors on another unit are not working.	Not Available	Yes	
	When there is 1 unit in a system, and one of the two compressors on it is not working.	Not Available	Yes	

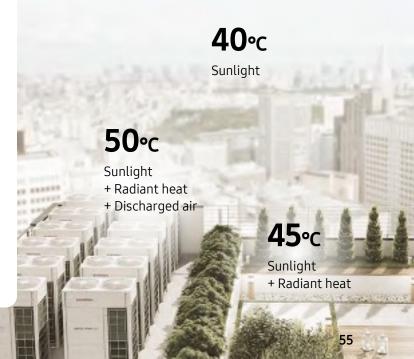
#### **Stable Performance** in a Wide Range of **Temperatures**

The DVM S2 operates in a wider range of weather conditions, delivering a more stable performance compared to the first generation of DVM S. It operates across a wide temperature spectrum. It can cool during a heat of up to 50 °C and provide warmth during freezing cold conditions of up to -25 °C, ensuring a constant comfortable indoor environment throughout the year.

The wide operating range is particularly helpful as most DVM S2 will be installed on the rooftop of a building. Here the unit is directly exposed to sunlight and the radiant heat of the rooftop as well as to the discharged air of the other outdoor units.



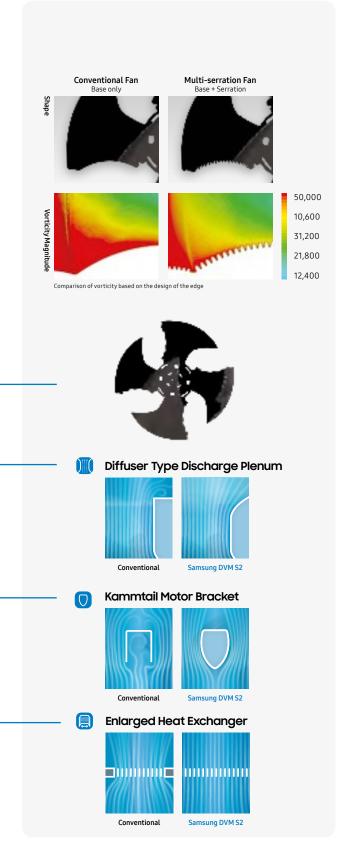
- \* When the 'Expand Operational Temperature Range' option is applied; the low limit of the cooling operation range can be expanded from -5°C to -15°C. Only available on HR models and under certain conditions.
  \*\*If the indoor temperature is lower than 15°C, it can work in heating mode but it cannot operate continuously due to a protection control, delivering thus a more stable performance than the DVM S.

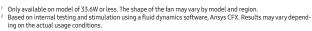


## Quiet operation: improvements on core elements

The DVM S2 reduces fan noise by minimizing the air vortex due to the unique Multi-serration Fan¹. In addition, it works quietly and efficiently at night due to its quiet operation feature.

Along with the Multi-serration Fan, the Samsung DVM S2 includes a new range of technologies that support the unit's air flow optimization, namely: the Diffuser Type Discharge Plenum, Kammtail Motor Bracket and the Enlarged Heat Exchanger. Thanks to these technologies the air flows smoothly and quickly, minimizing the turbulence of the air vortex, thus resulting in less noise<sup>2</sup>.





#### **Lasting Performance in Challenging Weather Conditions**

The Samsung DVM S2 is equipped with the new and innovative design features that are proven to significantly enhance its durability<sup>1</sup>. These include the robust frame, the Kammtail motor bracket and an improved structure of the legs of the unit. In addition, it features anti-corrosion capabilities on the heat

exchanger and chassis, due to the new Durafin™ Ultra fin coating, and the Galvanized Iron Steel Plate casing with a PE powder coating of up to  $100\mu m$  thickness. These features were proven to ensure a maximum durability in challenging weather conditions.<sup>2</sup>



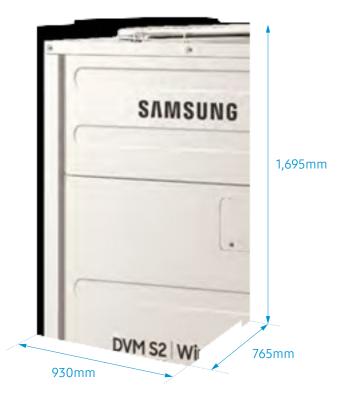
Based on a test in accordance with ICC ES AC156: 2010 (SDS=2.5g, z/h=1), conducted by SGS Korea Co., Ltd. Result Report No.: SGS-R20-1599-KR00

Based on internal testing using corrosion chambers, Q-FOG and CCT-1100. The Complex Cycle Test (ICCT) includes cycles of spray (for 2 hours at 55 °Celsius), dry (for 4 hours at 60 °C s with 30% Relative Humidity) and damp (for 2 hours at 50 °C with 95% Relative Humidity) conditions. As a result, the Galvanized Iron Steel Plate (GI) formed red rust after 240 hours, which is 43% slower than general Electro-Galvanized Steel Plate (EGI), which forms red rust after 168 hours.

#### **Extended Installation Flexibility**

The Samsung DVM S2 maximizes space without compromising on the quality of its performance. It is 33%1 smaller compared to the previous DVM S generation. The DVM S2 compact design enables outdoor units to be installed even inside the building. This can be especially important for high-rise buildings. It can result in freeing up valuable amounts of space. The DVM S2 is designed to enhance installation flexibility within the building, due to the 110Pa External Static Pressure<sup>2</sup>. This function effectively discharges air through a longer duct, making it a suitable choice for high-rise buildings.





- Based on the AM140AXVAGH/EU, compared to the same capacity models of companies.

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

#### **Convenient handling**



with its updated features: the Center Point Indicator of Weight and the Simplified Cover with Handle, making it safety with less effort.

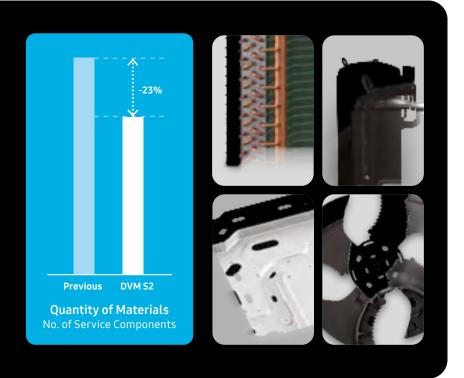
can be accessed easily when servicing, without opening the whole cabinet.



## Fewer parts, less effort and cost for service

The Samsung DVM S2 consists of optimized modular components that come in fewer parts compared to the previous generation of Samsung's DVM S.

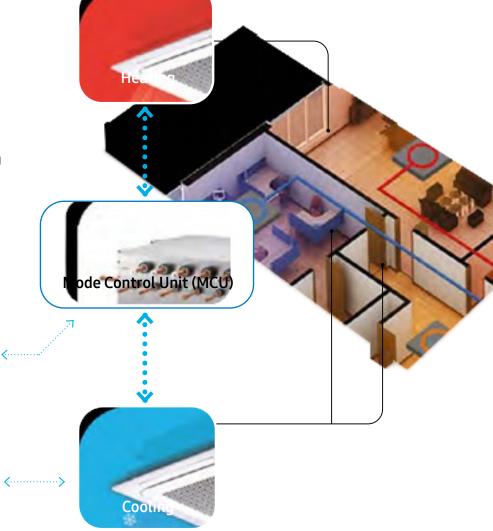
Based on its Quality-based Modular Design (QMD), the DVM S2 is built with high-quality modules that were preselected and preconfigured. It delivers both superior performance and reliability. Additionally, it saves up significant warehouse space, as it does not come in multiple parts.



#### Independently Cools and Heats Multiple Spaces

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 1 to 12 ports and can be piped together. This allows for up to 64 indoor unit connections to a single DVM S2 system (where specifications allow).









#### DVM S2 Essential Heat Pump (2-Pipe, R410A)

- Erp (Ecodesign) compliant and Eurovent certified.
- Advanced Flash Injection™ technology.
- Active AI Pressure Control.

- Active Al Defrost.
- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Optional Slimmer Liquid Pipe.
- On-device Inverter Checker™.







Model			AM100AXVDGH/EU	AM120AXVDGH/EU	AM140AXVDGH/EU	
PowerSupply		Φ, #, V, Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	
Performance						
HP		HP	10	12	14	
Capacity	Cooling (Rated)	kW	28.0	33.6	40.0	
	Heating (Rated) Heating (Max)	kW	28.0	33.6	40.0	
Maximum number of connectable indoor units	neating (Max)	kW	31.5 18	37.8 21	45.0	
Total capacity of the connected indoor units	Min.	ea kW	14.0	16.8	26 20.0	
	Max.	kW	36.4	43.7	52.0	
Power						
Current Input	Cooling (Rated)	Α	20.50	22.01	28.60	
	Heating (Rated)	Α	14.34	16.45	20.91	
Current	Minimum SSC value	MVA	3.7	4.0	4.6	
	MCA	Α	23.0	25.0	29.0	
	MFA	Α	32	32	32	
Energy efficiency <sup>1</sup> SEER		M/M	4.00	4.40	4.20	
SCOP		W/W W/W	6.00 4.10	6.40 4.30	6.20 4.10	
ηs.c		%	237	253	245	
ηs.h		%	161	169	161	
Compressor						
Туре		-	Inverter Scroll x 1	Inverter Scroll x 1	Inverter Scroll x 1	
Output		kW x n	6.67 x 1	6.67 x 1	6.67 x 1	
Oil	Туре	-	PVE	PVE	PVE	
	Initial Charge	cc x n	1,100 x 1	1,100 x 1	1,100 x 1	
Fan			0	B	D	
Type Discharge direction		-	Propeller	Propeller	Propeller	
Number of Fans		ea	Vertical 1	Vertical 1	Vertical 1	
Airflow Rate		m³/min	167	196	210	
		l/s	2,779	3,260	3,500	
External Static Pressure	Max.	mmAq	11	11	8	
		Pa	110	110	80	
Fan Motor						
Туре		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output		Wxn	630 x1	630 x1	630 x 1	
Piping Connection Liquid Pipe			0.53	12.70	12.70	
Liquid Pipe		ø, mm ø, inch	9.52 3/8	12.70 1/2	12.70 1/2	
Gas Pipe		ø, inch ø, mm	22.22	28.58	28.58	
···· •		ø, inch	7/8	11/8	11/8	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.)	m m	200 [220]	200 [220]	200 [220]	
Piping length (1st Branch - IDU) <sup>3</sup>	Max.	m	90	90	90	
Total piping length (System)	Max.	m	1,000	1,000	1,000	
Level difference (ODU in highest position) <sup>3</sup>	Max.	m	110	110	110	
Level difference (IDU in highest position)	Max.	m	110	110	110	
Level Difference (IDU-IDU)3	Max.	m	50	50	50	
Wiring Connections Transmission Cable	Min.	mm²	0.75	0.75	0.75	
ii aiisillissiuli Caule	MIN. Remark	mm²	0.75 F1, F2	0.75 F1, F2	0.75 F1, F2	
Refrigerant	Kemurk	•	FI, FZ	F1, FZ	F 1, FZ	
Туре		-	R410	A (Fluorinated greenhouse gas, GWP=2	2,088)	
Factory Charging		kg	5.5	7.0	7.0	
		tCO₂e	11.48	14.62	14.62	
Sound						
Sound Pressure <sup>2</sup>	Cooling	dB(A)	56	61	63	
	Heating	dB(A)	60	63	65	
Sound Power	Cooling	dB(A)	78	81	85	
External Dimensions			44-	0.5 -	0.7	
Net Dimensions (W x H x D)		kg	185	205	207	
Net Dimensions (W x H x D)		mm	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765	
Operating Temperature Range Cooling		°C	-5~50	-5~50	-5~50	
Heating		°C	-5~50 -25~24	-5~50 -25~24	-5~50 -25~24	
			-23-24	-23-24	-23-24	





AM160AXVDGH/EU	AM180AXVDGH/EU		
3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380-415 V Hz		
16	18		
45.0	50.4		
45.0	50.4 56.7		
50.4	32		
22.5	25.2		
58.5	65.5		
31.04	37.61		
22.38	24.75		
5.2	6.3		
32.0	39.2		
40	50		
6.30	5.90		
4.20	4.10		
249 165	233 161		
100	101		
Inverter Scroll x 1	Inverter Scroll x 1		
8.93 x1	8.93 x 1		
PVE	PVE		
1,400 x 1	1,400 x 1		
Propeller	Propeller		
Vertical	Vertical		
2	2		
303	324		
5,052	5,401		
11 110	11 110		
110	110		
BLDC Motor	BLDC Motor		
620 x 2	620 x 2		
12.70	15.88		
1/2	5/8		
28.58	28.58		
11/8	11/8		
200 [220]	200 [220]		
90	90		
1,000	1,000		
110	110		
110 50	110 50		
50	20		
0.75	0.75		
F1, F2	F1, F2		
. 4.2			
R410A (Fluorinated gre	eenhouse gas, GWP=2,088)		
8.0	8.0		
16.70	16.70		
60	61		
62	64		
81	83		
242	242		
242	242 1 205 v 1 605 v 765		
1,295 x 1,695 x 765	1,295 x 1,695 x 765		
-5~50	-5~50		
-25~24	-25~24		
	. <del>-</del> ·		

Performances are based on the following test conditions:

Cooling: Indoor temperature: 27 ° C DB, 19 ° C WB,
Outdoor temperature: 25 ° 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: 75 m, Level differences: 0 m

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".

ODU: Outdoor Unit, IDU: Indoor Unit

#### DVM S2 Standard Heat Pump (2-Pipe, R410A)

- Erp (Ecodesign) compliant and Eurovent certified
- Advanced Flash Injection™ technology.
- Active AI Pressure Control.
- Active AI Defrost.
- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Optional Slimmer Liquid Pipe.
- On-device Inverter Checker™.







Model			AM080AXVAGH/EU	AM100AXVAGH/EU	AM120AXVAGH/EU	
Para Carala		A # V II-	70.4.700.415.7.50.11	7.0 A 700 A15 V 50 U	7.0.4.700.415.1/.50.11	
Power Supply Performance		Ф, #, V, Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	
НР		НР	8	10	12	
Capacity	Cooling	kW	22.4	28.0	33.6	
	Heating	kW	22.4	28.0	33.6	
Maximum number of connectable indoor units		ea	14	18	21	
Total capacity of the connected indoor units	Min.	kW	11.2	14.0	16.8	
2	Max.	kW	29.1	36.4	43.7	
Power Current Input	Cooling	A	12.60	18.41	19.83	
Current input	Heating	A	9.50	12.90	14.82	
Current	MCA	A	18.0	23.0	25.0	
	MFA	A	25	32	32	
Energy Efficiency <sup>1</sup>						
SEER		W/W	6.5	6.2	6.6	
SCOP		W/W	4.2	4.2	4.4	
ηs.c		%	257	245	261	
ηs.h		%	165	165	173	
Compressor						
Output	Type	kW x n	4.39 x 1	6.67 x 1	6.67 x 1	
Oit	Type Initial Charge	- cc x n	PVE 900 x 1	PVE 1,100 x 1	PVE 1,100 x 1	
Fan	ilitiat Charge	ссхп	900 X I	1,100 X 1	1,100 x 1	
Type		-	Propeller	Propeller	Propeller	
Discharge direction		-	Vertical	Vertical	Vertical	
Number of Fans		ea	1	1	1	
Airflow Rate		m³/min	151	167	196	
		l/s	2,515.00	2,779.00	3,260.00	
External Static Pressure	Max.	mmAq	11	11	11	
		Pa	110	110	110	
Fan Motor Type		_	DIDCH	DIDCH	DI DC Maria	
Output		- W x n	BLDC Motor 630 x1	BLDC Motor 630 x 1	BLDC Motor 630 x 1	
Piping Connections		WXII	030 X I	030 X I	030 X I	
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	11/8	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.)	m	200 [220]	200 [220]	200 [220]	
Piping length (1st Branch - IDU) <sup>3</sup>	Max.	m	90	90	90	
Total piping length (System)	Max.	m	1,000	1,000	1,000	
Level difference (ODU in highest position) <sup>3</sup> Level difference (IDU in highest position) <sup>3</sup>	Max. Max.	m	110	110	110	
Level Difference (IDU in nignest position) <sup>3</sup>	мах.	m m	110 50	110 50	110 50	
Wiring Connections	. 100.	m	30	50	30	
Transmission Cable		mm²	0.75	0.75	0.75	
Remark		-	F1, F2	F1, F2	F1, F2	
Refrigerant			,	,	,	
Туре		-	R410	A (Fluorinated greenhouse gas, GWP=2	2,088)	
Factory Charging		kg	5.5	5.5	7.0	
		tCO₂e	11.48	11.48	14.62	
Sound						
Sound Pressure <sup>2</sup>	Cooling	dB(A)	53	56	61	
Sound Power	Heating Cooling	dB(A)	58	60	63	
External Dimensions	cooting	dB(A)	75	78	81	
Net Weight		kg	175	185	205	
Net Dimensions (W x H x D)		mm	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765	
Operating Temperature Range			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
Cooling		°C	-5~50	-5~50	-5~50	
Heating		°C	-25~24	-25~24	-25~24	

- Performances 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
- <sup>2</sup> Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".



















AM140AXVAGH/EU	AM160AXVAGH/EU	AM180AXVAGH/EU	AM200AXVAGH/EU	AM220AXVAGH/EU	AM240AXVAGH/EU	AM260AXVAGH/EU
3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380–415 V, 50 H
.,,,	, , , ,	,,	, , ,	.,,,	, , , ,	, ,
14	16	18	20	22	24	26
40.0	45.0	50.4	56.0	61.6	67.2	72.8
40.0	45.0	50.4	56.0	61.6	67.2	68.0
26	29	32	36	40	43	47
20.0	22.5	25.2	28.0	30.8	33.6	36.4
52.0	58.5	65.5	72.8	80.1	87.4	94.6
27.72	29.47	33.87	39.87	45.43	50.05	58.83
18.81	20.13	22.29	26.49	28.11	45.58	46.54
29.0	32.0	39.2	43.0	46.0	55.0	60.0
32	40	50	63	63	63	75
6.4	6.5	6.1	6.2	5.9	5.6	5.1
4.2	4.3	4.2	4.1	4.1	3.7	3.7
253	257	241	245	233	221	201
165	169	165	161	161	145	145
6.67 x 1	8.93 x 1	8.93 x 1	8.93 x 1	6.67 x 2	6.67 x 2	6.67 x 2
PVE	PVE	PVE	PVE	PVE	PVE	PVE
1,100 x 1	1,400 x 1	1,400 x 1	1,400 x 1	1,100 x 2	1,100 x 2	1,100 x 2
Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Vertical	Vertical	Vertical	Vertical	Vertical	Vertical	Vertical
1	2	2	2	2	2	2
210	303	324	313	342	365	365
3,500.00	5,052.00	5,401.00	5,209.00	5,698.00	6,089.00	6,089.00
8	11	11	11	11	8	8
80	110	110	110	110	80	80
BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
630 x 1	620 x 2	620 x 2	620 x 2	620 x 2	620 x 2	620 x 2
12.70	12.70	15.88	15.88	15.88	15.88	19.05
1/2	1/2	5/8	5/8	5/8	5/8	3/4
28.58	28.58	28.58	28.58	28.58	34.92	34.92
11/8	11/8	11/8	11/8	11/8	1 3/8	13/8
200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]
90	90	90	90	90	90	90
1,000	1,000	1,000	1,000	1,000	1,000	1,000
110	110	110	110	110	110	110
110	110	110	110	110	110	110
50	50	50	50	50	50	50
0.75	0.75	0.75	0.75	0.75	0.75	0.75
0.75 F1, F2	0.75 F1, F2	0.75 F1, F2	0.75 F1, F2	0.75 F1, F2	0.75 F1, F2	F1, F2
11,12	11,12	11,12	11,12	11,12	11,12	11,12
		R410A (	Fluorinated greenhouse gas, GW	P=2,088)		
7.0	8.0	8.0	10.5	10.5	14.0	14.0
14.62	16.70	16.70	21.92	21.92	29.23	29.23
63	60	61	61	64	65	65
65	62	64	63	65	67	67
85	81	83	84	86	87	87
207	242	242	2/0	701	705	705
207 930 x 1,695 x 765	242 1,295 x 1,695 x 765	242 1,295 x 1,695 x 765	268 1,295 x 1,695 x 765	301 1,295 x 1,695 x 765	325 1,295 x 1,695 x 765	325 1,295 x 1,695 x 765
730 X 07073 X 003	1,270 X 1,070 X 700	1,273 X 1,073 X 703	1,273 X 1,073 X 703	1,273 X 1,073 X 703	1,270 X 1,070 X 700	1,270 X 1,070 X 700
-5~50	-5~50	-5~50	-5~50	-5~50	-5~50	-5~50

#### DVM S2 High Efficiency Heat Pump (2-Pipe, R410A)

- Erp (Ecodesign) compliant and Eurovent certified.
- Advanced Flash Injection™ technology.
- Active AI Pressure Control.
- Active Al Defrost.
- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Optional Slimmer Liquid Pipe.
- On-device Inverter Checker™.







			_			
Model			AM080AXVGGH/EU	AM100AXVGGH/EU	AM120AXVGGH/EU	
PowerSupply		Ф, #, V, Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	
Performance		+, -, -, -,	21, 1,000 110 1,001			
НР		HP	8	10	12	
Capacity	Cooling	kW	22.4	28.0	33.6	
	Heating	kW	22.4	28.0	33.6	
Maximum number of connectable indoor units		ea	14	18	21	
Total capacity of the connected indoor units	Min.	kW	11.2	14.0	16.8	
	Max.	kW	29.1	36.4	43.7	
Power Current Input	Cooling	_	11.44	15.07	10.25	
Current input	Heating	A	9.09	15.97 11.41	19.25 14.37	
Current	Minimum SSC value	MVA	3.0	3.4	4.0	
	MCA	A	18.0	21.2	25.0	
	MFA	A	25	32	32	
Energy Efficiency <sup>1</sup>						
SEER		W/W	7.2	6.9	6.9	
SCOP		W/W	4.50	4.40	4.56	
ηs.c		%	285	273	273	
ηs.h		%	177	173	179.4	
Compressor						
Output		kW x n	4.39 x 1	6.67 x 1	6.67 x 1	
Oil	Туре	-	PVE	PVE	PVE	
_	Initial Charge	cc x n	900 x1	1,100 x 1	1,100 x 1	
Fan Type		-	Propeller	Propeller	Propeller	
Discharge direction		-	Тор	Тор	Top	
Number of Fans		ea	1	1	1	
Airflow Rate		m³/min	164	181	196	
		l/s	2,738.00	3,019.00	3,260.00	
External Static Pressure	Max.	mmAq	11	11	11	
		Pa	110.00	110.00	110.00	
Fan Motor						
Туре		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output		Wxn	TBD	TBD	TBD	
Piping Connections			0.50	0.50		
Liquid Pipe		ø, mm	9.52	9.52	12.70	
Gas Pipe		ø, inch ø, mm	3/8 19.05	3/8 22.22	1/2 28.58	
Sub 1 ipc		ø, inch	3/4	7/8	11/8	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.)	m	200 [220]	200 [220]	200 [220]	
Piping length (1st Branch - IDU) <sup>3</sup>	Max.		90	90	90	
Total piping length (System)	Max.		1,000	1,000	1,000	
Level difference (ODU in highest position) <sup>3</sup>	Max.		110	110	110	
Level difference (IDU in highest position) <sup>3</sup>	Max.		110	110	110	
Level Difference (IDU-IDU) <sup>3</sup>	Max.		50	50	50	
Wiring Connections						
Transmission Cable		mm²	0.75	0.75	0.75	
Remark		-	F1, F2	F1, F2	F1, F2	
Refrigerant Type			D4104	/Eluciostad association CM/D-3	000)	
Factory Charging		- kg	7.0	A (Fluorinated greenhouse gas, GWP=2 7.0	7.0	
,		tCO₂e	14.62	14.62	14.62	
Sound				02		
Sound Pressure <sup>2</sup>	Cooling	dB(A)	53	56	61	
	Heating	dB(A)	58	60	63	
Sound Power	Cooling	dB(A)	75	78	81	
External Dimensions						
Net Weight		kg	194	205	205	
Net Dimensions (W x H x D)		mm	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765	
Operating Temperature Range						
Cooling Heating		°C	-5~50	-5~50	-5~50	
Heating			-25~24	-25~24	-25~24	

- <sup>1</sup> Performances 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
- <sup>2</sup> Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".



















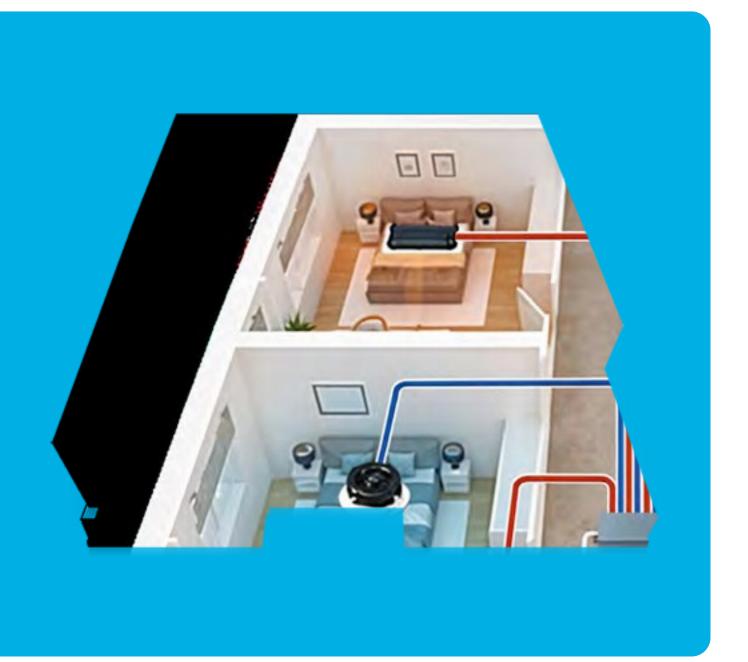
AM140AXVGGH/EU	AM160AXVGGH/EU	AM180AXVGGH/EU	AM200AXVGGH/EU	AM220AXVGGH/EU	AM240AXVGGH/EU	AM260AXVGGH/EU
3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 H
14 40.0	16	18	20	22	24	26
	45.0	50.4	56.0	61.6	67.2	72.8
40.0	45.0	50.4	56.0	61.6	67.2	68.0
26 20.0	29	32 25.2	36 28.0	40 30.8	43 33.6	47 36.4
52.0	22.5 58.5	65.5	72.8	80.1	87.4	94.6
52.0	38.3	05.5	72.8	80.1	87.4	94.0
25.44	26.96	26.79	38.63	44.15	48.62	57.61
17.06	19.35	21.14	25.72	27.29	44.20	45.11
4.4 27.0	5.2 32.0	6.4	7.0 43.0	7.4 46.0	9.3	10.2
32	40	50	63		55.0	60.0
52	40	50	0.5	63	63	75
6.7	6.9	7.5	6.5	6.2	5.9	5.4
4.25	4.30	4.80	4.50	4.30	3.90	3.90
265	273	297	257	245	233	213
167	169	189	177	169	153	153
107			***			.55
6.67 x 1	8.93 x 1	8.93 x 1	8.93 x 1	6.67 x 2	6.67 x 2	6.67 x 2
PVE	PVE	PVE	PVE	PVE	PVE	PVE
1,100 x 1	1,400 x 1	1,400 x 1	1,400 x 1	1,100 x 2	1,100 x 2	1,100 x 2
Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Тор	Тор	Тор	Тор	Тор	Тор	Тор
2	2	2	2	2	2	2
291	292	313	313	342	365	365
4,852.00	4,866.00	5,209.00	5,209.00	5,698.00	6,089.00	6,089.00
11	11	11	11	11	8	8
110.00	110.00	110.00	110.00	110.00	80.00	80.00
BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
TBD	TBD	TBD	TBD	TBD	TBD	TBD
12.70	12.70	15.88	15.88	15.88	15.88	19.05
1/2	1/2	5/8	5/8	5/8	5/8	3/4
28.58	28.58	28.58	28.58	28.58	34.92	34.92
11/8	11/8	11/8	11/8	11/8	13/8	1 3/8
200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]
90	90	90	90	90	90	90
1,000	1,000	1,000	1,000	1,000	1,000	1,000
110	110	110	110	110	110	110
110	110	110	110	110	110	110
50	50	50	50	50	50	50
0.75	0.75	0.75	0.75	0.75	0.75	0.75
F4 F0		F1, F2	F1, F2	F1, F2	F1, F2	F1, F2
F1, F2	F1, F2	11,12				
F1, F2	F1, F2		Juorinated greenhouse gas CWF	=2 088)		
		R410A (F	Fluorinated greenhouse gas, GWF		14.0	14.0
8.0	10.5	R410A (F	10.5	10.5	14.0	14.0
		R410A (F			14.0 29.23	14.0 29.23
8.0 16.70	10.5 21.92	R410A (F 10.5 21.92	10.5 21.92	10.5 21.92	29.23	29.23
8.0 16.70 58	10.5 21.92 58	R410A (F 10.5 21.92 59	10.5 21.92 61	10.5 21.92 64	29.23 65	29.23 65
8.0 16.70 58 61	10.5 21.92 58 61	R410A (F 10.5 21.92 59 63	10.5 21.92 61 63	10.5 21.92 64 65	29.23 65 67	29.23 65 67
8.0 16.70 58	10.5 21.92 58	R410A (F 10.5 21.92 59	10.5 21.92 61	10.5 21.92 64	29.23 65	29.23 65
8.0 16.70 58 61	10.5 21.92 58 61	R410A (F 10.5 21.92 59 63	10.5 21.92 61 63	10.5 21.92 64 65	29.23 65 67	29.23 65 67
8.0 16.70 58 61 81	10.5 21.92 58 61 81	R410A (F 10.5 21.92 59 63 81	10.5 21.92 61 63 84	10.5 21.92 64 65 86	29,23 65 67 87	29.23 65 67 87
8.0 16.70 58 61 81	10.5 21.92 58 61 81	R410A (F 10.5 21.92 59 63 81	10.5 21.92 61 63 84 268	10.5 21.92 64 65 86	29.23 65 67 87 325	29.23 65 67 87
8.0 16.70 58 61 81	10.5 21.92 58 61 81	R410A (F 10.5 21.92 59 63 81	10.5 21.92 61 63 84 268	10.5 21.92 64 65 86	29.23 65 67 87 325	29.23 65 67 87

# Heat Recovery for DVM



#### **Compact Heat Recovery solution**

The Heat Recovery (HR) feature for Samsung DVM S and DVM S2 is designed to control temperatures in multiple spaces at once. Optimised for hotels, offices and residential buildings, it can provide cooling and heating for up to 12 indoor units simultaneously. An HR Changer is used to convert a DVM S Heat Pump (4, 5 and 6 HP) to a Heat Recovery (HR) model, which can be connected to a multiport Mode Control Unit (MCU).





### DVM S (R410A) 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 Rotatory compressor.
- means of two propeller BLDC Inverter fans. Eurovent certified and ErP (Ecodesign) compliant.
- Night Silent Mode available.
- Four-way direction piping connection.







Mode	el		AM040BXMDER/EU	AM050BXMDER/EU	AM060BXMDER/EU	
Power Supply		Ф, V, Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	
Performance HP						
Capacity	Cooling	HP kW	12.1	5 14.0	6 15.5	
capacity	Heating	kW	12.1	14.0	15.5	
Power			12.1	1110	13.3	
Power Input (Nominal)	Cooling	kW	3.87	5	5.74	
	Heating	kW	3.04	3.83	4.43	
Current Input (Nominal)	Cooling	Α	17.7	22.9	26.3	
Current	Heating MCA	A	13.9	17.5	20.3	
Current	MFA	A	22 25	24 32	30 40	
Energy Efficiency <sup>1</sup>	PIIA	A	25	32	40	
EER (Nominal Cooling)		W/W	3.13	2.8	2.7	
COP (Nominal Heating)		W/W	3.98	3.66	3.5	
SEER (Cassette)		W/W	7.9	7.4	7.75	
SCOP (Cassette)		W/W	4.65	4.65	4.9	
Compressor						
Type Output		-	Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
Oil	Туре	kW x n	4.04 x 1 PVE	4.04 x 1 PVE	4.04 x 1 PVE	
Oil .	Initial Charge	сс	1,700	1,700	1,700	
Fan		cc	1,700	1,700	1,700	
Type & Discharge direction		-	Propeller	Propeller	Propeller	
		-	Horizontal	Horizontal	Horizontal	
Number of Fans		ea	2	2	2	
Airflow Rate	(H/M/L)	m³/min	100	100	100	
		l/s	1,667	1,667	1,667	
External Static Pressure	Max.	mmAq	3	3	3	
Fan Motor		Pa	29.4	29.4	29.4	
Model		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output x n		Wxn	125.0 x 2	125.0 x 2	125.0 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	15.88	
Discharge Gas Pipe		ø, inch	5/8	5/8	5/8	
Discharge das Pipe		ø, mm ø, inch	15.88 5/8	15.88 5/8	15.88 5/8	
Piping length (ODU-IDU)	Max. [Equiv.]	ø, inch m	150 (75)	150 (75)	150 (75)	
Piping length (1st Branch-IDU)	Max	m	40	40	40	
Total Piping length (System)	Max	m	300	300	300	
Level difference (ODU in highest position)	Max	m	50	50	50	
Level difference (IDU in highest position)	Max	m	40	40	40	
Level difference (IDU-ODU)	Max	m	50	50	50	
Wiring Connections	Min		A DE	0.00		
Communication	Min. Remark	m	0.75	0.75	0.75	
Refrigerant	Nemark	-	F1, F2	F1, F2	F1, F2	
Туре		-	R410A (	Fluorinated greenhouse gas, GWP=2	.088)	
Factory Charging		kg	3.2	3.2	3.3	
		kg / tCO₂e	6.68	6.68	6.89	
Sound						
Sound Pressure <sup>2</sup> (Cooling)		dB(A)	51	52	53	
Sound Pressure <sup>2</sup> (Heating)		dB(A)	55	55	55	
Sound Power		dB(A)	68	69	70	
External Dimensions Net Weight		ka	97	97	100	
Net Dimensions (W x H x D)		kg mm	97 940 x 1,210 x 330	9/ 940 x 1,210 x 330	100 940 x 1,210 x 330	
Operating Temperature Range			, 10 x 1/2 10 x 330	, ,	, 10 x 1,210 x 330	
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	







AM040BXMDGR/EU	AM050BXMDGR/EU	AM060BXMDGR/EU	
3Ф, 380~415 V, 50 Hz	3Ф, 380~415 V, 50 Hz	3Ф, 380~415 V, 50 Hz	
4	5	6	
12.1	14.0	15.5	
12.1	14.0	15.5	
3.87	5	5.74	
3.04	3.83	4.43	
5.9	7.6	8.7	
4.6	5.8	6.7	
16.1	16.1	16.1	
20	20	20	
7.17	2.0	27	
3.13 3.98	2.8 3.66	2.7 3.5	
	7.4		
7.9		7.75	
4.65	4.65	4.9	
Twin BLDC Rotary	Twin BLDC Rotary	Twin BLDC Rotary	
4.04 x 1	4.04 x 1	4.04 x 1	
PVE	PVE	PVE	
1,700	1,700	1,700	
Propeller	Propeller	Propeller	
Horizontal	Horizontal	Horizontal	
2	2	2	
100	100	100	
1,667	1,667	1,667	
3	3	3	
29.4	29.4	29.4	
DI DC M-t	DIDC M-+	DIDC M-+	
BLDC Motor	BLDC Motor	BLDC Motor	
125.0 x 2	125.0 x 2	125.0 x 2	
9.52	9.52	9.52	
3/8	3/8	3/8	
15.88	15.88	15.88	
5/8	5/8	5/8	
15.88	15.88	15.88	
5/8	5/8	5/8	
150 (75)	150 (75)	150 (75)	
40	40	40	
300	300	300	
50	50	50	
40	40	40	
50	50	50	
0.75	0.75	0.75	
F1, F2	F1, F2	F1, F2	
DA10	A (Fluorinated greenhouse gas, GWP=2,	088)	
3.2	3.2	3.3	
6.68	6.68	6.89	
51	52	53	
	55	55	
55		70	
55 68	69		
68			
68 95	95	98	
68			
68 95	95	98	

Performances are based on the following test conditions:
Cooling: Indoor temperature: 27 °C DB, 19 °C WB,
Outdoor temperature: 59 °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

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".

#### DVM S2 High EER Heat Recovery (3-Pipe, R410A)

- Erp (Ecodesign) compliant and Eurovent certified.
- Advanced Flash Injection™ technology.
- Active AI Pressure Control.
- Active Al Defrost.
- Active AI Refrigerant analysis.
- Durafin™ Ultra Heat Exchanger Fin.
- Optional Slimmer Liquid Pipe.
- On-device Inverter Checker™.

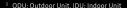






Model			AM080AXVGGR/EU	AM100AXVGGR/EU	AM120AXVGGR/EU	
Power Supply		Φ, #, V, Hz	3Φ, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	
Mode		-	HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY	
Performance						
HP		HP	8	10	12	
Capacity	Cooling	kW	22.4	28.0	33.6	
	Heating	kW	22.4	28.0	33.6	
Maximum number of connectable indoor units	Min	ea	14	18	21	
Total capacity of the connected indoor units	Min. Max.	kW kW	11.2	14.0	16.8	
Power	Max.	KVV	29.1	36.4	43.7	
Current Input	Cooling	A	11.44	15.97	19.25	
	Heating	A	9.09	11,41	14.37	
Current	Minimum SSC value	MVA	3.0	3.4	4.0	
	MCA	Α	18.0	21.1	25.0	
	MFA	Α	25	32	32	
Energy Efficiency <sup>1</sup>						
SEER		W/W	7.2	6.9	6.9	
SCOP		W/W	4.5	4.4	4.56	
ηs.c		%	285	273	273	
ηs.h		%	177	173	179.4	
Compressor Output		-	4.39 x 1	6.67 x 1	6.67 x 1	
Oil	Туре	-	PVE	PVE	PVE	
	Initial Charge	cc x n	900 x 1	1,100 x 1	1,100 x 1	
Fan						
Туре		-	Propeller	Propeller	Propeller	
Discharge direction		-	Тор	Тор	Тор	
Number of Fans		ea	1	1	1	
Airflow Rate		m³/min	164	181	196	
External Static Pressure	Max.	l/s	2,738	3,019	3,260	
External Static Pressure	™dX.	mmAq Pa	11 110	11 110	11 110	
Fan Motor		Pd	110	110	110	
Туре		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output		Wxn	630 x 1	630 x 1	630 x 1	
Piping Connections						
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	
History Con Pine (UP Only)		ø, inch	3/4	7/8	11/8	
High Pressure Gas Pipe (HR Only)		ø, mm	15.88	19.05	19.05	
Piping length (ODU-IDU) <sup>3</sup>	Max. (Equiv.)	ø, inch m	5/8 200 [220]	3/4 200 [220]	3/4 200 [220]	
Piping length (1st Branch - IDU) <sup>3</sup>	Max.	m	90	90	90	
Total piping length (System)	Max.	m	1,000	1,000	1,000	
Level Difference (ODU in highest position) <sup>3</sup>	Max.	m	110	110	110	
Level Difference (IDU in highest position) <sup>3</sup>	Max.	m	110	110	110	
Level Difference (IDU-IDU) <sup>3</sup>	Max.	m	50	50	50	
Wiring Connections						
Transmission Cable		mm²	0.75	0.75	0.75	
Remark		-	F1, F2	F1, F2	F1, F2	
Refrigerant						
Type Factory Charging		-	7.0 R410.	A (Fluorinated greenhouse gas, GWP=2 7.0	7.0	
ractory charging		kg tCO₂e	14.62	14.62	14.62	
Sound		10020	14.02	14.02	14.02	
Sound Pressure <sup>2</sup>	Cooling	dB(A)	53	56	61	
	Heating	dB(A)	58	60	63	
Sound Power		dB(A)	75	78	81	
		kg	199	211	211	
Net Weight						
Net Weight Net Dimensions (W x H x D)		mm	930 x 1,695 x 765	930 x 1,695 x 765	930 x 1,695 x 765	
Net Dimensions (W x H x D)  Operating Temperature Range		mm	930 x 1,695 x 765	930 x 1,695 x 765		
Net Weight Net Dimensions (W x H x D)					930 x 1,695 x 765 -5-50 -25-24	

- Performances 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
- Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".











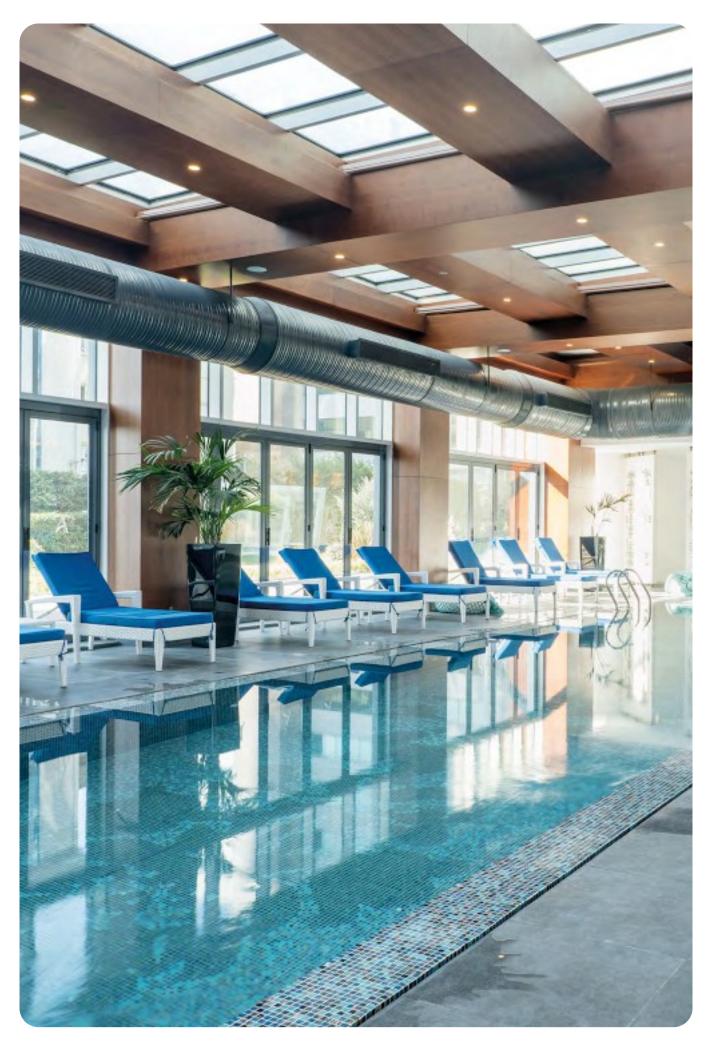








AM140AXVGGR/EU	AM160AXVGGR/EU	AM180AXVGGR/EU	AM200AXVGGR/EU	AM220AXVGGR/EU	AM240AXVGGR/EU	AM260AXVGGR/EU
3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	3Φ, 4, 380-415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz
HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY	HEAT RECOVERY
14	16	18	20	22	24	26
40.0	45.0	50.4	56.0	61.6	67.2	72.8
40.0	45.0	50.4	56.0	61.6	67.2	68.0
26	29	32	36	40	43	47
20.0	22.5	25.2	28.0	30.8	33.6	36.4
52.0	58.5	65.5	72.8	80.1	87.4	94.6
25.44	26.96	26.79	38.63	44.15	48.62	57.61
17.06	19.35	21.14	25.72	27.29	44.20	45.11
4.4	5.2	6.4	7.0	7.4	9.3	10.2
27.0	32.0	39.2	43.0	46.0	55.0	60.0
32	40	50	63	63	63	75
6.7	6.9	7.5	6.5	6.2	5.9	5.4
4.25	4.3	4.8	4.5	4.3	3.9	3.9
265	273	297	257	245	233	213
167	169	189	177	169	153	153
	0.05	0.05				
6.67 x 1	8.93 x 1	8.93 x 1	8.93 x 1	6.67 x 2	6.67 x 2	6.67 x 2
PVE	PVE	PVE	PVE	PVE	PVE	PVE
1,100 x 1	1,400 x 1	1,400 x 1	1,400 x 1	1,100 x 2	1,100 x 2	1,100 x 2
Propeller	Propeller	Propeller	Propeller	Propeller	Propeller	Propeller
Тор	Тор	Тор	Тор	Top	Тор	Тор
2	2	2	2	2	2	2
291	292	313	313	342	365	365
4,852	4,866	5,209	5,209	5,698	6,089	6,089
11	11	11	11	11	8	8
110	110	110	110	110	80	80
BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor	BLDC Motor
620 x 2	620 x 2	620 x 2	620 x 2	620 x 2	620 x 2	620 x 2
12.70	12.70	15.88	15.88	15.88	15.88	19.05
1/2	1/2	5/8	5/8	5/8	5/8	3/4
22.22	28.58	28.58	28.58	28.58	34.92	34.92
7/8	11/8	11/8	11/8	11/8	13/8	13/8
22.22	22.22	22.22	28.58	28.58	28.58	28.58
7/8	7/8	7/8	1-1/8	1-1/8	1-1/8	1-1/8
200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]	200 [220]
90	90	90	90	90	90	90
1,000	1,000	1,000	1,000	1,000	1,000	1,000
110		110				440
110	110	110	110	110	110	110
110	110 110	110	110 110	110 110	110 110	110
	110		110	110	110	
110 50	110 110 50	110 50	110 110 50	110 110 50	110 110 50	110 50
110 50 0.75	110 110 50 0.75	110 50 0.75	110 110 50 0.75	110 110 50 0.75	110 110 50 0.75	110 50 0.75
110 50	110 110 50	110 50	110 110 50	110 110 50	110 110 50	110 50
110 50 0.75	110 110 50 0.75	110 50 0.75 F1, F2	110 110 50 0.75	110 110 50 0.75 F1, F2	110 110 50 0.75	110 50 0.75
110 50 0.75	110 110 50 0.75	110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 110 50 0.75	110 50 0.75
110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 110 50 0.75 F1, F2	110 50 0.75 F1, F2
110 50 0.75 F1, F2 8.0 16.70	110 110 50 0.75 F1, F2	110 50 0.75 F1, F2 R410A (I 10.5 21,92	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92	110 110 50 0.75 F1, F2 =2,088) 10.5 21,92	110 110 50 0.75 F1, F2	110 50 0.75 F1, F2 14.0 29.23
110 50 0.75 F1, F2 8.0 16.70	110 110 50 0.75 F1, F2 10.5 21.92	110 50 0.75 F1, F2 R410A (I 10.5 21.92	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92	110 110 50 0.75 F1, F2 =2,088) 10.5 21,92	110 110 50 0.75 F1, F2 14.0 29.23	110 50 0.75 F1, F2 14.0 29.23
110 50 0.75 F1, F2 8.0 16.70	110 110 50 0.75 F1, F2 10.5 21.92 58 61	110 50 0.75 F1, F2 R410A (I 10.5 21.92	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92	110 110 50 0.75 F1, F2 =2,088) 10.5 21.92	110 110 50 0.75 F1, F2 14.0 29.23	110 50 0.75 F1, F2 14.0 29.23
110 50 0.75 F1, F2 8.0 16.70	110 110 50 0.75 F1, F2 10.5 21.92	110 50 0.75 F1, F2 R410A (I 10.5 21.92	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92	110 110 50 0.75 F1, F2 =2,088) 10.5 21,92	110 110 50 0.75 F1, F2 14.0 29.23	110 50 0.75 F1, F2 14.0 29.23
110 50 0.75 F1, F2 8.0 16.70 58 61	110 110 50 0.75 F1, F2 10.5 21.92 58 61 81	110 50 0.75 F1, F2 R410A (I 10.5 21.92 59 63 81	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92 61 63 84	110 110 50 0.75 F1,F2 =2,088) 10.5 21.92 64 65 86	110 110 50 0.75 F1, F2 14.0 29.23 65 67	110 50 0.75 F1, F2 14.0 29.23 65 67
110 50 0.75 F1, F2 8.0 16.70 58 61 81	110 110 50 0.75 F1, F2 10.5 21.92 58 61 81	110 50 0.75 F1, F2 R410A (I 10.5 21,92 59 63 81	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92 61 63 84	110 110 50 0.75 F1,F2 =2,088) 10.5 21,92 64 65 86	110 110 50 0.75 F1, F2 14.0 29.23 65 67 87	110 50 0.75 F1, F2 14.0 29.23 65 67 87
110 50 0.75 F1, F2 8.0 16.70 58 61	110 110 50 0.75 F1, F2 10.5 21.92 58 61 81	110 50 0.75 F1, F2 R410A (I 10.5 21.92 59 63 81	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92 61 63 84	110 110 50 0.75 F1,F2 =2,088) 10.5 21.92 64 65 86	110 110 50 0.75 F1, F2 14.0 29.23 65 67	110 50 0.75 F1, F2 14.0 29.23 65 67
110 50 0.75 F1, F2 8.0 16.70 58 61 81	110 110 50 0.75 F1, F2 10.5 21.92 58 61 81	110 50 0.75 F1, F2 R410A (I 10.5 21,92 59 63 81	110 110 50 0.75 F1, F2 Fluorinated greenhouse gas, GWP 10.5 21.92 61 63 84	110 110 50 0.75 F1,F2 =2,088) 10.5 21,92 64 65 86	110 110 50 0.75 F1, F2 14.0 29.23 65 67 87	110 50 0.75 F1, F2 14.0 29.23 65 67 87



#### **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

DVM S Water gives an effective and reliable performance using water as a means of heat exchange. It can be connected through a heat exchanger to multiple natural sources like geothermal loops, seawater or lakes.



#### DVM S Water (R410A)

- 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.







				,			
	Mod	del		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	3Ф, 4, 380-415 V, 50/60 Hz	
Performance							
HP			HP	8	10	12	
Capacity (Nominal)	Cooling		kW	22.4	28.0	33.6	
	Heating		kW	25.2	31.5	37.8	
	of connectable indoor uni	ts	ea	14	18	22	
Total capacity of the connected	Min. Max.		kW	11.2	14.0	16.8	
indoor units	Mdx.		kW	29.1	36.4	43.7	
Power Input	Cooling		LAM	7./7	4.07	400	
(Nominal)	Heating		kW kW	3.67 3.97	4.87 5.04	6.00 6.25	
Current Input	Cooling		A	5.9	8.1	9.6	
(Nominal)	Heating		A	6.4	8.4	10.0	
Current	Minimum SSC value		MVA	3.9	3.9	4.8	
	MCA		Α	16.1	16.1	20.0	
	MFA		Α	20	20	25	
COP1							
Nominal Cooling			W/W	6.10	5.75	5.60	
Nominal Heating			W/W	6.35	6.25	6.05	
Compressor							
Type Output			-	Inverter Scroll	Inverter Scroll	Inverter Scroll	
Oil	Туре		kW×n	4.96 x 1 PVE	4.96 x 1 PVE	6.13 x 1 PVE	
Oit	Initial Charge		cc	3,900	3,900	3,900	
Condenser			· · ·	3,700	3,700	3,700	
Туре			-	Plate Heat Exchanger	Plate Heat Exchanger	Plate Heat Exchanger	
Pipe Size			ø, inch	PT11/4	PT11/4	PT11/4	
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	
Dining Companies			ø, inch	3/4	7/8	11/8	
Piping Connection Discharge Gas Pip			ø, mm	15.88	19.05	19.05	
Discharge dus rip	•		ø, inch	5/8	3/4	3/4	
Piping length	Outdoor-Indoor	Max.	m m	170 (190)	170 (190)	170 (190)	
	After branch	Max.	m	90	90	90	
Total piping	System	Actual	m	500	500	500	
length Level difference	Outdoor-Indoor	Outdoor unit in					
20 vot uniterence	Saturdi maddi	highest position	m	50	50	50	
		Indoor unit in highest position	m	40	40	40	
	Indoor-Indoor	Max.	m	50	50	50	
Wiring Connection	ns			. <del></del>			
Communication	Minimum		mm²	0.75	0.75	0.75	
	Remark		-	F1, F2	F1, F2	F1, F2	
Refrigerant							
Туре			-		(Fluorinated greenhouse gas, GWP=2		
Factory Charging			kg	5.5	5.8	6.0	
Council			tCO₂e	11.48	12.11	12.53	
Sound Pressure <sup>2</sup>		Cooling	dD(A)	48	40	50	
Journa i-1635u16-		Heating	dB(A) dB(A)	48 51	48 51	50	
Sound Power			dB(A)	70	70	70	
External Dimension	ons		0.50.0	, ,	, 0	,,,	
Net Weight			kg	160.0	160.0	160.0	
Net Dimensions (V	V x H x D)		mm	770 x 1,000 x 545	770 x 1,000 x 545	770 x 1,000 x 545	
Operating Temper	ature 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
3Ф, 4, 380-415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz
20	70
20 56.0	30 84
63	94.5
36	55
28.0	42.0
72.8	109.2
10.77	16.80
10.86	16.88
17.3	26.4
17.4	26.5
7.7	-
32.2 40	48.0 63
40	03
5.20	5.00
5.80	5.60
Inverter Scroll	SSC Scroll x 2
4.96 x 2	6.75 x 2
PVE	PVE
6,200	6,200
Plate Heat Exchanger	Plate Heat Exchanger
PT11/4	PT 2
54	50
190	285
1.96	1.96
15.88	19.05
5/8	3/4
28.58	34.92
11/8	13/8
28.58	28.58
11/8	11/8
170 (190)	170 (190)
90	90
500	500
50	50
40	40
50	50
0.75	0.75
0.75 F1, F2	0.75 F1, F2
	reenhouse gas, GWP=2,088)
9.8	11.0
20.46	22.96
51	55
52	58
73	75
240.0	280.0
1,100 x 1,000 x 545	280.0 1,100 x 1,000 x 545
1,100 x 1,000 x 343	1,100 x 1,000 x 545
10.0~45.0	10.0~45.0
10.0~45.0	10.0~45.0

- Performances are based on the following test conditions:

   Cooling: Indoor temperature: 27 °C DB, 19 °C WB,
   Indet 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

- Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ according to operating conditions. Sound power level is an absolute value that a sound source generates. Sound Power: ODU and IDU operation mode is "Cooling" and hydro unit is "Heating".

Indoo Units VRF





## Line-up indoor 1/2

#### Universal R32 & R410A

Model	Image						С	apacity (kW)			
		1.5	1.7	2.2	2.8	3.6	4.5	5.6	6.0	7.1	
Cassette NEW											
WindFree™ 1-Way Cassette			•	•	•	•		•		•	
WindFree™ Mini 4-Way Cassette		•		•	•	•	•	•	•		
WindFree™ 4-Way Cassette					•	•	•	•		•	
Sensible WindFree™ 4-Way Cassette	1			•	•	•	•	•		•	
360 Cassette	0						•	•		•	
Ducted NEW											
LSP Duct (drain pump included)	_		•	•	•	•	•	•		•	
MSP Duct (drain pump included)				•	•	•	•	•		•	
Sensible MSP Duct (drain pump included)				•	•	•	•	•		•	
HSP Duct											
Ceiling NEW											
Floor/Ceiling								•			
Big Ceiling	+									•	
Wall-Mounted NEW											
WindFree™ Deluxe (EEV included)		•		•	•	•	•	•		•	
Max Wall-Mounted											

- NOTE

  Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

  Make sure to use an indoor unit that is compatible with DVM S2.

  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 × Σ (Outdoor unit capacity)

  STotal capacity of the connected indoor units 13. × Σ (Outdoor unit capacity).

  EEV kit is necessary for all Indoor Units which do not have EEV kit included, please order EEV Kit separately.

						Capacity (kW)					
8.2	9.0	11.2	12.8	14.0	16.0	18.0	22.0	25.0	28.0	32.0	50.0
	•	•	•	•							
	•	•	•	•							
	•	•	•	•	•						
	•	•	•	•							
		•		•							
•											
	_										
	•										

## Line-up indoor 2/2

#### **R410A**

Model	Image						Ca	apacity (kW)			
		1.5	1.7	2.2	2.8	3.6	4.5	5.6	6.0	7.1	
Ducted											
LSP Duct (drain pump excluded) R410A	_		•	•	•	•	•	•		•	
HSP Duct R410A											
Wall-Mounted											
WindFree™ Deluxe (EEV excluded) R410A		•		•	•	•	•	•		•	
FloorStanding											
Console R410A				•	•	•	•	•			
Concealed Floor-Standing R410A	100					•		•		•	
Packaged Floor-Standing R410A											
Hydro Unit											
Hydro Unit HE R410A	í i										
Hydro Unit HT R410A	F										

- NOTE

   Make sure to use an indoor unit that is compatible with DVM S2.

   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 × Σ (Outdoor unit capacity)

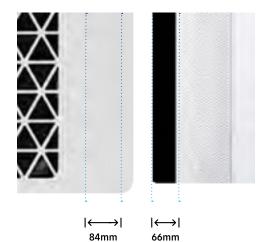
   Total capacity of the connected indoor units ≤ 1.3 × Σ (Outdoor unit capacity).

   EEV kit is necessary for all Indoor Units which do not have EEV kit included, please order EEV Kit separately.

						Capacity (kW)					
8.2	9.0	11.2	12.8	14.0	16.0	18.0	22.0	25.0	28.0	32.0	50.0
	•										
	•										
						•	•	•	•		
•											
•											
				•					•		
											_
					•					•	•
					•			•			

## WindFree<sup>™</sup> 4-Way Cassette <sup>™</sup>





#### **Optimised blades**

The larger optimised blades¹ (84 mm WindFree™ 4-Way Cassette, 66 mm WindFree™ 4-Way 600 x 600 Cassette) facilitate a wider cooling range and improved air circulation within the room. This advanced technology also cools the space much faster leaving no zone untouched. These blades are detachable and can be washed easily with water to remove dust or debris that has collected on them, therefore allowing for optimal quality of airflow that in turn helps maintain a cleaner environment.

Samsung testing compares the WindFree™ 4-Way and WindFree™ 4-Way 600 x 600 Cassette to a previous 4-Way Cassette type air conditioner.

## Smart Comfort Operation

The WindFree™ 4-Way Cassette and the WindFree™ 4-Way 600 x 600 Cassette boosts 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.





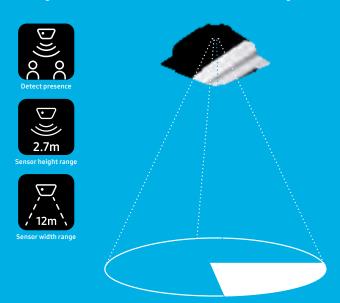




WindFree™ Cooling

#### 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.

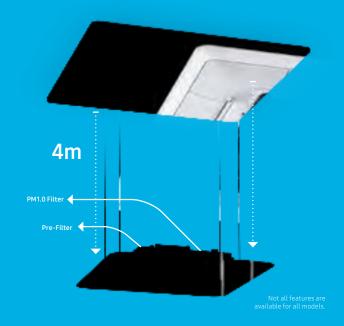


#### **Auto Elevation Panel**

The cleaning of filters is also an integral part of maintaining good indoor air quality, and elevation panels can make this process easier.

An Auto Elevation Panel is a panel that provides quick and comfortable access to dust filters for cleaning, facilitating extra convenience with the 4 metre<sup>1</sup> elevation advantage with a single remote click. Thus, a ladder is no longer required when cleaning panels. This makes it easier and safer for end users or service engineers to access filters for cleaning.

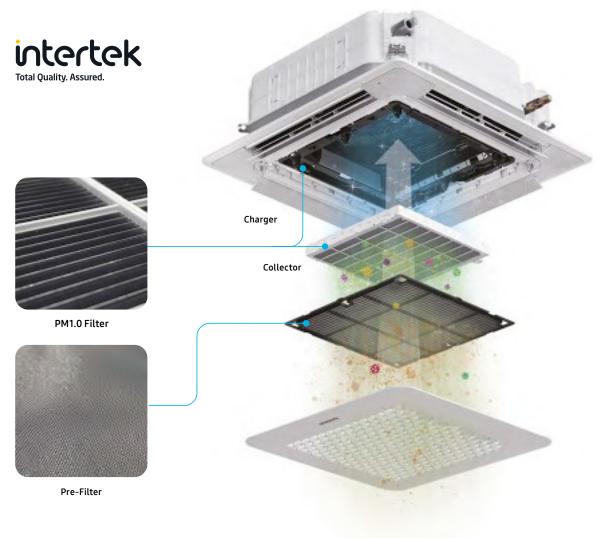
<sup>1</sup> May vary based on the actual usage conditions.



#### **Air Purification Panel**

The Air Purification Panels in the WindFree™ 4-Way Cassette contain two types of filters to enhance the mitigation of certain Particulate Matter (PM), aimed to keep the indoor air cleaner all day long. The WindFree™ 4-Way Cassette is made of a two filter purification system the Pre-Filter and the PM1.0 Filter. The Pre-Filter captures larger dust particles, stopping them from entering the air conditioning unit.

The PM1.0 Filter¹ not only effectively captures ultrafine dust upto  $0.3~\mu m$  but also inactivates certain types of bacteria that are captured, using an electrostatic precipitator. It has two main parts that charge and collect certain types of dust and bacteria¹. The brush discharger generates negative ions. And these give certain dust particles and bacteria¹ a negative charge, so they become strongly attached to the ground electrode due to the electrostatic force of the collector. An added advantage is that this filter is also semi washable, thus saving the purchase and maintenance cost of replacing the filter.

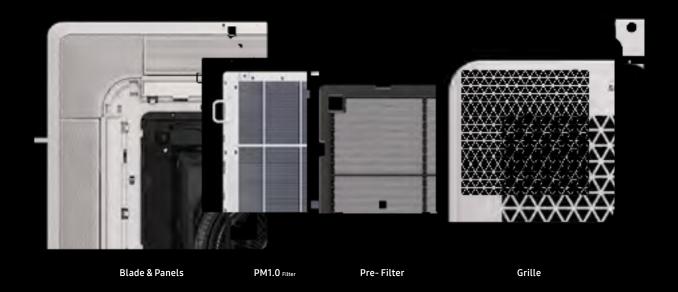


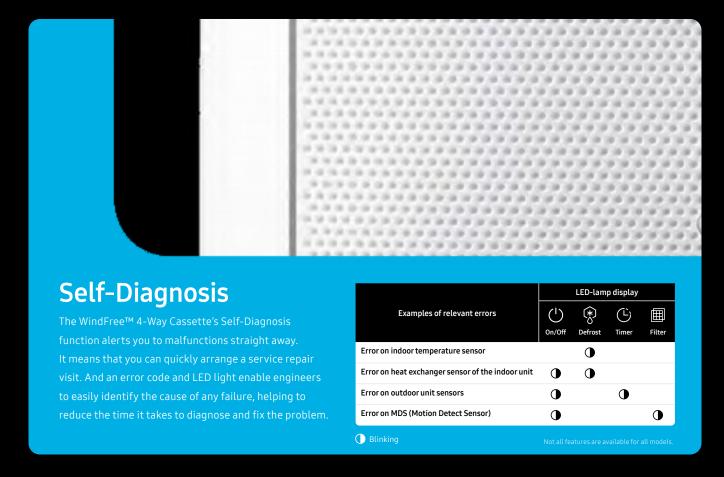
<sup>&</sup>lt;sup>1</sup> Intertek Report No.: RT20E-S0010-R Date: APR. 17, 2020 (Revised) Based on the data collected the Hypothesis is accepted: The K-element (Electrostatic Precipitator) of Samsung Electronics can sterilize the certain types of bacteria that collected on the filter. (Escherichia coli: above 99 %, Staphylococcus aureus: above 99 %)

#### **Detachable Washable Parts**

The cleanliness of the exterior, as well as the filters, is very important for 4-Way Cassettes that are widely used in commercial spaces. The panels and filters of the WindFree<sup>TM</sup> 4-Way Cassette are very

easy to remove and clean. One can pull the hook inside the panel grille (near the Samsung logo) to open and remove it. And the corner panels and blades can be easily separated when pulled downwards. All of the exterior parts can be cleaned with a soft brush or cloth. You can also use a vacuum or water to clean the internal filter, so you don't need to keep purchasing new filters.





#### 





- Fast Cooling mode and WindFree™ 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.
- Can be controlled by Smartphone via Wi-Fi Kit.
- Built-in R32 refrigerant leak detect sensor.
- Motion Detect Sensor (Optional).







Mo	odel		AM015DNNDKG/EU	AM022DNNDKG/EU	AM028DNNDKG/EU	
PowerSupply		Φ, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz	
Performance		Ψ, π, ν, 112	14, 2, 220–240 V, 30/00 Hz	10, 2, 220-240 1, 30/00 112	10, 2, 220-240 V, 30/00 Hz	
Capacity	Cooling	kW	1.5	2.2	2.8	
	Heating	kW	1.7	2.5	3.2	
Power		KW	1.7	2.3	5.2	
owerInput	Cooling	W	18	18	18	
	Heating	w	18	18	18	
Current Input	Cooling	Α	0.17	0.17	0.17	
	Heating	A	0.17	0.17	0.17	
Current	MCA	Ā	0.23	0.23	0.23	
	MFA	A	15	15	15	
Fan			15	15	13	
ype		_	Turbo Fan	Turbo Fan	Turbo Fan	
Number of Fans		ea	1	1	1	
Airflow Rate	H/M/L	m³/min	8.2/7.2/6.5	9.0/7.7/6.5	10.0/8.5/7.5	
		l/s	142/120/108	150/128/108	167/142/125	
an Motor		4,5	142/120/100	130, 120, 100	107/142/123	
Model		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output x n		W	65 x 1	65 x 1	65 x 1	
Piping Connections		"	03 X I	03 X I	03 X I	
iquid Pipe		ø, mm	6.35	6.35	6.35	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		ø, inch	1/4	1/4	1/4	
ias Pipe		ø, mm	12.7	12.7	12.7	
•		ø, inch	1/2	1/2	1/2	
Orain Pipe		ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	
Viring Connections		2,	11 23 (03 32, 13 23)	11 23 (03 32, 13 23)	V. 25 (05 52, 15 25)	
Communication	Min.	mm²	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant			1912		. 9.2	
Type		-	R3	2(Fluorinated greenhouse gas, GWP=6	75)	
Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
ound						
Sound Pressure <sup>1</sup>	H/M/L	dB(A)	30/28/23	32/29/25	33/30/26	
ound Power	Cooling	dB(A)	46	47	50	
Dimensions		22(17				
Net Weight		kg	11.5	11.6	11.6	
Net Dimensions (W × H × D)		mm	575 x 250 x 575	575 x 250 x 575	575 x 250 x 575	
Panel			***************************************			
Model Name		-	PC4SUFMANW	PC4SUFMANW	PC4SUFMANW	
Drain Pump						
Drain Pump		-	INCLUDED	INCLUDED	INCLUDED	
Max. Lifting Height/Displacement		mm/				
		litres/h	750/24	750/24	750/24	

#### **Controls**













Wireless Remote Controller	Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wi-Fi Kit
AR-EH03E	AR-CH01E	MWR-SH00N	MWR-SH11N	MWR-WG01*N	MIM-H04EN

<sup>\*</sup> Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

¹ Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.









AM036DNNDKG/EU	AM045DNNDKG/EU	AM056DNNDKG/EU	AM060DNNDKG/EU
1Ф, 2, 220-240 V, 50/60 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
0.25	0.29	0.35	0.39
15	15	15	15
15	15	15	15
Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
1	1	1	1
10.5/9.0/7.5	11.5/10.2/9.0	13.0/11.0/9.5	13.5/12.0/10.2
175/150/125	192/170/150	217/183/158	225/200/170
1737 1307 123	172/110/130	211/103/130	223/200/170
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)			
0.75	0.75	0.75	0.75
F1, F2	F1, F2	F1, F2	F1, F2
	R32(Fluorinated greer	nhouse gas, GWP=675)	
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
34/30/26	36/34/32	39/36/33	40/38/35
51	53	56	57
11.6	12	12	12
575 x 250 x 575			
PC4SUFMANW	PC4SUFMANW	PC4SUFMANW	PC4SUFMANW
INCLUDED	INCLUDED	INCLUDED	INCLUDED
750/24	750/24	750/24	750/24

#### Accessories







External Room Sensor

MRW-TA

Panel (Mandatory)
PC4SUFMANW

Motion Detect Sensor

MCR-SMD

#### 





- Fast Cooling mode and WindFree™ 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.

- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Motion Detect Sensor (Optional).
- Air Purification Panel, Auto Elevation Panel (Optional).







М	lodel		AM022DN4FKG/EU	AM028DN4FKG/EU	AM036DN4FKG/EU	
PowerSupply		Ф, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz	
Performance		Ψ, #, ۷, Π2	1Ψ, 2, 220-240 V, 30/60 H2	1Ψ, 2, 220-240 V, 30/60 H2	1Φ, 2, 220=240 V, 30/60 H2	
Capacity	Cooling	kW	2.2	2.8	3.6	
cupacity	Heating	kW	2.5	3.2	4.0	
Power	ricating	KW	2.3	3.2	4.0	
PowerInput	Cooling	W	17	20	27	
. onepac	Heating	W	17	20	27	
Current Input	Cooling	A	0.14	0.17	0.23	
current input	Heating	A	0.14	0.17	0.23	
Current	MCA	A	0.29	0.33	0.23	
current	MFA	A	15	15	15	
Fan	PILA	А	15	15	15	
Туре		-	Turbo Fan	Turbo Fan	Turbo Fan	
Number of Fans		-	Turbo Fan	1 Iurbo Fan	1 Iurdo Fan	
Airflow Rate		m³/min	13.0/12.0/11.0	14.0/13.0/12.0	16.0/15.0/14.0	
H/M/L		l/s	217/200/183	233/217/200	267/250/233	
Fan Motor		1/5	21//200/183	233/21//200	20//250/253	
Model			DIDCM	DI DC Mala	DI DCM. I	
Output x n		w	BLDC Motor 65 x 1	BLDC Motor 65 x 1	BLDC Motor 65 x 1	
•		W	03 X I	05 X I	03 X I	
Piping Connections Liquid Pipe			6.35	6.35	6.35	
Liquiu Fipe		ø, mm				
Gas Pipe		ø, inch	1/4	1/4	1/4	
das Pipe		ø, mm	12.70	12.70	12.70	
Drain Pipe		ø, inch	1/2	1/2	1/2	
· · · · · · · · · · · · · · · · · · ·		ø, mm	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	VP25 (OD 32,ID 25)	
Wiring Connections Communication	Minimum	2				
Communication		mm²	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant				are	75)	
Type		-		2(Fluorinated greenhouse gas, GWP=6		
Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound Pressure <sup>1</sup>	H/M/L/W	18/43		77.77.77		
Sound Pressure	H/M/L/W Cooling	dB(A)	32/30/29/29	33/31/30/30	34/33/31/31	
	Cooling	dB(A)	48	49	50	
Dimensions						
Net Weight		kg	18	18	18	
Net Dimensions (W × H × D)		mm	840 x 246 x 840	840 x 246 x 840	840 x 246 x 840	
Panel			DC4NU/5NANUM/	DC AND ISAAANIM	DC AND EMANDE	
Model Name			PC4NUFMANW PC4NBFMANW	PC4NUFMANW PC4NBFMANW	PC4NUFMANW PC4NBFMANW	
		-	PC4NUCMANW	PC4NUCMANW	PC4NUCMANW	
			PC4NUXMANW	PC4NUXMANW	PC4NUXMANW	
Drain Pump						
Drain Pump  Max. Lifting Height/Displacement		- mm/	INCLUDED	INCLUDED	INCLUDED	

<sup>\*</sup> Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

¹ Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.







AM045DN4FKG/EU	AM056DN4FKG/EU	AM071DN4FKG/EU
1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz
4.5	5.6	7.1
5.0	6.3	8.0
35	49	75
35	49	75
0.29	0.38	0.58
0.29	0.38	0.58
0.49	0.57	0.56
15	15	15
Turbo Fan	Turbo Fan	Turbo Fan
1	1	1
18.0/16.0/14.0	24.0/21.0/19.0	31.0/26/0/21.0
300/267/233	400/350/317	517/433/350
BLDC Motor	BLDC Motor	BLDC Motor
65 x 1	97 x 1	97 x 1
6.35	6.35	9.52
1/4	1/4	3/8
12.70	12.70	15.88
1/2	1/2	5/8
VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
		•
0.75	0.75	0.75
F1, F2	F1, F2	F1, F2
,	. ,,	. ,
R3	2(Fluorinated greenhouse gas, GWP=67	5)
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
34/32/30/30	35/33/29/29	39/36/32/32
50	55/ 55/ 29/ 29	55
30	11	23
18	21.5	22.5
840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
040 X 240 X 040	040 A 200 A 040	040 A 200 A 040
PC4NUFMANW	PC4NUFMANW	PC4NUFMANW
PC4NBFMANW	PC4NBFMANW	PC4NBFMANW
PC4NUCMANW PC4NUXMANW	PC4NUCMANW	PC4NUCMANW
PC4NUXMANW	PC4NUXMANW	PC4NUXMANW
INCLUDED	INCLUDED	INCLUDED

#### Controls







Wireless Remote Controller	Wireless Remote Controller	Simple Type Controller
AR-EH03E	AR-CH01E	MWR-SH00N
881		-
Touch Controller	Wired Remote Controller	Wi-Fi Kit
MWR-SH11N	MWR-WG01*N	MIM-H04EN

#### Accessories







External Room Sensor	Panel Black (Mandatory)	Panel White (Mandatory)
MRW-TA	PC4NBFMANW	PC4NUFMANW
800	80	B
Air Purification Panel (Optional)	Auto Elevation Panel (Optional)	Motion Detect Sensor
PC4NUCMANW	PC4NUXMANW	MCR-SMC

#### 





- Fast Cooling mode and WindFree™ 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.

- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Motion Detect Sensor (Optional).
- Air Purification Panel, Auto Elevation Panel (Optional).







Мо	odel		AM028DN4DKG/EU	AM036DN4DKG/EU	AM045DN4DKG/EU	
Power Supply		Φ, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	10, 2, 220-240 V, 50/60 Hz	
Performance		Ψ, #, ۷, Π2	1Ψ, 2, 220-240 V, 30/60 H2	1Ψ, 2, 220-240 V, 30/00 H2	1Ψ, 2, 220-240 V, 30/60 H2	
Capacity	Cooling	kW	2.8	3.6	4.5	
capacity	Heating	kW	3.2	4.0	5.0	
Power	ricating	KW	3.2	4.0	5.0	
PowerInput	Cooling	W	24	26	28	
i ower input	Heating	W	24	26	28	
Current Input	Cooling	A	0.25	0.27	0.30	
current input	Heating	A	0.25	0.27	0.30	
Current	MCA	A	0.33	0.27	0.30	
Current	MFA	A	15	15	15	
5	MIA	А	15	15	15	
Fan Type		-	Tuebe Fee	Tuebe Fee	Tuebe Fee	
Number of Fans			Turbo Fan	Turbo Fan	Turbo Fan	
Airflow Rate		ea	1	1	1	
H/M/L		m³/min	14.4/13.4/12.4	15.4/14.4/13.4	16.3/15.4/14.4	
		l/s	240/223.3/206.7	255/240/223.3	271.7/256.7/240	
Fan Motor Model			818844		515511	
		-	BLDC Motor	BLDC Motor	BLDC Motor	
Output x n		W	65 x 1	65 x 1	65 x 1	
Piping Connections Liquid Pipe						
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)	
Wiring Connections						
Communication	Minimum	mm²	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	
Refrigerant						
Туре		-		32(Fluorinated greenhouse gas, GWP=6		
Electronic Expansion Valve		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound						
Sound Pressure <sup>1</sup>	H/M/L/W	dB(A)	30/28/27/27	31/30/28/28	33/31/29/29	
Sound Power	Cooling	dB(A)	46	47	49	
Dimensions						
Net Weight		kg	15.0	15.0	15.0	
Net Dimensions (W × H × D)		mm	840 x 204 x 840	840 x 204 x 840	840 x 204 x 840	
Panel						
Model Name			PC4NUFMANW PC4NBFMANW	PC4NUFMANW PC4NBFMANW	PC4NUFMANW PC4NBFMANW	
		-	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	
			PC4NUXMANW	PC4NUXMANW	PC4NUXMANW	
Drain Pump						
Drain Pump		-	INCLUDED	INCLUDED	INCLUDED	
Max. Lifting Height/Displacement		mm/	750 / 24	750 / 24	750/24	
		litres/h	.55 / 24	,50 / 24	,30,2.	

#### **Controls**















Wireless Remote Controller	Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wi-Fi Kit
AR-EH03E	AR-CH01E	MWR-SH00N	MWR-SH11N	MWR-WG01*N	MIM-H04EN

<sup>\*</sup> Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

¹ Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.













AM056DN4DKG/EU	AM071DN4DKG/EU	AM090DN4DKG/EU	AM112DN4DKG/EU	AM128DN4DKG/EU	AM140DN4DKG/EU
1Ф, 2, 220-240 V, 50/60 Hz					
5.6	7.1	9.0	11.2	12.8	14.0
6.3	8.0	10.0	12.5	13.8	16.0
32	34	55	78	95	115
32	34	55	78	95	115
0.32	0.35	0.45	0.60	0.75	0.85
0.32	0.35	0.45	0.60	0.75	0.85
0.43	0.47	0.6	0.8	1.0	1.13
15	15	15	15	15	15
Turbo Fan					
1	1	1	1	1	1
16.4/14.6/12.8	18.2/15.4/12.8	24.4/19.9/15.5	26.6/21.0/15.5	35.4/29.2/24.3	37.9/31.7/25.5
273/243.3/213.3	303.3/256.7/213.3	406.7/331.7/258.3	443.3/350/258.3	590/486.7/405	631.7/528.3/425
BLDC Motor					
65 x 1	65 x 1	65 x 1	65 x 1	97 x 1	97 x 1
6.35	9.52	9.52	9.52	9.52	9.52
1/4	3/8	3/8	3/8	3/8	3/8
12.70	15.88	15.88	15.88	15.88	15.88
1/2	5/8	5/8	5/8	5/8	5/8
VP25 (OD 32, ID 25)					
0.75	0.75	0.75	0.75	0.75	0.75
F1, F2					
		R32(Fluorinated green	nhouse gas, GWP=675)		
EEV INCLUDED					
75 (77 (20 (20	77/74/70/70	70/75/70/70	41/7//70/70	42 /77 /75 /75	44/70/75/75
35/33/29/29	37/34/30/30	39/35/30/30	41/36/30/30	42/37/35/35	44/39/35/35
51	53	55	59	58	60
16.5	16.5	18.0	19.0	21.5	22.5
840 x 204 x 840	840 x 204 x 840	840 x 246 x 840	840 x 246 x 840	840 x 288 x 840	840 x 288 x 840
PC4NUFMANW	PC4NUFMANW	PC4NUFMANW	PC4NUFMANW	PC4NUFMANW	PC4NUFMANW
PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW	PC4NBFMANW PC4NUCMANW
PC4NUXMANW PC4NUXMANW	PC4NUXMANW PC4NUXMANW	PC4NUXMANW PC4NUXMANW	PC4NUXMANW PC4NUXMANW	PC4NUXMANW PC4NUXMANW	PC4NUXMANW PC4NUXMANW
INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED	INCLUDED
750/24	750/24	750/24	750/24	750/24	750/24

#### **Accessories**













External Room Sensor

MRW-TA P

(Mandatory)
PC4NBFMANW

PC4NUFMANW

(Optional)
PC4NUCMANW

PC4NUXMANW

Motion Detect Sensor

MCR-SMC

# WindFree<sup>™</sup> 1-Way Cassette

#### Slim installation

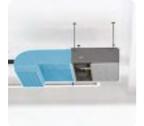
At a height of only 135 mm<sup>1</sup>, the WindFree<sup>™</sup> 1-Way Cassette is a compact and lightweight device (8–13.5 kg). This slim design makes it not only visually pleasing but also easier to install and maintain, and it can be fitted into small gaps or ceilings.



#### **Easy Maintenance**

The Samsung WindFree™ 1-Way Cassette requires no duct work. You simply need to regularly clean the built-in filter with water, after removing it from your air conditioner.

#### **Ducted Airconditioner**



**Duct work required**Dust particles accumulate in both filters and duct work



Professional cleaning service or tool required It is difficult to clean the inside duct work, so you need to hire a professional cleaner

#### WindFree™ 1-Way Cassette



No duct work required
Only the filter needs to be cleaned



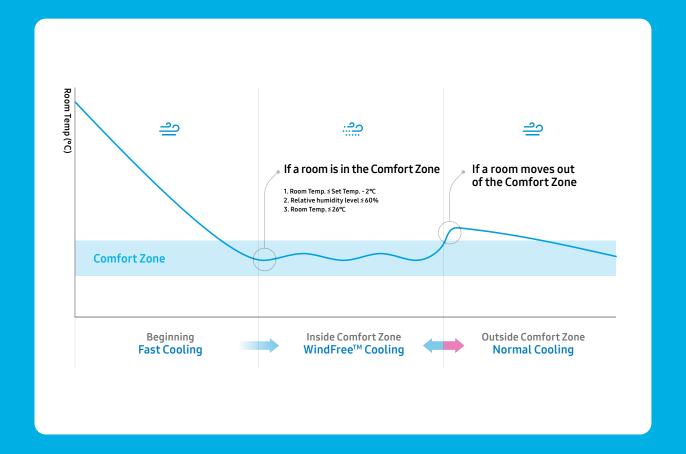
Anyone can clean it with water Only the filter needs to be cleaned

<sup>&</sup>lt;sup>1</sup> 135 mm is the height of the unit until the ceiling tile. 145 mm is the height including the ceiling tile. Up to 3.6 kW (DVM) models measures 135 mm (180 mm including panel)



#### Wider cooling range

The larger optimised blade is 100 mm<sup>1</sup> and works to cool a larger can deliver cool air efficiently, rapidly and evenly over an area of up to 8 m² leaving no zone

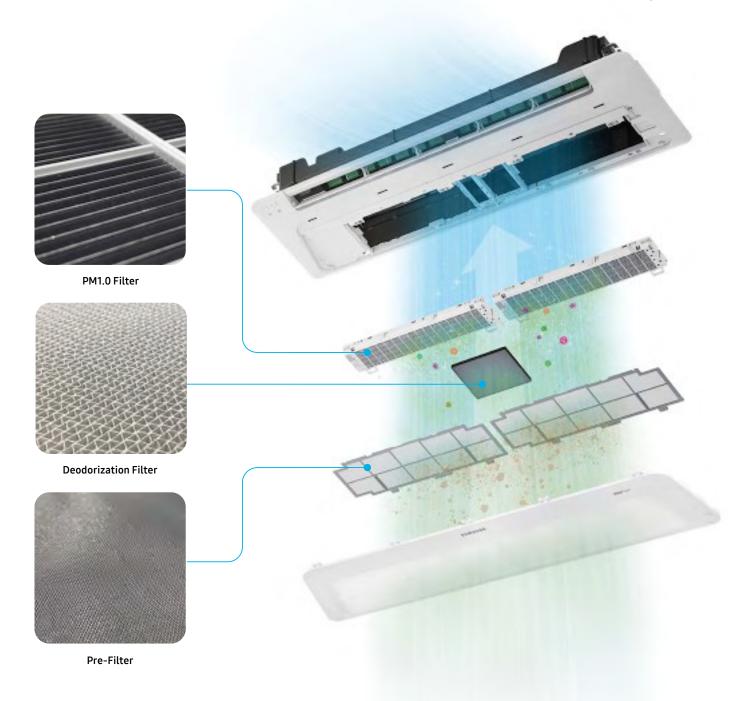


#### **Smart Comfort Operation**

temperature and relative humidity<sup>1</sup> and analyzes the room

modes to keep everyone feeling really comfortable without the need for any manual control.





#### **Air Purification Panel**

The Air Purification Panels in the WindFree™ 1-Way Cassette contain three types of filters to enhance the mitigation of certain Particulate Matter, aimed to keep the indoor air cleaner all day long. The WindFree™ 1-Way Cassette is made of a three filter purification system the Pre-Filter, Deodorization Filter<sup>1</sup> and the PM1.0 Filter.

The Pre-Filter captures larger dust particles, stopping them from entering the air conditioning unit. The deodorization filter captures certain unpleasant odours. The PM1.0 Filter not only effectively

captures ultrafine dust upto  $0.3~\mu m$  but also inactivates certain types of bacteria that are captured, using an electrostatic precipitator. It has two main parts that charge and collect certain types of dust and bacteria.<sup>2</sup> The brush discharger generates negative ions. These give the dust particles and certain types of bacteria a negative charge, so they become strongly attached to the ground electrode due to the electrostatic force of the collector. An added advantage is that this filter is also semi washable, thus saving the purchase and maintenance cost of replacing the filter.

The Deodorization Filter can only be found in WindFree<sup>IM</sup> 1-Way Cassette.
Intertek Report No.: RT20E-S0010-R Date: APR. 17, 2020 (Revised) Based on the data collected the Hypothesis is accepted: The K-element (Electrostatic Precipitator) of Samsung Electronics can sterilize the certain types of bacteria that collected on the filter. (Escherichia coli: above 99 %, Staphylococcus aureus: above 99 %)

# 13,000 micro-holes



#### WindFree<sup>™</sup> Technology

The WindFree™ 1-Way Cassette uses WindFree™ Cooling and 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", which cools the room gradually and noticeably without drafts.

<sup>1</sup> 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.

#### 





- Fast Cooling mode and WindFree™ 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.

- Built-in R32 refrigerant leak detect sensor.
- Optional Air Purification Panel.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).







Model
New
New
Cooling   No
Heating
Name
Colling   W
Covering   Marcian   Mar
Heating   A   0.14   0.15   0.23
MCA   MFA
MFA
Page   -
Marcian   Marc
tirflow Rate
Vs   80.00/71.67/68.33   85.007/6.67/71.67   116.67/100.00/83.33
Model
Model
The content of the
## 1/4
## 12.70
Sinch   1/2   1/
Section   Sect
Minimum   mm²   0.75
Remark   F1, F2   F
### Seffigerant  ### Se
R32(Fluorinated greenhouse gas, GWP=675)   EEV INCLUDED
EEV INCLUDED   EEV INCLUDED   EEV INCLUDED   EEV INCLUDED
Sound   Sound Pressure   Sound Pressure   Sound Pressure   Sound Pressure   Sound Pressure   Sound Power   Sound B(A)   28/26/24   29/26/24   32/28/24   Sound Power   S
cound Pressure¹         (H/M/L)         dB(A)         28/26/24         29/26/24         32/28/24           cound Power         Cooling         dB(A)         46         47         50           Immediate Weight         Set Weight         8.0         8.0         10.0           det Dimensions (W x H x D)         mm         740 x135 x 360         740 x135 x 360         970 x135 x 410           anel           fodel Name         PC1MWFMANW         PC1MWFMANW         PC1MWFMANW         PC1MWFMANW         PC1MWCMANW           ratin pump         PC1MUFDED         INCLUDED         INCLUDED         INCLUDED           fax. Lifting Height/Displacement         mm /         750/24         750/24         750/24         750/24
Cooling   dB(A)   46   47   50
Solid   Soli
Net Weight   Net Dimensions (W x H x D)
Net Dimensions (W x H x D)   mm
PCIMWFMANW
PCIMWFMANW
- PCIMWCMANW PCIMWCMANW PCINWCMANW    PCIMWCMANW   PCIMWC
- INCLUDED INCLUDED INCLUDED  Max. Lifting Height/Displacement
Max. Lifting Height/Displacement mm / 750/24 750/24 750/24
litres/h 730/24 730/24 730/24
uves/n

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment Sound pressure level may differ depending on operation conditions.







AM036DN1DKG/EU	AM056DN1DKG/EU	AM071DN1DKG/EU
1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz
3.6	5.6	7.1
4.0	6.3	8.0
4.0	0.5	8.0
50	55	80
50	55	80
0.25	0.28	0.40
0.25	0.28	0.40
0.31	0.35	0.5
15	15	15
Crossflow Fan	Crossflow Fan	Crossflow Fan
1	1	1
8.00/7.00/6.00	16.00/14.00/12.50	17.00/15.50/14.00
133.33/116.67/100.00	266.67/233.33/208.33	283.33/258.33/233.33
AC Motor	BLDC Motor	BLDC Motor
23 x 1	54 x 1	54 x 1
Z3 X I	54 X I	34 X I
6.35	6.35	9.52
1/4	1/4	3/8
12.70	12.70	15.88
1/2	1/2	5/8
VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)	VP20 (OD 25, ID 20)
0.75	0.75	0.75
F1, F2	F1, F2	F1, F2
DZ	2(Fluorinated greenhouse gas, GWP=67	5)
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
EEV INCEODED	EEV INCEODED	ELV INCEODED
37/33/30	41/38/35	42/39/36
55	59	60
10.0	13.5	13.5
970 x 135 x 410	1,200 x 138 x 450	1,200 x 138 x 450
PC1NWFMANW	DC1DWEMANW	DC1DWEMANIA/
PC1NWFMANW PC1NWCMANW	PC1BWFMANW PC1BWCMANW	PC1BWFMANW PC1BWCMANW
INCLUDED	INCLUDED	INCLUDED
750/24	750/24	750/24

#### Controls







	NEW	
Wireless Remote Controller	Wireless Remote Controller	Simple Type Controller
AR-EH03E	AR-CH01E	MWR-SH00N
98		_
Touch Controller	Wired Remote Controller	Wi-Fi Kit
MWR-SH11N	MWR-WG01*N	MIM-H04EN

#### Accessories







External Room Sensor	Panel (Mandatory)	Air Purification Panel (Optional)
	PC1MWFMANW	PC1MWCMANW
MRW-TA	PC1NWFMANW	PC1NWCMANW
	PC1BWFMANW	PC1BWCMANW





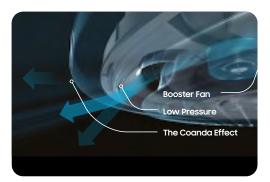


#### **Airflow Control**

The air supply is easily adjusted without the use of flaps. Three booster fans work to alter the direction of airflow from within the cassette's hollow space. A rain-like distribution of the air (known as the 'coanda' effect) keeps the room cool and comfortable at all times. The innovative technology overcomes the usual limits of the conventional outlets that use blades, as they obstruct the air at low angles and cause a significant low airflow¹. The Motion Detector Sensor (MDS) is available for the 360 Cassette.

<sup>1</sup> Based on internal testing compared to a general 4-Way Cassette air conditioner.

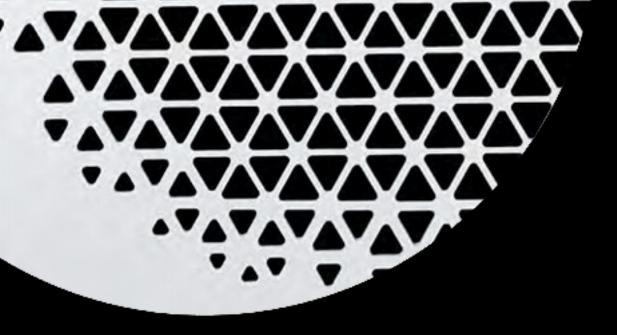




#### Stylish design

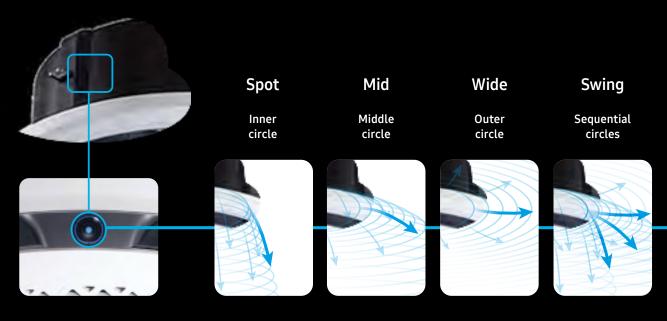
The 360 Cassette has an innovative circular design that enables it to match a multitude of interior designs, that adds a touch of style to any room. Its minimalistic and elegant styling can help to create a sophisticated and distinctive look in many different sites. With a circular panel, it can fit into a very tiny ceiling space of just 225 mm<sup>1</sup>, so it gives you much greater flexibility as it can be installed in a wider choice of locations. The 360 Cassette is available in black or white, in a square or circular design, and can be fitted within the ceiling or exposed on any material.

The minimum installation height of ceiling space may vary depending on the panel design - circular or square type. Square type panels require 30 mm more height in a ceiling space than circular type panel.



## Circular LED display

The unit features a stylish panel and an intuitive Circular LED display, which allows users to choose or adjust the direction of the airflow with an intuitive wireless (jog shuttle) wireless remote controller. Besides the LED Display also monitors other essential operating information, such as the filter the air flow direction, filter status and any errors. So, with just one glance, you can quickly tell where the air is going and how your 360 Cassette is performing.



Samsung 360 Cassette

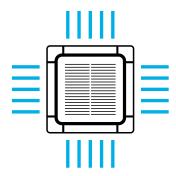
#### Circular airflow

Unlike traditional 4-Way Cassette units<sup>1</sup>, which create areas of uneven airflow<sup>2</sup>, the 360 Cassette reaches every single corner of a room or space. Its circular outlet blows cool air in every direction. The bladeless design keeps things comfortably cool without creating a cold draft<sup>3</sup>, and without blades blocking the airflow it sends 25 % more air even further<sup>1</sup>.

- Samsung testing compares the 360 Cassette to a conventional 4-Way Cassette type air conditioner.
   The temperature difference is less than 0.6 °C within a 9.3 m radius.
   No cold draft between 0-1.5 m in height (with a 14.0 kW indoor unit) within a 5 m radius.

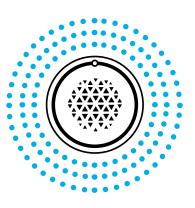
Conventional 4-Way Cassette





Samsung **360 Cassette** 









#### **Air Purification Panel**

The Samsung 360 Cassette offers an Purifying Panel that keeps the indoor air cleaner. It is made of a two filter purification system the pre-filter and the PM1.0 Filter and has a superior filter mesh with 0.5 mm holes, which is 20 % denser than a vinyl chloride type filter.

The Pre-Filter captures larger dust particles, stopping them from entering the air conditioning unit. The PM1.0 Filter is not only effective at capturing ultrafine dust of up to 0.3  $\mu m$  in size, but it also sterilizes up to 99 % of certain types of bacteria¹ trapped by the filter using an electrostatic precipitator1.

- Precipitator) of Samsung Electronics can sterilize certain types of bacteria that collected on the filter (Escherichia coli: above 99 %, Staphylococcus aureus: above 99 %).
- The Air Purification panel is an optional accessory



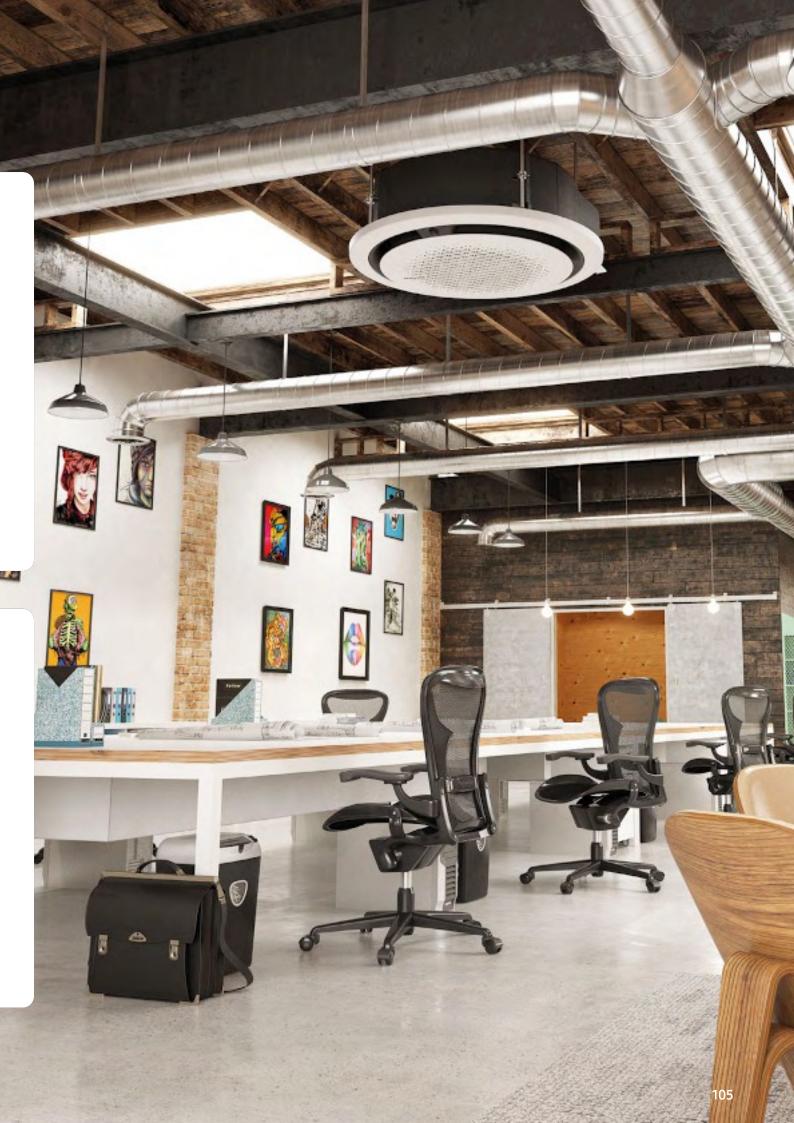
#### **Auto Elevation Panel**

The cleaning of filters is also an integral part of maintaining good indoor air quality, and elevation panels can make this process easier.

An Auto Elevation Panel is a panel that provides quick and comfortable access to dust filters for cleaning, facilitating extra convenience with the 4.5 metre<sup>1</sup> elevation advantage with a single remote click. Thus, a ladder is no longer required when cleaning panels. This makes it easier and safer for end users or service engineers to access filters for cleaning.

- May vary based on the actual usage conditions.
   The Auto Elevation panel is an optional accessory





#### Universal 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 and R32 refrigerant leak detect sensor.
- The Air purification panel is an optional accessory for circle panel.
- Auto elevation panel is an optional accessory available in circle panel
- Circular or square cassette panel. Available in white and black.
- Predisposition of the air inlet to let fresh air in.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Motion Detector Sensor is optional for square cassette panel.







	Model		AM045DN6DKG/EU	AM056DN6DKG/EU	AM071DN6DKG/EU	
PowerSupply		Ф, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz	
Performance						
Capacity (Nominal)	Cooling	kW	4.5	5.6	7.1	
	Heating	kW	5.0	6.3	8.0	
Power						
Power Input (Nominal)	Cooling	W	26	30	34	
	Heating	w	26	30	34	
Current Input (Nominal)	Cooling	Α	0.18	0.21	0.25	
	Heating	Α	0.18	0.21	0.25	
Fan						
Motor	Туре	-	Turbo Fan	Turbo Fan	Turbo Fan	
	Output x n	w	65 x 1	65 x 1	65 x 1	
Airflow Rate	H/M/L (UL)	m³/min	14.50/13.50/12.50	16.00/14.50/13.50	18.00/16.00/14.00	
		l/s	242/225.00/208	267/242/225	300.00/267/233	
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		mm²	1.5-2.5	1.5-2.5	1.5-2.5	
Transmission Cable		mm²	0.75-1.50	0.75-1.50	0.75-1.50	
Refrigerant						
Туре		-	R3	2(Fluorinated greenhouse gas, GWP=67	5)	
Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound						
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	33/31/29	34/32/29	36/33/30	
Sound Power	Cooling	dB(A)	50	51	53	
Dimension						
Net Weight		kg	21	21	21	
Net Dimensions (W x H x D)		mm	947 x 281 x 947	947 x 281 x 947	947 x 281 x 947	
Model Name		-	PC6NUSMANW PC6EUSMANW PC6NBSMANW PC6EBSMANW PC6EUCMANW PC6EUCMANW	PC6NUSMANW PC6EUSMANW PC6NBSMANW PC6EBSMANW PC6EUCMANW PC6EUCMANW	PC6NUSMANW PC6EUSMANW PC6NBSMANW PC6EBSMANW PC6EUCMANW PC6EUCMANW	

#### **Controls**











Wireless Remote Controller	Simple Type Controller	Touch Controller	Wired Remote Controller	Wi-Fi Kit
AR-CH01E	MWR-SH00N	MWR-SH11N	MWR-WG01*N	MIM-H04EN

<sup>\*</sup> Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

¹ Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



#### Accessories

















MCR-SME

External Room Sensor	Panel (Mandatory)	Panel (Mandatory)	Panel (Mandatory)	Panel (Mandatory)	Air Purification Panel (Optional)	Auto Elevation Panel (Optional)
MRW-TA	PC6NUSMANW	PC6EUSMANW	PC6NBSMANW	PC6EBSMANW	PC6EUCMANW	PC6EUXMANW

### LSP Slim Duct



#### Slim design for small ceiling spaces

The Slim Duct S is 200 mm in height, making it much narrower than conventional products. This allows for easy installation and maintenance in all kinds of spaces.<sup>1</sup>

<sup>1</sup> Based on the AM017~071\*NLD\*H/EU



#### Built-in check valve<sup>1</sup>

A check valve 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.

<sup>1</sup> Based on models AM\*\*\*KNLDEH/EU, AM\*\*\*MNLD\*H/EU



### Universal LSP 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.
- Auto Restart function.

- Built-in R32 refrigerant leak detect sensor.
- Built-in condensation drain pump (included).
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)

Performance					-		
Performance		Model		AM017DNLDKG/EU	AM022DNLDKG/EU	AM028DNLDKG/EU	AM036DNLDKG/EU
Performance							
Cologing (Monimal)         Cologing (Monimal)         Wile (Monimal)         2.2         2,8         3.6           Power (Horning)         Week (Monimal)         Week (Monimal)         2.2         2.5         3.2         4.0           Power (Horning)         Cooling (Monimal)         Week (Monimal)         2.8         3.0         3.4         4.0           Current Input (Nominal)         Cooling (Monimal)         Week (Monimal)         2.0         2.0         3.0         3.0         4.0           Current Input (Nominal)         Cooling (Monimal)         Week (Monimal)         2.0         2.0         3.0         3.0         4.0           Current Input (Nominal)         Cooling (Monimal)         Week (Monimal)         2.0         2.0         3.0         3.0         3.0         3.0           Week (Monimal)         Onding (Monimal)         Week (Monimal)         See (Monimal)         3.0         3.0         3.0         3.0         3.0           Week (Monimal)         Menth (Monimal)         Me	Power Supply		Φ, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz
	Performance						
Power [Nominal)         Cooling         W         28         30         34         40           Current Injunt (Nominal)         Cooling         A         28         30         34         42           Current Injunt (Nominal)         Cooling         A         0.23         0.25         0.28         0.33         0.33           Current Injunt (Nominal)         Leding         A         0.23         0.25         0.28         0.33         0.35           Simon         Many         Many         Simon         Simon         Simon         9.00         0.00           Work         Pull         Simon         Simon         Simon         9.00         0.00           Market         Mull         Min         0.49         0.00         <	Capacity (Nominal)	Cooling	kW	1.7	2,2	2,8	3.6
Power input (Nominal)         Cooling         W         28         3 0         3 4         4 0           Current input (Nominal)         Patriag         W         28         3 0         3 0         4 0           Current input (Nominal)         Patriage         A         0.23         0.25         0.30         0.35           To provide the firm of the patriage		Heating	kW	1.9	2,5	3.2	4.0
Meating   Marting   Mart	Power						
Current input (Nominal)         Cooling         A         0.23         0.25         0.28         0.33           France         Heating         A         0.23         0.25         0.29         0.35         0.35           France         Horizon         France         Sirocco Fan         Sirocco Fan         Sirocco Fan         Sirocco Fan         Sirocco Fan         Sirocco Fan         50         69 <td>Power Input (Nominal)</td> <td>Cooling</td> <td>w</td> <td>28</td> <td>30</td> <td>34</td> <td>40</td>	Power Input (Nominal)	Cooling	w	28	30	34	40
No.   Place   Place		Heating	W	28	30	36	42
Prope   Sirocco Fan   Sirocco Fan   Sirocco Fan   Sirocco Fan   Sirocco Fan   Sirocco Fan	Current Input (Nominal)	Cooling	Α	0.23	0.25	0.28	0.33
Sirocco Fan   Motor   Motor   Mupt x m   W   69   69   69   69   69   69   69		Heating	Α	0.23	0.25	0.30	0.35
Motor Output x n W 69 69 69 69 69 69 69 69 69 69 69 69 69	Fan						
Min/Std/ Mare   Min/Std/ Ma	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
Vs   91/4/63   100/82/63   118/86/73   137/108/82     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     Piping Connections	Motor	Output x n	W	69	69	69	69
Min/Std/Max	Airflow Rate	H/M/L (UL)	m³/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
Pa   0.00/s8/2942   0.00/s8/12942   0.00/s8			l/s	91/74/63	100/82/63	118/86/73	137/108/82
Find Connections	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
Seminary   Seminary			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
S, inch   1/4	Piping Connections						
Gas Pipe         a, mm         12,7         12.70	Liquid Pipe		ø, mm	6.35	6.35	6.35	6.35
Part			ø, inch	1/4	1/4	1/4	1/4
VP25 (OD 32, ID 25)   VP25 (OD 32, ID 25)	Gas Pipe		ø, mm	12,7	12.70	12.70	12.70
Field Wirring  Transmission Cable mm² 0.75-1.50 0.75-1.50 0.75-1.50 0.75-1.50 0.75-1.50  Refrigerant  Type EEV INCLUDED EEV INCLUD			ø, inch	1/2	1/2	1/2	1/2
Transmission Cable         mm²         0.75-1.50	Drain Pipe		ø, mm	VP25 (OD 32, ID 25)			
Part	Field Wiring						
Type	Transmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50
FEV INCLUDED	Refrigerant						
Sound         Sound Pressure¹         (H/M/L)         dB(A)         25/22/19         26/23/19         28/24/19         31/26/20           Sound Power         Cooling         dB(A)         40         42         44         46           Dimensions           Net Weight         kg         15.9         15.9         15.9         16.3           Net Dimensions (W × H × D)         mm         700 ×199 × 440         700 ×199 × 440         700 ×199 × 440         700 ×199 × 440           Additional Accessories         Included         Included         Included         Included	Туре		-		R32(Fluorinated gree	nhouse gas, GWP=675)	
Sound Pressure¹         (H/M/L)         dB(A)         25/22/19         26/23/19         28/24/19         31/26/ 20           Sound Power         Cooling         dB(A)         40         42         44         46           Dimensions           Net Weight         kg         15.9         15.9         15.9         16.3           Net Dimensions (W × H × D)         mm         700 ×199 × 440         700 ×199 × 440         700 ×199 × 440         700 ×199 × 440           Additional Accessories         Included         Included         Included         Included	Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound Power         Cooling         dB(A)         40         42         44         46           Dimensions         Net Weight         kg         15.9         15.9         15.9         16.3           Net Dimensions (W × H × D)         mm         700 x199 x440         700 x199 x440         700 x199 x440         700 x199 x440           Additional Accessories         Drain Pump         -         Included         Included         Included         Included	Sound						
Dimensions           Net Weight         kg         15.9         15.9         15.9         16.3           Net Dimensions (W × H × D)         mm         700 x 199 x 440           Additional Accessories         Drain Pump         -         Included         Included         Included         Included         Included	Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	25/22/19	26/23/19	28/24/19	31/26/ 20
Net Weight         kg         15.9         15.9         15.9         16.3           Net Dimensions (W × H × D)         mm         700 x 199 x 440           Additional Accessories         Drain Pump         -         Included         Included         Included         Included	Sound Power	Cooling	dB(A)	40	42	44	46
Net Dimensions (W × H × D)         mm         700 x 199 x 440         Included         Included <td>Dimensions</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Dimensions						
Additional Accessories  Prain Pump - Included Included Included Included Included	Net Weight		kg	15.9	15.9	15.9	16.3
Drain Pump - Included Included Included Included	Net Dimensions (W × H × D)		mm	700 x 199 x 440			
·	Additional Accessories						
Max. Lifting Height/Displacement         mm / litres/h         750/24         750/24         750/24         750/24         750/24	Drain Pump		-	Included	Included	Included	Included
	Max. Lifting Height/Displacement		mm / litres/h	750/24	750/24	750/24	750/24

Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



AM045DNLDKG/EU	AM056DNLDKG/EU	AM071DNLDKG/EU
1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz
4.5	5.6	7.1
5.0	6.3	8.0
51	73	82
46	68	77
0.50	0.62	0.69
0.40	0.58	0.65
Sirocco Fan	Sirocco Fan	Sirocco Fan
84	84	84
12.50/10.00/7.50	15.50/12.50/9.50	18.00/14.50/11.00
208/167/125	258/208/158	300/242/183
0.00/2.00/4.00	0.00/2.00/4.00	0.00/2.00/4.00
0.00/19.61/39.23	0.00/19.61/39.23	0.00/19.61/39.23
6.35	6.35	9.52
1/4	1/4	3/8
12.70	12.70	15.88
1/2	1/2	5/8
VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
0.75~1.50	0.75~1.50	0.75~1.50
R32(I	Fluorinated greenhouse gas, GWP	=675)
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
32 / 28 / 25	34 / 30 / 26	34 / 30 / 27
47	49	49
19.3	19.3	22.7
900 x 199 x 440	900 x 199 x 440	1100 x 199 x 440
Included	Included	Included
750/24	750/24	750/24

#### Controls







MIM-H04EN

Wireless Remote Controller	Wireless Remote Controller	Wireless Receiver Kit
AR-CH01E	AR-EH03E (to be matched with MRK-A10N)	MRK-A10N (to be matched with AR-EH03E)
88		-
	Wired	

MWR-WG01\*N

### Accessories

MWR-SH11N



External Room Sensor

MRW-TA

### LSP Duct (drain pump excluded, R410A)

- 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.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).

	Model		AM017ANLDKH/EU	AM022ANLDKH/EU	AM028ANLDKH/EU	AM036ANLDKH/EU
Power Supply		Ф, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 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	Α	0.23	0.25	0.28	0.33
	Heating	Α	0.23	0.25	0.30	0.35
Fan						
Туре		-	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)	m³/min	5.5 / 4.5 / 3.8	6.0 / 4.9 / 3.8	7.1 / 5.2 / 4.4	8.2 / 6.5 / 4.9
		l/s	91 / 74 / 63	100 / 82 / 63	118 / 86 / 73	137/108 / 82
External Static Pressure	Min/Std/Max	mmAq	0.0 / 1.0 / 3.0	0.0 / 1.0 / 3.0	0.0 / 1.0 / 3.0	0.0 / 1.0 / 3.0
		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)			
Field Wiring						
Power Source Wire	Below 20 m/over 20 m	mm²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
Transmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50
Refrigerant						
Туре		-		R410A (Fluorinated gree	nhouse gas, GWP=2,088)	
Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound						
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	25 / 22 / 19	26 / 23 / 19	28 / 24 / 19	31 / 26 / 20
Sound Power		dB(A)	40	42	44	46
Dimensions						
Net Weight		kg	14.9	14.9	14.9	15.3
Net Dimensions (W x H x D)		mm	700 x 199 x 440			
Air Filter		-	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter
Accessoires						
Drain Pump		-	N/A	N/A	N/A	N/A

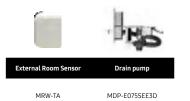
#### **Controls**



<sup>&</sup>lt;sup>1</sup> Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment Sound pressure level may differ depending on operation conditions.

AM045ANLDKH/EU	AM056ANLDKH/EU	AM071ANLDKH/EU	AM090ANLDKH/EU
1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220–240 V, 50/60 Hz
4.5	5.6	7.1	9.0
5.0	6.3	8.0	10.0
51	73	82	170
46	68	77	170
0.45	0.62	0.69	0.96
0.41	0.58	0.65	0.96
Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
84 x 1	84 x 1	84 x 1	183 x 1
12.5 / 10.0 / 7.5	15.5 / 12.5 / 9.5	18.0 / 14.5 / 11.0	29.0 / 27.0 / 25.0
208/167/125	258/208/158	300/242/183	483/450/417
0.0 / 2.0 / 4.0	0.0 / 2.0 / 4.0	0.0 / 2.0 / 4.0	0.0 / 3.0 / 6.0
0.00/19.61/39.23	0.00/19.61/39.23	0.00/19.61/39.23	0.00/29.42/58.84
6.35	6.35	9.52	9.52
1/4	1/4	3/8	3/8
12.70	12.70	15.88	15.88
1/2	1/2	5/8	5/8
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 (Fluorinated gree	nhouse gas, GWP=2,088)	
EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
32 / 28 / 25	34 / 30 / 26	34 / 30 / 27	37 / 36 / 34
47	49	49	66
18.8	18.8	22.0	40.0
900 x 199 x 440	900 x 199 x 440	1,100 x 199 x 440	1,300 x 295 x 690
Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter
N/A	N/A	N/A	MDP-E075SEE3D

### Accessories



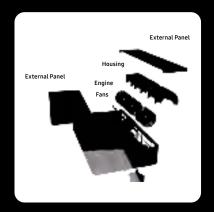
113

### MSP/HSP Duct S<sup>1</sup>

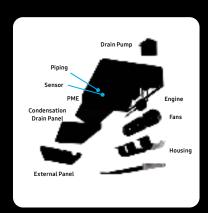
### Easy installation and maintenance

Thanks to their ultra-compact design, Samsung duct units can be placed anywhere. This makes for easy installation and maintenance.

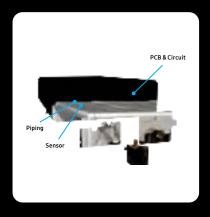
The indoor unit can be accessed from three directions: from the top, bottom and one side, making maintenance simpler than ever.



Accessible from top



Accessible from bottom



Accessible from side

## Installation flexibility and easy maintenance with a lightweight and compact Slim Fit design

The compact and lightweight Slim Fit Design allows you to fit your air conditioner unit into small spaces, thus facilitating its

handling as well as the set up. This means you can now install it in most places within a building with minimum difficulty.



Based on model AM\*\*\*AN\*PKH/EU



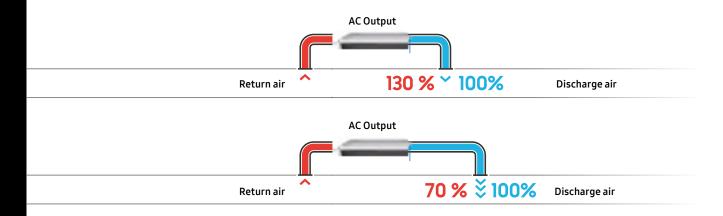
## Indoor discharge temperature

Each ducted indoor unit, or Air Handling Unit (AHU) kit, boosts discharge air temperature control function that offers greater comfort without the need to change the outdoor unit setting. Cooling and heating options can be selected using a remote control, and this applies to all ducted/AHU connected systems.

### Automatic External Static Pressure (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.





### **Universal** 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.
- Built-in R32 refrigerant leak detect sensor.
- Auto Restart function.

- Automatic ESP setting.
- Built-in condensation drain pump.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)









	Model		AM022DNMDKG/EU	AM028DNMDKG/EU	AM036DNMDKG/EU	AM045DNMDKG/EU
Power Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz
Performance		4,, .,	14,2,220 210 1,30,0012	14,2,220 210 1,30,0012	14,2,220 210 1,30,0012	14,2,220 210 1,30,00 112
Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6	4.5
	Heating	kW	2.5	3.2	4.0	5.0
Power	ricating		2.3	J.2	4.0	5.0
Power Input (Nominal)	Cooling	W	42	42	45	55
· one: input (itominut)	Heating	W	42	42	45	55
Current Input (Nominal)	Cooling	Α	0.4	0.4	0.4	0.5
current input (Norminat)	Heating	A	0.4	0.4	0.4	
Current Input (Nominal)	MCA	A				0.5
carrent input (Nonlinat)	MFA/MOP	A	0.67	0.67	0.81	0.89
	MFA/MUP	^	15	15	15	15
Fan Type		-	C	C'	C' F	C' 5
Number of Fans			Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	11/14/1 /111 \	ea	2	2	2	2
Airflow Rate	H/M/L (UL)	m³/min	10.5 / 9.0 / 7.0	10.5 / 9.0 / 7.0	12.0 / 9.5 / 7.5	14.0 / 11.0 / 8.0
		l/s	170 / 150 / 115	170 / 150 /115	200 / 158 / 125	233 / 183 / 133
External Pressure	Min/Std/Max	mmAq	0 / 2.5 / 15	0 / 2.5 / 15	0 / 2.5 / 15	0 / 3 / 15
		Pa	0.00 / 24.52 / 147.10	0.00 / 24.52 / 147.10	0.00 / 24.52 / 147.10	0.00 / 29.42 / 147.10
Fan Motor						
Model		-	BLDC	BLDC	BLDC	BLDC
Output x n		W	153	153	153	153
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)
Wiring Connections						
Connection with Indoor	Minimum	mm²	0.75	0.75	0.75	0.75
	Remark	-	F1, F2	F1, F2	F1, F2	F1, F2
Refrigerant						
Туре		-	R32(F	luorinated greenhouse gas, GWP	P=675)	
Control Method		-	EEV Included	EEV Included	EEV Included	EEV Included
Sound						
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	28/26/24	28/26/24	30/27/24	31/28/25
Sound Power	Cooling (Nominal)	dB(A)	50	51	53	54
Dimensions						
Net Weight		kg	27	27	27	27
Net Dimensions (W × H × D)		mm	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700	850 x 250 x 700
Additional Accessories						
Drain Pump		Model	INCLUDED	INCLUDED	INCLUDED	INCLUDED
	Max. Lifting Height	mm/ Liter/H	750/24	750/ 24	750/24	750/ 24
	5 . 5 .		7307 21	.50, 2.	730, 21	750, 21

#### **Controls**















MRW-TA

**Accessories** 

AR-EH03E MRK-A10N)

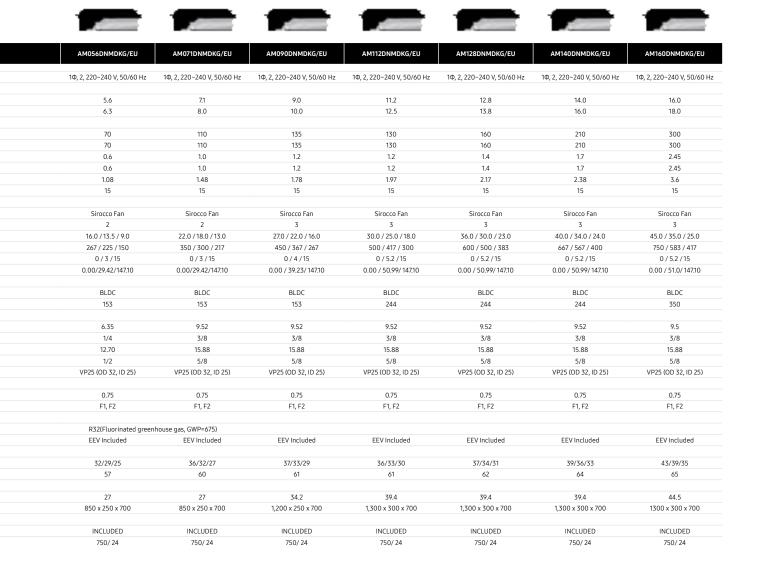
MRK-A10N AR-EH03E)

MWR-WG01\*N

MIM-H04EN

Wi-Fi Kit

Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



### Universal Sensible 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.
- Auto Restart function.
- Automatic ESP setting.

- Built-in condensation drain pump.
- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)









	Model		AM022DNMFKG/EU	AM028DNMFKG/EU	AM036DNMFKG/EU	AM045DNMFKG/EU	
Davis a Cumple.		Ф, #, V, Hz	10, 2, 220~240 V, 50/60 Hz	10 2 220 240 // 50 // 0 !!=	10 2 220 240 // 50 // 0 //-	16 2 220 240 / 50 / 0 11-	
Power Supply Performance		Ψ, #, V, HZ	1Ψ, 2, 220~240 V, 50/60 H2	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	
Capacity (Nominal)	Cooling	kW	2.2	2.8	3.6	4.5	
capacity (Hommat)	Heating	kW	2.5	3.2	4.0	5.0	
Power	ricuting	KII	2.5	3.2	4.0	5.0	
Power Input (Nominal)	Cooling	W	25	30	40	50	
· one:pac (oac,	Heating	W	25	30	40	50	
Current Input (Nominal)	Cooling	A	0.19	0.22	0.29	0.37	
current input (Nominal)	Heating	A	0.19	0.22	0.29	0.37	
Current Input (Nominal)	MCA	A	0.78	0.22	1.04	1.22	
current input (Nominal)	MFA/MOP	A	0.78	15	1.04	1.22	
Fan	I-II A/I-IOI	^	13	15	15	15	
Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan	
Number of Fans		ea	3	3	3	3	
Airflow Rate	H/M/L (UL)	m³/min	10/9.5/9	12.5/11/10.5	15/13/12	18.5 / 16 / 13.5	
/ III TOW HALE	11/11/2(02/	l/s	167/158/150	208/183/175	250/217/200	308 / 267 / 225	
External Pressure	Min/Std/Max	mmAq	0/3/15	0/3/15	0/3/15	0/3/15	
	,	Pa	0.00 / 29.42 / 147.1	0.00 / 29.42 / 147.1	0.00 / 29.42 / 147.1	0.00 / 29.42 / 147.10	
Fan Motor			0.00 / 27.42 / 147.1	0.00 / 27.42 / 147.1	0.00 / 27.42 / 147.1	0.007 27.427 147.10	
Model		-	BLDC	BLDC	BLDC	BLDC	
Output x n		w	153	153	153	153	
Piping Connections			.55	1,33	.55	.33	
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)	
Wiring Connections			,				
Connection with Indoor	Minimum	mm²	0.75	0.75	0.75	0.75	
	Remark	-	F1, F2	F1, F2	F1, F2	F1, F2	
Refrigerant							
Туре		-	R3.	2(Fluorinated greenhouse gas, GWP=6	75)		
Control Method		-	EEV Included	EEV Included	EEV Included	EEV Included	
Sound							
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	33/31/29	33/31/29	34/31/28	34/31/28	
Sound Power	Cooling (Nominal)	dB(A)	55	56	57	57	
Dimensions							
Net Weight		kg	34.2	34.2	34.2	34.2	
Net Dimensions (W × H × D)		mm	1200 x 250 x 700	1200 x 250 x 700	1200 x 250 x 700	1200 x 250 x 700	
Additional Accessories							
Drain Pump		Model	INCLUDED	INCLUDED	INCLUDED	INCLUDED	
	Max. Lifting Height	mm/ Liter/H	750/24	750/24	750/24	750/24	

Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.





AM056DNMFKG/EU	AM071DNMFKG/EU
1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz
5.6	7.1
6.3	8.0
90	135
90	135
0.66	0.98
0.66	0.98
1.45	2.17
15	15
Sirocco Fan	Sirocco Fan
3	3
24 / 21.5 / 18.5	32 / 28.5 / 24.5
400 / 358 / 308	533 / 475 / 408
0 / 5.2 / 15	0 / 5.2 / 15
0 / 51.0 / 147.1	0 / 51.0 / 147.1
BLDC	BLDC
244	244
6.35	9.52
1/4	3/8
12.70	15.88
1/2	5/8
VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
0.75	0.75
F1, F2	F1, F2
R32(Fluorinated gre	enhouse gas, GWP=675)
EEV Included	EEV Included
38/35/31	39/35/30
63	63
39.4	39.4
1300 x 300 x 700	1300 x 300 x 700
INCLUDED	INCLUDED
750/24	750/24

#### Controls







Wireless Remote Controller	Wireless Remote Controller	Wireless Receiver Kit
AR-CH01E	AR-EH03E (to be matched with MRK-A10N)	MRK-A10N (to be matched with AR-EH03E)
880		_
Touch Controller	Wired Remote Controller	Wi-Fi Kit
MWR-SH11N	MWR-WG01*N	MIM-H04EN

### Accessories



External Room Sensor

MRW-TA

### **Universal** 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.
- Built-in R32 refrigerant leak detect sensor.

- Auto ESP setting (model-specific).
- Long-life HD 40 permanent filter is included (model-specific).
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)



Model			AM090DNHDKG/EU	AM112DNHDKG/EU	AM128DNHDKG/EU	
Power Supply		Ф, #, V, Hz	1,2,220~240,50/60	1,2,220~240,50/60	1,2,220~240,50/60	
Performance		Ψ, π, ν, 112	1,2,220 *240,30/00	1,2,220 240,30/00	1,2,220 240,30/00	
Capacity (Nominal)	Cooling	kW	9.0	11.2	12.8	
	Heating	kW	10.0	12.5	13.8	
Power	, <b>,</b>		10.0	12.3	15.0	
Power Input (Nominal)	Cooling	W	145.0	130	185	
	Heating	W	145.0	130	185	
Current Input (Nominal)	Cooling	Α	1.20	1.2	1.3	
	Heating	Α	1.20	1.2	1.3	
Current Input (Nominal)	MCA	Α	2.05	2.41	2.96	
	MFA/MOP	Α	15	15	15	
Fan						
Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	
Number of Fans		ea	3	3	3	
Airflow Rate	H/M/L(UL)	m³/min	29.00/25.00/22.00	32.0 / 26.0 / 20.0	37.0 / 30.0 / 22.0	
		l/s	483 / 417 / 367	533 / 433 / 333	617 / 500 / 367	
External Static Pressure	Min/Std/Max	mmAq	0/3/20	3 / 6.2 / 20	3 / 6.2 / 20	
		Pa	0 / 29.42 / 196.13	29.42 / 60.80 / 196.13	29.42 / 60.80 / 196.13	
Fan Motor						
Model		-	BLDC motor	BLDC motor	BLDC motor	
Output x n		W	153 x 1	350 x 1	350 x 1	
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	mm²	1.5	1.5	1.5	
Transmission Cable	Transmission Cable	mm²	0.75	0.75	0.75	
	Remark	-	F1,F2	F1,F2	F1,F2	
Refrigerant						
Туре		-		R32(Fluorinated greenhouse gas, GWP=675)		
Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound <sup>2</sup>						
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	34/31/28	36/33/30	39/36/33	
Sound Power	Cooling	dB(A)	60	61	64	
Dimensions		les.				
Net Weight		kg	34.2	44.5	44.5	
Net Dimensions (W x H x D)		mm	1200x250x700	1300 x 300 x 700	1300 x 300 x 700	
Additional Accessories	Internal					
Drain Pump	Internal	-	INCLUDED	INCLUDED	INCLUDED	
	Max. Lifting Height/ Displacement	mm / litres/h	750/24	750/24	750/24	

Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.
 Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



AM140DNHDKG/EU	
1,2,220-240,50/60	
14.0 16.0	
16.0	
220	
220	
1.5	
1.5	
3.23	
15	
Sirocco Fan	
3	
41.0 / 34.0 / 25.0	
683 / 567 / 417	
3 / 6.2 / 20	
29.42 / 60.80 / 196.13	
BLDC motor	
350 x1	
9.52	
3/8	
15.88	
5/8	
VP25 (OD 32,ID 25)	
1.5	
0.75	
F1,F2	
R32(Fluorinated greenhouse gas, GWP=675	5)
EEV INCLUDED	
10 (70 (7)	
42/38/34	
65	
44.5	
44.5 1300 x 300 x 700	
1500 x 500 x 700	
INCLUDED	
750/24	
750/24	

#### Controls





### HSP Duct (R410A)

- Equipped with two Sirocco fans direct driven by a single motor.
- Long-life HD 40 permanent filter is included (model-specific).
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Two-position field adjustable air return, on the bottom or at the rear of the unit.
- Auto Restart function.
- Auto ESP setting (model-specific).







	Model		AM180JNHFKH/EU	AM224JNHFKH/EU	AM220FNHDEH/EU	
PowerSupply		Ф, #, V, Hz	1Ф, 2, 220–240 V, 50 Hz	10, 2, 220-240 V, 50 Hz	1ф, 2, 220–240 V, 50 Hz	
Performance		.,,,	.,, ,	.,, ,	.,, ,	
Capacity (Nominal)	Cooling	kW	18.0	22.4	22.4	
	Heating	kW	20.0	25.0	25.0	
Power						
Power Input (Nominal)	Cooling	W	340	530	530	
	Heating	W	340	530	530	
Current Input (Nominal)	Cooling	Α	1.90	2,9	3.80	
	Heating	Α	1.90	2,9	3.80	
Current Input (Nominal)	MCA	Α	5.72	-	5.80	
	MFA/MOP	Α	15	-	15	
Fan						
Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	
Number of Fans		ea	1	1	1	
Airflow Rate	H/M/L (UL)	m³/min	58.0 / 50.0 / 43.0	72.0 /61.0 / 50.0	58.0 / 52.0 / 47.0	
		l/s	966.67/833.33/716.67	1200.00/1016.67/833.33	966.67/866.67/783.33	
External Static Pressure	Min/Std/Max	mmAq	5.00/7.34/20.00	5.00/7.34/20.00	5.00/15.00/25.00	
		Pa	49.00/71.93/196.00	49.03/71.93/196.00	49.03/147.10/245.17	
Fan Motor						
Model		-	-	-	-	
Output x n		W	630 x 1	630 x 1	400 x 1	
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	
Drain Pipe		ø, mm	VP25 (OD 25, ID 20)	VP25 (OD 25, ID 20)	VP25 (OD 32, ID 25)	
Field Wiring					, , ,	
Power Source Wire	Below 20 m/ over 20 m	mm²	1.5/2.5	1.5/2.5	1.5/2.5	
Transmission Cable	Transmission Cable	mm²	0.75~1.50	0.75~1.50	0.75~1.50	
	Remark	-	F1,F2	F1,F2	F1,F2	
Refrigerant					·	
Туре		-	R	410A (Fluorinated greenhouse gas, GWP=2,088	3)	
Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	
Sound <sup>2</sup>						
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	43/39/35	44/40/36	45/43/41	
Sound Power	Cooling	dB(A)	80	81		
Dimensions						
Net Weight		kg	82.5	82.5	89.0	
Net Dimensions (W x H x D)		mm	1350 x 450 x 910	1350 x 450 x 910	1240 x 470 x 1,040	
Air Filter		-	-	-	-	
Additional Accessories						
Drain Pump	Internal	-	MDP-G075SQ	MDP-G075SQ	MDP-N047SNC1D	
	External	-	MDP-G075SP	MDP-G075SP	-	
	Max. Lifting Height/ Displacement	mm / litres/h	-	-	750/24	

<sup>\*</sup> Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

1 Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



AM280FNHDEH/EU	
1Ф, 2, 220–240 V, 50 Hz	
28.0	
31.5	
790	
790 5,90	
5.90	
8.64	
15	
e	
Sirocco Fan	
72.0 / 65.0 / 58.0	
1200.00/1083.33/966.67	
5.00/15.00/28.00	
49.03/147.10/274.59	
-	
400 x1	
9.52	
3/8 22.23	
7/8	
VP25 (OD 32, ID 25)	
1.5/2.5 0.75~1.50	
0.75-1.50 F1,F2	
R410A (Fluorinated greenhouse gas, GWP=2,08	8)
EEV INCLUDED	
48/46/43	
89.0	
1240 x 470 x 1040	
-	
MDP-N047SNC1D	
-	
750/24	

#### **Controls**





### Universal Floor/Ceiling

- Optional vertical or horizontal installation.
- Air supply by means of one adjustable blade.
- Reduced noise thanks to the remotely controlled EEV.
- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)



	Model		AM056DNCDKG/EU
Power Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50/60 Hz
Performance			
Capacity (Nominal)	Cooling	kW	5,6
	Heating	kW	6.3
Power			
Power Input (Nominal)	Cooling	W	50
	Heating	w	50
Current Input (Nominal)	Cooling	Α	0.43
	Heating	Α	0.43
Fan			
Motor	Туре	-	BLDC
	Output	W	40
	Number of Fans	ea	2
Airflow Rate	H/M/L (UL)	m³/min	12.6/11.3/10
		l/s	233/217/200
Piping Connections			
Liquid Pipe		ø, mm	6.35
		ø, inch	1/4
Gas Pipe		ø, mm	12.70
		ø, inch	1/2
Drain Pipe		ø, mm	ID 18 HOSE
Field Wiring			
Transmission Cable		mm²	0.75
Refrigerant			
Туре		-	R32(Fluorinated greenhouse gas, GWP=675)
Control Method		-	EEV INCLUDED
Sound			
Sound Pressure <sup>1</sup>	(H/M/L)	dB(A)	41/39/36
Dimensions			
Net Weight		kg	20.8
Net Dimensions (W × H × D)		mm	1000 x 650 x 200

#### **Controls**

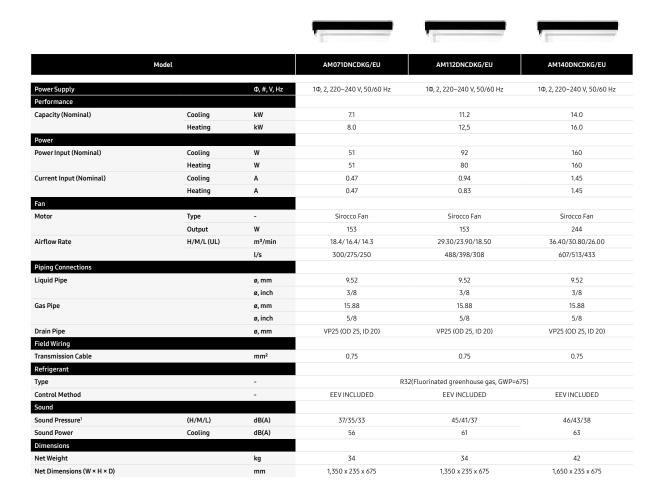




Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

### **Universal** Big Ceiling

- Horizontal installation only.
- Air supply by means of one adjustable blade.
- Sirocco Fan direct driven by a single motor.
- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Built-in Single Wi-Fi kit (MIM-H14EN)



#### **Controls**





Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment Sound pressure level may differ depending on operation conditions.

### Console (R410A)

- Slim design: only 199 mm in depth.
- Turbo fan with single-phase inverter motor.
- Two separate air outlets to avoid stratification.

- Long-life washable permanent filter.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Auto Restart function.











	Model		AM022KNJDEH/EU	AM028FNJDEH/EU	AM036FNJDEH/EU	AM045KNJDEH/EU	AM056FNJDEH/EU
ower Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220-240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
Performance			.,,	.,,	.,,	.,, , . ,	.,, , . , , , , , ,
Capacity	Cooling	kW	2.8	2.8	3.6	4.5	5.6
Nominal)	Heating	kW	3.2	3.2	4	5	6.3
ower							
ower Input	Cooling	W	30	30	35	36	62
Nominal)	Heating	W	30	30	35	36	62
urrent Input	Cooling	Α	0.25	0.25	0.29	0.30	0.49
Nominal)	Heating	Α	0.25	0.25	0.29	0.30	0.49
an							
lotor	Туре	-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Output	W	37	37	37	37	37
	Number of Fans	ea	1	1	1	1	1
irflow Rate	H/M/L (UL)	m³/min	7.00/6.00/5.00	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	116.67/100.00/83.33	116.67/100.00/83.33	141.67/125.00/108.33	188.33/163.33/136.67	216.67/191.67/166.67
iping Connectio	on						
iquid 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
as 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
rain Pipe		ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
ield Wiring							
ower Source Wi	re	mm²	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5	1.5/2.5
ransmission Ca	ble	mm²	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50
efrigerant							
уре		-		R410A (F	luorinated greenhouse gas, GW	P=2,088)	
ontrol Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
ound							
ressure <sup>1</sup>	(H/M/L)	dB(A)	38/36/34	38/36/34	39/37/34	42/39/36	43/40/37
ower	Cooling	dB(A)	58	58	59	63	64
imensions							
let Weight		kg	16.0	16.0	16.0	16.0	16.0
let 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
Air Filter			-	Long-life Filter	Long-life Filter	-	Long-life Filter

#### **Controls**









Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wi-Fi Kit
(included with holder)	MWR-SH11N	MWR-WG01*N	MIM-H04EN

#### Accessories



External Room Sensor

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

### Concealed Floor-Standing (R410A)

- Silent operation.
- Sirocco fan driven by inverter motor.
- Can be controlled by Smartphone via Wi-Fi Kit.
- Long-life washable permanent filter.
- Auto Restart function.







				1		1
		Model		AM036FNFDEH/EU	AM056FNFDEH/EU	AM071FNFDEH/EU
	Power Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
	Performance					
	Capacity (Nominal)	Cooling	kW	3.6	5.6	7.1
Cooling   W   Final		Heating	kW	4.0	6.3	8.0
Heating   W   50   110   110   110	ower					
	ower Input (Nominal)	Cooling	W	50	110	110
Heating   A   0.24   0.53		Heating	W	50	110	110
Note   Type   -	urrent Input (Nominal)	Cooling	Α	0.24	0.53	0.53
otor         Type         -         Sirocco Fan         Sirocco Fan         Sirocco Fan           inflow Rate         H/M/L (UL)         m³/min         10.00/8.50/6.00         15.50/14.00/11.00         15.50/14.00/11.00           ping Connections         • Inch (Arrival) (Min (Arriva		Heating	Α	0.24	0.53	0.53
Math	an					
	lotor	Type	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
Ping Connections   Sequid Pipe   Set   S	irflow Rate	H/M/L (UL)	m³/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
R, inch   1/4   3/8   3/8   3/8   as Pipe   8, mm   12.70   15.88	iping Connections					
## Pipe ## ## ## ## ## ## ## ## ## ## ## ## ##	iquid Pipe			6.35	9.52	9.52
			ø, inch	1/4	3/8	3/8
	as Pipe		ø, mm	12.70	15.88	15.88
Section   Sect			ø, inch	1/2	5/8	5/8
ower Source Wire         Below 20 m/ over 20 m         mm²         1.5/2.5         1.5/2.5         1.5/2.5         1.5/2.5           cansmission Cable         mm²         0.75-1.50         0.75-1.50         0.75-1.50         0.75-1.50           defigierant         Ferriagrant	rain Pipe		ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
1.5/2.5   1.5/	eld Wiring					
	ower Source Wire		mm²	1.5/2.5	1.5/2.5	1.5/2.5
R410A (Fluorinated greenhouse gas, GWP=2,088)	ransmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50
Tell	efrigerant					
Section   Control   Cont	ype		-	R410	A (Fluorinated greenhouse gas, GWP=2	2,088)
dund Pressure¹         (H/M/L)         dB(A)         37/32/27         40/36/32         40/36/32           imensions         kg         23.0         28.5         28.5           et Dimensions (W × H × D)         mm         945 x 600 x 220         1,225 x 600 x 220         1,225 x 600 x 220	ontrol Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
imensions         kg         23.0         28.5         28.5           et Dimensions (W × H × D)         mm         945 x 600 x 220         1,225 x 600 x 220         1,225 x 600 x 220	ound					
et Weight         kg         23.0         28.5         28.5           et Dimensions (W × H × D)         mm         945 x 600 x 220         1,225 x 600 x 220         1,225 x 600 x 220		(H/M/L)	dB(A)	37/32/27	40/36/32	40/36/32
et Dimensions (W×H×D) mm 945 x 600 x 220 1,225 x 600 x 220 1,225 x 600 x 220	imensions					
7 IS A GOOD A ELEG IN THE STATE OF THE STATE	•		kg	23.0	28.5	28.5
rFilter Long-life Filter Long-life Filter Long-life Filter	let Dimensions (W × H × D)		mm	945 x 600 x 220	1,225 x 600 x 220	1,225 x 600 x 220
	ir Filter			Long-life Filter	Long-life Filter	Long-life Filter

#### **Controls**







Touch Controller	Wired Remote Controller	Wi-Fi Kit
MWR-SH11N	MWR-WG01*N	MIM-H04EN

#### **Accessories**



External Room Sensor

MRW-TA

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

### Concealed Floor-Standing High static pressure (R410A)

- Silent operation.
- Sirocco fan driven by inverter motor.
- Can be controlled by Smartphone via Wi-Fi Kit.

- Long-life washable permanent filter.
- Auto Restart function.







	Model		AM036MNFDEH/EU	AM056MNFDEH/EU	AM071MNFDEH/EU
Power Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 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
ower					
ower Input (Nominal)	Cooling	kW	0.022	0.042	0.042
	Heating	kW	0.022	0.042	0.042
urrent Input (Nominal)	Cooling	Α	0.20	0.37	0.37
	Heating	Α	0.20	0.37	0.37
an					
lotor	Туре	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Output x n	W	100 x 1	100 x 1	100 x 1
xternal 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
irflow Rate	(H/M/L)	m³/h	600/510/360	930/840/660	930/840/660
iping Connections					
iquid Pipe		ø, mm	6.35	6.35	9.52
		ø, inch	1/4	1/4	3/8
as Pipe		ø, mm	12.70	12.70	15.88
		ø, inch	1/2	1/2	5/8
rain Pipe		ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
ield Wiring					
ower Source Wire		mm²	1.5~2.5	1.5~2.5	1.5~2.5
ransmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50
efrigerant					
ype		-	R410.	A (Fluorinated greenhouse gas, GWP=2	2,088)
ontrol Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
ound					
ound Pressure <sup>1</sup>	(H/M/L)	dB(A)	37/32/27	40/36/32	40/36/32
ound Power		dB(A)	53.0	59.0	59.0
imensions					
et Weight		kg	22.0	27.0	27.0
et Dimensions (W x H x D)		mm	945 x 600 x 220	1,225 x 600 x 220	1,225 x 600 x 220
ir Filter			Long-life Filter	Long-life Filter	Long-life Filter









NO.			
Touch Controller	Wired Remote Controller	Wi-Fi Kit	External Room Sensor
MWR-SH11N	MWR-WG01*N	MIM-H04EN	MRW-TA

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

### Packaged Floor-Standing (R410A)

- Sirocco fan driven by upgraded BLDC motor.
- Auto external static pressure control
- Embedded single Wi-Fi kit helps to control via SmartPhone





	Model		AM140RNPDKH/EU	AM280CNPDKH/EU
Power Supply		Φ, #, V, Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz
Performance				
Capacity (Nominal)	Cooling	kW	14	28
	Heating	kW	16	31.5
Power				
Power Input (Nominal)	Cooling	W	190	400
	Heating	W	190	400
Current Input (Nominal)	Cooling	Α	0.90	2.7
	Heating	Α	0.90	2.7
Fan				
Motor	Туре	-	Sirocco Fan	Sirocco Fan
	Output x n	W	154 x 1	630 x 1
Airflow Rate	H/M/L (UL)	m³/min	35.00/30.50/27.50	68.00/63.00/58.00
		l/s	583.33/508.33/458.33	2401.5 / 2224.9 / 2048.3
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		mm²	2.5	0.75
Transmission Cable		mm²	VCTF 0.75-1.50	VCTF 0.75-1.50
Refrigerant				
Туре		-	R410A (Fluorinated gree	nhouse gas, GWP=2,088)
Control Method		-	EEV INCLUDED	EEV INCLUDED
Sound				
Sound Pressure <sup>1</sup>	(H/M/L Silent)	dB(A)	54/47	58/56/54
Sound Power	Cooling	dB(A)	-	74
Dimension				
Net Weight		kg	48.0	108
Net Dimensions (W x H x D)		mm	610 x 1,850 x 400	1,100 x 1,800 x 485
Connectivity				Single Wi-Fi Kit embedded

#### **Controls**









Touch Controller	Remote Controller	Single Wi-Fi Kit	Wi-Fi Kit (optional)
MWR-SH11N	MWR-WG01*N	Included for AM280CNPDKH/EU	MIM-H04EN

#### **Accessories**



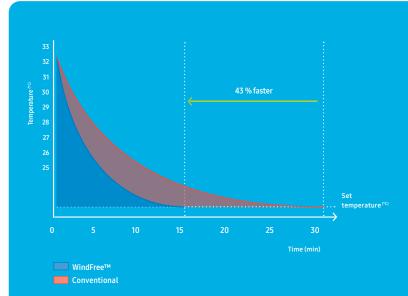
External Room Sensor

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.









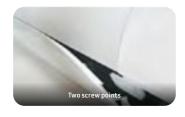
## High capacity in a compact design

Samsung wall-mounted air conditioners with WindFree™ technology cool quickly from corner to corner, making people comfortable whenever they want and wherever they are. Its advanced design also features a 15 % larger fan, 18 % wider inlet and a 31 % wider blade compared to Samsung conventional model¹. This means that cool air is dispersed farther and wider into every corner of a room, reaching up to 15 metres².

- Tested on the AM022TNVDKHEU model compared with the Samsung
- ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers) defines "Still Air" as air currents at speeds below 0.15 m/s which lacks the presence of cold drafts.

## Easy Installation and Servicing

The WindFree™ wall-mounted air conditioner features a snap-fit bottom cover that can be easily opened and closed. There are two screw points which allows for convenient installation and servicing. Unlike conventional brackets that can be fitted on two fixed hooks, the unit uses a roller type bracket that simplifies the installation process. This makes it easy to mount by installing the bracket on the wall and sliding it effortlessly into the exact position you want.





Samsung's roller type bracket makes mounting the unit much easier. Simply hang it on the unit and find the best place to install it by sliding the bracket from side to side.

Assembled parts (6)/ Screw points (5)

Installation time<sup>1</sup>:

45% ▼

Assembled parts (3)/ Screw points (2)

Installation time<sup>1</sup>: 5.1 min

<sup>1</sup> Tested on the AM022TNVDKHEU model compared with the Samsung conventional AM022JNVDKHEU model under specific conditions and may vary on specific factors

### Step 1 Step 2 Step 3 Dehumidification WindFree™ Fast Cooling Cooling Temperature (℃) temperature(°C

### WindFree™ **Cooling mode**

WindFree™ Cooling mode keeps the room comfortably cool. It cools gently and quietly, dispersing air through 23,000 micro-holes so that people do not have to deal with the unpleasant feeling of a cold draft on their skin. This results in a "Still Air" environment<sup>1</sup> 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 mode<sup>3</sup>, so people can stay comfortably cool while reducing energy costs.

- 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. Tested on the ARI2TXCAAWKNEU mode (in an anechoic environment. WindFreel\*\* 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.
- operating conditions.

  Tested on the ARIZTVE AAWKNAP model under specific testing conditions, based on the power consumption of Fast Cooling mode vs. WindFree<sup>IM</sup> Cooling mode.



Step 2

Step 1





Step 3

#### **Smart Control**

Control the temperature in any room, anytime and anywhere. Temperatures can be managed remotely using the SmartThings App1. With just a simple touch you can turn it on and off, select the cooling mode, schedule its operation and group devices. With the optional Wi-Fi Kit, the different aspects of the system with up to 16 connectible indoor units can be controlled via smartphone.

<sup>1</sup> A Wi-Fi connection and Samsung SmartThings application account are required. Wi-Fi Kit to be ordered separately. Requires iOS 10.0 or later & Android 5.0 or later. Additional requirements may be needed to apply SmartThings for medium-sized to large commercial buildings. For details contact a Samsung representative.



→ Time (min)





### **Universal** WindFree<sup>™</sup> Deluxe (EEV included)

UNIQUE

- Three-step cooling: Fast Cooling mode, Dehumidification mode and WindFree™ Cooling mode.
- Wi-Fi Control with SmartThings.

- Built-in R32 refrigerant leak detect sensor.
- Built-in Single Wi-Fi kit (MIM-H14EN)



			AM015DNVDKG/EU	AM022DNVDKG/EU	AM028DNVDKG/EU
PowerSupply			1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 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	kW	1.7	2.5	3.2
ower					
apacity (Nominal)	Cooling	w	20	24	30
	Heating	w	20	24	30
Current Input (Nominal)	Cooling	Α	0.13	0.16	0.20
	Heating	Α	0.13	0.16	0.20
MCA		Α	0.16	0.2	0.25
MFA		Α	15	15	15
an					
Motor	Туре	-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Output	w	27 x 1	27 x 1	27 x 1
rflow Rate	H/M/L(UL)	m³/min	4.9/4.5/4.1	5.7/5.0/4.5	8.5/7.7/6.9
		l/s	81.7/75.0/68.3	95.0/83.3/75.0	141.7/128.3/115.0
ping Connections					
quid Pipe		ø, mm	6.35	6.35	6.35
		ø, inch	1/4	1/4	1/4
as Pipe		ø, mm	12.70	12.70	12.70
		ø, inch	1/2	1/2	1/2
ain Pipe		ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
ield Wiring					
ransmission Cable		mm²	0.75	0.75	0.75
Remark		-	F1, F2	F1, F2	F1, F2
efrigerant					
уре		-	R	32(Fluorinated greenhouse gas, GWP=67	5)
Control Method		-	EEV INCLUDED	EEV INCLUDED	EEV INCLUDED
Sound					
iound Pressure <sup>1</sup>	(H/M/L/W)	dB(A)	31/30/27/26	34/32/30/27	34/33/32/26
Sound Power	Cooling	dB(A)	50	51	52
Dimensions					
let Weight		kg	9.0	8.7	9.5
let Dimensions (W × H × D	)	mm	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215

#### **Controls**

AR-CH01E





AR-EH03E



Touch Controller

MWR-SH11N

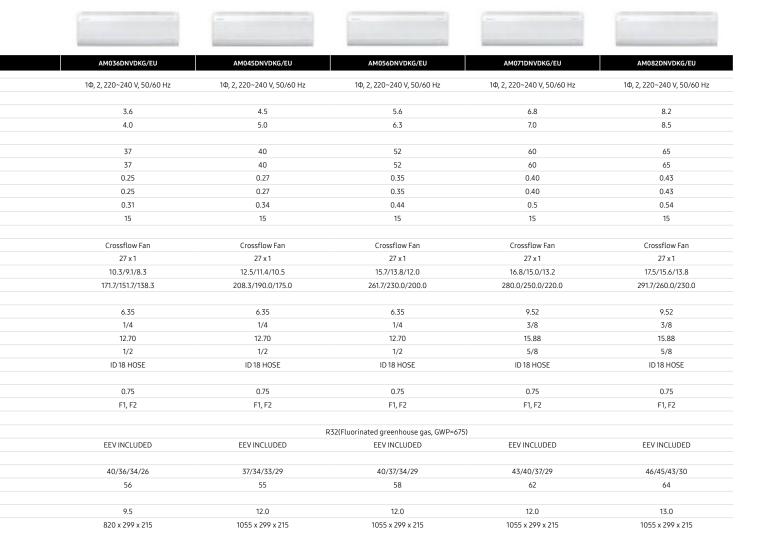




Wi-Fi Kit MWR-WG01\*N MIM-H04EN



Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



### WindFree™ Deluxe (EEV excluded, R410A)

- Three-step cooling: Fast Cooling mode, Dehumidification mode and WindFree™ Cooling mode.
- Wi-Fi Control with SmartThings and Bixby voice controls.
- Equipped with Easy Filter Plus.







			AM015TNADKH/EU	AM022TNADKH/EU	AM028TNADKH/EU
PowerSupply			1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Φ, 2, 220~240 V, 50/60 Hz
erformance					
Capacity (Nominal)	Cooling	kW	1.5	2.2	2.8
	Heating	kW	1.7	2.5	3.2
ower					
Capacity (Nominal)	Cooling	w	20	24	30
	Heating	w	20	24	30
Current Input (Nominal)	Cooling	Α	0.13	0.16	0.20
	Heating	Α	0.13	0.16	0.20
MCA		Α	0.2	0.2	0.3
MFA		Α	15	15	15
- Fan					
Motor	Туре	-	Crossflow Fan	Crossflow Fan	Crossflow Fan
	Output	w	27 x 1	27 x 1	27 x 1
Airflow Rate	H/M/L (UL)	m³/min	4.9/4.5/4.1	5.7/5.0/4.5	8.5/7.7/6.9
		l/s	81.7/75.0/68.3	95.0/83.3/75.0	141.7/128.3/115.0
ping Connections		1,75			
quid Pipe		ø, mm	6.35	6.35	6.35
quiu i ipc		ø, inch	1/4	1/4	1/4
as Pipe		ø, mm	12.70	12.70	12.70
is ripe		ø, inch	1/2	1/2	1/2
rain Pipe					
•		ø, mm	ID 18 HOSE	ID 18 HOSE	ID 18 HOSE
ield Wiring Power Source Wire		mm²	1.5/2.5	1.5/2.5	1.5/2.5
ransmission Cable		mm²	0.75~1.50		
ransmission Cable Remark		mm- -	0.75~1.50 F1, F2	0.75~1.50	0.75~1.50
			F1, F2	F1, F2	F1, F2
efrigerant		_	D4404	A (Fluorizated associated as	000)
Type Control Method <sup>1</sup>		-		A (Fluorinated greenhouse gas, GWP = 2	
			EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
Sound Droggure?	/H/M/13	dD(A)	74/70/27/2/ /// 15 50	74/70/70/07/09/07	74/77/72/72/72
ound Pressure <sup>2</sup>	(H/M/L)	dB(A)	31/30/27/26 (WindFree™)	34/32/30/27 (WindFree™)	34/33/32/26 (WindFree™)
ound Power	Cooling	dB(A)	50	51	52
Dimensions					
Net Weight		kg	8.5	8.5	9.0
Net Dimensions (W × H × D)		mm	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215
ir Filter			Easy Filter Plus	Long-life Filter	Long-life Filter

#### **Controls**













Wireless Remote Controller	Wireless Remote Controller	Touch Controller	Wired Remote Controller	Wi-Fi Kit
AR-CH01E	AR-EH03E	MWR-SH11N	MWR-WG01*N	MIM-H04EN

EEV Kit is necessary to control the refrigerant flow in the WindFree™ Deluxe (EEV Excluded), please order EEV Kit separately.

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.











•	•	•	•	•
AM036TNADKH/EU	AM045TNADKH/EU	AM056TNADKH/EU	AM071TNADKH/EU	AM082TNADKH/EU
1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz	1Ф, 2, 220~240 V, 50/60 Hz
3.6	4.5	5.6	6.8	8.2
4.0	5.0	6.3	7.0	8.5
37	40	52	60	65
37	40	52	60	65
0.25	0.27	0.35	0.40	0.43
0.25	0.27	0.35	0.40	0.43
0.3	0.3	0.4	0.5	0.5
15	15	15	15	15
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
10.3/9.1/8.3	12.5/11.4/10.5	15.7/13.8/12.0	16.8/15.0/13.2	17.5/15.6/13.8
171.7/151.7/138.3	208.3/190.0/175.0	261.7/230.0/200.0	280.0/250.0/220.0	291.7/260.0/230.0
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
F1, F2	F1, F2	F1, F2	F1, F2	F1, F2
	R410	OA (Fluorinated greenhouse gas, GWP = 2,0	088)	
EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
40/36/34/26 (WindFree™)	37/34/33/29 (WindFree™)	40/37/34/29 (WindFree™)	43/40/37/29 (WindFree™)	46/45/43/30(WindFree™)
56	55	58	62	64
00	11.5	11.5	11.5	12.5
9.0	11.5	11.5	11.5	12.5
820 x 299 x 215	1055 x 299 x 215	1055 x 299 x 215	1055 x 299 x 215	1055 x 299 x 215
Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter	Long-life Filter









	- Aller		
External Room Sensor	EEV Kit 1 Indoor	EEV Kit 2 Indoor	EEV Kit 3 Indoor
MRW-TA	MEV-***SA	MXD-E24/32K***A	MXD-E24/32K***A

### Universal Max Wall-Mounted

- Cross-flow fan direct driven by a single BLDC motor.
- Built-in R32 refrigerant leak detect sensor.
- Can be controlled by Smartphone via Wi-Fi Kit (Optional).
- Return air is filtered by means of an easily removable, washable pre filter.
- Built-in Single Wi-Fi kit (MIM-H14EN)

- 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		AM093DNQDKG/EU
Power Supply			1Ф, 2, 220-240 V, 50/60 Hz
Performance			
Capacity	Cooling	kW	9.3
	Heating	kW	9.8
Power			
PowerInput	Cooling	w	66
	Heating	w	76
Current Input	Cooling	Α	0.47
	Heating	Α	0.54
Current	MCA	Α	0.68
	MFA	Α	15
Fan			
Туре		-	Crossflow Fan
Number of Fans		ea	1
Airflow Rate	H/M/L	m³/min	23/20/17
		l/s	383/333/283
Fan Motor			
Туре		-	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.	mm²	0.75
	Remark	-	F1, F2
Refrigerant			
Туре		-	R32(Fluorinated greenhouse gas, GWP=675)
Electronic Expansion Valve		-	EEV INCLUDED
Sound			
Sound Pressure <sup>1</sup>	H/M/L	dB(A)	49/46/42
Sound Power	Cooling	dB(A)	66
Dimensions			
Net Weight		kg	18.5
Net Dimensions (W × H × D)		mm	1,280 x 345 x 253

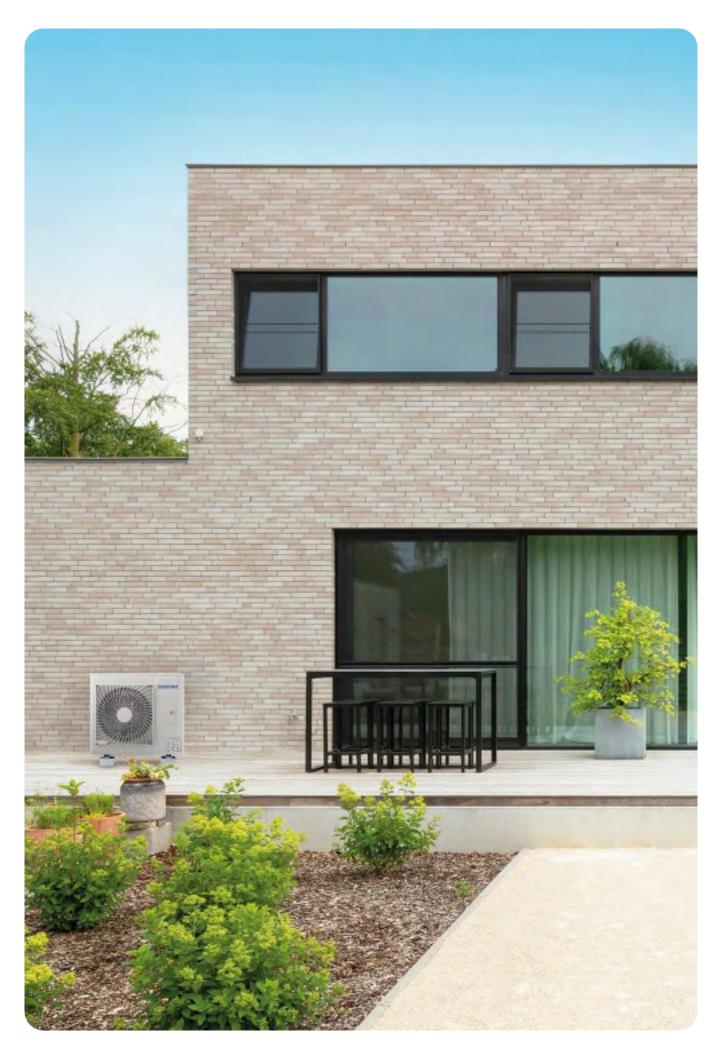
#### **Controls**





Universal indoor units, universal controller and universal accessories can be installed both with DVM R410A and DVM R32 Outdoor units.

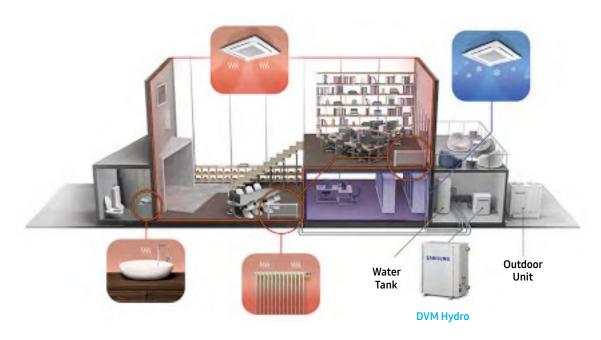
Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



## **DVM Hydro Unit**

#### **Performance**

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



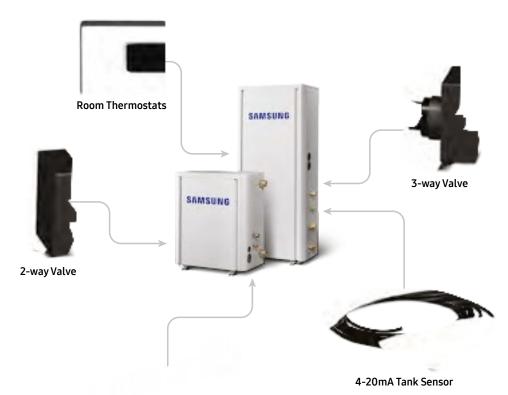
### An Integrated Solution in One System

The DVM Hydro system is compatible with all DVM S Mini R32 and DVM S2 outdoor units and can be added to create a single, integrated solution for cooling, heating and hot water that's simple to manage. So it ensures much greater efficiency to suit a variety of demands, generating substantial energy and cost savings with its high-efficiency heat pump technology.



## 2 Types - with a Choice of Hot Water needs

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



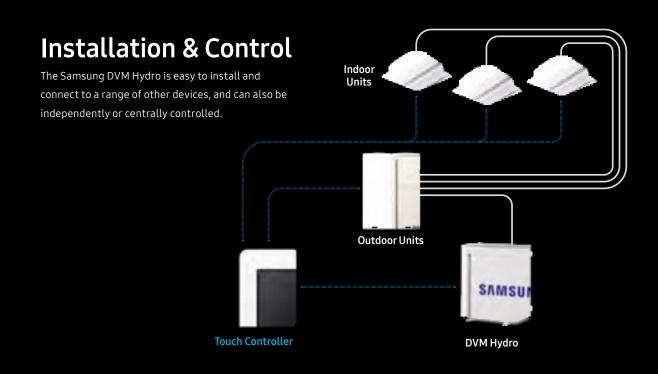
**Booster Heater** 

## Integrated Control System

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

## Simple & Easy Connection for External Control

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



### Hydro Unit (R410A)

- Production of low temperature hot water and chilled water.
- Hot water production to a maximum temperature of 50 °C/80 °C (HT models).
- Two-way control: leaving water temperature and room temperature control.
- Connection to low temperature radiators and AHU water coils.
- Hot water production for domestic hot water use.
- Connectable to Heat Recovery DVM S systems (excluding 50 kW hydro unit).







Mod	del (HE)		AM160FNBDEH/EU	AM320FNBDEH/EU	AM500FNBDEH/EU
PowerSupply			1Ф, 2, 220–240 V, 50 Hz	1Ф, 2, 220-240 V, 50 Hz	1Ф, 2, 220–240 V, 50 Hz
Performance					
Capacity (Nominal)	Cooling	kW	14.0	28,0	44.8
	Heating	kW	16.0	31.5	50.4
Power					
Power Input (Nominal)	Cooling	w	10	10	10
	Heating	w	10	10	10
Current Input (Nominal)	Cooling	A	0.05	0.05	0.05
	Heating	A	0.05	0.05	0.05
MCA (Including External Contact)		Α	2.2	2.2	2.2
MFA		A	2.75	2.75	2.75
Heat Exchange					
Туре		-	PHE	PHE	PHE
Quantity		ea	1	1	1
Pipe Size		ø, inch	PT1 (25A)	PT1 (25A)	PT11/4 (32A)
Water Flow Rate		l/min	48	92	150
Flow Switch		l/min	20	30	50
Piping Connections					
iquid 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	11/8
Field Wiring		.,			
Power Source Wire (L<10 m, Single Installa	ation)	mm²	2.5	2.5	2.5
Transmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50
Refrigerant					
Гуре		-	R410	A (Fluorinated greenhouse gas, GWP=2	2.088)
Control Method		-	EEV	EEV	EEV
Sound					
Sound Pressure <sup>1</sup>		dB(A)	27	28	31
Sound Power		dB(A)	54	56	59
Dimensions					
Net Weight		kg	29.0	33.0	40.0
Net Dimensions (W × H × D)		mm	518 x 627 x 330	518 x 627 x 330	518 x 627 x 330
Operating			3.0 / 02/ / 330	3.0 x 02.7 x 33.0	3.0 x 02, x 330
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

#### **Accessories**





 Wired
 Wired

 Remote Controller
 Remote Controller

 MWR-W000N
 MWR-W601\*N

Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.



Model (HT)			AM160TNBFEB/EU	AM160TNBFGB/EU	AM250TNBFEB/EU	AM250TNBFGB/EU
Power Supply			1Ф, 2, 220-240 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz	1Ф, 2, 220-240 V, 50 Hz	3Ф, 4, 380-415 V, 50 Hz
Performance						
Capacity (Nominal)	Cooling	kW	-	-	-	-
	Heating	kW	16	16	25	25
Power						
Power Input (Nominal)	Cooling	W	-	-	-	-
	Heating	W	3.1	3.1	5.0	5.0
Current Input (Nominal)	Cooling	A	-	-	-	-
	Heating	Α	14.30	4.85	23.10	7.85
MCA (Including External Contact)		A	18.0	16.1	30.0	16.1
MFA		A	25	20	40	20
Heat Exchanger						
Туре		-	PHE	PHE	PHE	PHE
Quantity		ea	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)		mm²	4	2.5	4	2.5
Transmission Cable			0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50
Refrigerant						
Туре		-	R134A (Fluorinated greenhouse gas, GWP=1,430)			
Control Method		-	EEV	EEV	EEV	EEV
Factory Charging		kg/tCO₂e	2.15/3.07	2.15/3.07	2.15/3.07	2.15/3.07
Sound						
Sound Pressure <sup>1</sup>		dB(A)	42	42	42	42
Sound Power		dB(A)	60	60	61	61
Dimensions						
Net Weight		kg	105.0	103.5	105.0	103.5
Net Dimensions (W × H × 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	-20~43	-20~43	-20~43	-20~43
	Hot Water (Main Cooling, HR)	°c	-20~43	-20~43	-20~43	-20~43
Leaving Water	Heating	°C	25-80	25~80	25~80	25~80

# Specifications Mode Control Unit (MCU, R410A)

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





Model		MCU-R4NEK0N	MCU-S6NEK3N	
Туре		HR Changer	MCU	
Power Supply		1Ф, 220-240 V, 50/60 Hz	1Ф, 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		22.4	22.4	
Max. capacity of indoor units per port				
	kW	5.6	5.6	
Y-Joint	kW	14.0	14.0	
Refrigerant				
Additional Refrigerant Charging	kg/unit	0.5	0.5	
Piping Connections				
Outdoor Unit - Liquid Pipe	ø, mm	9.52	9.52	
	ø, inch	3/8	3/8	
Gas Pipe (Low Pressure)	ø, mm	19.05	19.05	
	ø, inch	3/4	3/4	
Gas Pipe (High Pressure)	ø, mm	15.88	15.88	
	ø, inch	5/8	5/8	
Indoor Unit - 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	
External Dim				
Net Weight	kg	21.3	24.3	
Net Dimensions (W x H x D)	mm	728 x 199 x 469	728 x 199 x 469	
Operating Temperature				
Cooling	%	-5~48	-5~48	
Heating	°C	-25~26	-25~26	



	Model		MCU-S1NEK1N	MCU-S2NEK2N	MCU-S4NEK3N	MCU-S6NEK2N	MCU-S8NEK1N	MCU-S12NEK1N
Power Supply					1Ф, 2, 220~240 V, 50 Hz,	1Ф, 2, 208~230 V, 60 Hz		
Power								
Power Input (Nominal)	Cooling	W	19	25	40	55	80	110
	Heating	w	19	25	40	55	80	110
Current Input (Nominal)	Cooling	Α	0.20	0.20	0.20	0.30	0.40	0.60
	Heating	Α	0.20	0.20	0.20	0.30	0.40	0.60
MCA		A	2.0	2.0	2.0	2.0	2.0	2.0
MFA (MOP)		Α	15.0	15.0	15.0	15.0	15.0	15.0
Max. number of connecta	ble indoor		8	16	32	32	64	64
Max. number of connecta per branch	ble indoor units		8	8	8	8	8	8
Number of branches			1	2	4	6	8	12
Max. capacity of connecta	able indoor units		16.0	32.0	61.6	61.6	85.0	85.0
Max. capacity of connecta	able indoor units pe	er branch						
		kW	16.0	16.0	16.0	16.0	16.0	16.0
	Y-Joint	kW	-	32.0	32.0	32.0	32.0	32.0
Field Wiring								
Power Source Wire		mm²	2.5	2.5	2.5	2.5	2.5	2.5
Transmission Cable		mm²	0.75~1.50	0.75~1.50	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	38	38	
Heating-to-Cooling Chan	geover	-	50	50	50	50	50	50
Additional Refrigerant Cl	narging	kg/unit	0.5	0.5	0.5	0.5	1.0	1.0
Piping Connections								
Outdoor Unit	Liquid Pipe	ø, mm	9.52	15.88	15.88	15.88	15.88	15.88
		ø, inch	3/8	5/8	5/8	5/8	5/8	5/8
	Gas Pipe	ø, mm	22.22	28.58	28.58	28.58	28.58	28.58
		ø, inch	7/8	11/8	11/8	11/8	11/8	11/8
	Discharge Gas	ø, mm	19.05	28.58	28.58	28.58	28.58	28.58
		ø, inch	3/8	11/8	11/8	11/8	11/8	11/8
Indoor Unit	Liquid Pipe	ø, mm	9.52	9.52	9.52	9.52	9.52	9.52
		ø, inch	3/8	3/8	3/8	3/8	3/8	3/8
	Gas Pipe	ø, mm	15.88	15.88	15.88	15.88	15.88	15.88
		ø, inch	5/8	5/8	5/8	5/8	5/8	5/8
External Dimensions								
Net Weight kg		11.0	21.0	24.5	28.5	88.6	101.9	
Net Dimensions (W x H x l Operation Limit	D)	mm	338 x 199 x 409	728 x 199 x 469	728 x 199 x 469	728 x 199 x 469	980 x 298 x 469	980 x 298 x 469
Cooling		°C (°F)	-15~48 (5~118.4)	-15~48 (5~118.4)	-15~48 (5~118.4)	-15~48 (5~118.4)	-15~48 (5~118.4)	-15~48 (5~118.4)
Heating		°C (°F)	-25~24 (-13~75.2)	-25~24 (-13~75.2)	-25~24 (-13~75.2)	-25~24 (-13~75.2)	-25~24 (-13~75.2)	-25~24 (-13~75.2)
		/	_5 _1 ( 15 , 5.2)	_5 _1 ( 15 /5.2)	_3 _1 ( 13 /3.2)	_3 _1 ( 13 , 3.2)	_3 _1 ( 13 / 3.2)	_5





## Air Handling Unit (AHU) Kit

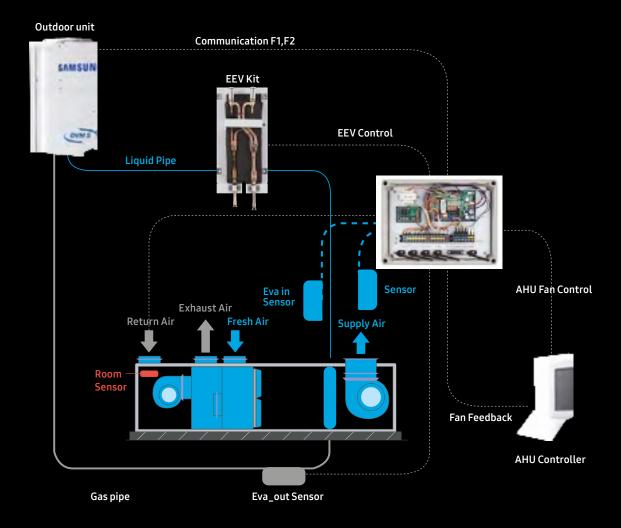
### Connect to third-party air handling units

The Samsung AHU kit allows the connection of DVM outdoor units to third-party air handling units (AHUs)<sup>1</sup>. With this kit you can supply heating or cooling to a DX coil in the AHU. This is a cost-efficient and effective 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

Please contact your local Samsung representative for more information.



# Specifications AHU Kit for Outdoor Unit (R410A)

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







М	odel			AHU Kit		
			MXD-K025AN	MXD-K050AN	MXD-K075AN	
Connectable Outdoor			HP/HR	HP/HR	HP/HR	
Power Supply			1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	
Design Recommendation						
AHU Capacity Allowance	Max.	kW	8.8	17.5	24.9	
		мвн	30	60	85	
	Min.	kW	6.3	12.6	18.9	
		МВН	21.6	43.2	64.8	
AHU Internal Heat Exchanger	Max.	cm <sup>3</sup>	2,000	4,000	6,000	
Volume Allowance	Min.	cm³	1,200	2,400	4,100	
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		Туре/Ф	103HW/6Φ	103HW/6Φ	103HW/6Φ	
		m/mm²	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	
EVA. OUT		Туре/Ф	103HW/7Φ	103HW/7Φ	103HW/7Φ	
		m/mm²	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	
Room		Туре/Ф	103HW/Moulding	103HW/Moulding	103HW/Moulding	
		m/mm²	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	
Discharge		Туре/Ф	103HW/7Φ	103HW/7Φ	103HW/7Φ	
		m/mm²	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	10 m/2*0.75 mm <sup>2</sup>	
Refrigerant						
Туре		-	R410	A (Fluorinated greenhouse gas, GWP=2	2,088)	
EEV Kit						
Туре		-	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	





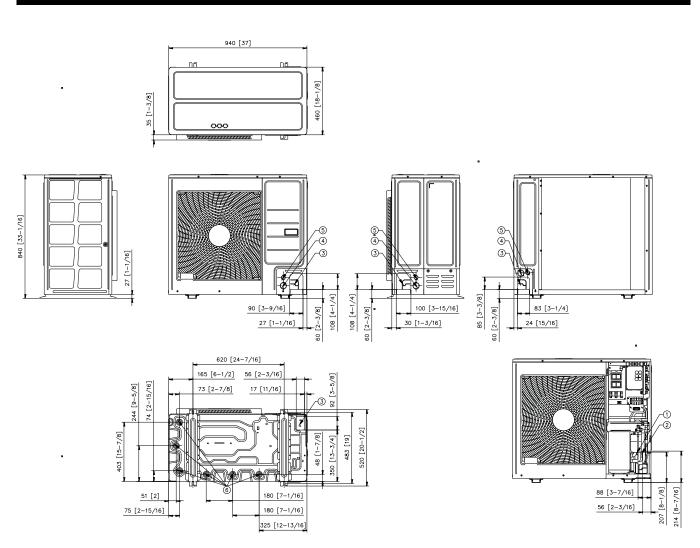


AHU Kit	Control Kit	EEV Kit (Optional)
MXD-K100AN	MCM-D201N	MXD-A64K100E
HP/HR	HP	HP
1Ф, 2, 220-240 V, 50/60 Hz	1Ф, 2, 220-240 V, 50/60 Hz	-
35.0	35.0/70.0/105.0/140.0	35.0
120	119/239/358/478	119
25.2	25.2/50.4/75.6/100.8	25.2
86.4	86.4/172.8/259.2/345.6	86.4
8,000	8,000/16,000/24,000/32,000	8,000
6,100	6,100/12,200/18,300/24,400	6,100
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 <sup>2</sup>	7 m/2*0.75 mm <sup>2</sup>	-
103HW/7Φ	103HW/7Φ	-
10 m/2*0.75 mm <sup>2</sup>	7 m/2*0.75 mm <sup>2</sup>	-
103HW/Moulding	PT1000Ω/4~20 mA Field Supply	-
10 m/2*0.75 mm <sup>2</sup>	-	-
103HW/7Φ	PT1000Ω/4~20 mA Field Supply	-
10 m/2*0.75 mm <sup>2</sup>	-	-
R410	A (Fluorinated greenhouse gas, GWP=:	2,088)
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	-

### **DVM S Mini Heat Pump**

AM040DXMDKG/EU, AM050DXMDKG/EU, AM060DXMDKG/EU, AM040DXMDNG/EU, AM050DXMDNG/EU, AM060DXMDNG/EU

Units: mm [inches]

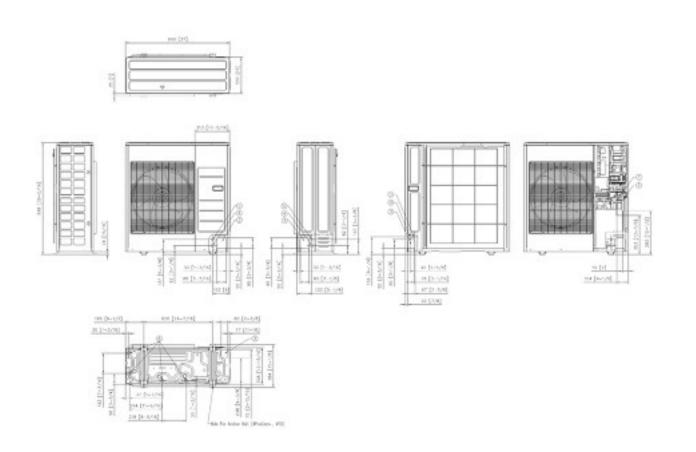


NO	Name	Descri	ption
		AM040DXMD*G/EU, AM050DXMD*G/EU	AM60DXMD*G/EU
1	Refrigerant liquid pipe	ø9.52 (	Ø3/8)
2	Refrigerant gas pipe	ø15.88 (ø5/8)	Ф19.05 (Ф3/4)
3	Knock-out hole for pipe intake	Front/Side/R	lear/Bottom
4	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)	
5	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)	
6	Drain holes Connect		rovided drain plug.

**DVM S Heat Pump (R410A)** 

AM040BXMDEH/EU, AM050BXMDEH/EU

Units: mm [inches]

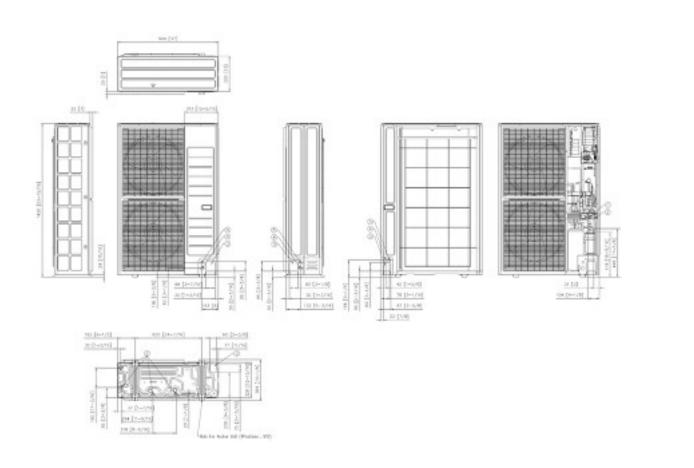


NO	Name	Description
		4/5 hp
1	Refrigerant liquid pipe	ø9.52 (ø3/8)
2	Refrigerant gas pipe	ø15.88 (ø5/8)
3	Knock-out hole for pipe intake	Front/Side/Rear/Bottom
4	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)
5	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)
6	Drain holes	Connect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

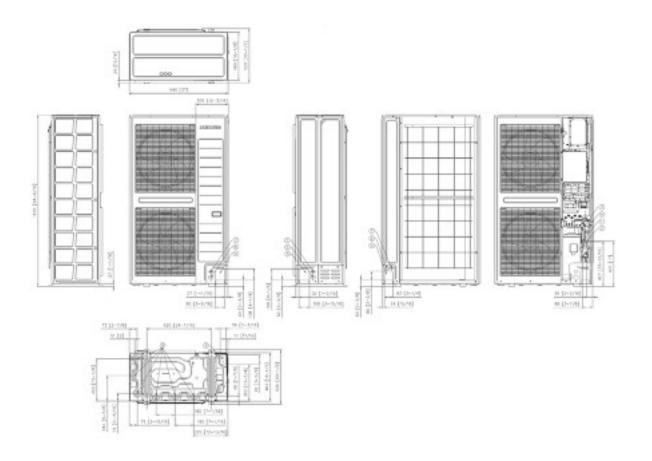
**DVM S Heat Pump (R410A)** 

AM080BXMDGH/EU, AM080BXMWGH/EU

Units: mm [inches]



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.

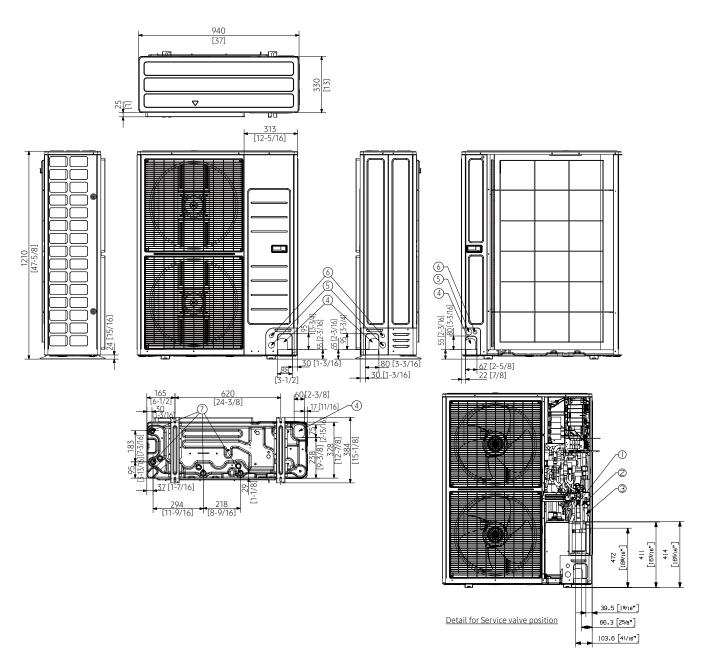


NO	Name	Desc	ription
		10 hp	12 hp
1	Refrigerant liquid pipe	ø9.52 (ø3/8)	ø12.70 (ø1/2)
2	Refrigerant gas pipe	ø22.28 (ø5/8)	ø28.58 (ø3/4)
3	Service valve (gas)		
4	Service valve (liquid)		
5	Knock-out hole for pipe intake	Front/S	ide/Rear
6	Power wiring conduits	Front/Side/Rear, ø44 (ø1 3/4)	
7	Communication wiring conduits	Front/Side/Rear, ø28 (ø11/8)	
8	Drain holes	Connect with the	provided drain plug.
9	Knock-out hole for pipe intake	Во	ttom

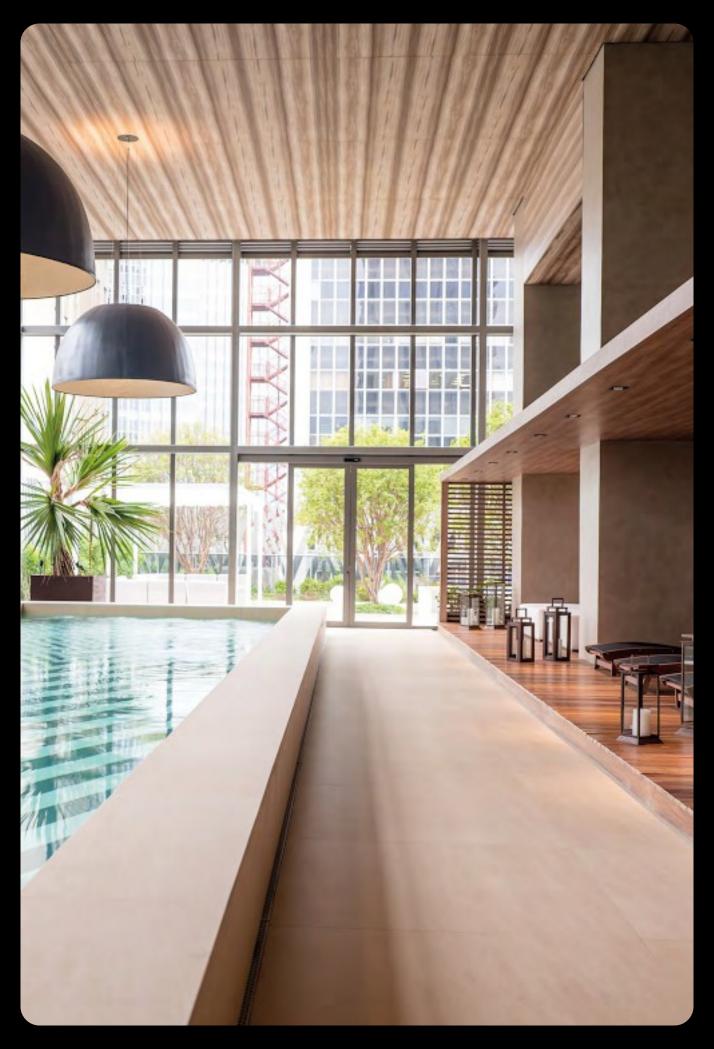
DVM S (R410A) Heat Recovery (With Heat Recovery Changer Kit)

AM040BXMDER/EU, AM050BXMDER/EU, AM060BXMDER/EU

Units: mm finches

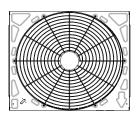


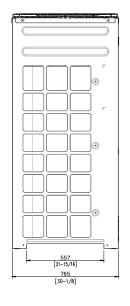
NO	Name	Description
1	Refrigerant liquid pipe	ø9.52 (ø3/8)
2	Refrigerant High pressure Gas pipe	ø15.88 (ø5/8)
3	Refrigerant low pressure gas pipe	Φ19.05 (Φ3/4)
4	Knock-out hole for pipe intake	Front/Side/Rear/Bottom
5	Power wiring conduits	Front/Side/Rear, ø34.00 (ø1 3/8)
6	Communication wiring conduits	Front/Side/Rear, ø22.00 (ø7/8)
7	Drain holes	Connect with the provided drain plug.

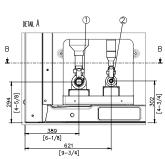


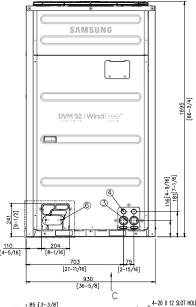
DVM S2 Essential Heat Pump (2-Pipe, R410A)

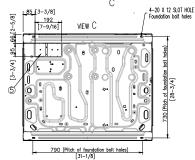
AM100/120/140AXVDGH/EU

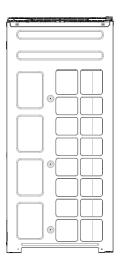


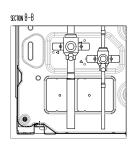












NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe	See NOTE 4.
3	Power wiring conduit	Ø44
4	Communication wiring conduit	Ø34
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

- Note:

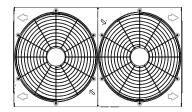
  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

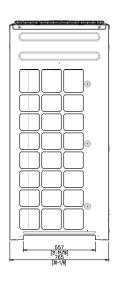
  2. Item 3-6: Knock-out hole
  3. View C indicate the dimension of knock-out hole (bottom)

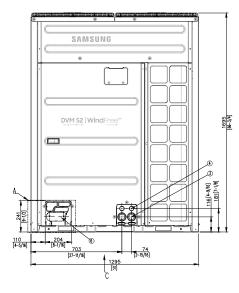
  4. Pipe [Ø, mm(inch)]: Brazing connection

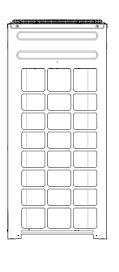
HP	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

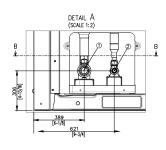
AM160/180AXVDGH/EU Units: mm [inches]

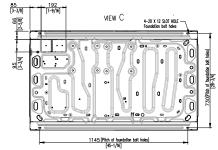


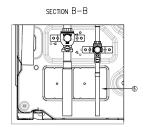












NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe	See NOTE 4.
3	Power wiring conduit	Ø44
4	Communication wiring conduit	Ø34
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

- Note:

  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

  2. Item 3-6: Knock-out hole

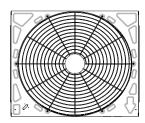
  3. View C indicate the dimension of knock-out hole (bottom)

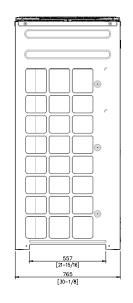
  4. Pipe [Ø, mm(linch]]: Brazing connection

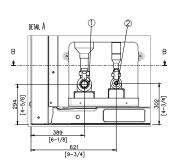
НР	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

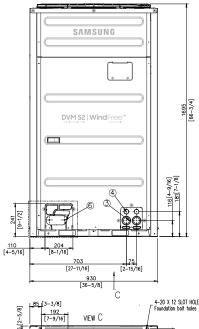
DVM S2 Standard Heat Pump (2-Pipe, R410A)

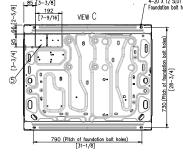
AM080/100/120/140AXVAGH/EU

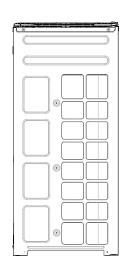


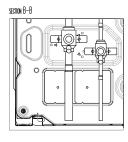












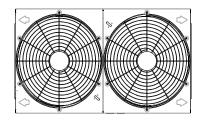
NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe See NOTE 4.	
3	Power wiring conduit	Ø44
4	Communication wiring conduit	Ø34
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

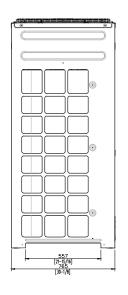
HP	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

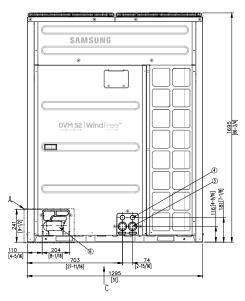
- Note:

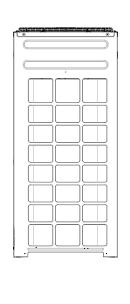
  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.
  2. Item 3-6: Knock-out hole
  3. View C indicate the dimension of knock-out hole (bottom)
  4. Pipe [Ø, mm(inch)]: Brazing connection

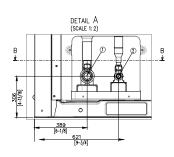
Units: mm [inches] AM160/180/200/240/260AXVAGH/EU

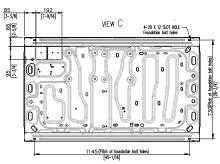


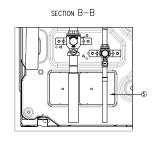












NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe	See NOTE 4.
3	Power wiring conduit	Ø44
4	Communication wiring conduit	Ø34
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

HP	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

- Note:

  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

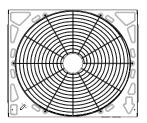
  2. Item 3-6: Knock-out hole

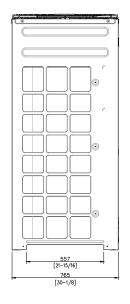
  3. View C indicate the dimension of knock-out hole (bottom)

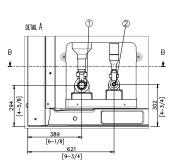
  4. Pipe [Ø, mm(inch)]: Brazing connection

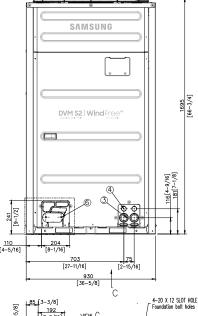
# Dimensional drawings DVM S2 High Efficiency Heat Pump (2-Pipe, R410A)

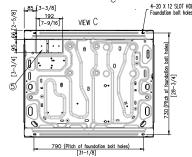
AM080/100/120AXVGGH/EU

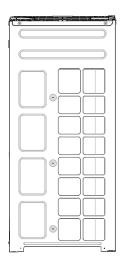


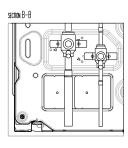












NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe	See NOTE 4.
7		
	Power wiring conduit	Ø44
4	Communication wiring conduit Ø34	
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

HP	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

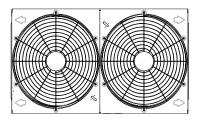
- Note:

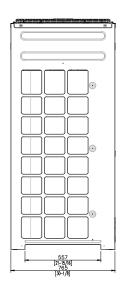
  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

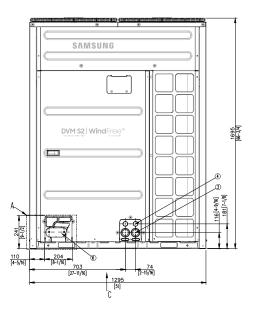
  2. Item 3-6: Knock-out hole
  3. View C indicate the dimension of knock-out hole (bottom)

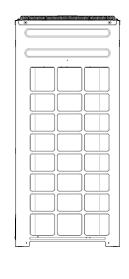
  4. Pipe [Ø, mm(inch)]: Brazing connection

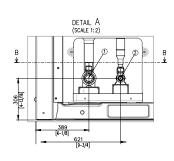
AM140/160/180/200/240/260AXVGGH/EU Units: mm [inches]

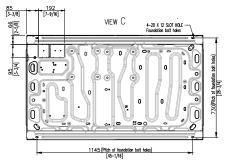


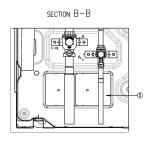












NO	Name	Description
1	Gas Ref.pipe	See NOTE 4.
2	Liquid Ref.pipe See NOTE 4.	
3	Power wiring conduit Ø44	
4	Communication wiring conduit Ø34	
5	Knock-out Hole for Ref.Piping (bottom)	
6	Knock-out Hole for Ref.Piping (front)	

HP	Liquid pipe	Gas pipe
8	9.52(3/8)	19.05(3/4)
10	9.52(3/8)	22.22(7/8)
12	12.70(1/2)	28.58(1-1/8)
14	12.70(1/2)	28.58(1-1/8)
16	12.70(1/2)	28.58(1-1/8)
18	15.88(5/8)	28.58(1-1/8)
20	15.88(5/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)
26	19.05(3/4)	34.92(1-3/8)

- Note:

  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

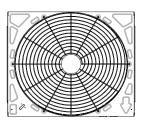
  2. Item 3-6: Knock-out hole

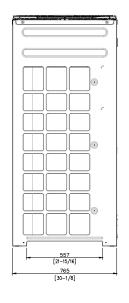
  3. View C indicate the dimension of knock-out hole (bottom)

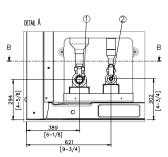
  4. Pipe [Ø, mm(linch]]: Brazing connection

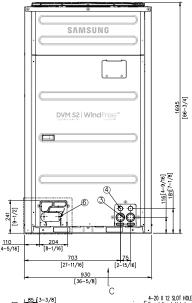
# Dimensional drawings DVM S2 High EER Heat Recovery (3-Pipe, R410A)

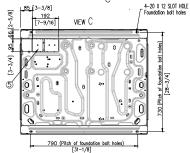
AM080/100/120AXVGGR/EU Units: mm [inches]

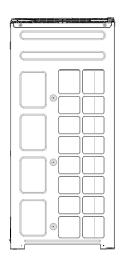


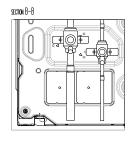












NO	Name	Description
1	Low Pressure Gas Ref.pipe	See NOTE 4.
2	High Pressure Ref.pipe	See NOTE 4.
3	Liquid Ref.pipe See NOTE 4.	
4	Power wiring conduit Ø44	
5	Communication wiring conduit Ø34	
6	Knock-out Hole for Ref.Piping (bottom)	
7	Knock-out Hole for Ref.Piping (front)	

пР	Liquid pipe	Low Pressure das pipe	High Pressure das pipe
8	9.52(3/8)	19.05(3/4)	15.88(5/8)
10	9.52(3/8)	22.22(7/8)	19.05(3/4)
12	12.70(1/2)	28.58(1-1/8)	19.05(3/4)
14	12.70(1/2)	22.22(7/8)	22.22(7/8)
16	12.70(1/2)	28.58(1-1/8)	22.22(7/8)
18	15.88(5/8)	28.58(1-1/8)	22.22(7/8)
20	15.88(5/8)	28.58(1-1/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)	28.58(1-1/8)
26	19.05(3/4)	34.92(1-3/8)	28.58(1-1/8)

- Note:

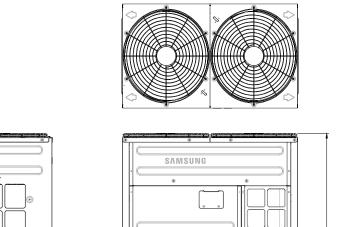
  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

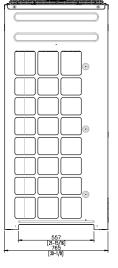
  2. Item 3-7: Knock-out hole

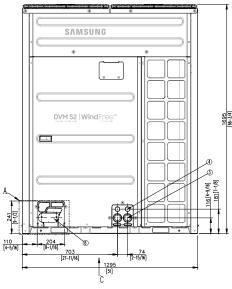
  3. View C indicate the dimension of knock-out hole (bottom)

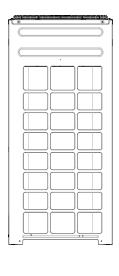
  4. Pipe [Ø, mm(inch)]: Brazing connection

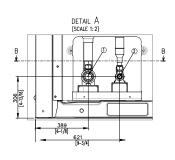
AM140/160/180/200/240/260AXVGGR/EU Units: mm [inches]

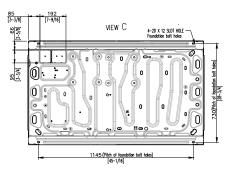


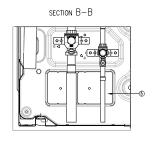












NO	Name	Description	
1	Low Pressure Gas Ref.pipe	See NOTE 4.	
2	High Pressure Ref.pipe	See NOTE 4.	
3	Liquid Ref.pipe	See NOTE 4.	
4	Power wiring conduit	Ø44	
5	Communication wiring conduit		
6	Knock-out Hole for Ref.Piping (bottom)		
7	Knock-out Hole for Ref.Piping (front)		

HP	Liquid pipe	Low Pressure Gas pipe	High Pressure Gas pipe
8	9.52(3/8)	19.05(3/4)	15.88(5/8)
10	9.52(3/8)	22.22(7/8)	19.05(3/4)
12	12.70(1/2)	28.58(1-1/8)	19.05(3/4)
14	12.70(1/2)	28.58(1-1/8)	22.22(7/8)
16	12.70(1/2)	28.58(1-1/8)	22.22(7/8)
18	15.88(5/8)	28.58(1-1/8)	22.22(7/8)
20	15.88(5/8)	28.58(1-1/8)	28.58(1-1/8)
22	15.88(5/8)	28.58(1-1/8)	28.58(1-1/8)
24	15.88(5/8)	34.92(1-3/8)	28.58(1-1/8)
26	19.05(3/4)	34.92(1-3/8)	28.58(1-1/8)

- Note:

  1. Detail A and SECTION B-B indicate the dimension after fixing the attached piping.

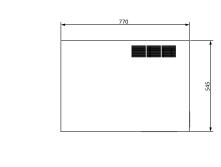
  2. Item 3-7: Knock-out hole

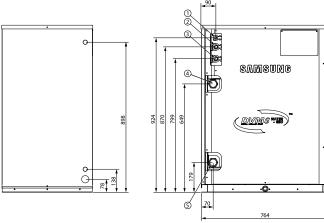
  3. View C indicate the dimension of knock-out hole (bottom)

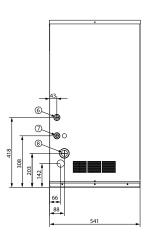
  4. Pipe [Ø, mm(inch]]: Brazing connection

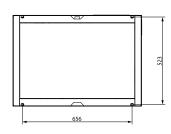
DVM S Water (R410A)

AM080/100/120MXWANR/EU
Units: mm [inches



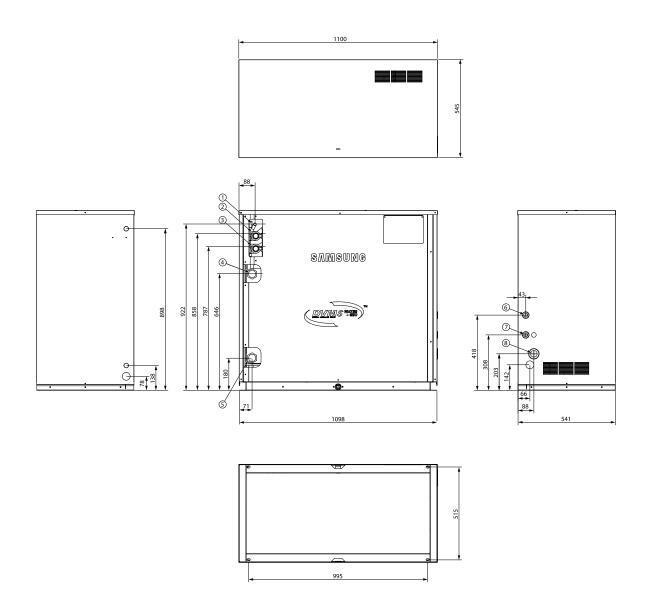






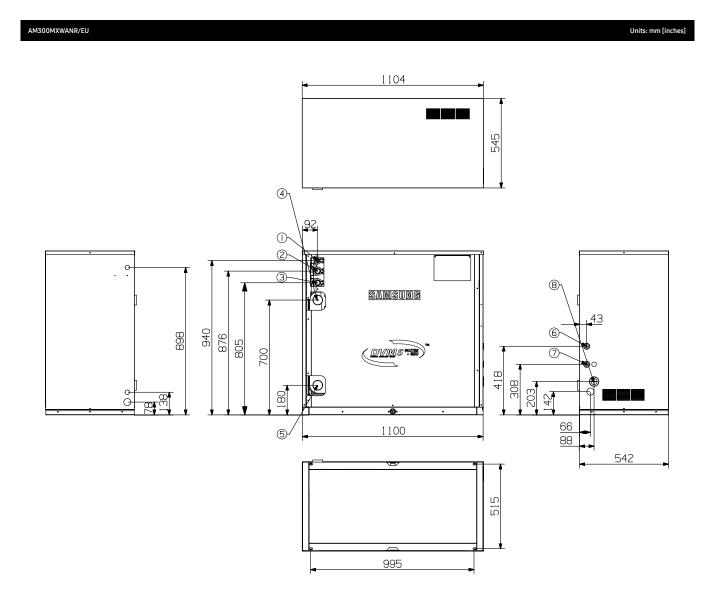
NO	Name	Description
1	Liquid Ref. pipe	ø19.05 (3/4)
2	High Pressure Gas Ref. pipe	ø28.58 (11/8)
3	Low Pressure Gas Ref. pipe	ø 34.92 (1 3/8)
4	Water outlet pipe	PT 2
5	Water inlet pipe	PT 2
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	

AM200MXWANR/EU Units: mm [inches]

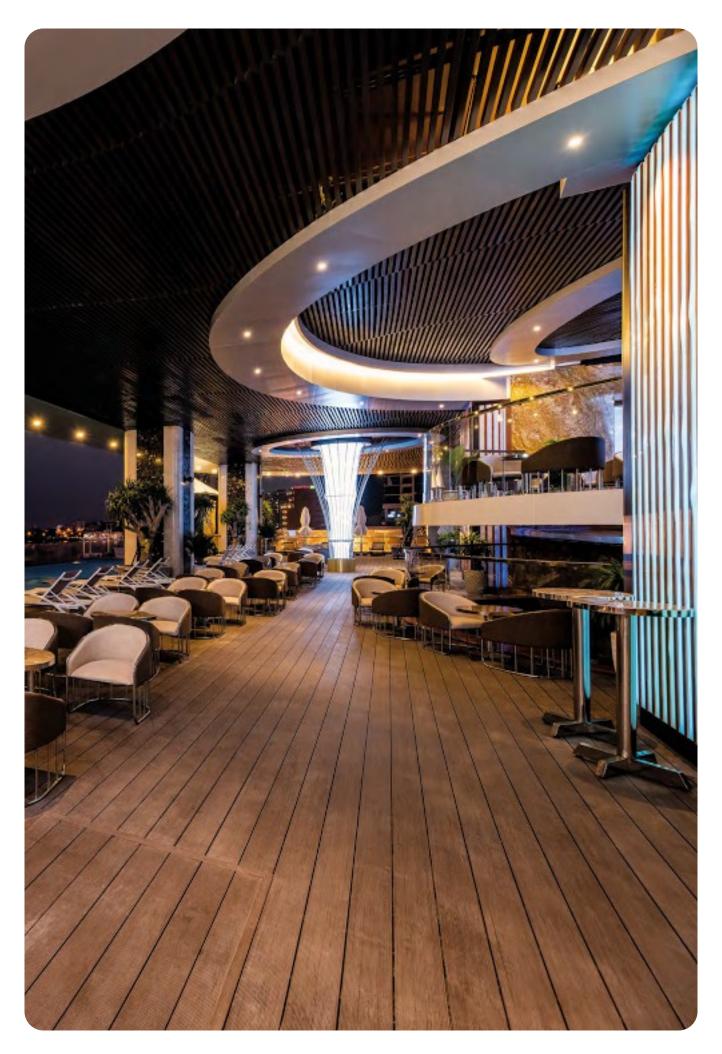


NO	Name	Description
1	Liquid Ref. pipe	15.88 (5/8)
2	High Pressure Gas Ref. pipe	ø28.58 (11/8)
3	Low Pressure Gas Ref. pipe	ø28.58 (11/8)
4	Water outlet pipe	PT11/4
5	Water inlet pipe	PT11/4
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	

DVM S Water (R410A)



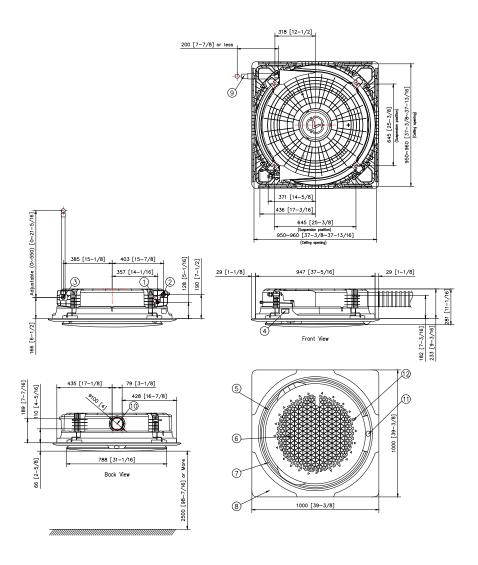
NO	Name	Description
1	Liquid Ref. pipe	ø19.05 (3/4)
2	High Pressure Gas Ref. pipe	ø28.58 (11/8)
3	Low Pressure Gas Ref. pipe	ø 34.92 (1 3/8)
4	Water outlet pipe	PT 2
5	Water inlet pipe	PT 2
6	Communication wiring conduits	
7	External contact wiring	
8	Power wiring conduits	



### Universal 360 Cassette (square)

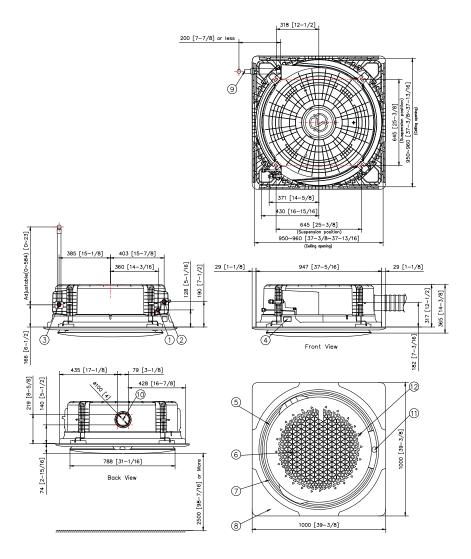
AM045DN6DKG/EU, AM056DN6DKG/EU, AM071DN6DKG/EU, AM090DN6DKG/EU

Units: mm [inches



NO	Name	Description		
		AM045DN6DKG/EU AM056DN6DKG/EU	AM071DN6DKG/EU AM090DN6DKG/EU	
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 pipe connection	VP25 (OD32, ID25)		
4	Power supply/Communication wiring conduit	-		
5	Air Discharge opening	-		
6	Air suction grille		-	
7	Suction rim for Booster fan	-		
8	Decoration cover		-	
9	Drain hose (Accessory)		-	
10	Fresh air intake knockout hole	Use M4 Screw		
11	Display Window		-	
12	Remote controller receiver		-	

As for suspension bolt, please use M8 – M10. (Procured at local site) Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4]. Max ceiling opening: 960mm[36-13/16]. When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam, thickness 10mm[3/8] or more)

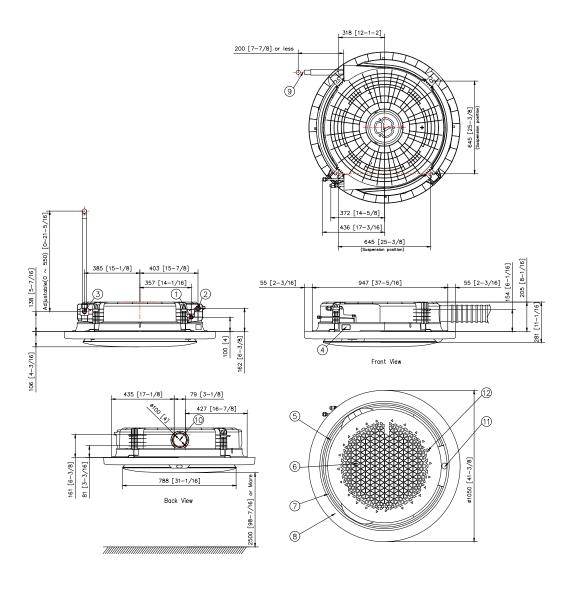


NO	Name	Description
110	Nume	Description
1	Gas pipe connection	Ø15.88 (5/8")
2	Liquid pipe connection	Ø9.52 (3/8")
3	Drain pipe connection	VP25 (OD32, ID25)
4	Power supply/Communication wiring conduit	-
5	Air Discharge opening	-
6	Air suction grille	-
7	Suction rim for Booster fan	-
8	Decoration cover	-
9	Drain hose (Accessory)	-
10	Fresh air intake knockout hole	Use M4 Screw
11	Display Window	-
12	Remote controller receiver	-

- As for suspension bolt, please use M8 M10. (Procured at local site) Make sure the spacing between the ceiling and the cassette is no more than 29mm[1-1/4]. Max ceiling opening :960mm[36-13/6]. When the condition exceed  $30^\circ\text{C}$  and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam , thickness 10mm[3/8] or more)

### Universal 360 Cassette (circular)

AM045DN6DKG/EU, AM056DN6DKG/EU, AM071DN6DKG/EU, AM090DN6DKG/EU

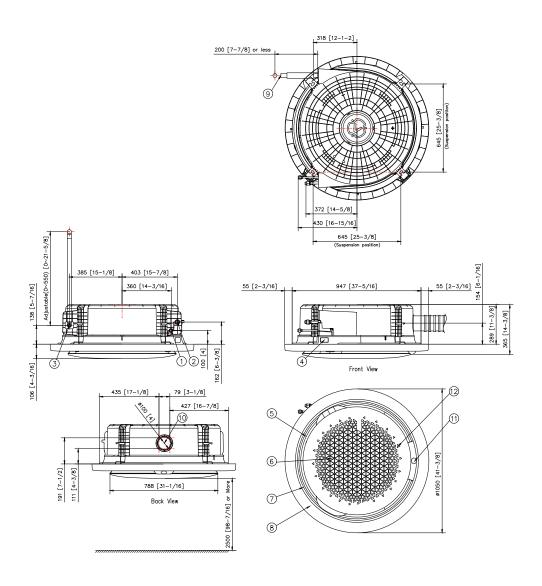


NO	Name	Description		
		AM045DN6DKG/EU AM056DN6DKG/EU	AM071DN6DKG/EU AM090DN6DKG/EU	
1	Liquid pipe connection	Φ6.35[1/4]	Ф9.52[3/8]	
2	Gas pipe connection	Φ12.7[1/2]	Φ15.88[5/8]	
3	Drain pipe connection	VP25 (OD32, ID25)		
4	Power supply/communication wiring conduit	-		
5	Air discharge opening	-		
6	Air suction grille	-		
7	Suction rim for booster fan	-		
8	Decoration cover	-		
9	Drain hose (Accessory)	-		
10	Fresh air intake knock-out hole	Use M4 Screw		
11	Display window	-		
12	Remote controller receiver		-	

- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
  Make sure the spacing between the ceiling and the cassette is no more than 10mm[3/8]
  When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam, thickness 10mm[3/8] or more)
  When installing the circular panel on the ceiling, make sure to install 2 or more inspection holes for the maintenance.
  The circular panel is by default available in exposed installation. Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table.
  (The size of an inspection hole must be at least 450 mm x 450 mm.)

	Inspection hole			
Category	Recessed installation		Exposed	
	Integrated	Suspended	installation	
Square panel	1 ea			
Circular panel	2 ea		•	

· A suspended ceiling structure can substitute for the inspection holes.



NO	Name	Description
1	Liquid pipe connection	Φ9.52[3/8]
2	Gas pipe connection	Φ15.88[5/8]
3	Drain pipe connection	VP25 (OD32, ID25)
4	Power supply/communication wiring conduit	-
5	Air discharge opening	-
6	Air suction grille	-
7	Suction rim for booster fan	-
8	Decoration cover	-
9	Drain hose (Accessory)	-
10	Fresh air intake knock-out hole	Use M4 Screw
11	Display window	-
12	Remote controller receiver	-

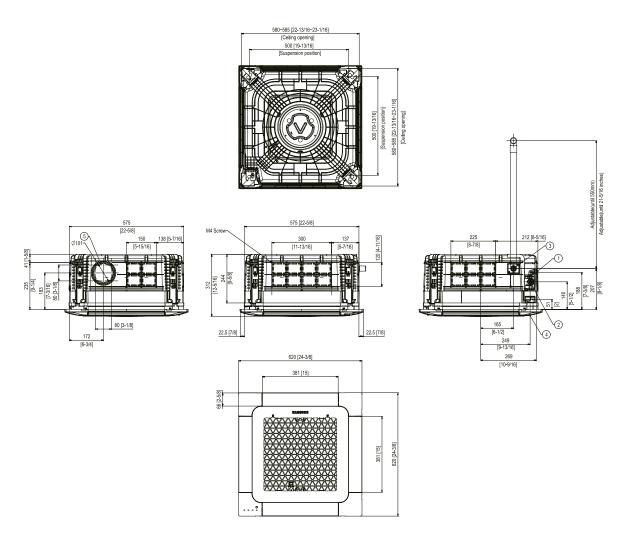
- As for suspension bolt, please use M8 ~ M10. (Procured at local site)
  Make sure the spacing between the ceiling and the cassette is no more than 10mm[3/8]
  When the condition exceed 30°C and RH 80% in the ceiling or fresh air is inducted into the ceiling, and additional insulation is required (polyethylene foam, thickness 10mm[3/8] or more)
  When installing the circular panel on the ceiling, make sure to install 2 or more inspection holes for the maintenance.
  The circular panel is by default available in exposed installation. Make inspection holes on the ceiling for easier installation and maintenance, as shown in the following table.
  (The size of an inspection hole must be at least 450 mm x 450 mm.)

	Inspection hole		
Category	Recessed installation		Exposed
	Integrated	Suspended	installation
Square panel	1 ea		
Circular panel	2 ea		•

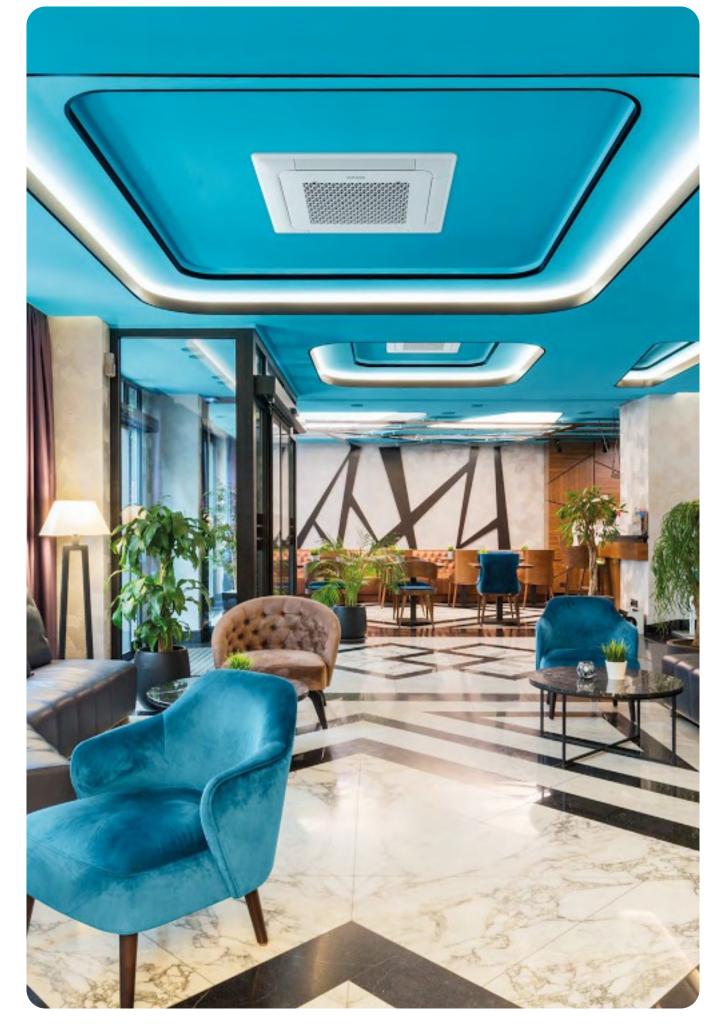
A suspended ceiling structure can substitute for the inspection holes.

**Universal** WindFree<sup>™</sup> 4-Way 600 x 600 Cassette

AMO\*\*DNNDKG/EU Units: mm [inches



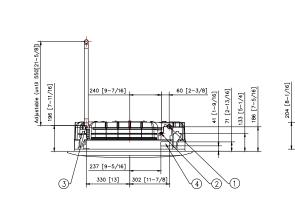
NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection	VP25 (OD 32, ID 25)
4	Power supply/communication wiring conduits	Use M4 Screw
5	Fresh air intake knock-out hole	ø10 [4], use M4 Screw

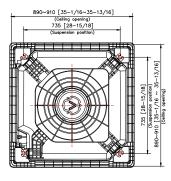


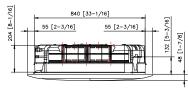
### **Universal** WindFree<sup>™</sup> 4-Way Cassette

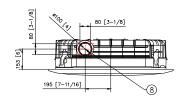
AMO28DN4DKG/EU, AMO36DN4DKG/EU, AMO45DN4DKG/EU, AMO56DN4DKG/EU, AMO71DN4DKG/EU

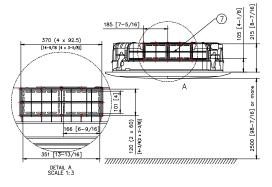
Units: mm linches

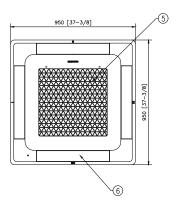




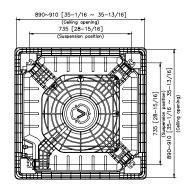


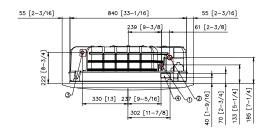


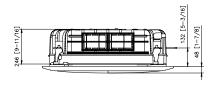


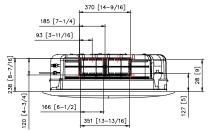


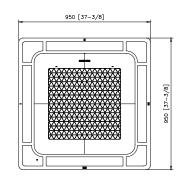
NO	Name	Description		
		AM028DN4DKG/EU, AM036DN4DKG/EU AM045DN4DKG/EU, AM056DN4DKG/EU	AM071DN4DKG/EU	
1	Gas pipe connection	ø12.7 (1/2)	ø15.88 (5/8)	
2	Liquid pipe connection	Φ6.35[1/4]		
3	Drain pipe connection	VP25 (OD 32, ID 25)		
4	Power supply/communication wiring conduits			
5	Air Inlet Grille			
6	Air Outlet Louver			
7	Sub - duct	* The sub duct is not applicable to the WindFree™ panel		
8	Fresh air intake	ø10 [4], use M	4 Screw	











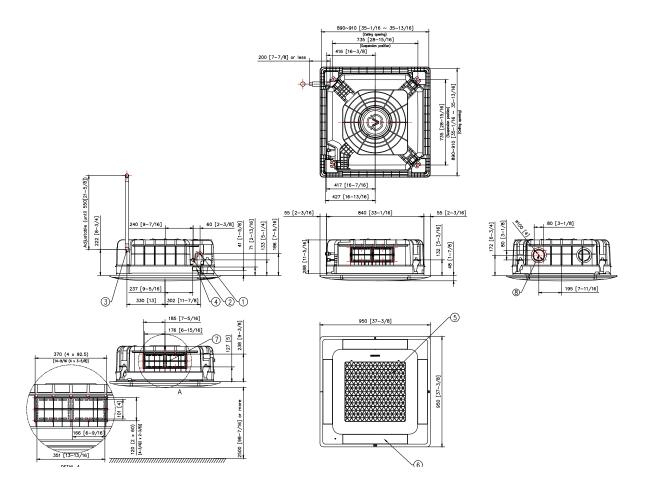
172 [6-3/4]	***************************************	
	\$ 195 [7-11/16]	

NO	Name	Description	
		AM022DN4FKG/EU, AM028DN4FKG/EU AM036DN4FKG/EU, AM045DN4FKG/EU	AM090DN4DKG/EU, AM112DN4DKG/EU
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	

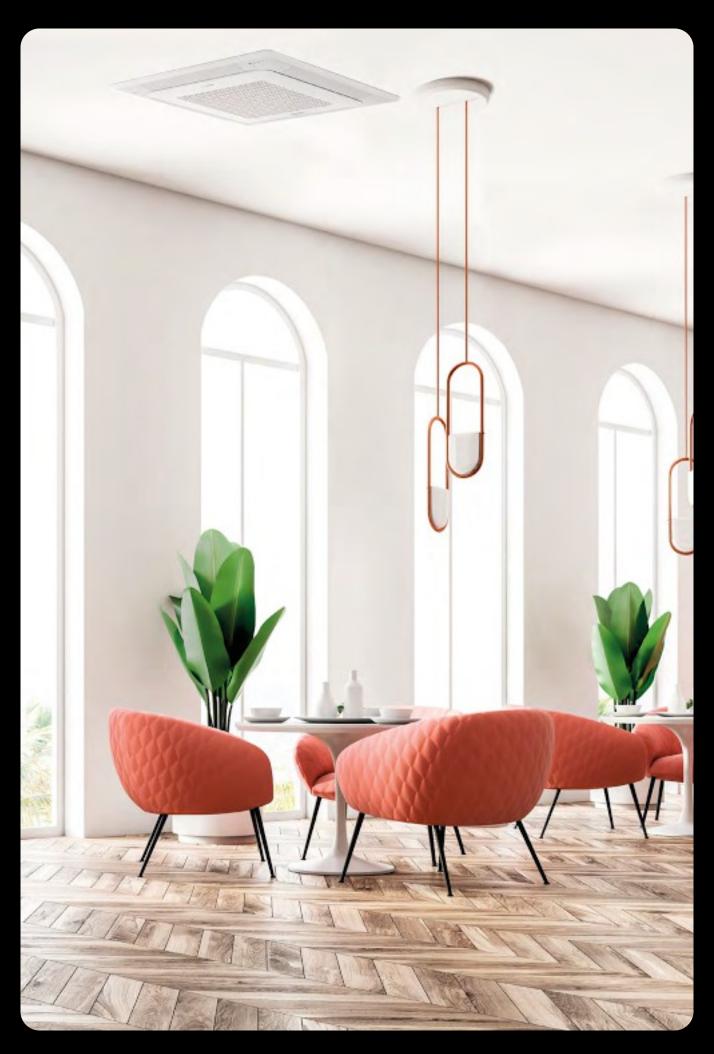
### **Universal** WindFree<sup>™</sup> 4-Way Cassette

AM128DN4DKG/EU, AM140DN4DKG/EU, AM056DN4FKG/EU, AM071DN4FKG/EU

Units: mm [inches]



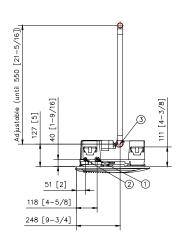
NO	Name	Description	
		AM056DN4FKG/EU	AM071DN4FKG/EU, AM128DN4DKG/EU AM140DN4DKG/EU
1	Gas pipe connection	Ф6.35[1/4]	ø15.88 (5/8)
2	Liquid pipe connection	Φ12.7[1/2]	Φ9.52[3/8]
3	Drain pipe connection	VP25 (OD 32, ID 25)	
4	Power supply/communication wiring conduits		
5	Air Inlet Grille		
6	Air Outlet Louver		
7	Sub - duct	* The sub duct is not applicabel to the WindFree™ panel	
8	Fresh air intake	ø10 [4], use M4 Screw	

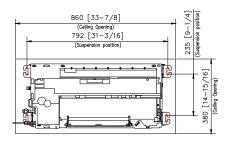


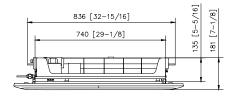
### **Universal** WindFree<sup>™</sup> 1-Way Cassette

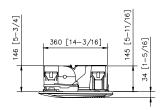
AM017DN1DKG/EU, AM022DN1DKG/EU

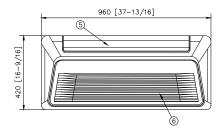
Units: mm [inches]

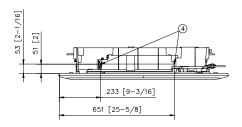








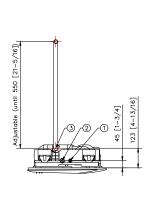


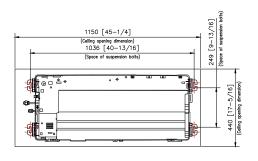


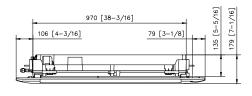
NO	Name	Description
1	Gas pipe connection	Ø12.7 (1/2")
2	Liquid pipe connection	Ø6.35 (1/4")
3	Drain pipe connection VP25(0D32, ID25)	
4	Power supply/Communication wiring conduit -	
5	Air outlet louver -	
6	Air inlet grille -	

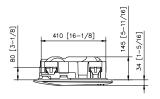
AM028DN1DKG/EU, AM036DN1DKG/EU

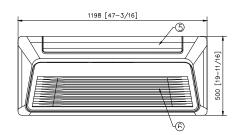
Units: mm [inches]

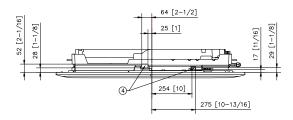










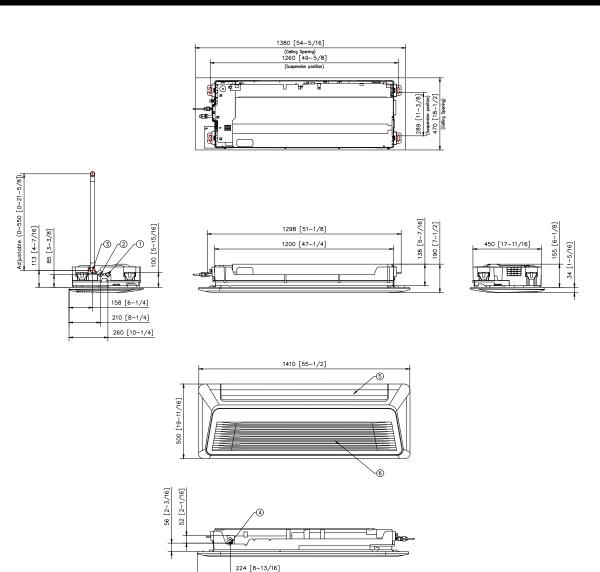


NO	Name	Description
1	Gas pipe connection	Ø12.7 (1/2")
2	Liquid pipe connection	Ø6.35 (1/4")
3	Drain pipe connection	VP25(OD32, ID25)
4	Power supply/Communication wiring conduit -	
5	Air outlet louver -	
6	Air inlet grille -	

### **Universal** WindFree<sup>™</sup> 1-Way Cassette

AM056DN1DKG/EU, AM071DN1DKG/EU

Units: mm [inches



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 pipe connection	VP25 (OI	D32, ID25)
4	Power supply/Communication wiring conduit		
5	Air outlet louver		
6	Air inlet grille		-





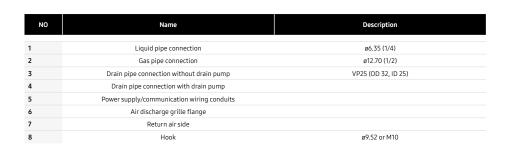


Universal LSP Duct (drain pump included)

AM017DNLDKG/EU, AM022DNLDKG/EU, AM028DNLDKG/EU, AM036DNLDKG/EU Units: mm [inches] 20 [13/16] or More 100 [3-15/16] 71 [2-13/16] 607 [23-7/8] 746 [29-3/8] 20 [13/16] or More 440 [17-5/16] 316 [12-7/16] Air Outlet <u></u> 5 X 100 = 500 [3/16 X 3-15/16 = 19-11/16] 542 [21-5/16] 700 [27-9/16] 150 [5-7/8] 116 [4-9/16] 29 [1-1/8] 83 [3-1/4] 170 [6-11/16] Instruction hole

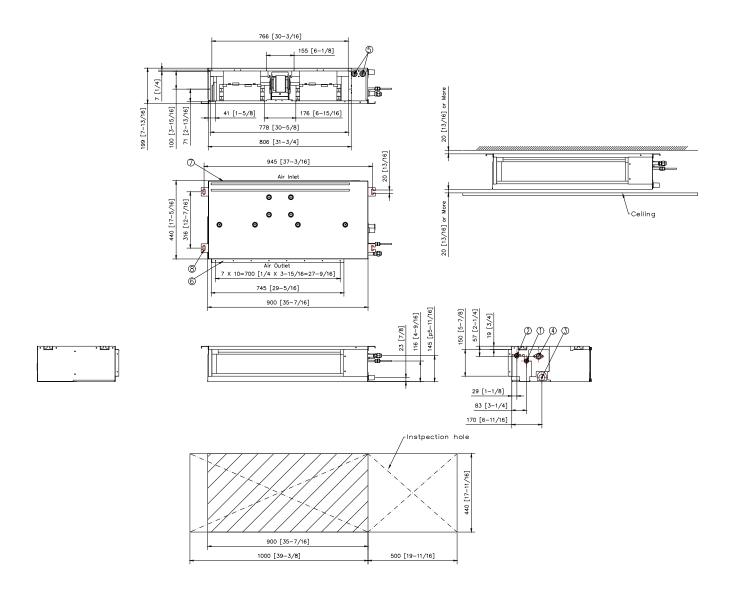
440 [17-11/16]

500 [19-11/16]



800 [31-1/2]

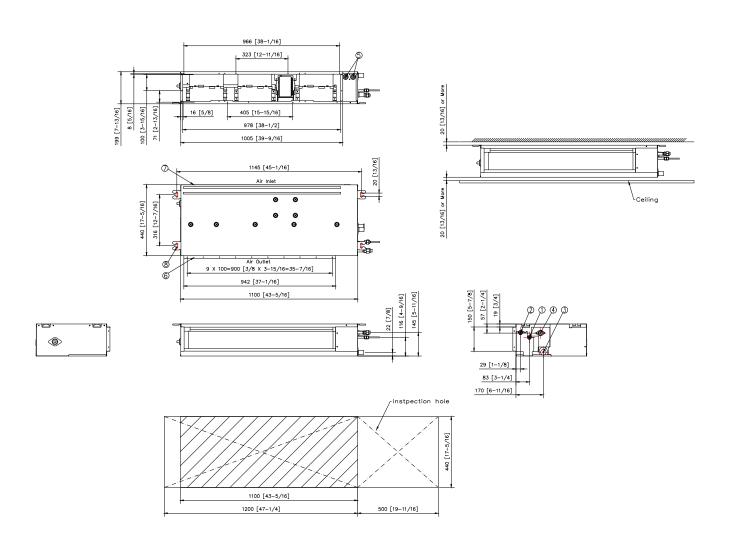
AM045DNLDKG/EU, AM056DNLDKG/EU
Units: mm [inches]



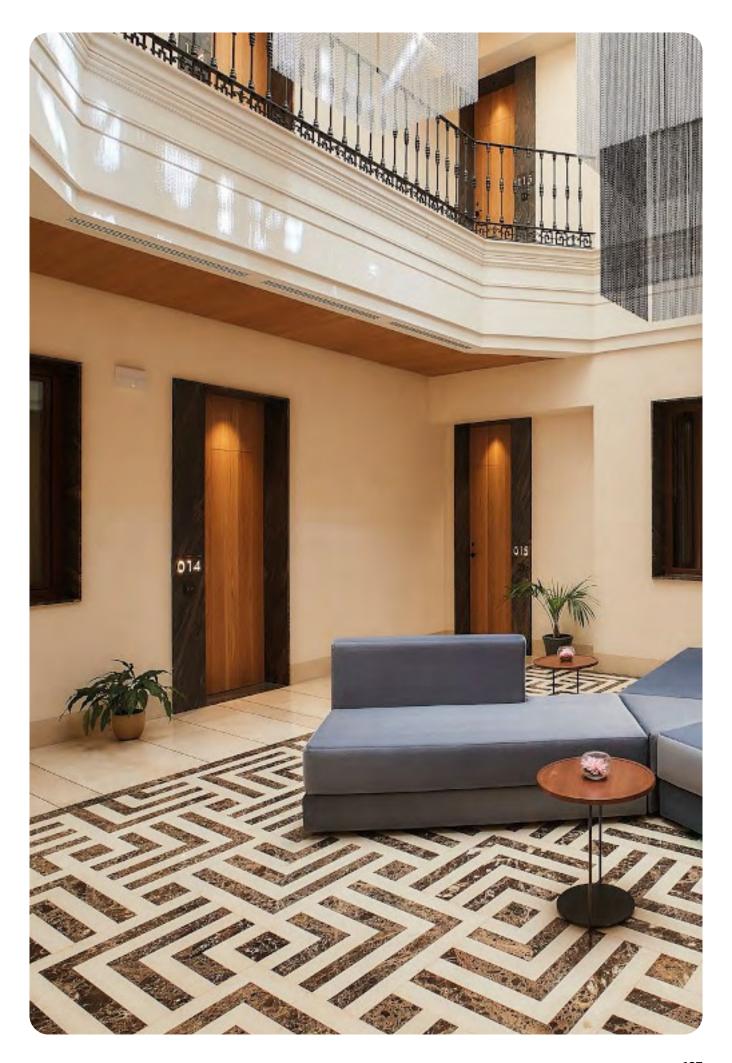
NO	Name	Description
1	Liquid pipe connection	ø6.35 (1/4)
2	Gas pipe connection	ø12.70 (1/2)
3	Drain pipe connection without drain pump VP25 (OD 32, ID 25)	
4	Drain pipe connection with drain pump	
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook ø9.52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

Universal LSP Duct (drain pump included)

AM071DNLDKG/EU Units: mm [inches]

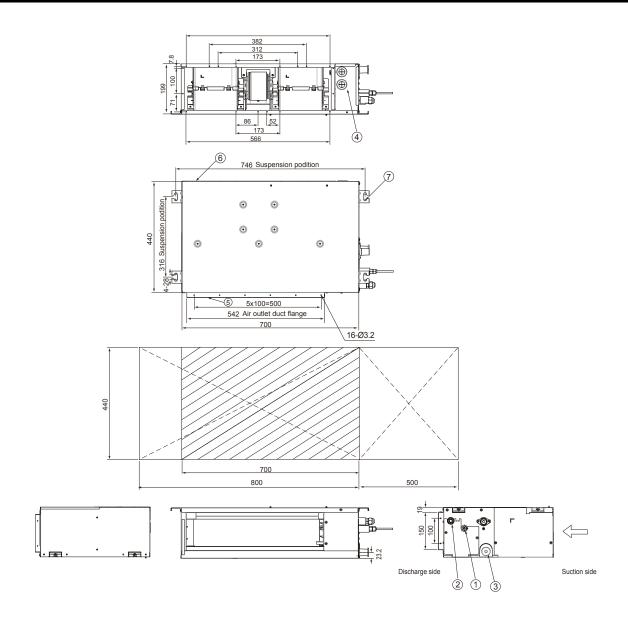


NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø15.88 (5/8)
3	Drain pipe connection without drain pump VP25 (OD 32, ID 25)	
4	Drain pipe connection with drain pump	
5	Power supply/communication wiring conduits	
6	Air discharge grille flange	
7	Return air side	
8	Hook ø9.52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



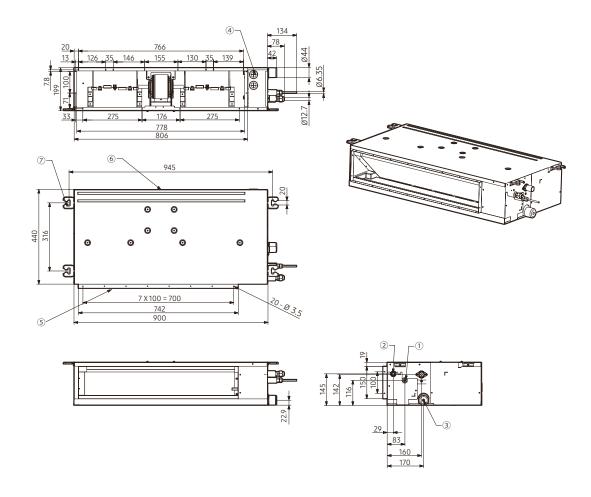
LSP Duct (drain pump excluded, R410A)

AM017/022/028/036ANLDKH/EU
Units: mm [inches]



NO	Name	Description
1	Refrigerant Liquid Pipe	Ø6.35 [1/4"]
2	Refrigerant Gas Pipe	Φ12.70 [1/2"]
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Power supply / Communication connection	-
5	Air discharge grille flange	-
6	Return air side	-
7	Hook	ø9.52 or M10

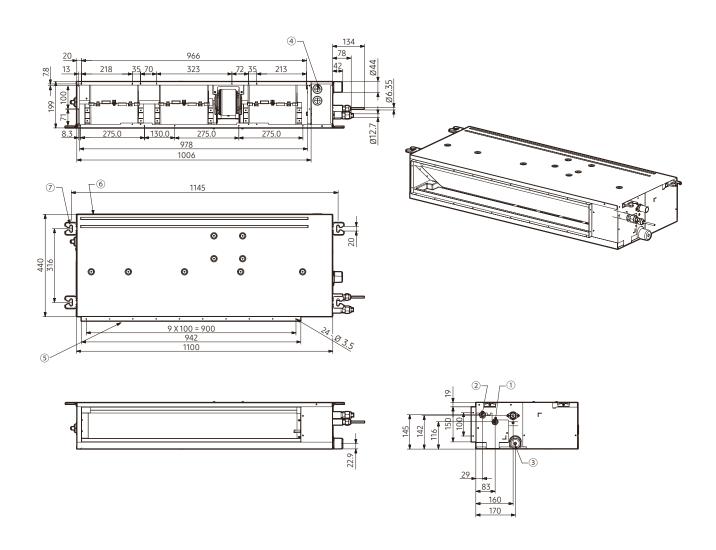
AM045/056ANLDKH/EU Units: mm [inches]



NO	Name	Description
1	Refrigerant Liquid Pipe	Ø6.35 [1/4"] Flare Connection
2	Refrigerant Gas Pipe	Φ12.70 [1/2"] Flare Connection
3	Condensate Drain (Option)	VP25 (OD 32, ID 25)
4	Power & Comm. Wiring Conduits	-
5	Supply Air Flange	-
6	Return Air Flange	-
7	Hook	-

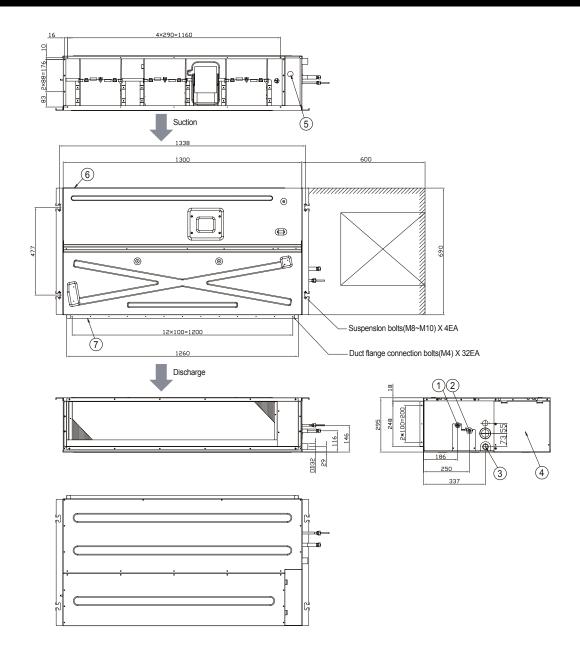
LSP Duct (drain pump excluded, R410A)

AM071ANLDKH/EU Units: mm [inches]



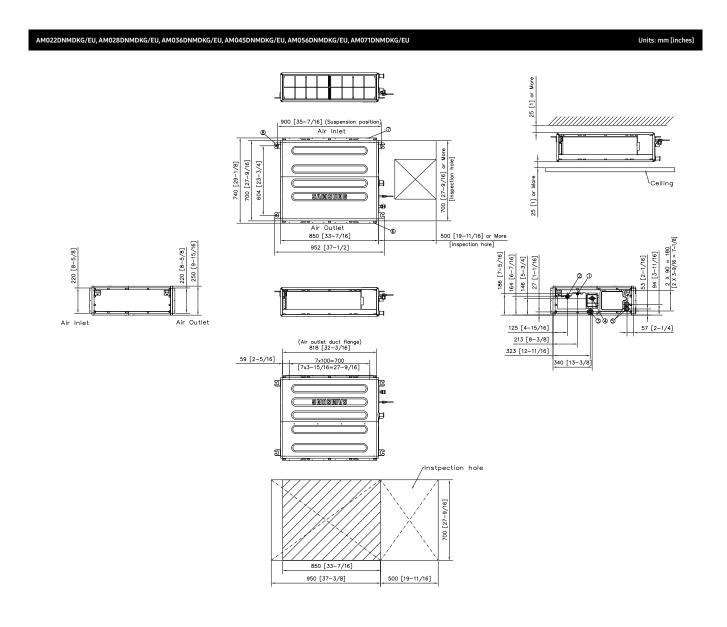
NO	Name	Description
1	Refrigerant Liquid Pipe	Ø9.52 [3/8"] Flare Connection
2	Refrigerant Gas Pipe	Φ15.88 [5/8"] Flare Connection
3	Condensate Drain (Option)	VP25 (OD 32, ID 25)
4	Power & Comm. Wiring Conduits	-
5	Supply Air Flange	-
6	Return Air Flange	-
7	Hook	-

AM090ANLDKH/EU Units: mm [inches]

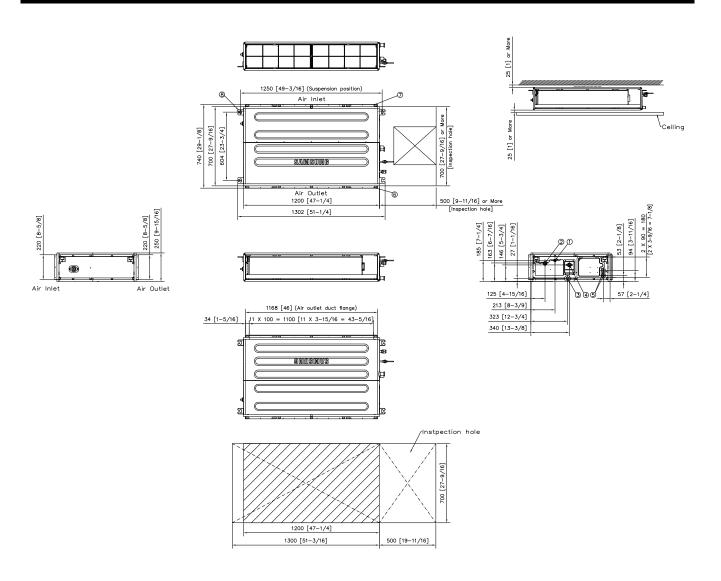


NO	Name	Description
1	Refrigerant Liquid Pipe	Ø9.52 [3/8"] Flare Connection
2	Refrigerant Gas Pipe	Φ15.88 [5/8"] Flare Connection
3	Drain pipe connection without drain pump	VP25 (OD 32, ID 25)
4	Control unit	-
5	Conduit for power supply & communication wiring	-
6	Return air side	-
7	Air outlet duct flange	-

Universal MSP Duct (drain pump included)

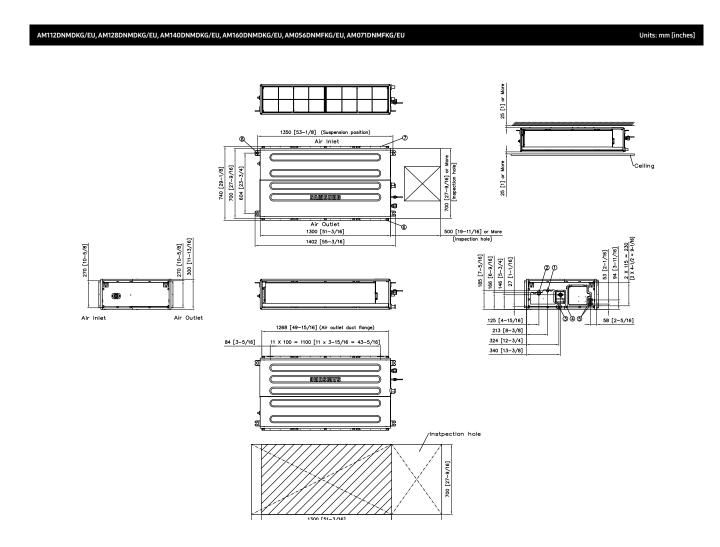


NO	Name	Description	
		AM022DNMDKG/EU, AM028DNMDKG/EU, AM036DNMDKG/EU AM045DNMDKG/EU, AM056DNMDKG/EU	AM071DNMDKG/EU
1	Gas pipe connection	Ø12.70 (1/2")	Ø15.88 (5/8")
2	Liquid pipe connection	Ø6.35 (1/4")	Ø9.52 (3/8")
3	Drain pipe connection (Without drain pump)	VP25 (0D32, ID25)	
4	Drain pipe connection (With drain pump)		
5	Power & Communication Conduits		
6	Air discharge grille flange	-	
7	Return Air Side	-	
8	Hook	Ø9.52 or	M10

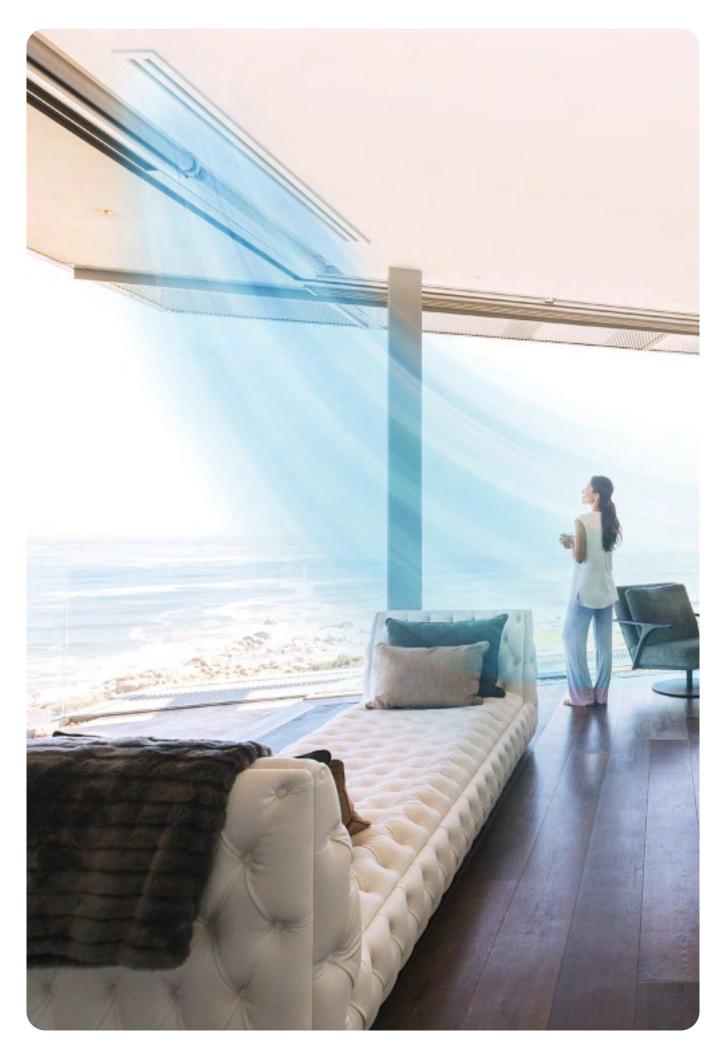


NO	Name	Description	
		AM022DNMFKG/EU, AM028DNMFKG/EU, AM036DNMFKG/EU AM045DNMFKG/EU	AM090DNHDKG/EU
1	Gas pipe connection	Ø12.70 (1/2")	Ø15.88 (5/8")
2	Liquid pipe connection	Ø6.35 (1/4")	Ø9.52 (3/8")
3	Drain pipe connection (Without drain pump)	VP25 (OD32, ID25)	
4	Drain pipe connection (With drain pump)		
5	Power & Communication Conduits	-	
6	Air discharge grille flange	-	
7	Return Air Side	-	
8	Hook	Ø9.52 or	M10

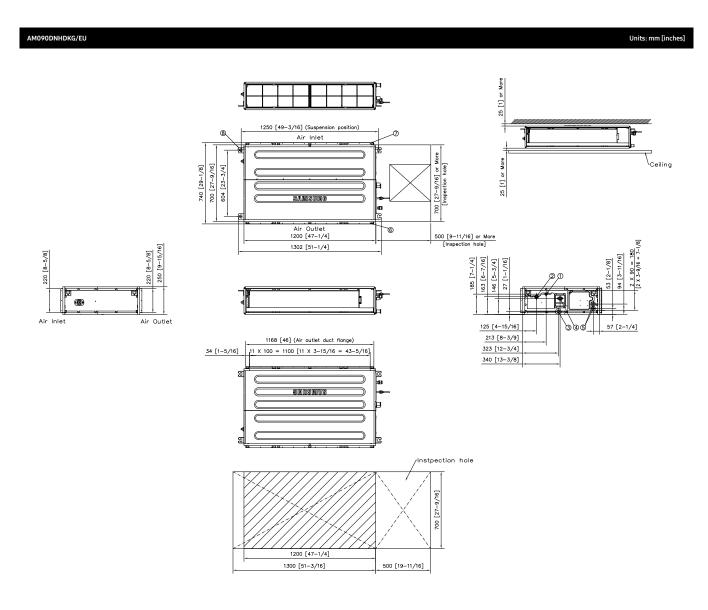
Universal MSP Duct (drain pump included)



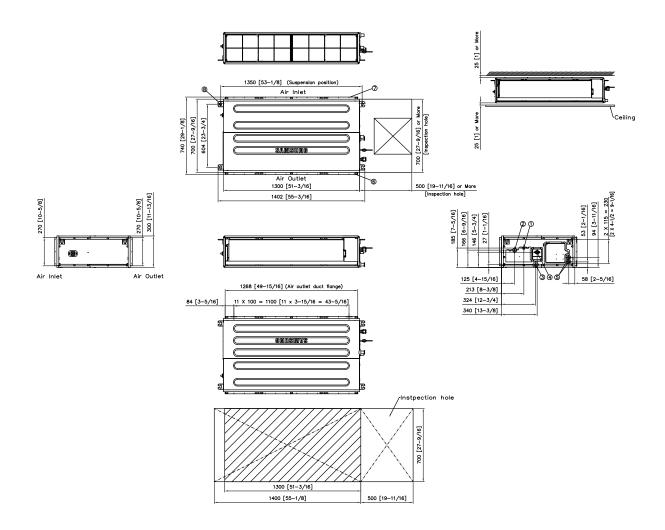
NO	Name	Description	
		AM056DNMFKG/EU	AM112DNMDKG/EU, AM128DNMDKG/EU, AM140DNMDKG/EU AM160DNMDKG/EU, AM071DNMFKG/EU
1	Gas pipe connection	Ø12.70 (1/2")	Ø15.88 (5/8")
2	Liquid pipe connection	Ø6.35 (1/4")	Ø9.52 (3/8")
3	Drain pipe connection (Without drain pump)	VP25 (OD32, ID25)	
4	Drain pipe connection (With drain pump)		
5	Power & Communication Conduits		
6	Air discharge grille flange		
7	Return Air Side		
8	Hook	Ø9.52 c	or M10



#### **Universal** HSP Duct



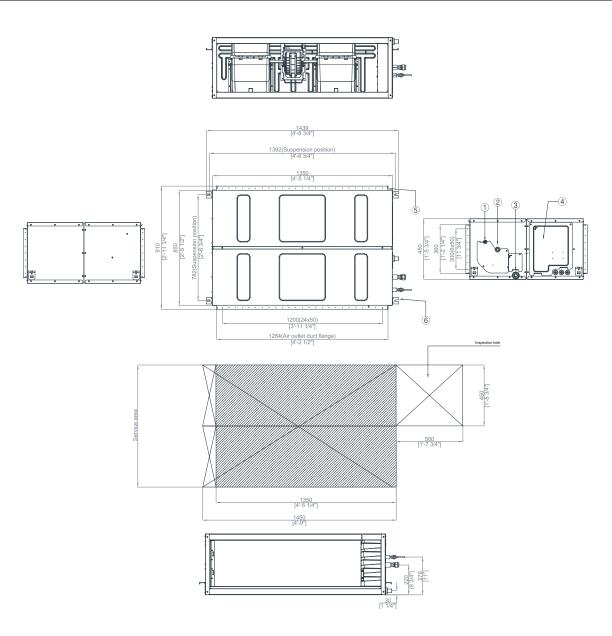
NO	Name	Description
1	Liquid pipe connection	Ø9.52 (3/8)
2	Gas pipe connection Ф15.88 (5/8)	
3	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)
4	Drain pipe connection (With drain pump)	-
5	Power & Communication Conduits	-
6	Air discharge grille flange	-
7	Air suction flange	-
8	Hook	Use M8~M10 bolt(4ea)



NO	Name	Description
1	Liquid pipe connection	Ø9.52 (3/8)
2	Gas pipe connection Ф15.88 (5/8)	
3	Drain pipe connection (Without drain pump)	VP25 (OD 32, ID 25)
4	Drain pipe connection (With drain pump)	-
5	Power & Communication Conduits	-
6	Air discharge grille flange	-
7	Air suction flange	-
8	Hook	Use M8~M10 bolt(4ea)

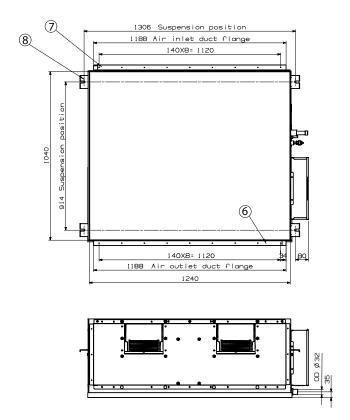
HSP Duct (R410A)

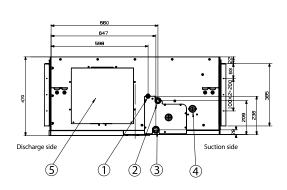
AM180J/224JNHFKH/EU Units: mm [inches]



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

AM220/280FNHDEH\*\*\*
Units: mm [inches]



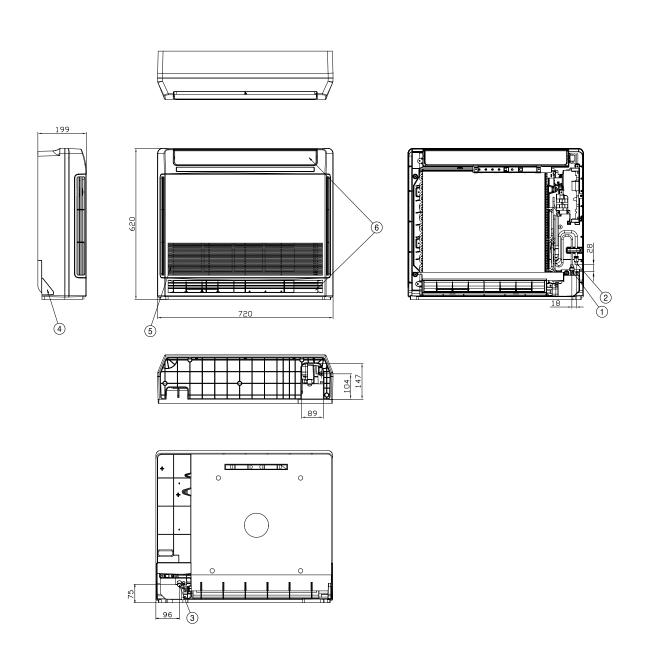


NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	AM220***: ø19.05 (3/4), AM280***: ø22.22 (7/8)
3	Drain pipe connection	VP25 (OD 32, ID 25)
4	Power supply connetion	VP25 (OD 32, ID 25)
5	Air discharge flange	
6	Hook	
7	Suction flange	
8	Hook	3/8 or M10

Console (R410A)

AM022KNJDEH/EU, AM028/036FNJDEH/EU

Units: mm [inches]

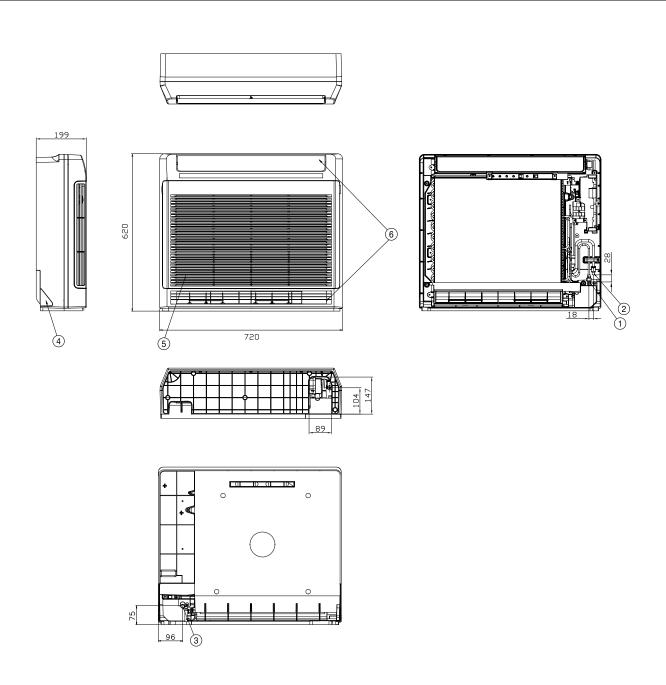


NO	Name	Description
1	Liquid pipe connection	ø6.35 Flare
2	Gas pipe connection	ø12.70 Flare
3	Drain pipe connection	ID 18 Hose
4	Power supply/communication wiring conduits	
5	Air inlet grille	
6	Air outlet louvre	



Console (R410A)

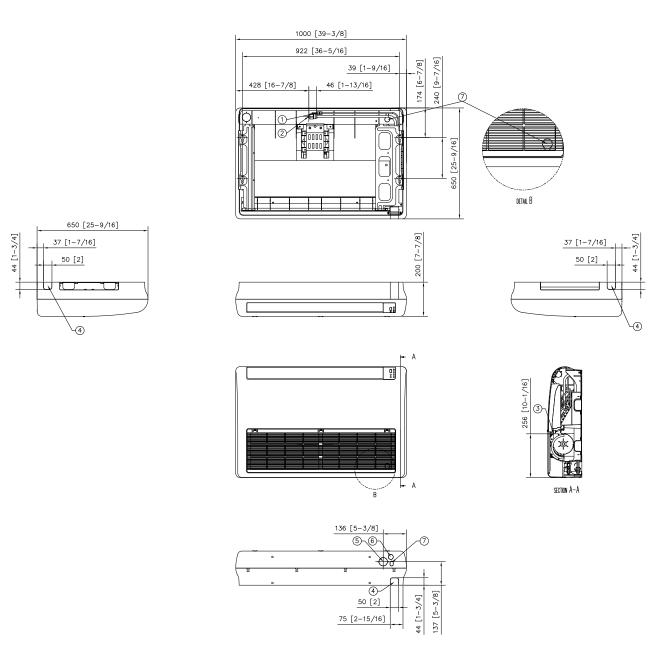
AM045KNJDEH/EU, AM056FNJDEH/EU
Units: mm [inches]



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	

#### Universal Floor/Ceiling

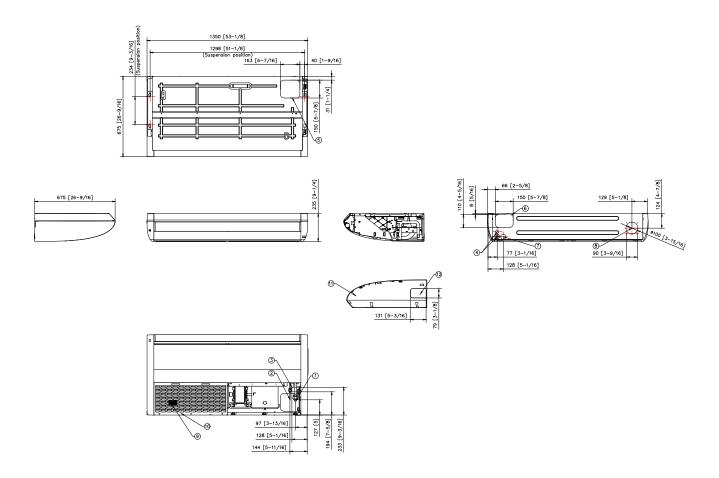
AM056DNCDKG/EU Units: mm [inches]



NO	Name	Description
1	Refrigerant gas pipe	Φ12.7(1/2)
2	Refrigerant liquid pipe	Φ6.35(1/4)
3	Condensate drain	ID18mm [11/16inch] Hose
4	Knockout hole for piping	
5	Knockout hole for air intake	Ф50 [2]
6	Knockout hole for drain pipe	
7	Knockout hole for wiring	

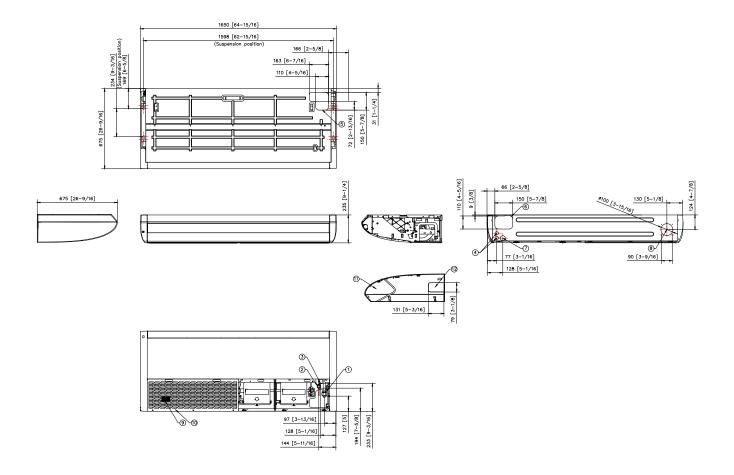
#### **Universal** Big Ceiling

AM071DNCDKG/EU, AM112DNCDKG/EU
Units: mm [inches]



NO	Name	Description
1	Refrigerant gas pipe	Ф15.88 (5/8)
2	Refrigerant liquid pipe	Ф9.52 (3/8)
3	Condensate drain	VP25 (OD32, ID25)
4	Conduit hole	ø28(ø1-1/8)
5	Knockout hole for upper piping arrangement	
6	Knockout hole for rear piping arrangement	
7	Knockout hole for drain pipe arrangement	
8	Knockout hole for fresh air intake	Φ42(Φ1-5/16)
9	Airfilter	
10	Air suction grille	
11	Cover side	
12	Knockout hole for side piping arrangement	

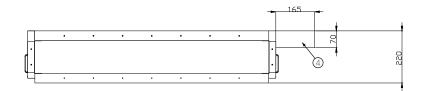
AM140DNCDKG/EU Units: mm [inches]

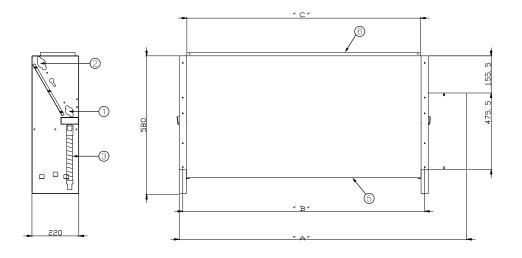


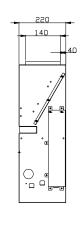
NO	Name	Description
1	Gas pipe connection	Ф15.88 (5/8)
2	Liquid pipe connection	Φ9.52 (3/8)
3	Drain pipe connection	VP25 (OD32, ID25)
4	Conduit hole	ø28(ø1-1/8)
5	Knockout hole for upper piping arrangement	
6	Knockout hole for rear piping arrangement	
7	Knockout hole for drain pipe arrangement	
8	Knockout hole for fresh air intake	Φ42(Φ1-5/16)
9	Air filter	
10	Air suction grille	
11	Cover side	
12	Knockout hole for side piping arrangement	

### Concealed Floor-Standing (R410A)

AM036/056/07IFNFDEH/\*\*
Units: mm [inches]



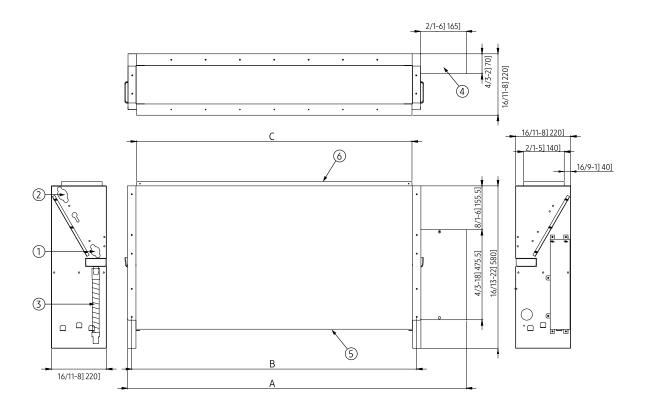




Model	А	В	С
AM036FNFDEH/EU	945	730	700
AM056/071FNFDEH/EU	1,225	1,010	980

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			

AM036/056/071MNFDEH/\*\*
Units: mm [inches]

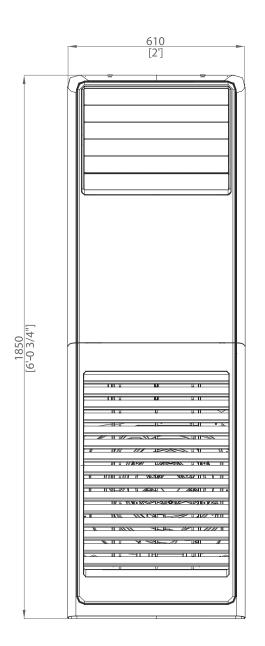


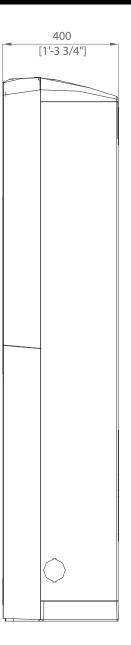
Model	А	В	С
AM036MNFDEH/EU	945	730	700
AM056/071MNFDEH/EU	1,225	1,010	980

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			

Packaged Floor-Standing (R410A)

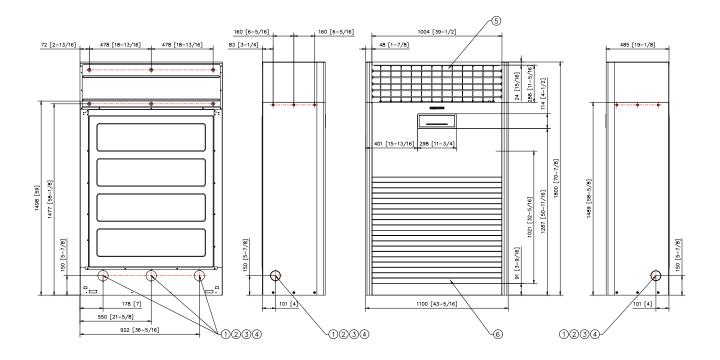
AM140RNPDKH/EU Units: mm [inches]





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

AM280CNPDKH/EU Units: mm [inches]

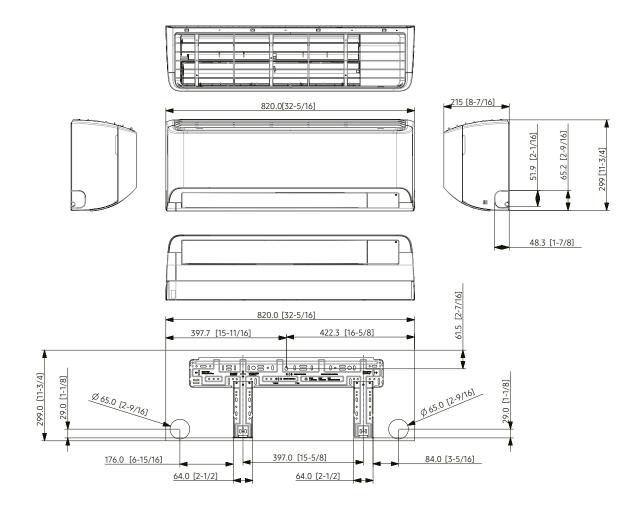


NO	Name	Description
1	Gas pipe connection	Φ22.22 [7/8]
2	Liquid pipe connection	Φ9.52 [3/8]
3	Drain hose connection	-
4	Power supply/Communication wiring conduit	-
5	Air outlet louver	-
6	Air inlet grille	-

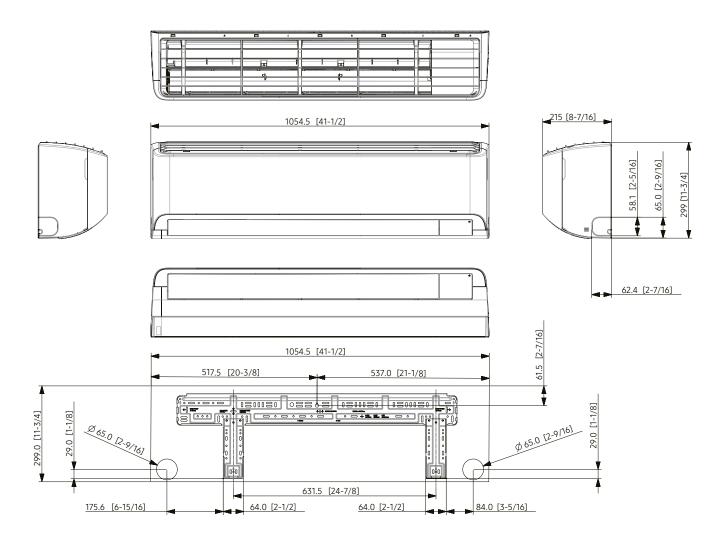
**Universal** WindFree<sup>™</sup> Deluxe (EEV included)

AM015DNVDKG/EU, AM022DNVDKG/EU, AM028DNVDKG/EU, AM036DNVDKG/EU

Units: mm [inches]



NO	Name	Description
1	Refrigerant gas pipe	ø12.70 (1/2) Flare
2	Refrigerant liquid pipe	ø6.35 (1/4) Flare
3	Drain pipe connection	ID 18 Hose

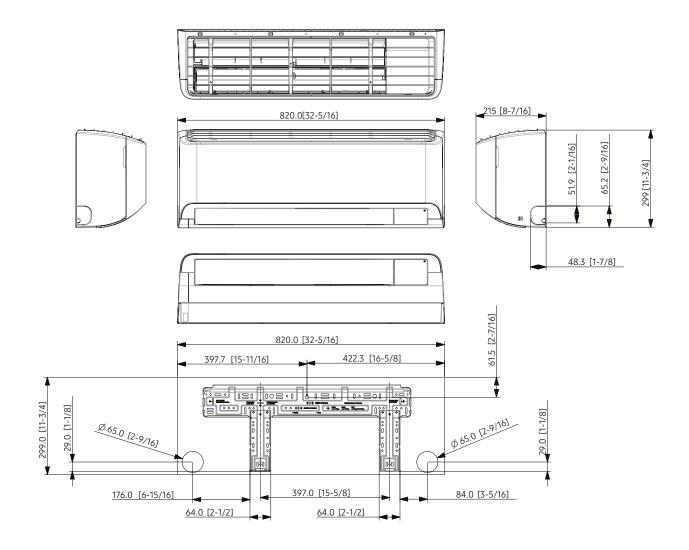


NO	Name	Description	
		AM045DNVDKG/EU AM056DNVDKG/EU	AM071DNVDKG/EU AM082DNVDKG/EU
1	Refrigerant gas pipe	ø12.70 (1/2) Flare	ø15.88 (5/8) Flare
2	Refrigerant liquid pipe	ø6.35 (1/4) Flare	ø9.52 (3/58) Flare
3	Drain pipe connection	ID 18 Hose	ID 18 Hose

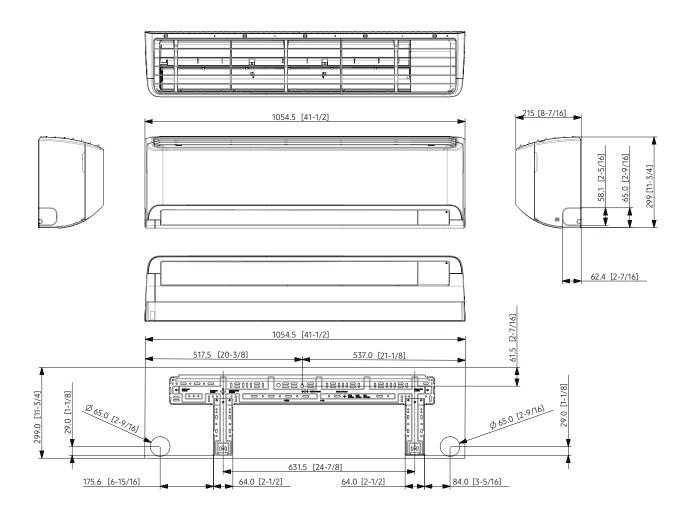
WindFree™ Deluxe (EEV excluded, R410A)

AM015TNADKH/EU, AM022TNADKH/EU, AM028TNADKH/EU, AM036TNADKH/EU

Units: mm [inches]



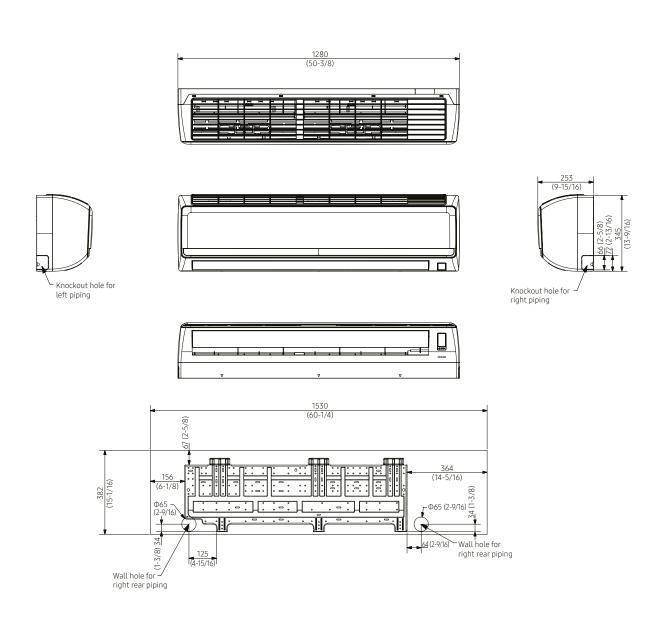
NO	Name	Description
1	Refrigerant gas pipe	ø12.70 (1/2) Flare
2	Refrigerant liquid pipe	ø6.35 (1/4) Flare
3	Drain pipe connection	ID 18 Hose



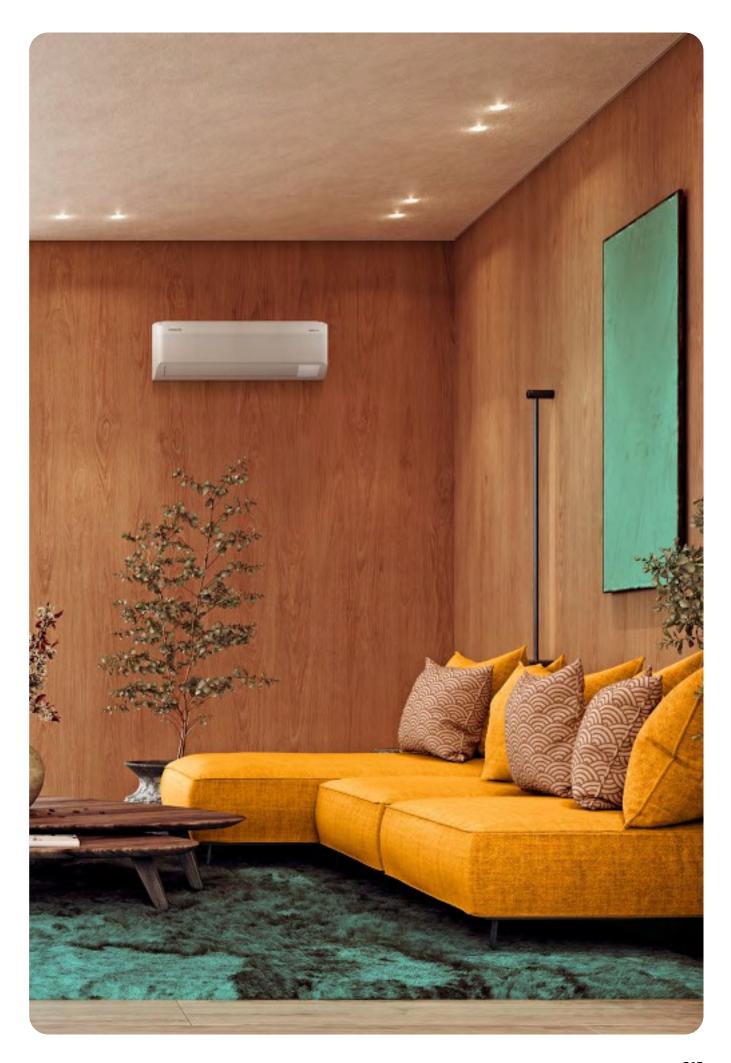
NO	Name	Description
1	Refrigerant gas pipe	ø12.70 (1/2) Flare
2	Refrigerant liquid pipe	ø6.35 (1/4) Flare
3	Drain pipe connection	ID 18 Hose

#### Universal Max Wall-Mounted

AM093DNQDKG/EU Units: mm [inches]

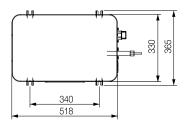


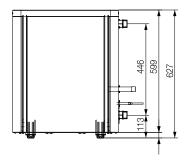
NO	Name	Description
1	Liquid pipe connection	ø9.52 (3/8)
2	Gas pipe connection	ø15.88 (5/8)
3	Drain pipe connection	ID 18 HOSE
4	Power supply/communication wiring conduits -	

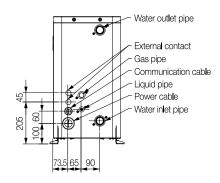


Hydro Unit (R410A)

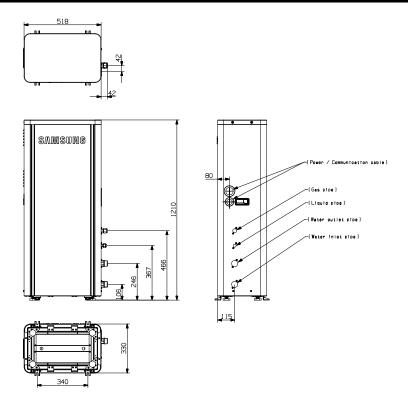
AM\*\*\*FNBDEH/EU Units: mm [inches]



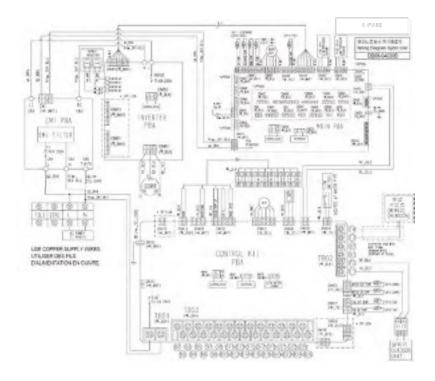




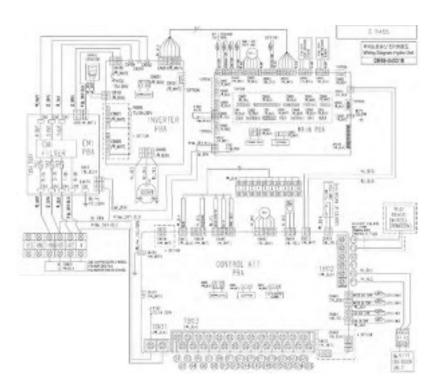
AM\*\*\*TNBF\*B/EU Units: mm [inches]



AM160/250TNBFEB/EU Units: mm [inches]



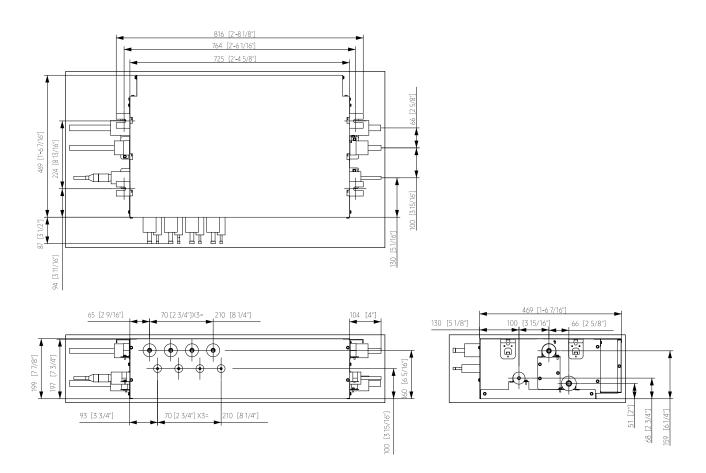
AM160/250TNBFGB/EU
Units: mm [inches]



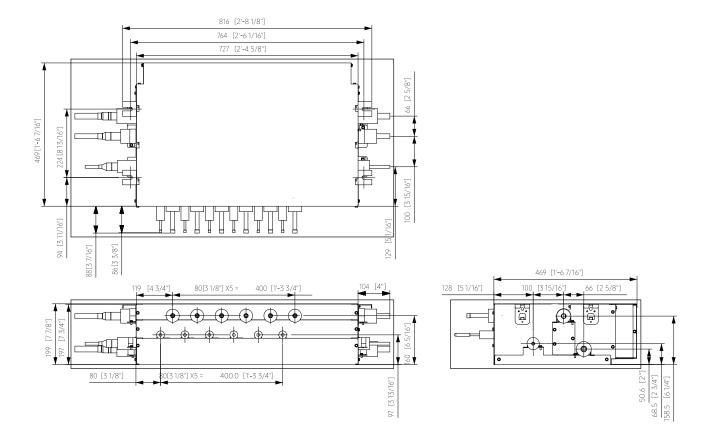
# Dimensional drawings 1/4

Mode Control Unit (MCU, R410A)

MCU-R4NEKON Units: mm [inches]



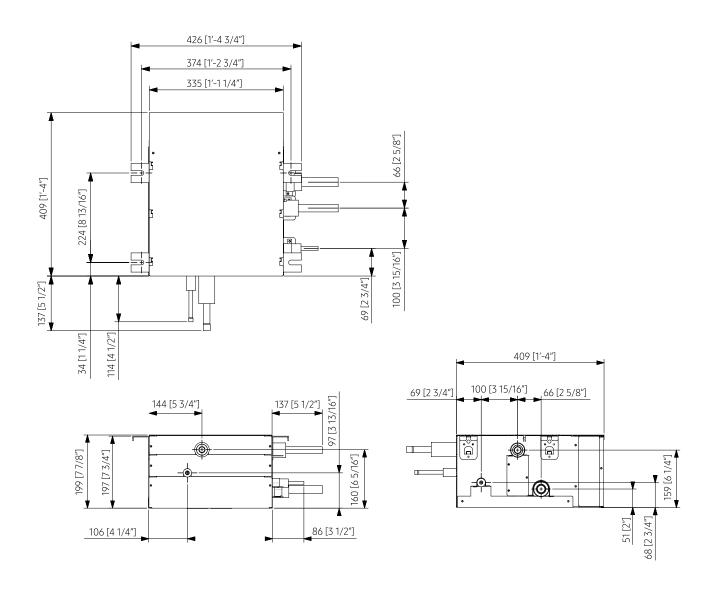
MCU-S6NEK3N Units: mm [inches]



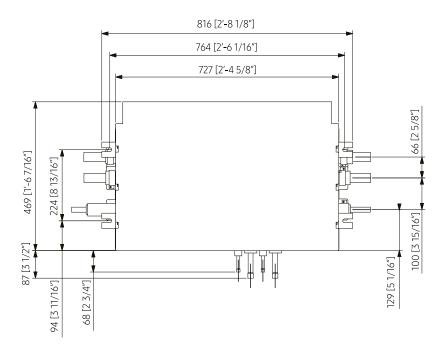
# Dimensional drawings 2/4

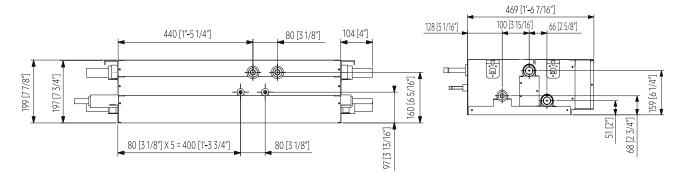
Mode Control Unit (MCU, R410A)

MCU-SINEKIN Units: mm [inches]



MCU-S2NEK2N Units: mm [inches]

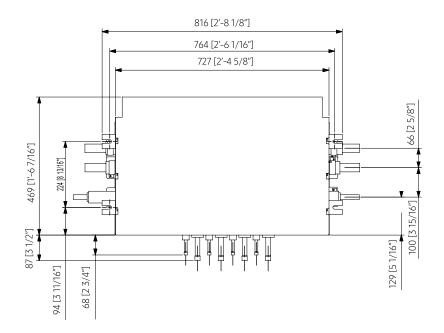


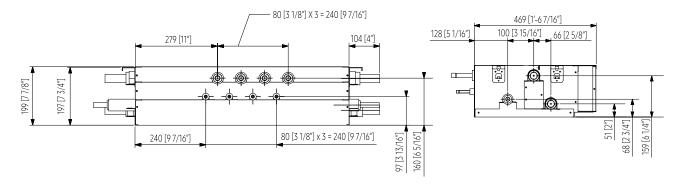


# Dimensional drawings 3/4

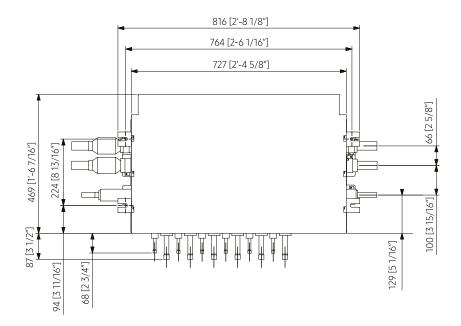
Mode Control Unit (MCU, R410A)

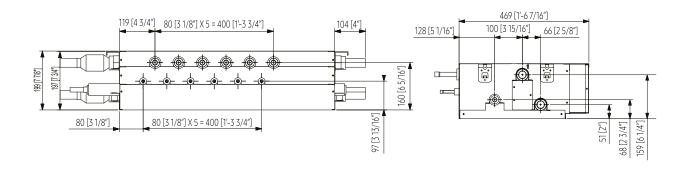
MCU-SANEK3N Units: mm [inches]





MCU-S6NEK2N Units: mm [inches]

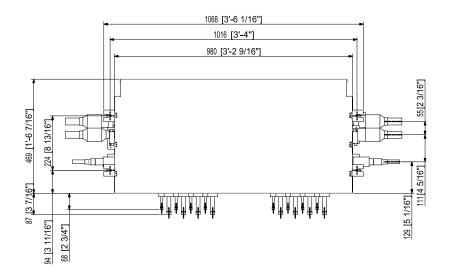


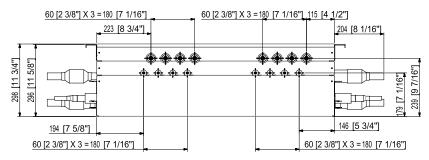


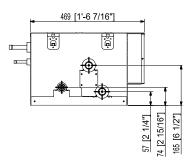
# Dimensional drawings 4/4

Mode Control Unit (MCU, R410A)

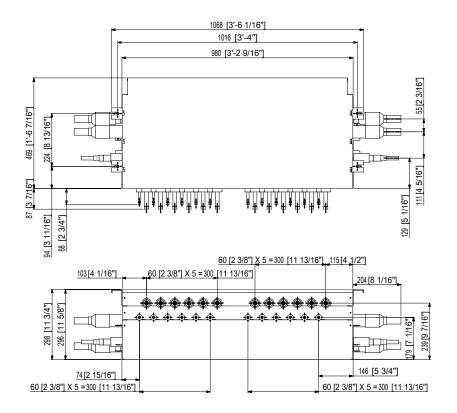
MCU-S8NEKTN Units: mm [inches]

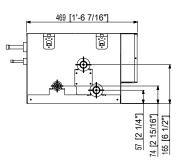






MCU-S12NEK1N Units: mm [inches]





# VRF Chilers

# HVM: water-based cooling and heating of individual zones

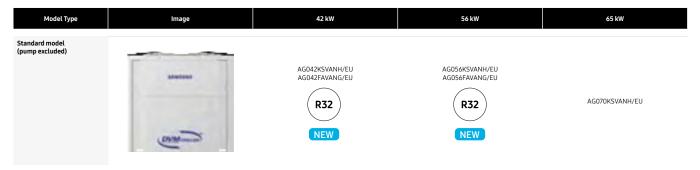
A Hydro Variable Multi (HVM) system combines the benefits of VRF and Chiller technologies to provide a water-based solution for retrofit and new design projects.

It is an air-to-water heat pump that can be connected via water piping to a variety of indoor Fan Coil Units (FCUs) such as the 360 Cassette or a one-way cassette, to provide cooling and heating to individual zones. An HVM system can also be connected to thermal storage systems and hot water systems.





# Line-up outdoor



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

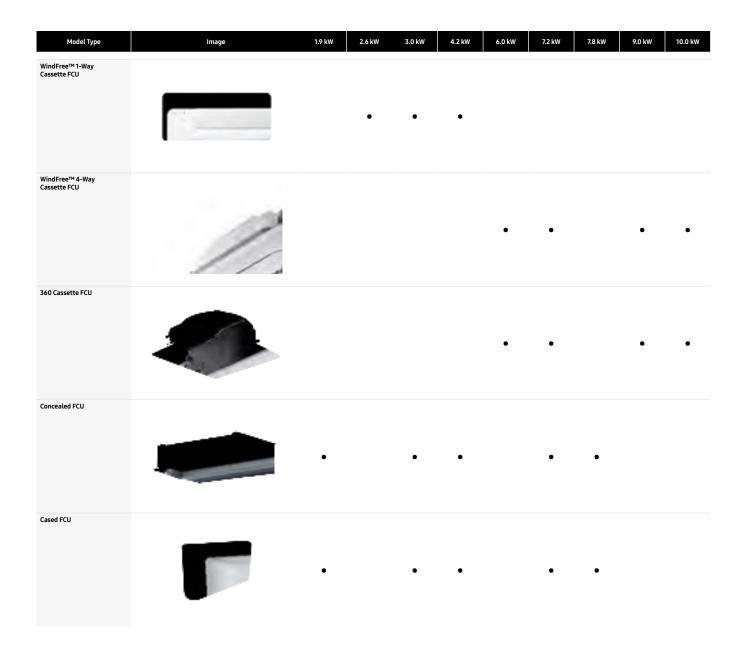
# Combination guide outdoor

### Modulation guide

Total Capacity		Suggested ø water type		
Total Capacity (kW)	AG042	AG056	AG070	Suggested ø water type controller piping
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		Model		Suggested ø water type
Total Capacity (kW)	AG042	AG056	AG070	Suggested ø water type controller piping
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



# Selection guide

### Cassette







Feature	WindFree™ 1-Way Cassette FCU	WindFree™ 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	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**



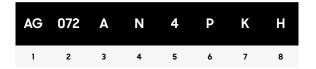


Feature	Concealed FCU <sup>1</sup>	Cased FCU <sup>1</sup>
Cooling capacity range (nominal)	1.9–7.8 kW	1.9–7.8 kW
Heating capacity range (nominal)	2.1-8.4 kW	2.1-8.4 kW
Fan motor type	3-step AC	3-step AC
Drain Pump	Optional	Optional
Filter	Polypropylene washable	Polypropylene washable
3-Way Valve	Built-in	Built-in
2-pipe	•	•
4-pipe (optional)	•	•
Installation	Horizontal/vertical	Horizontal/vertical

<sup>&</sup>lt;sup>1</sup> Concealed FCU and Cased FCU are third party products

# Nomenclature

### **Indoor units**



1	Classification	AG	Chiller/Fan Coil Unit (FCU)
2	Capacity		x 1/10 kW (3 digits)
		K	2016
		М	2017
3	Version	N	2018
		T	2020
		Α	2021
4	Product Type	N	Indoor Unit
5	Product Notation	1	WindFree™1-Way Cassette
	Product Notation	4	WindFree™ 4-Way Cassette, 360 Cassette
6	Feature	D	Deluxe
•	reature	P	Premium
7	Voltage Rating	K	1Ф, 220~240 V, 50/60 Hz
8	Mode	н	Heat Pump

# Indoor units (third party)



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

## **Outdoor units**



1	Classification	AG	Chiller (HVM Chiller)			
2	Capacity	kW (3 digits)				
		K	2016			
3	Version	М	2017			
		N	2018			
4	Product Type	S SET HVM Chiller				
5	Product Notation	٧	Inverter			
6	Feature	Α	Non-pump			
7	Voltage Rating	<b>N</b> 3Φ, 380~415 V, 50/60 Hz				
8	Mode	н	Heat Pump			

# **HVM** Chiller

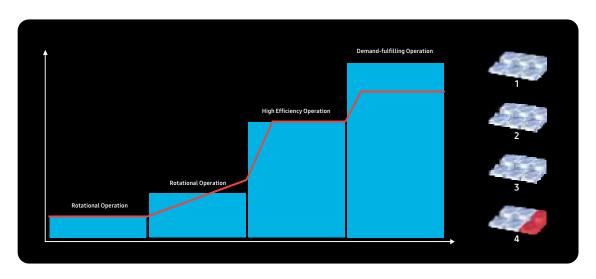


### **Modular Function**

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 safer than traditional VRF systems. Its refrigerant charge is up to 65 % lower<sup>1</sup> than in traditional VRF systems.

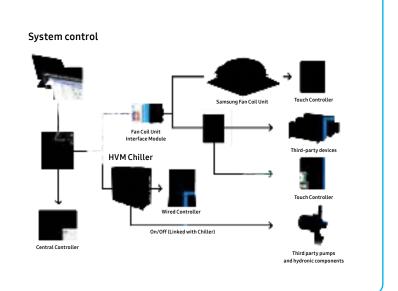
1 Compared to a Samsung DVM S 60 HP, holding R410A refrigerant, connected to twelve 14 kW indoor units and 100 metres of pipes.

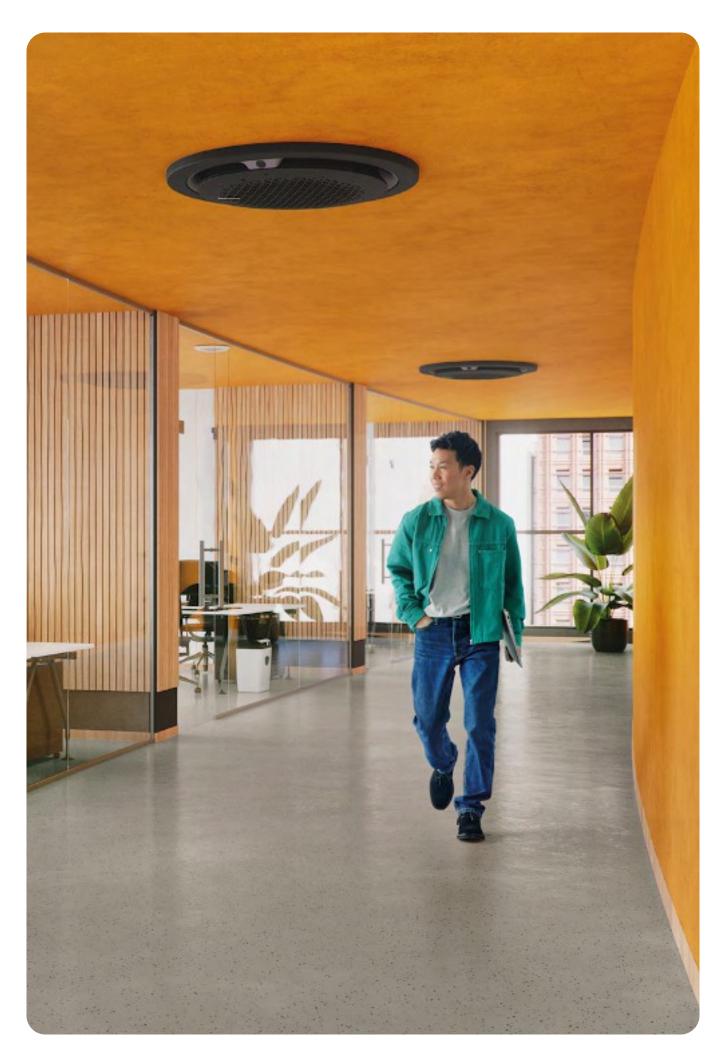


- At low load, the varying outdoor units are switched on at alternate intervals 2/3. At average load, the outdoor units are operated at partial load to optimise efficiency At maximum load, all compressors of all outdoor units are operated at maximum capacity

### 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.





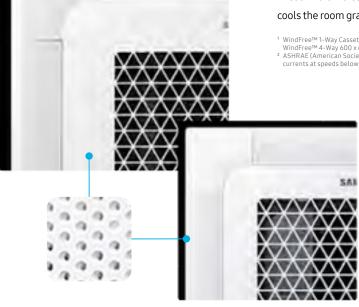
# **WindFree**<sup>™</sup> 1&4-Way Cassette

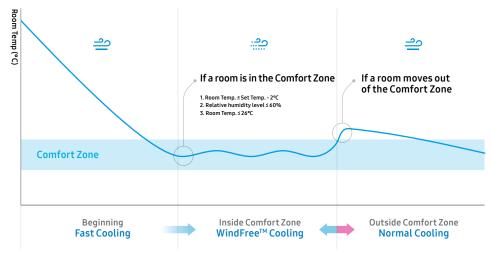


# WindFree<sup>™</sup> Technology

The WindFree™ Cassette¹ directs air through thousands of micro-holes in the panel. These micro-holes are essential for creating a type of airflow called "Still Air" which cools the room gradually and noticeably without drafts.

- ¹ WindFree™ 1-Way Cassette uses 13,000 microholes, WindFree™ 4-Way Cassette uses 15,700 microholes, WindFree™ 4-Way 600 x 600 Cassette uses 9,000 microholes.
  ² ASHRAE (American Society of Heating, Refrigeration, and Air-Conditioning Engineers) defines "Still Air" as air currents at speeds below 0.15 m/s which lack the presence of cold drafts.





### **Smart Comfort Operation**

The Fast Cooling process helps to achieve the desired temperature in a room quickly. By simultaneously detecting the humidity<sup>1</sup> levels, the Smart Comfort Operation feature maintains the room's temperature automatically.

<sup>1</sup> The humidity level will only be shown during WindFree™ operation and Dry Mode via the SmartThings app display.

### Slim installation

At a height of only 135 mm<sup>1</sup>, the WindFree™ 1-Way Cassette is a compact and lightweight device (8–13.5 kg). 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.

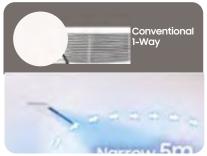
<sup>1</sup> 135 mm is the height of the unit until the ceiling tile. 145 mm is the height including the ceiling tile. Up to 3.6 kW (DVM) models measures 135 mm (180 mm including panel).

### **Optimised blades**

The larger optimised blade(s) of the 1- and 4-Way facilitate a wider cooling range and improved air circulation within the room. This advanced technology also cools the space much faster leaving no zone untouched. The blades of the 4-Way cassette are detachable and can be washed easily with water to remove dust or debris that has collected on them, therefore allowing for optimal quality of airflow that in turn helps maintain a cleaner environment.

1 100 mm WindFree™ 1-Way Cassette, 84 mm WindFree™ 4-Way Cassette, 66 mm WindFree™ 4-Way 600 x 600 Cassette1. Samsung testing compares the WindFree™ 1-Way Cassette to a conventional 1-Way Cassette-type air conditioner. And the WindFree™ 4-Way and WindFree™ 4-Way 000 x 600 Cassette to a previous 4-Way Cassette type air conditioner. 2 Based on the 7.1 kW indoor unit.





# 360 cassette



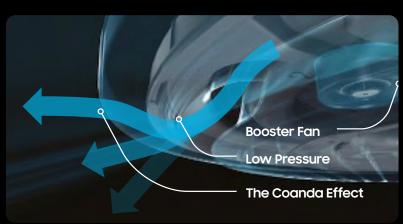
### Circular LED display

The unit features a stylish panel and an intuitive Circular LED display, which allows users to choose or adjust the direction of the airflow with an intuitive wireless (jog shuttle) wireless remote controller. Besides the LED Display also monitors other essential operating information, such as the filter the air flow direction, filter status and any errors. So, with just one glance, you can quickly tell where the air is going and how your 360 Cassette is performing.

### **Airflow Control**

The air supply is easily adjusted without the use of flaps. Three booster fans work to alter the direction of airflow from within the cassette's hollow space. A rain-like distribution of the air (known as the 'coanda' effect) keeps the room cool and comfortable at all times. The innovative technology overcomes the usual limits of the conventional outlets that use blades, as they obstruct the air at low angles and cause a significant low airflow¹. The Motion Detector Sensor (MDS) is available for the 360 Cassette.

 $^{\,1}\,$  Based on internal testing compared to a general 4-Way Cassette air conditioner.



For more product features, refer to the following pages:

WindFree<sup>™</sup> 4-Way cassette: pages 84-93 WindFree<sup>™</sup> 1-Way Cassette: pages 94-99 360 Cassette: pages 100-107

#### CERTIFI PERFORMAN www.eurovent-certification

## HVM Chiller

- Option of connecting up to 16 modules for a total capacity of more than 1 MW.
- Air-cooled HVM Chiller Heat Pump.
- Capacity modulation between 15% and 100%.

• Each unit houses 2 Inverter Scroll compressors, all equipped with Flash Injection technology.







Mod	del		AG042KSVANH/EU	AG056KSVANH/EU	AG070KSVANH/EU
Power Supply			3Ф, 4, 380-415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz	3Ф, 4, 380-415 V, 50/60 Hz
Performance					
Capacity (Nominal)	Cooling	kW	42	56	65
	Heating	kW	42.0	56.0	69.5
Power					
Power Input (Nominal)	Cooling	kW	12.35	18.67	26.00
	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	Α	40	60	75
Efficiency	luded\	W/W			
EER Nominal Cooling (pump input is not incl		W/W	3.4	3.0	2.5
COP Nominal Heating (pump input is not inc ESEER (Pump input is not included)	cluded)	W/W W/W	3.55	3.20	2.85
		VV/ VV	5.7	5.4	5.0
Fan Type		-	Axial Fan	Axial Fan	Axial Fan
Number of Fans		-	Axiai Fan	Axiai Fan	Axial Fan
Airflow Rate		m³/min	364 (182 x 2)	364 (182 x 2)	392 (196 x 2)
THE TOTAL PROPERTY.		l/s	6,067	6,067	6,535
External Static Pressure	Max.	mmAq	8.00	8.00	8.00
Externat Static Fressure	Max.	Pa	78.5	78.5	78.5
Fan Motor			76.3	76.5	76.5
Туре		-	BLDC Motor	BLDC Motor	BLDC Motor
Output x n		w	630 x 2	630 x 2	630 x 2
Water Side Heat Exchanger		-	030 X Z	030 X Z	030 12
Туре		-	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	11/2	11/2	2
Quantity		-	2	2	2
Wiring Connections					
Communication	Min.	mm²	0.75	0.75	0.75
	Remark		F1, F2	F1, F2	F1, F2
Refrigerant					
Туре		-	R410	A(Fluorinated greenhouse gas, GWP=2	2,088)
Factory Charging		kg/tCO₂e	18/37.58	18/37.58	18/37.58
Sound <sup>2</sup>					
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		14.			
Nater Flow Rate		l/min	60~240	80~320	93~400
Minimum Water Storage in the System		L	294	392	490
Operating Ambient Temperature Range		25			
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**









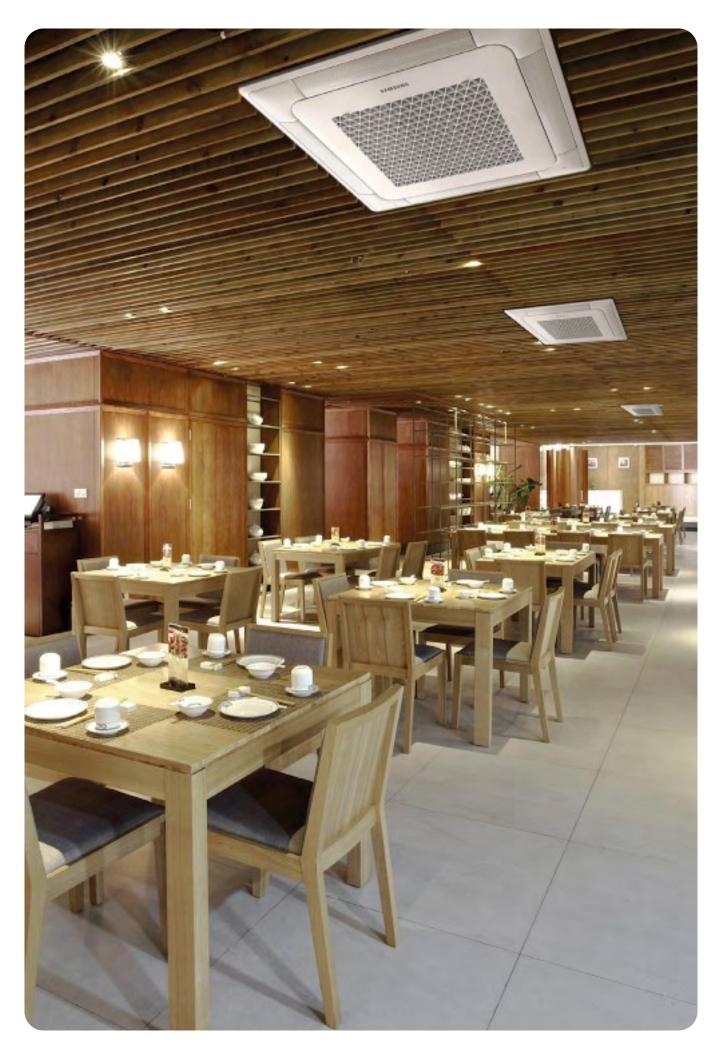








Module Controller	DMS2.5	BACnet Gateway	Touch Centralised Controller	On/Off controller	PIM Module (Pulse Interface Module	LonWorks Gateway	External Contact Interface Module
MCM-A00N	MIM-D01AN	MIM-B17BN	MCM-A300N	MCM-A202DN	MIM-B16N	MIM-B18BN	MIM-B14



## WindFree™ 1-Way Cassette FCU

UNIQUE

- 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.

- Optional 3-Way valve kit.
- Available in WindFree<sup>™</sup> function.
- Can be controlled by Smartphone via Wi-Fi Kit.







	Model		AG026TN1DKH/EU	AG032TN1DKH/EU	AG042TN1DKH/EU
owerSupply			1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz
lode			HP	HP	HP
erformance					
apacity (Nominal)	Cooling	kW	2.60	3.00	4.20
	Heating	kW	2.90	3.40	5.00
ower					
ower Input (Nominal)	Cooling	W	27	35	55
	Heating	w	27	35	55
urrent Input (Nominal)	Cooling	Α	0.14	0.19	0.29
	Heating	Α	0.14	0.19	0.29
eat Exchanger					
уре		-	Fin & tube	Fin & tube	Fin & tube
an					
rpe		-	Crossflow fan	Crossflow fan	Crossflow fan
umber of Fans		ea	1	1	1
rflow Rate	H/M/L	m³/min	6.8/5.8/4.9	7.8/6.8/5.8	14.6/12.6/10.7
n Motor					
rpe		-	BLDC	BLDC	BLDC
utput x n		W	27 x 1	27 x 1	65 x 1
ater					
ater Flow Rate	Cooling	l/min	7.5	9.6	11.9
ater Flow Rate	Heating	l/min	8.4	9.7	14.4
essure Drop	Cooling	kPa	23.0	34.5	45.0
ressure Drop	Heating	kPa	28.0	35.8	64.6
ping Connections					
quid Pipe (IN)		Туре	PF MALE	PF MALE	PF MALE
		ø, mm (inch)	20A (3/4")	20A (3/4")	20A (3/4")
quid Pipe (OUT)		Туре	PF MALE	PF MALE	PF MALE
		ø, mm (inch)	20A (3/4")	20A (3/4")	20A (3/4")
eat Insulation		-	Both inlet/outlet pipes	Both inlet/outlet pipes	Both inlet/outlet pipes
rain Pipe		ø, mm	VP20 (OD 26, ID 20)	VP20 (OD 26, ID 20)	VP25 (OD 32, ID 25)
ound			(3,		
ound Pressure <sup>1</sup>	(H/M/L)	dB(A)	33/31/29	38/35/31	40/37/33
ound Power	Cooling	dB(A)	50	53	59
mensions					<del>-</del> -
et Weight		kg	10.1	10.1	14.0
et Dimensions (W × H × D)		mm	970 × 135 × 410	970 × 135 × 410	1,200 × 138 × 450
asing					.,50 .50
aterial		-	Plastic	Plastic	Plastic
nel				· tastic	1 40500
anel Model		-	PC1NWFMBN(WindFree™)	PC1NWFMBN(WindFree™)	PC1BWFMBN(WindFree™
Iditional Accessories			. C.AWI FIDIQUING I CC	. CAWA PIDA(WINGI ICC.)	. CIDWI INDIN WINDI TEE
rain Pump	Туре	-	Built-in	Built-in	Built-in
P	Max. Lifting	mm/(cc/	DUILL-III	DUILL-III	Duitt-III
	Height/	min)	750/400	750/400	750/400
W V . L 160 ( 1)	Displacement				
Way Valve Kit (optional)		-	ACL-A60V3	ACL-A60V3	ACL-A60V3
ilter		-			

#### **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 Minimum Circuit Ampacity (MCA) value.

## WindFree™ 4-Way Cassette FCU

UNIQUE

- Four-way air supply via independently adjustable blades.
- Direct drive fan powered by a BLDC motor.
- Built-in condensation drain pump.

- Optional 3-Way valve kit.
- Can be controlled by Smartphone via Wi-Fi Kit.
- Available in WindFree<sup>™</sup> function.









			1			
			AG060AN4DKH/EU	AG072AN4DKH/EU	AG090AN4DKH/EU	AG105AN4DKH/EU
Power Supply		Ф, V, Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 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	Α	0.37	0.50	0.58	0.79
	Heating	Α	0.37	0.50	0.58	0.79
Heat Exchanger						
Туре		-	Fin & tube	Fin & tube	Fin & tube	Fin & tube
Fan						
Туре		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
Number of Fans		-	1	1	1	1
Airflow Rate	H/M/L	m³/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						
Туре		-	BLDC	BLDC	BLDC	BLDC
Output x n		w	65 x 1	65 x 1	97 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)		Туре	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)		Туре	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)			
Sound						
Sound Pressure	(H/M/L)	dB(A)	37/33/30	41/36/30	42/39/36	45/41/37
Sound Power	Cooling	dB(A)	56	60	58	60
Dimensions						
Net Weight		kg	15.5	15.5	18.0	18.0
Net Dimensions (W × H × D)		mm	840 x 204 x 840	840 x 204 x 840	840 × 246 × 840	840 × 246 × 840
Panel						
Panel Model		-	PC4NUFMAN	PC4NUFMAN	PPC4NUFMAN	PC4NUFMAN
Additional Accessories						
Drain Pump	Туре	-	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 WindFree™
 FCU Interface Module
 Wireless Remote Controller
 Simple Type Controller
 Touch Controller
 Wired Remote Controller

 PC4NUFMAN
 MIM-F10N
 AR-EH03E, AR-CH01E
 MWR-SH00N
 MWR-SH11N
 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 Minimum Circuit Ampacity (MCA) value.

### **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).
- Can be controlled by Smartphone via Wi-Fi Kit.

- A front panel is mandatory and can be selected from one of the 4 front panels mentioned in the accessories.
- Built-in condensation drain pump.
- Predisposition of the air inlet to let fresh air in.
- Circular or square cassette panel.
- Optional Motion Detect Sensor.



	Model		AG060MN4PKH/EU	AG072MN4PKH/EU	AG090MN4PKH/EU	AG105MN4PKH/EU
Power Supply			1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 H;
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	58	58	77	100
	Heating	w	58	58	77	100
Current Input (Nominal)	Cooling	Α	0.50	0.50	0.62	0.79
	Heating	Α	0.50	0.50	0.62	0.79
Heat Exchanger			0.50	0.50	0.02	0.77
Туре		-	Fin & tube	Fin & tube	Fin & tube	Fin & tube
Fan			Till & tabe	Till & tabe	T III d tabe	Till & tabe
Туре		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
Number of Fans		ea	1	1	1	1
Airflow Rate	H/M/L	m³/min	21.0/17.5/15.0	25.5/22.0/19.8	29.5/24.0/19.8	31.5/22.5/19.8
Fan Motor	.,.,-	,	21.0/17.5/15.0	23.3/22.0/17.0	27.3/24.0/17.0	31.3/22.3/17.0
Туре		_	BLDC	BLDC	BLDC	BLDC
Output x n		w			97 x 1	97 x 1
Water			65 x 1	97 x 1	7/ X I	7/ X I
Water Flow Rate	Cooling	l/min	17.5	20.8	2/ 0	28.9
Water Flow Rate	Heating	l/min	17.5		26.0	
Pressure Drop	Cooling	kPa	21.1	24.5	28.9	30.9
•	<del>-</del>	kPa	27.0	26.0	38.5	47.4
Pressure Drop	Heating	кра	37.6	35.6	47.4	53.2
Piping Connections Liquid Pipe (IN)		T				
Liquid Pipe (IN)		Type	PF MALE	PF MALE	PF MALE	PF MALE
L'and D'an (OUT)		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
Hard to a declar		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)			
Sound	4.4.4.					
Sound Pressure	(H/M/L)	dB(A)	40/37/32	39/35/33	43/38/33	45/39/33
Sound Power	Cooling	dB(A)	57	58	60	62
Dimensions		_				
Net Weight		kg	21.0	25.0	25.0	25.0
Net Dimensions (W × H × D)		mm	947 x 281 x 947	947 x 365 x 947	947 x 365 x 947	947 x 365 x 947
Casing						
Material		-	-	-	-	-
Panel						
Panel Model		White	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN	PC4NUDMAN
			PC4NUNMAN	PC4NUNMAN	PC4NUNMAN	PC4NUNMAN
		Black	PC4NBDMAN	PC4NBDMAN	PC4NBDMAN	PC4NBDMAN
			PC4NBNMAN	PC4NBNMAN	PC4NBNMAN	PC4NBNMAN
Additional Accessories						
Drain Pump	Туре	-	Built-in	Built-in	Built-in	Built-in
Diam'r amp		mm/(cc/				
Diam'i amp	Max. Lifting Height/ Displacement	min)	750/400	750/400	750/400	750/400
Jidan Camp			750/400 ACL-A60V3	750/400 ACL-A60V3	750/400 ACL-A60V3	750/400 ACL-A60V3



### Accessories























Panel (Mandatory)	Panel (

MWR-SH00N

Panel (Mandatory) PC4NBNMAN PC4NUDMAN PC4NUNMAN MIM-F10N AR-EH03E, AR-CH01E MWR-SH11N MWR-WG00\*N PC4NBDMAN

# Specifications Concealed FCU

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

- Optional drain pipe.
- Optional heating coil 4-pipe.
- Optional 3-way valve kit 4-pipe.
- Auxilary Drain Pan vertical/horizontal.







	Model		ACL-18DF	ACL-25DF	ACL-35DF	
Power Supply			1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	
Mode			HP	HP	HP	
Performance						
Capacity	Cooling (H/M/L)	kW	1.91/1.66/1.34	2.87/2.34/1.73	4.24/3.20/2.47	
(Nominal)	Heating (H/M/L)	kW	2.15/1.81/1.50	2.91/2.35/1.73	4.24/3.24/2.47	
Power	3		2.13/ 1.01/ 1.30	2.71/2.33/1.73	7.27/ 3.27/ 2.7/	
PowerInput	Cooling (H/M/L)	W	53/36/24	56/43/29	90/50/40	
(Nominal)	Heating (H/M/L)	w	53/36/24	56/43/29	90/50/40	
Current Input	Cooling	Α	0.26	0.28	0.45	
(Nominal)	Heating	A	0.26	0.28	0.45	
Heat Exchanger	···cating		0.20	0.20	0.43	
Type		-	Fin & tube	Fin & tube	Fin & tube	
-an			riii & tube	riii & tube	riii & tube	
Гуре		-	B. H	8. 11	B. H	
Number of Fans		ea	Double suction centrifugal fan 2	Double suction centrifugal fan 2	Double suction centrifugal fan 2	
Airflow Rate	H/M/L	m³/min	5.7/4.5/3.5	7.6/5.7/4.0	11.7/8.3/6.0	
	⊓/M/L	111 / 111111	5.//4.5/3.5	7.6/5.7/4.0	11.//8.3/6.0	
Fan Motor Type		_	7.1. 10	7	7.1	
Output x n		w	3-step AC	3-step AC	3-step AC	
		VV	53/36/24	56/43/29	90/50/40	
Vater Vater Flow Rate	Caslina	I /min				
water Flow Rate	Cooling	l/min	5.6	8.4	12.4	
	Heating	l/min	6.2	8.4	12.4	
Pressure Drop	Cooling	kPa	17	24	35	
	Heating	kPa	20	24	35	
Piping Connection						
Liquid Pipe (IN)	Туре	-	Female	Female	Female	
	Dimension	ø, mm (inch)	1/2	1/2	1/2	
Liquid Pipe (OUT)	Туре		Female	Female	Female	
	Dimension	ø, mm (inch)	1/2	1/2	1/2	
Heat Insulation		-	-	-	-	
Orain 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 x 224 x 535	935 x 224 x 535	1,145 x 224 x 535	
Casing						
Material		-	-	-	-	
Panel						
Panel Model		-	-	-	-	
Additional Access	ories					
Orain Pump	Туре	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	Vertical	optional	ACL-ADV	ACL-ADV	ACL-ADV	
Orain Pan	Horizontal	optional	ACL-ADH	ACL-ADH	ACL-ADH	

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 Minimum Circuit Ampacity (MCA) value.





ACL-55DF	ACL-65DF
 1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz
1Ψ, 220~240 V, 50/60 H2 HP	1Ψ, 220~240 V, 50/60 H2 HP
HF	HF
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
, .2.0/ /	
3-step AC	3-step AC
182/127/86	244/169/109
21.1	22.9
20.2	24.2
39	42
35	47
51	F I.
Female 3/4	Female 3/4
5/4 Female	5/4 Female
3/4	3/4
-	-
-	-
53/46/39	59/52/41
61/54/47	67/60/49
37.0	37.0
1,355 x 249 x 535	1,355 x 249 x 535
-	-
_	_
-	-
ACL-ADP	ACL-ADP
750/133	750/133
ACL-A055HC ACL-A055V3	ACL-A055HC ACL-A055V3
ACL-ADV	ACL-ADV
ACL-ADH	ACL-ADH
Polypropylene washable	Polypropylene washable
XF -FX	XE -127

### Accessories







FCU Interface Module	FCU Kit	Touch Controller
MIM-F10N	MIM-F00N	MWR-SH11N





Simple Type Controller

MWR-WG00\*N MWR-SH00N

### Cased FCU

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

- Optional drain pipe.
- Optional heating coil 4-pipe.
- Optional 3-Way valve kit 4-pipe.
- Auxiliary Drain Pan vertical/horizontal.







	Model		ACL-18DG	ACL-25DG	ACL-35DG	
Daniel Carrella			1+ 220 240 // 50 // 0 //	1+ 220 240 / 50 //0 //	1+ 220 240 / 50 // 0 / /	
Power Supply			1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz	
Mode			HP	HP	HP	
Performance Capacity	Cooling (H/M/L)	kW	1.91/1.66/1.34	2.87/2.34/1.73	4.24/3.20/2.47	
(Nominal)	Heating (H/M/L)	kW	2.15/1.81/1.50		4.24/3.24/2.47	
Power	Treating (11/1-1/2)	KW	2.15/1.81/1.50	2.91/2.35/1.73	4.24/3.24/2.4/	
Power Input	Cooling (H/M/L)	W	53/36/24	56/43/29	90/50/40	
(Nominal)	Heating (H/M/L)	w	53/36/24	56/43/29	90/50/40	
Current Input	Cooling	Α	0.26	0.28	0.45	
(Nominal)	Heating	A	0.26	0.28	0.45	
Heat Eychanger	ricuting		0.26	0.26	0.45	
Heat Exchanger Type		_	Fin & tube	F:- 0 +	Fin & tube	
Fan			FIII & Lube	Fin & tube	FIII & Lube	
Туре		-	Double susting contributal for	Double suction contributed for	Double susting contributed for	
Number of Fans		-	Double suction centrifugal fan 2	Double suction centrifugal fan 2	Double suction centrifugal fan 2	
Airflow Rate	H/M/L	m³/min	5.7/4.5/3.5	7.6/5.7/4.0	11.7/8.3/6.0	
Fan Motor	11/11/2		5.7/4.5/3.5	7.0/3.7/4.0	11.7/6.3/6.0	
Туре		-	3-step AC	3-step AC	3-step AC	
Output x n		W	53/36/24	56/43/29	90/50/40	
Water			33/30/24	30/43/27	70/30/40	
Water Flow Rate	Cooling	l/min	5.6	8.4	12.4	
mater i tom nate	Heating	l/min	6.2	8.4	12.4	
Pressure Drop	Cooling	kPa	17	24	35	
	Heating	kPa	20	24	35	
Piping Connection		W. G.	20	24	33	
Liquid Pipe (IN)	Туре	-	Female	Female	Female	
	Dimension	ø, mm (inch)	1/2	1/2	1/2	
Liquid Pipe	Туре	-	Female	Female	Female	
(OUT)	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			30,11,10	10/ 12/ 30	33, 13, 33	
Net Weight		kg	22.0	29.0	35.0	
Net Dimensions (	WxHxD)	mm	774x564x226	984x564x226	1,194x564x226	
Casing					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Material		-	-	-	-	
Panel						
Panel Model		-	-	-	-	
Additional Access	sories					
Drain Pump	Туре	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 Pa		optional	ACL-ADV	ACL-ADV	ACL-ADV	
Auxiliary Drain Pa	an Horizontal	optional	ACL-ADH	ACL-ADH	ACL-ADH	





ACL-55DG	ACL-65DG
 1Ф, 220~240 V, 50/60 Hz	1Ф, 220~240 V, 50/60 Hz
НР	НР
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
0.70	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 42
35	47
Female	Female
3/4 Female	3/4 Female
3/4	3/4
-	-
-	-
53/46/39	59/52/41
61/54/47	67/60/49
45.0	45.0
45.0 1,404x564x251	45.0 1,404x564x251
1,404x304x231	1,404x304x231
-	-
-	-
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 Kit	Touch Controller
MIM-F00N	MWR-SH11N





Simple Type Controller

MWR-WG00\*N MWR-SH00N

# Dimensional drawings

### **HVM Chiller**

Units: mm [inches] AG042/056/070KSVANH/EU Detail A 80 3 [2'-7 1/2" ] [5′-13/4″] pitch of foundation bolt holes pitch of foundation bo It holes 4-20 x 12 SLOTHOLE Foundation bolt holes

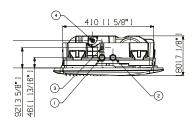
NO	Name	Description
1	Inlet water flange	15/20 HP 40A Din Flange, 25 HP: 50A Din Flange
2	Outlet water flange	15/20 HP 40A Din Flange, 25 HP: 50A Din Flange
3	Power wiring conduits	Knock-out hole (front)
4	Communication wiring conduits	Knock-out hole (front)
5	Power wiring conduits	Knock-out hole (side)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

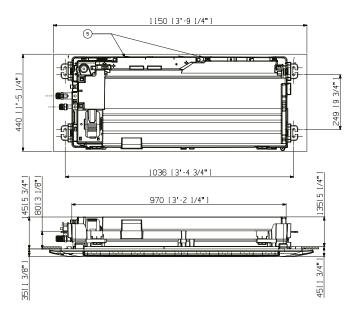


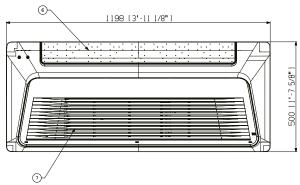
# Dimensional drawings

# WindFree<sup>™</sup> 1-Way Cassette FCU

AG026/032TN1DKH/EU
Units: mm [inches]

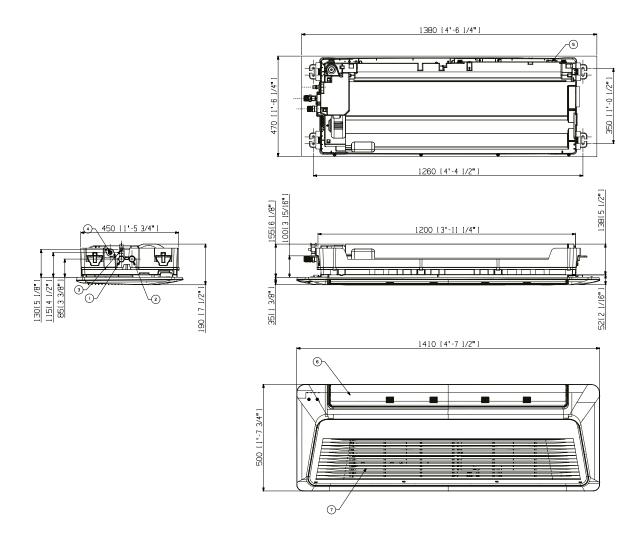






NO	Name	Description	
1	Water pipe connection out	PF Male 3/4" (20A)	
2	Water pipe connection in	PF Male 3/4" (20A)	
3	Airventvalve		
4	Drain hose	VP20 (OD 26, ID 20)	
5	Power supply/communication wiring conduits		
6	Air discharge part		
7	Air suction part		

AG042TN1DKH/EU Units: mm [inches]

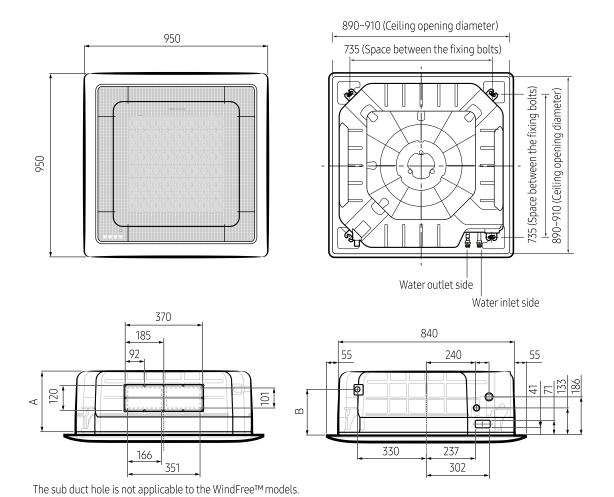


NO	Name	Description	
1	Water pipe connection out	PF Male 3/4" (20A)	
2	Water pipe connection in	PF Male 3/4" (20A)	
3	Airvent valve		
4	<b>Drain hose</b>	VP25 (OD 32, ID 25)	
5	Power supply/communication wiring conduits		
6	Air discharge part		
7	Air suction part		

# Dimensional drawings

### WindFree™ 4-Way Cassette FCU

AG060/072/090/105AN4DKH/EU
Units: mm [inches]

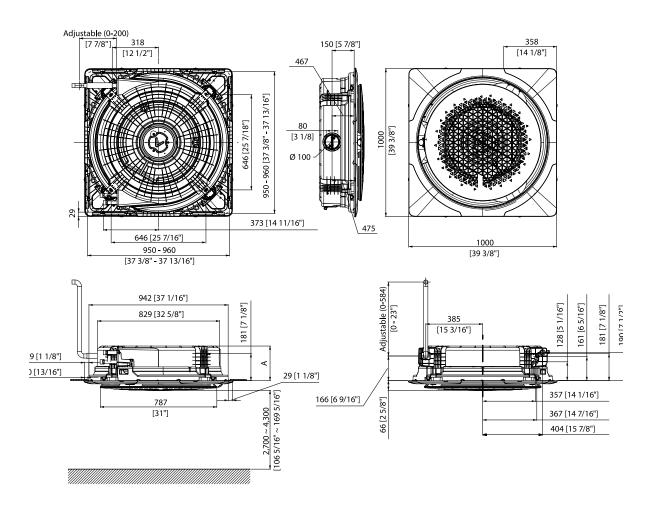


	Category	Type A	Type B	
Model		AG060*N4DKH*	AG090*N4DKH*	
		AG072*N4DKH*	AG105*N4DKH*	
Α	(mm)	204	246	
В	(mm)	196	222	
Connection port	(mm)	PF 3/4" Male		
Flexible hose connection port	(mm)	VP25 (outer diameter: Ø32, inner diameter: Ø25)		



## **360 Cassette FCU**

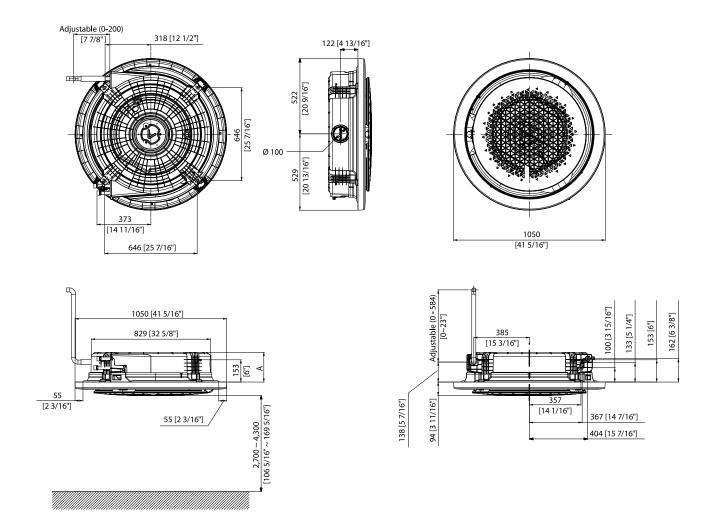
AG060/072/090/105MN4PKH/EU
Units: mm [inches]



Pos.	A Type	В Туре				
Model		AG072MN4PKH/EU				
	AG060MN4PKH/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)					

AG060/072/090/105MN4PKH/EU

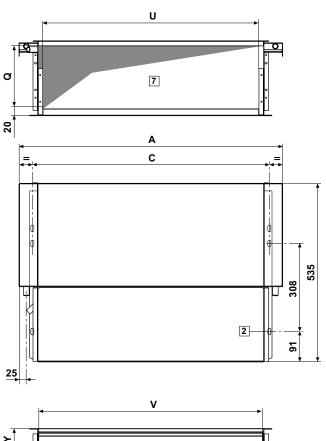
Units: mm [inches]

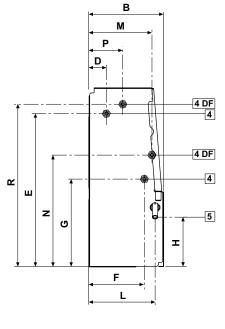


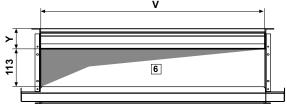
Pos.	A Type	В Туре				
Model		AG072MN4PKH/EU				
	AG060MN4PKH/EU	AG090MN4PKH/EU				
		AG105MN4PKH/EU				
A	205 289					
Pipe connection	PF 3/4 Male					
Drain pipe connection	VP25 (OD 32, ID 25)					

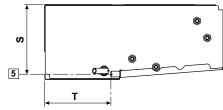
## **Concealed FCU**

ACL-\*\*DF Units: mm [inches]







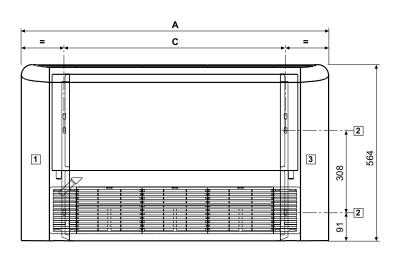


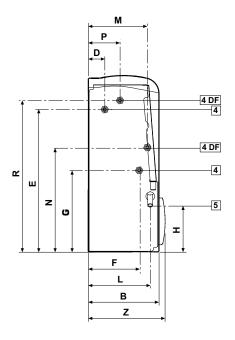
NO	Name	Description						
1	Water pipe connection out	PF Male 3/4 (20A)						
2	Water pipe connection in	PF Male 3/4 (20A)						
3	Airventvalve							
4	<b>Drain hose</b>	VP25 (OD 32, ID 25)						
5	Power supply/communication wiring conduits							
6	Air discharge part	Air discharge part						
7	Air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

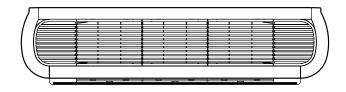
MODEL	A	В	С	н	L	S	T	Y
ACL-18DH	584	224	498	149	198	208	198	61
ACL-25DH	794	224	708	149	198	208	198	61
ACL-35DH	1004	224	918	149	198	208	198	61
ACL-55DH	1214	249	1128	155	220	234	208	67
ACL-65DH	1214	249	1128	155	220	234	208	67

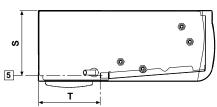
## **Cased FCU**

ACL-\*\*DG Units: mm [inches]









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	В	С	н	L	S	Т	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



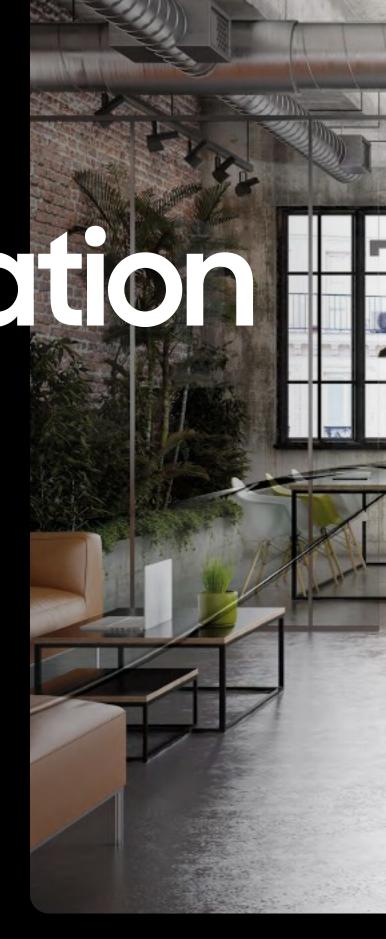




# ERV brings fresh air to your workplace

An Energy Recovery Ventilation (ERV) system helps to maintain a fresh indoor environment in shared spaces such as an office, school, or retail space.

The ventilation solution improves indoor air quality and temperature by exchanging stale indoor air with fresh outdoor air. At the same time, it recovers the energy from the outgoing air using a heat exchanger and uses this to precondition the incoming air.





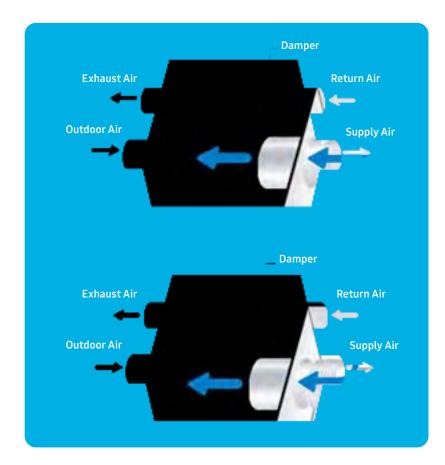
# ERV (Plus)



# Smart cooling auto mode

To conserve energy and remain costeffective, 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.

1 Optional, to be bought seperately



# Instantly reduces CO<sub>2</sub> in your room

The ERV indoor unit has a  $CO_2$  Sensor<sup>1</sup> that detects the level of  $CO_2$  in the air and instantly draws in more outdoor air to maintain a comfortable environment. When the  $CO_2$  level is low the fan speed will be lower and energy will be saved due to the lower power consumption of the fans and loss due to the ventilation of the room air.

Exhaust Air

Dust & CO<sub>2</sub>

Heat Exchanger

Fresh Air

Outdoor Air

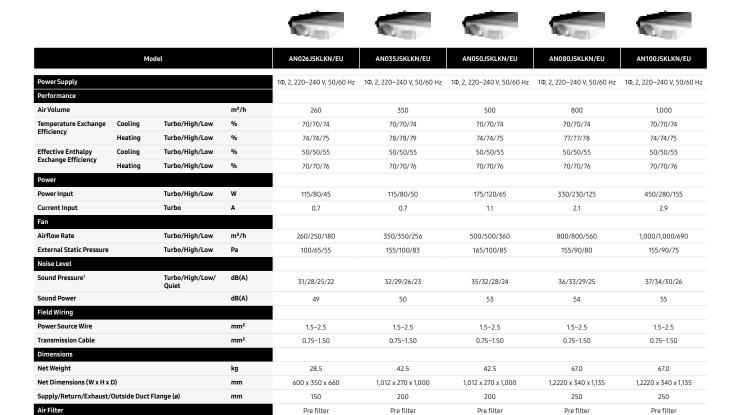
Outdoor

Indoor



# Specifications

- Energy recovery ventilation unit.
- Cellulose heat exchanger element.
- High Efficiency (F7 class) air filter.
- Optional CO<sub>2</sub> 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.



#### Accessories









CO<sub>2</sub> Senso MOS-P1050 MWR-VH12N MWR-WG01\*N MOS-C1

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

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.

# Specifications

# ERV Plus for DVM S (R410A)

- Cellulose heat exchanger element.
- High Efficiency (F7 class) air filter.
- Two centrifugal fans direct driven by electric BLDC motor.
- Optional CO<sub>2</sub> sensor for automatic regulation.
- Energy recovery ventilation unit with built-in direct expansion coil. 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.





	Mode	ι		AM050FNKDEH/EU	AM100FNKDEH/EU
ower Supply				1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
erformance					
emp. Exchange Efficiency	Cooling	Turbo/High/Low	%	70/70/74	70/70/74
	Heating	Turbo/High/Low	%	75/75/79	75/75/79
ffective Enthalpy Exchange Efficiency	Cooling	Turbo/High/Low	%	60/60/66	62/62/68
	Heating	Turbo/High/Low	%	73/73/79	75/75/81
utside 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)
an		-		,	
irflow Rate		Turbo/High/Low (UL)	m,/hr	500/500/360	1,000/1,000/690
			l/s	138.9/138.9/100.0	277.8/277.8/191.7
xternal 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
lotor		Туре	_	BLDC	BLDC
		Output	w	60	70
		Quantity	ea	2	2
ower		4		2	2
ower Input		Turbo/High/Low	W	220/140/90	510/350/235
urrent Input		Turbo/High/Low	A		
•		rurbo/riigii/ Low	^	1.7/1.0/0.6	3.7/2.4/1.6
ping Connections quid Pipe			ø, mm	6.35	6.35
iquiu ripe			ø, inch		
as Pipe				1/4	1/4
as ripe			ø, mm	12.70	12.70
and a Plant			ø, inch	1/2	1/2
rain Pipe			ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
to to a constant			ø, inch	VP25 (OD 1-1/4", ID 1")	VP25 (OD 1-1/4", ID 1")
ater Supply			ø, mm	12.70	12.70
			ø, inch	1/2	1/2
ield Wiring					
ower Source Wire			mm²	1.5/2.5	1.5/2.5
ransmission Cable			mm²	0.75~1.50	0.75~1.50
efrigerant					
/pe			-	R410A(Fluorinated green	
ontrol Method			-	EEV	EEV
ound					
ound Pressure <sup>1</sup>		Turbo/High/Low	dB(A)	36/32/28	36/33/31
ound Power			dB(A)	67	67
imensions					
et Weight			kg	61.0	90.0
et Dimensions (W x H x D)			mm	1,553 x 270 x 1,000	1,763 x 340 x 1,135
upply/Return/Exhaust/Outside Duct Flan	ige (ø)		mm	200	250
mbient Conditions					
round Unit			-	0~40 °C DB, 80 % RH or less	0~40 °C DB, 80 % RH or less
utdoor Air			-	-15~40 °C DB, 80 % RH or less	-15~40 °C DB, 80 % RH or less
eturn Air			-	0~40 °C DB, 80 % RH or less	0~40 °C DB, 80 % RH or less
ccum An				0~40 °C DB, 80 % RH 01 tess	0~40 °C DB, 80 % RH 01 less

#### **Controls**



#### **Accessories**



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

# Specifications

# OAP Duct for DVM S (R410A)

- 100% outdoor air unit.
- Equipped with two Sirocco fans direct driven by a single motor.
- Only discharge temperature control.
- No limitation in OAP Duct quantity for one system.
- 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		AM140MNEPEH/EU	AM220MNEPEH/EU	AM280MNEPEH/EU
Power Supply			1Ф, 2, 220-240 V, 50 Hz	1Φ, 2, 220-240 V, 50 Hz	1Ф, 2, 220–240 V, 50 Hz
Performance					
Capacity (Nominal)	Cooling	kW	14.0	22.4	28.0
	Heating	kW	8.9	13.9	17.4
Power					
Power Input (Nominal)	Cooling	w	300	450	600
	Heating	w	300	450	600
Current Input (Nominal)	Cooling	A	2.2	3.5	4.6
	Heating	A	2.2	3.5	4.6
leat Exchanger					
уре		-	Fin & tube	Fin & tube	Fin & tube
Material		Fin	Al	Al	Al
		Tube	Cu	Cu	Cu
an					
Motor	Туре	-	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Output x n	w	183 x 1	630 x 1	630 x 1
	Number of Fans	ea	2	2	2
Airflow Rate	H/M/L	m³/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					
iquid 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
Orain Pipe		ø, mm	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)	VP25 (OD 32, ID 25)
ield Wiring					,
Fransmission Cable	Min.	mm²	0.75	0.75	0.75
Refrigerant					
Гуре		-	R41	OA(Fluorinated greenhouse gas, GWP=2,08	8)
Control Method		-	EEV (INCLUDED)	EEV (INCLUDED)	EEV (INCLUDED)
Noise Level					
Sound Pressure <sup>1</sup>	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-M075SGU2D	MDP-G075SP	MDP-G075SP
	Max. Lifting Height/Displacement	mm / litres/h	750/24	750/24	750/24
	-iax. Litting Height, Displacement	min / tities/il	730/24	730/24	730/24

#### **Controls**



















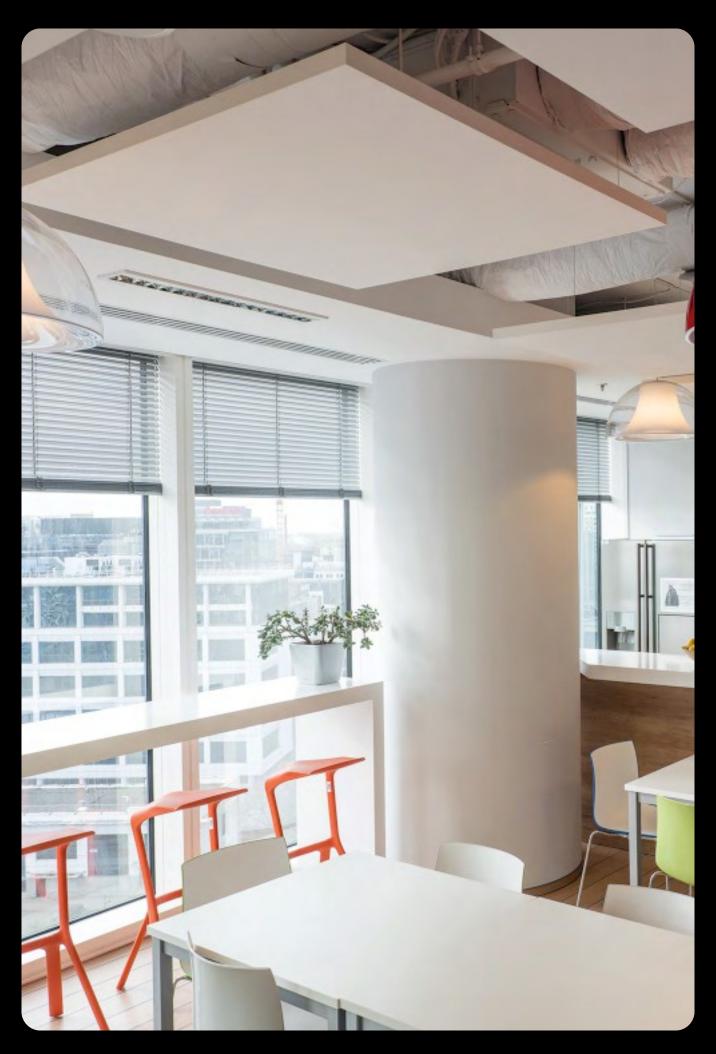
**Accessories** 



Wireless Remote Controller	Wireless Remote Controller	Wireless Receiver Kit	Touch Controller	Wired Remote Controller	Wi-Fi Kit
	AR-EH03E	MRK-A10N			
AR-CH01E	(to be matched with	(to be matched with	MWR-SH11N	MWR-WG01*N	MIM-H04EN
	MRK-A10N)	AR-EH03E)			

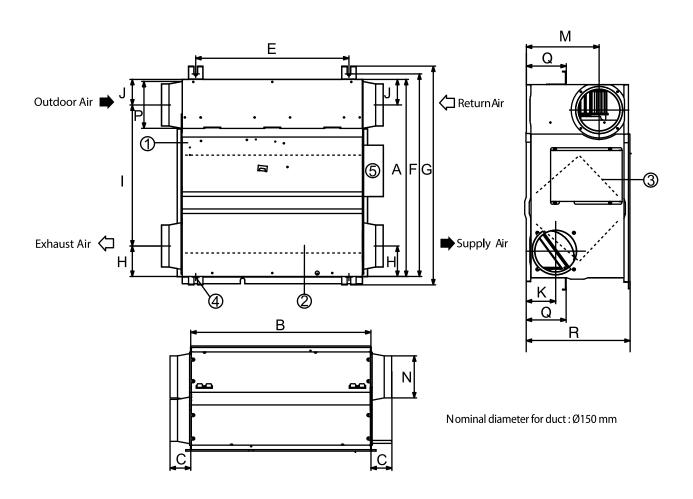
MRW-TA MDP-G075SP/Q MDP-N047SNC1D

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



**ERV** 

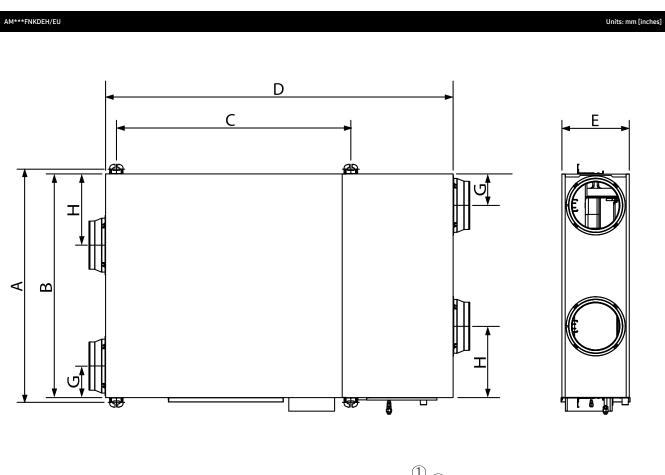
AN026JSKLKN/EU Units: mm [inches]

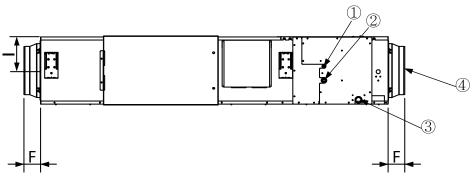


NO	Name	Description
1	Maintenance cover	1
2	Heat exchange element	1
3	Dust filter	2
4	Hanger	4
5	Electrical component box	1

Model	А	В	С	E	F	G	н	1	J	К	М	N	Р	Q	R
	Length (mm)						Diamet	er(mm)		Length (mm)					
026	600	660	70	510	675	729	102	470	85	98	242	140	156	133	350

ERV Plus for DVM S (R410A)



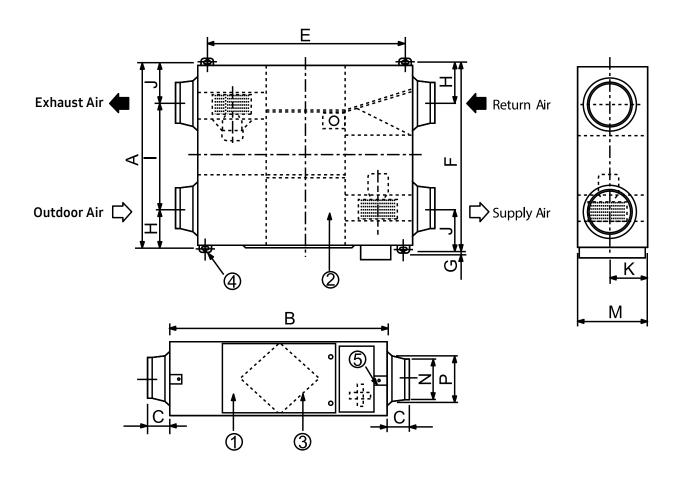


NO	Name	Description					
		AM050FNKDEH	AM100FNKDEH				
1	Liquid pipe connection	ø6.35 Flare					
2	Gas pipe connection	ø12.70 Flare					
3	Drain pipe connection	VP25 (OD 32, ID 25)					
4	Nominal diameter for duct	Ø200 Ø250					

Model	A	В	С	D	E	F	G	н	ı
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

**ERV** 

035/050 - 080/100 Units: mm [inches]



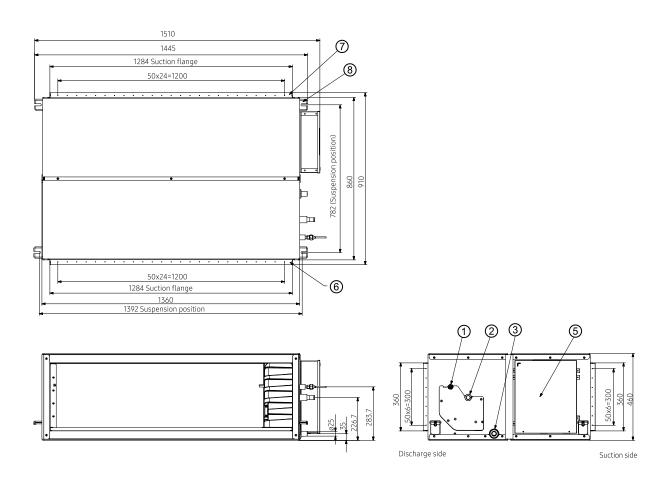
NO	Name	Description
1	Maintenance cover	1
2	Heat exchange element	2
3	Dust filter	4
4	Hanger	4
5	Electrical component box	1

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

Model	Α	В	С	E	F	G	Н	I	J	К	М	N	Р	Q	R
	Length (mm)									Diamet	er (mm)		Length (mm)		
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		

OAP Duct for DVM S (R410A)

AM140MNEP\*H Units: mm [inches]



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





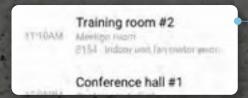
**System Air Conditioner** 

# Touch Centralized Controller 2.0

A 253.5mm LCD display with touch controls eliminates the physical buttons from the front. Its minimalist design, which is fully covered in glass with a narrow metallic frame, means it simply blends with any interior style while improving usability.

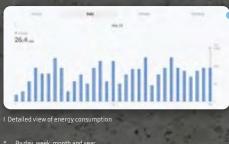
## **Operation Summary**

Quickly monitor the number of devices in operation or to be serviced at a glance.



## Energy Usage Monitor

Efficiently manage energy use by visually comparing the real-time consumption with the previous periods\*.



 By day, week, month and year.
 The information provided includes estimated figures intended solely for illustrative and indicative purposes. Actual consumption depends on variou factors and other usage conditions.

## Scheduling

Simply set the operation schedules of multiple devices - all at once or individually.



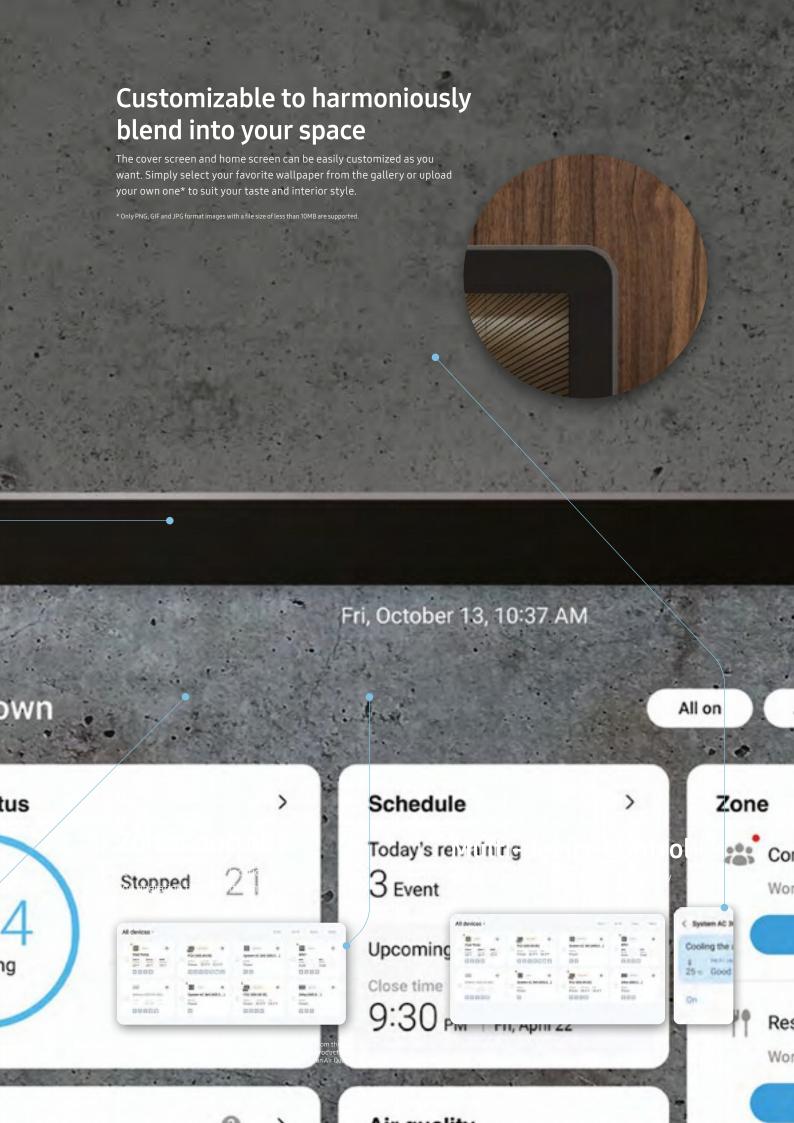
# Af 1000

## **Air Quality Monitor**

Check the real-time air quality of each room in your workplace at a glance.



I Detailed view of the real-time air quality

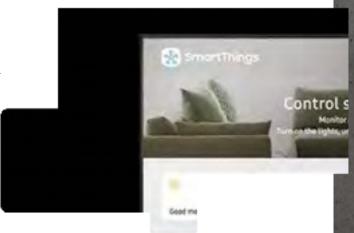


## **Intuitive Control**

#### SmartThings Style UI

With a simplified layout and icons, you can easily monitor and control the entire system from one spot. If you are familiar with SmartThings then you will intuitively know how to use it.

- Consistent user experience across Samsung appliances, based on SmartThings and One UI
- High Visibility with a simple layout and icons
- 2D Layout view\*

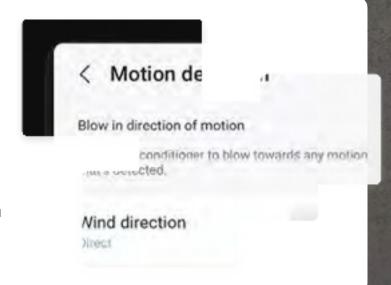


## **Efficient Management**

#### Dashboard on the Home Screen

Intuitively check the current status and easily control everything in your workplace. From scheduling to the MDS\*, you can automate the performance of the air conditioning to optimize your comfort and energy savings.

- One-stop scheduling on multiple devices and zones
- Quick access to the settings for the MDS\*
- Electric Current Control\*\* for balancing the energy load
- \* MDS: Motion Detection Sensor. \*\* New

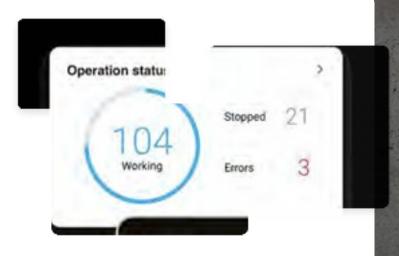


## **Effortless Service**

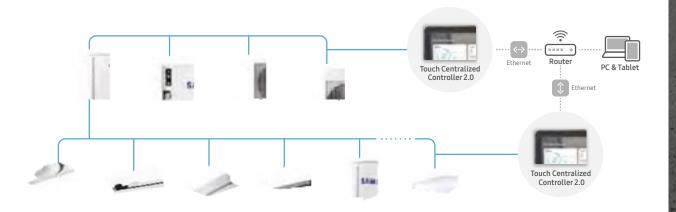
#### Service History

Get a real-time notification when an error occurs, and view the history of any troubleshooting at a glance. Based on the accumulated data, errors can be quickly addressed and solved.

- Real-time notificiation of errors
- Troubleshooting history management of up to 1 year



# **System Configuration**



- \* Please contact your installer or sales expert of Samsung Air Conditioner to connect to ventilation systems (\* shown above), inluding the Samsung ERV and ERV Plus.

  \*The number of devices (indoor and outdoor units) that can be connected will differ based on the location of the controller's connection ports.

# **Specifications**

- Dimensions (WxHxD in mm) 245.7 x 164.5 x 30.9
- Display Size (WxH in mm) 215.2 x 134 (253.5mm TFT LCD)
- Display Resolution (WxH in px) 1,280 x 800



	ı	Model Name		MCM-A300BN*		
Connection	Indoor Units			Up to 128		
Layer	Set (F1/F2)			•		
	Control (R1/R2)			•		
Hardware	Power Supply			DC 12V (Adapter: AC 100-240V, 50/60Hz)		
	Memory	RAM		3 GB		
		Flash		16 GB		
	External Port	DI/DO		2 EA / 2 EA		
		SD Card Slot		Micro SD1EA		
		RJ45 (LAN)		1 EA (1 Gbps)		
		RS485 (NASA)	Quantity	2 EA		
			F1, F2 Wiring	1 Outdoor Unit per Port / Up to 64 Indoor Units per Port		
			R1, R2 Wiring	Up to 16 Outdoor Units per Port (including Module) / Up to 128 Indoor Units per Port (Port 1 + Port 2)		
Software	Energy Saving			•		
(Function)	Power Consumpt	tion		•		
Air Quality						
Expandable	In-site (Connecti	on with Local Networ	k)	PC/Tablet		
Device	Supported Brows	ser (PC/Tablet)		Web (Chrome)		

<sup>\*</sup> Features and specifications are subject to change without notice for the improvement of performance.

# Line-up

Product	Model	lmage	Matchable Products
Individual Control System			
Wireless Remote Controller	AR-EH03E AR-EH04E*	Î	FJM, CAC, DVM, FCU *only for FCU 1-Way/4-Way Cassette
Wireless Remote Controller SolarCell	AR-CH01E	NEW	TDM, FJM, CAC, CAC HEE, DVM, FCU *also for 360 Cassette
Wired Remote Controller	MWR-WG01JN MWR-WG01KN	NEW	FJM, CAC, DVM, ERV, FCU *Added Safety measures for DVM R32
	MWR-WWOON MWR-WW1ON MWR-WW1OJN MWR-WW10KN		DVM *only for Hydro unit
Simple Type Controller	MWR-SH00N		CAC, DVM, FCU
Touch Type Controller	MWR-SH11N	889	CAC, DVM, FCU (with WindFree™ function)
ERV Wired Remote Controller	MWR-VH12N		ERV
Wireless Receiver Kit	MRK-A10N	30	CAC, DVM *only for duct models
Centralised Control System ON/OFF Controller	MCM-A202DN	-	FJM, CAC, DVM, ERV Plus, HVM Chiller
Touch Centralised Controller 2.0	MCM-A300BN	(0)=1 =	FJM, CAC, DVM, ERV Plus, HVM Chiller
Wi-Fi Kit	MIM-H04EN		All (except HVM Chiller & 3rd party FCU)
Module Controller	MCM-A00N		HVM Chiller

Product	Model	lmage	Matchable Products
Integrated Management System			
DMS2.5	MIM-D01AN	-	FJM, CAC, DVM, ERV Plus, HVM Chiller
S-NET3	MST-P3P	Personal Control of the Control of t	
b.IoT Lite Software	MST-BL1A		
Gateway & Interface			
BACnet Gateway	MIM-B17BN		FJM, CAC, DVM, ERV Plus, HVM Chiller
LonWorks Gateway	MIM-B18BN	-	FJM, CAC, DVM, ERV Plus, HVM Chiller
External Contact Interface Module	MIM-B14 (KEY TAG) MIM-B14A (LEAK DETECTION)		RAC, FJM, CAC, DVM, HVM Chiller
PIM (Pulse Interface Module)	MIM-B16N	-	FJM, CAC, DVM, ERV Plus, HVM Chiller
MODBUS Gateway	MIM-B19N		FJM, CAC, DVM, ERV Plus, HVM Chiller
Interface Module (Converter RS485 to NASA)	MIM-N01		FJM, CAC
ERV Interface Module (Converter RS485 to NASA)	MIM-N10		ERV
FCU Kit	MIM-F00N	S	Concealed & Cased FCU
FCU Interface Module	MIM-F10N		FCU
Installation/Test Run Solution			
S-Converter	MIM-CO2N MIM-S10N (TBD)	E .	
Others			
External Room Sensor	MRW-TA		FJM, CAC, DVM
Operation Mode Selection Switch	MCM-C200		
MTFC (Multi-Tenant Function Controller)	MCM-C210N	١.	

# Compatibility guide

Marian	Product	Model		Image		Compatibility		
Microst Advanced   A					DVM	HVM Chiller	FCU1W/4W/360	
Controlled   March	Individual Control System							
Ministration   An Colific		AR-EH03E		10 CEO	•		•	
Marie Mari	Wireless Remote	AR-CH01E	NEW	1 14:00 8	•		•	
March   Marc		MWR-WG01JN MWR-WG01KN		VEG.			•	
Imper   Impe		MWR-WW00N			-		-	
	Simple Type Controller	(DVM Hydro)		Column Land	•			
Micros Receiver   Micros Andre   Micros Micros   Micros Micr					•		•	
Miles and Eccinion of Controllary   Miles ADDI	Touch Controller	MWR-SH11N		82	•		•	
Transitude Control 25   Incomplete Control 25   Inco		MWR-VH12N		in .				
Time	Wireless Receiver Kit	MRK-A10N			•			
Customize	Centralised Control System	n		•				
Mid-HADEN		MCM-A300BN		= -	•			
Modula Controllary   MCM-2004	ON/OFF Controller	MCM-A202DN		PROFES	•	•		
Minespriet   Management   Man	Wi-Fi Kit	MIM-H04EN			•		•	
MIN-POTIAN   MIN	Module Controller	MCM-A00N				•		
S-NET3	Integrated Management S	ystem						
Dulof Lite Software   MST-BLIA	DMS 2.5	MIM-D01AN		•	•	•		
	S-NET3	MST-P3P			•			
BACHE Gateway	b.IoT Lite Software	MST-BL1A			•			
Lonworks Gateway	Gateway & Interface							
Modbus Interface Module	BACnet Gateway	MIM-B17BN		-	•	•		
MIM-B16N	Lonworks Gateway	MIM-B18BN		-	•	•		
### Contact   MIM-B14   MI	Modbus Interface Module	MIM-B19N			•			
MIM-F10A	PIM (Pulse interface module)	MIM-B16N			•	•		
Interface Module		MIM-B14			•	•		
Interface Module		(refrigerant leak	age	P	•			
Converter (R5485-NASA)         MIM-F00N MIM-F10N           Installation/Test Run Soutor         MIM-C02N           S-Converter         MIM-C02N           Others         External Room Sensor         MRW-TA           Operation Mode Selection Switch         MIM-C200           MIM-C200         MIM-C200					•			
Installation/Test Run Solution   MIM-CO2N	ERV Interface Module Converter (RS485-NASA)	MIM-N10						
S-Converter MIM-C02N  Others  External Room Sensor MRW-TA  Operation Mode Selection Switch MIM-C200  MTFC (Multi-Tenant MCM-210N	FCU Interface Module						•	
Others  External Room Sensor MRW-TA  Operation Mode Selection Switch MIM-C200  MTFC (Multi-Tenant MCM-210N	Installation/Test Run Solu	tion						
External Room Sensor MRW-TA  Operation Mode Selection Switch MIM-C200  MTFC (Multi-Tenant MCM-210N	S-Converter	MIM-C02N		4.5	•	•		
External Room Sensor MRW-TA  Operation Mode Selection Switch MIM-C200  MTFC (Multi-Tenant MCM-210N	Others							
Selection Switch  MTFC (Multi-Tenant MCM-210N MC		MRW-TA			•			
MTFC (Multi-Tenant MCM-210N MCM-210N	Operation Mode Selection Switch	MIM-C200			•			
		MCM-210N			•			

FCU 3rd party	ERV	ERV Kit	ERV Plus	PAC	AHU Kit
					•
•	•		•		•
•					
•					
	•		•		
	•	•	•	•	•
	•		•	•	•
	•	•	•	•	•
	•	•	•	•	•
	•		•	•	•
	•		•	•	•
	•	•	•	•	•
	•	•		•	•
	•		•	•	•
	•	•	•	•	•
	•		•	•	
	<u> </u>		•	•	
			•	•	•
	•	•			
•					
	•	•	•	•	•

# Selection guide











Model	AR-CH01E	MWR-WG01*N	MWR-SH00N	MWR-SH11N	MWR-VH12N
Appearance					
Dimensions	35 x 160 x 13	120.0 x 120.0 x 19.0	75x 122x 16.6	94.2 x 122.0 x 19.5	75.0 x 122.0 x 16.6
Power					
USB-C charging	•				
Solar Cell panel	•				
Connection					
Indoor units control	•	•	•	•	
ERV control		•			•
Maximum connectable indoor units	1	16	16	16	6
Control & monitoring					
ON/OFF	•	•	•	•	•
Operation mode	•	•	•	•	•
Fan speed	•	•	•	•	•
Airswing		•	•	•	
Room temperature display	•	•			
°C convertible	•	•		•	
Filter cleaning alarm reset	•	•	•	•	
Air quality display		•			
Purification display	•	•			
Display indoor model number	•	•			
Error display		•	•	•	•
Errorlist		•			
Schedule					
Weekly schedule		•			
Simple ON/OFF timer	•		•	•	•
Convenient function					
Dual set point	•	•			
Multiple languages		•			
Built-in room sensor		•		•	
LCD backlight		•		•	
OLED	•				
Freeze Wash	•				
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	_	•			
	•	0			
CO <sub>2</sub> display		O <sub>ERV</sub>			•
Purification mode		o <sub>ERV</sub>			
Energy saving					
Temperature range limit	•	•	•	•	
Automatic operation stop		•			
Operation time limit		•			
Energy consumption monitoring		•			
Energy saving mode with ERV		•			
Al Comfort	•				
Al Diagnostics	•				
Maintenance					
SD slot		•			
AP mode (WiFi setting)	•				

# Features and Dimensional drawings

#### Individual Control System

## Wireless Remote Controller AR-CH01E

- Operation ON/OFF control
- Mode (Auto, Cool, Fan, Dry, Heat)
- Operation temperature setting
- · Air flow direction
- Fan speed control
- Indoor unit option code setting

#### Options (depends on selected model code)

- Option/Setting selection/ Model selection (Standard/360)
- WindFree™ cooling function
- Long wind/Quiet/Purify/Turbo fan speed
- Filter replacement alarm reset
- Heating range (Temperature control in heat mode 8 °C to 30 °C)
- Individual blade control

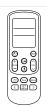
- Auto Clean
- Motion detection
- Freeze wash
- Lighting/ Beep
- ON/OFF timer
- Good Sleep
- Al Features
- Al Comfort Al Diagnostics
- Power & Dimensions:
- 0.95 inch OLED display
- Charging via SolarCell & USB-C type
- Net dimensions (W x H x D): 35 x 160 x 13mm

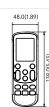


#### Wireless Remote Controller AR-EH03E / AR-EH03M / AR-EH04E

- Operation ON/OFF control
- Fan speed control
- Operation temperature setting
- WindFree™ Cooling function
- Filter cleaning alarm reset
- Air swing control
- · Simple ON/OFF timer
- Indoor unit option code setting
- Option/Setting selection









## Wired Remote Controller MWR-WG01JN, MWR-WG01KN

#### NEW

#### Air conditioner/ERV control

- 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

#### **Energy saving operation**

- Upper/lower temperature limit setting
- Automatically stops operating when not used for certain period of time as set by user

#### Weekly operation schedule setting

- 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
- · Operation time limit

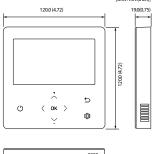
#### User convenience function

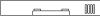
- Child lock
- Different button permission levels
- Room temperature display
- · Dual set point
- · Built-in room temperature sensor
- · Real-time clock: displays current time and day (summer time support)
- Multiple language support
- Service mode support
- Indoor unit cycle data monitoring
- Indoor unit option code setting and monitoring
- · Indoor unit address setting and monitoring
- · SD card slot

#### Available languages

- MWR-WG01JN: English, French, Spanish, Portuguese, Dutch, German
- MWR-WG01KN: English, Italian, Greek, Czech, Slovak, Polish



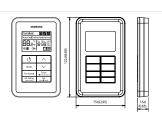




#### Simple Type Controller MWR-SH00N

- 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





#### Touch Controller MWR-SH11N

- Bigger display: clear & bright backlight screen with big fonts
- WindFree™ button: control WindFree™ 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

#### Wireless Receiver Kit MRK-A10N

- Concealed wireless signal receiver
- · Filter cleaning sign
- Fan operation display
- Operation Timer setting display
- Operation ON/OFF button
- Operation On display LED (blue)
- Defrost operation display LED (red)

#### ON/OFF Controller MCM-A202DN

- 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

## Touch Centralised Controller 2.0 MCM-A300BN

- Large Display: 10.1 inch touch LCD controller
- Ease of use: Provides a familiar user experience by applying the SmartThings UI style
- Simple and modern design (Slim bezel 15mm, Resolution (pixels): 1280 x 800 (TFT LCD)
- Harmony with interior, easy to select background image
- Controls max. 128 indoor units
- Can display energy usage for each device (Hour/Day/Week/Year) NEW
- Set detailed schedule according to each zone and indoor unit
- History of error helps to check the cause of failure and take quick action
- 2D Layout NEW
- Remote control by PC/Tablet (In-site) NEW
- Net dimensions (W x H x D): 245.7 x 164.5 x 30.9 mm

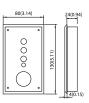




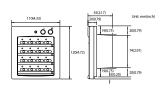




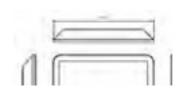












#### Wi-Fi Kit 2.0 MIM-H04EN

- Enhanced Convenience
- Voice Control available through a smartphone with Bixby
- Connected home with affordable units in every home using SmartThings
- Welcome cooling and heating based on Geo-fencing
- Individual indoor unit control
- Personalized Climate Environment
- Preferred automation
- Multi-device experience interoperable with smart appliances
- Energy Usage Monitoring
- Current and daily, weekly or monthly energy usage\* of the outdoor unit
- Provides ease of installation
- Easy set-up possible for up to 16 indoor units at once
- Net dimensions (W x H x D): 185 x 130 x 29mm







#### Module Controller MCM-A00N

- DVM CHILLER ON/OFF control (Module/Group)
- Operation mode, water outlet temperature setting
- Optional operation setting
- Module/Group setting
- Weekly operation schedule setting



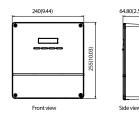


### **Integrated Control Systems**

## DMS 2.5 MIM-D01AN

- Built-in web server for PC-independent management and remote access control
- Multiple upper-layer control access (S-NET 3, Web-client)
- Weekly/Daily schedule control
- Power distribution function
- Current time management even during power failure (for 24 hours)
- Emergency stop function with simple contact interface
- Individual/Group control of up to 256 indoor units, AHU and ERV
- User editable control logic
- Accessible level management.
- Dynamic security management
- Operation & error history management
- Data storage in non-volatile memory & SD memory
- Net dimensions (W x H x D): 240 x 255 x 65mm







- Integrated building management solution for operational convenience and energy savings
- Open platform which enables integrated control such as DVM, 3rd party devices via BACnet interface
- Suitable for small & medium sized buildings
- Management and remote access control up to 4000 points
- Convenient control authority setting up to maximum 100 clients
   Easy UI experience, HTML5-based Dashboard with a quick overview of customized data for each user
- Operation & error history management: Information on the operation of indoor and outdoor
- units can be stored in graphs or Excel.
- Weekly/Daily schedule control
- 2D layout overview provides location-based intuitive monitoring by visualizing the location of DVM on the drawings of each building and floor.
- Individual/Group/Zone control
- Intelligent Energy Management help to provide more precise energy saving with data-based intelligent controls via algorithms, energy leakage detection and energy distribution

- Energy consumption trend/ energy target setting/tenant based power usage
- Data-based comfort control prevents overcooling/overheating by calculating the proper temperature in consideration of climate and human factors (clothing and activity)
- Al learning based pre-cooling/heating energy saving control predicts time to reach target temperature by learning temperature change and air conditioner setting
- · Price Response Control helps to reduces energy consumption and operation costs by controlling indoor temperature and outdoor unit performance by responding to the rates fluctuating by the time of the day.
- Mandatory Hardware requirements: 2.5 GHz CPU, min 32GB RAM, Hard disk or SSD with capacity of 2 TB, 10/100/1000 Base-T(RJ-45  $\,$ Connector) LAN Card and 1920 x 1080 resolution Display
- Mandatory Software requirements: Windows 10/11 64-bit Chrome browser is recommended (60.x.x.x or newer)

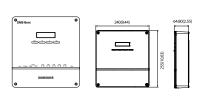


## **Gateway & Interfaces**

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.

- 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

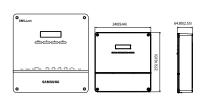




## LonWorks Gateway MIM-B18BN

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.

- 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

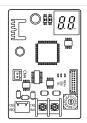


#### lodbus Interface Module

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

- BMS unit protocol: Modbus RS485 (2 wires, max. 1,000m)
- Unit connection protocol: Samsung Control Layer Protocol
- Max. No. of connection units: 1 outdoor unit (4 outdoor units including sub units in the case of modular installation) and  $% \left( \left( 1\right) \right) =\left( 1\right) \left( 1\right)$ 48 indoor units
- Modbus interface module address range: up to 247
- Net dimensions (W x H): 50 x 80mm







#### External Contact Interface Module MIM-B14

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.

- 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

## Refrigerant Leak Detect (RLD) Interface Module MIM-B14A

The RLD Interface Module is an interface module that has 2 outputs and 1 input. It is mainly applied to the Refrigerant Leak Detector system.

- RLD Interface Module function
- To send a refrigerant leakage detection signal from a master DDC to an outdoor unit
- To send a outdoor pump down operation status signal from an outdoor unit to a master DDC
- Net dimensions (W x H x D): 50 x 80 x 35mm

#### PIM (Pulse Interface Module) MIM-B16N

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

#### Interface Module MIM-N01

- 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
  - Conventional outdoor unit communication ←→ New upper level controller communication
- New outdoor unit communication  $\longleftrightarrow$  Conventional upper level controller communication

#### FCU Interface Module MIM-F10N

- Communication interface module
- Connect one FCU interface module to a maximum of 16 FCU Kits.
- Supports FCU Kit only

#### FCU Kit MIM-F00N

- For 3rdParty FCU
- Communication and control interfacing kit between 3rd party FCU and Samsung control system
- Possible to use wired remote controller
- Possible to use DMS 2.5, touch centralized controller
- Provides external contact input
- Outputs control signal for FCU fan/water valve
- Size: 270 x 200 x 87.4mm (W x H x D)





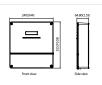










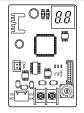


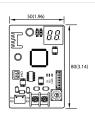










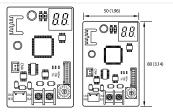




#### Interface Module (Converter RS485 to NASA) MIM-N10

- 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
- Conventional ERV communication ←→ New upper level controller communication
- New ERV communication ←→ Conventional upper level controller communication
- New ERV communication ←→ New upper level controller communication





#### Installation/Test Run Solution

#### S-Converter MIM-C02N, MIM-S10N (TBD)

- Communication converting module to connect Samsung system air conditioner to a PC.
- Main purpose for use
- To connect with test run programme [Test run programme]
- S-NET Pro: Conventional communication
- S-NET Pro2: NASA communication







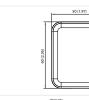


#### **Others**

#### External Room Senso

- Indoor unit is operated by MRW-TA instead of its own sensor.
- Wire length: 12 m





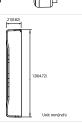


# Operation Mode Selection Switch MCM-C200

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







## MTFC (Multi-Tenant Function Controller) MCM-C210N

- 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

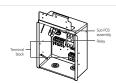






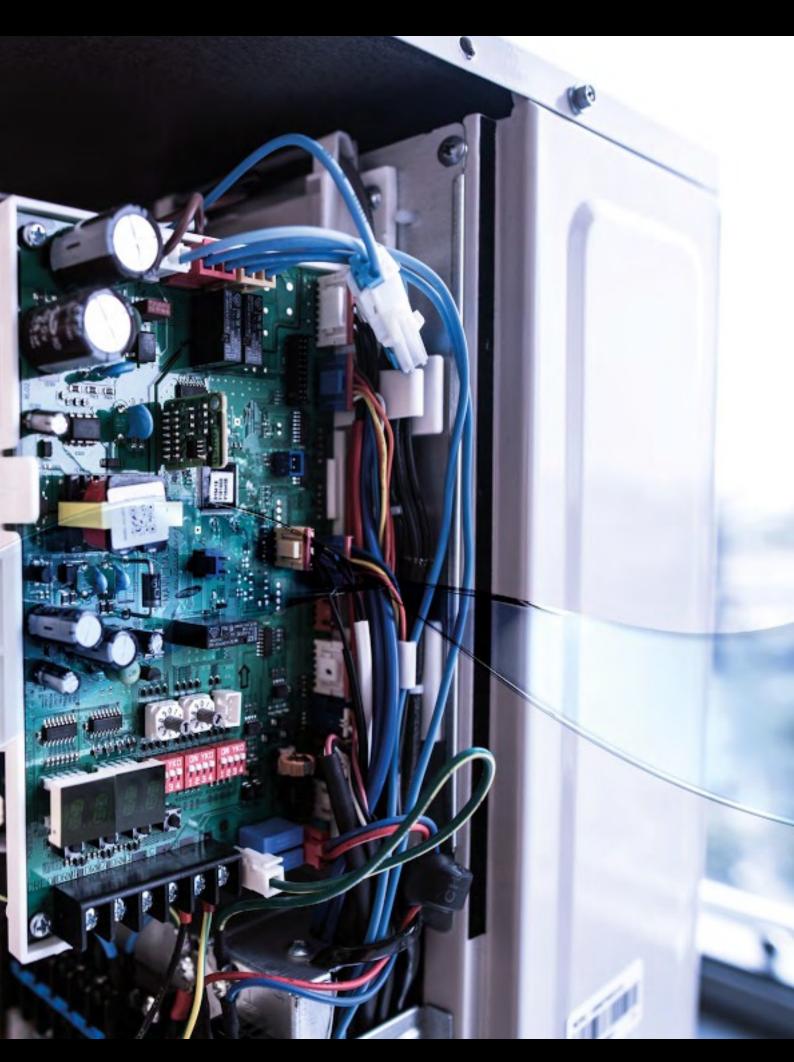
#### Base heater Control Kit

 Only Compatible with DVM S2 base heaters (MHC-013VE1 and MHC-015VE1)









## Line-up panels

#### 360 Cassette Front Panel Motion Detect Sensor Black Circle (Exposed installation) White Circle (Exposed installation) White Square Black Square PC4NUNMAN PC4NBNMAN PC4NUDMAN PC4NBDMAN MCR-SME Standard Air Purification PC6EUCMAN Standard Auto Elevation PC6EUXMAN Universal SmartThings PC6EUSMANW PC6EBSMANW PC6NUSMANW PC6NBSMANW Universal SmartThings Air Purification PC6EUCMANW Universal SmartThings Auto Elevation PC6EUXMANW

Standard PC4SUFMAN PC4NUFMAN - Standard Air Purification - PC4NUCEAN - Standard Auto Elevation - PC4NUFMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NUFMANW	NEW COLOR	NEW COLOR           600x600 Mini White         900x900 White         900x900 Black         900 x 900         600 x 600           Standard         PC4SUFMAN         PCANUFMAN         -         MCR-SMC         MCR-SMD           Standard Air Purification         -         PCANUCEAN         -           Standard Auto Elevation         -         PCANUMAN         -           Universal SmartThings         PC4SUFMANW         PC4NUFMANW         PC4NUFMANW			WindFree™ 4-Way Casse	tte Front Panel		Motion Detect Sens	or
Standard PC4SUFMAN PC4NUFMAN - MCR-SMC Standard Air Purification - PC4NUCEAN - Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NBFMANW	PC4NUFMAN         -         MCR-SMD         MCR-SMD           PC4NUCEAN         -         -         -           PC4NUXMAN         -         -         -           PC4NUFMANW         PC4NBFMANW         -         -           PC4NUCMANW         -         -         -	Standard PC4SUFMAN PC4NUFMAN - MCR-SMC MCR-SMD  Standard Air Purification - PC4NUCEAN - Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NUFMANW Universal SmartThings Air Purification - PC4NUCMANW -					NEW COLOR		
Standard Air Purification - PC4NUCEAN - Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4NUFMANW PC4NUFMANW PC4NBFMANW	PC4NUCEAN         -           PC4NUXMAN         -           PC4NUFMANW         PC4NBFMANW           PC4NUCMANW         -	Standard Air Purification - PC4NUCEAN - Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NUFMANW Universal SmartThings Air Purification - PC4NUCMANW -			600x600 Mini White	900x900 White	900x900 Black	900 x 900	600 x 600
Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NBFMANW	PC4NUXMAN         -           PC4NUFMANW         PC4NBFMANW           PC4NUCMANW         -	Standard Auto Elevation - PC4NUXMAN - Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NBFMANW Universal SmartThings Air Purification - PC4NUCMANW -			PC4SUFMAN		-	MCR-SMC	MCR-SMD
Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NBFMANW	PC4NUFMANW PC4NBFMANW -	Universal SmartThings PC4SUFMANW PC4NUFMANW PC4NBFMANW Universal SmartThings Air Purification - PC4NUCMANW -			-		-		
	PC4NUCMANW -	Window Universal SmartThings Air Purification - PC4NUCMANW -		Standard Auto Elevation	-	PC4NUXMAN	-		
				Universal SmartThings	PC4SUFMANW	PC4NUFMANW	PC4NBFMANW		
W OSO Universal SmartThings Air Purification - PC4NUCMANW -	DCANILIVAAANIW		EW %	Universal SmartThings Air Purification	-	PC4NUCMANW	-		
	PC4NOXPIANW			Universal SmartThings Auto Elevation	-	PC4NUXMANW	-		

	1.7~2.2 kW	2.8~3.6 kW	5.6~7.1 kW
Standard	PC1MWFMAN	PC1NWFMAN	PC1BWFMAN
FCU	-	PC1NWFMBN	PC1BWFMBN
Universal SmartThings	PC1MWFMANW	PC1NWFMANW	PC1BWFMANW
Universal SmartThings Air Purification	PC1MWCMANW	PC1NWCMANW	PC1BWCMANW

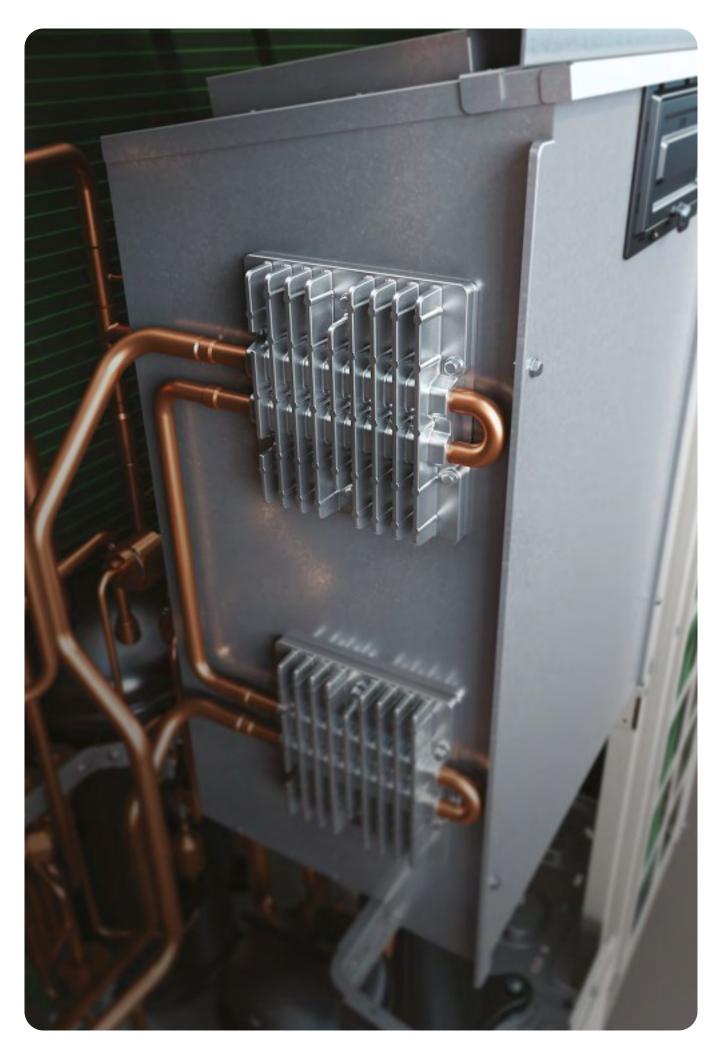


NEW %

New Panel model codes ending with W in blue color are equipped with a factory-integrated Wi-Fi kit (MIM-H14EN), enabling seamless management of indoor units directly through the intuitive SmartThings App

Classification	lmage	Model	Application	
Drain Pump	T.	MDP-N047SNC1D	HSP Duct (22.4/28.0 kW) Fresh Air Intake Duct (14.0 kW)	
		MDP-M075SGU2D	OAP Duct for DVM S	
		MDP-G075SP		
			Global Duct (External Type)	
AHU Kits	Mas	MDP-G075SQ	Global Duct (Internal Type)	
Anu Kits		MXD-K025AN	EEV + Control Kit (7.00–8.75 kW AHU)	
	15.26	MXD-K050AN	EEV + Control Kit (14.00–17.50 kW AHU)	
	100	MXD-K075AN	EEV + Control Kit (21.00–26.25 kW AHU)	
		MXD-K100AN	EEV + Control Kit (28.00–35.00 kW AHU)	
	Derection	MXD-A64K100E	AHU EEV Kit (10 HP)	
	No.	MCM-D201N	Control Kit (PBA, 10 HP~40 HP)	
Y-joint		MXJ-YA1509M	15.0 kW and below	
		MXJ-YA2512M	Over15.0 kW~40.0 kW and below	
	7	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	Over135.2 kW	
Y-Joint (HR Only)		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	Over135.2 kW	
Y-Joint (Outdoor Unit)		MXJ-TA3419M	135.2 kW and below	
		MXJ-TA4122M	140.2 kW and over	
Y-Joint (HR Outdoor Unit)	10. 10. 1	MXJ-TA3100M	135.2 kW and below	
	¥	MXJ-TA3800M	140.2 kW and over	
Y-Joint (for MCU)	声	MXJ-YM1509M	Over16.0 kW-28.0 kW and below	
		MXJ-YM1206M	Over 6.0 kW~14.0 kW and below	
		MXJ-YM1206R	Over 6.0 kW-14.0 kW and below	
Distribution Header	1777	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	Trans	MCU-R4NEK0N		
		MCU-S6NEK3N		

Classification	lmage	Model	Application
мси		MCU-S12NEK1N	12 ports, max 61.6 kW (~16 kW/port)
		MCU-S8NEK1N	8 ports, max 61.6 kW (-16 kW/port)
	-	MCU-S6NEK2N	6 ports, max 61.6 kW (~16 kW/port)
	100	MCU-S4NEK3N	4 ports, max 61.6 kW (-16 kW/port)
	-	MCU-S2NEK2N	2 ports, max 32.0 kW (-16 kW/port)
	100	MCU-S1NEK1N	1 ports, max 16.0 kW (~16 kW/port)
EEV Kit		MXD-E24K132A	
	2	MXD-E24K200A	2 Indoor
		MXD-E32K200A	
		MXD-E24K232A	
	4	MXD-E24K300A	3 Indoor
	-	MXD-E32K224A	
		MXD-E32K300A	
	. 0	MEV-E24SA	1 Indoor
DD ANNUAGE		MEV-E32SA	
DRAIN HOSE		MOK-200DA	L TYPE SLIM 1-WAY / 4-WAY MINI
Differential Pressure Switch		MOS-P1050	ERV (Plus)
CO₂ SENSOR		MOS-C1	ERV (Plus)
Base-heater Kits		MHC-015EE	DVM S Eco HR, DVM S Mini R32
		MHC-013VE1	DVM S 2 Small
		MHC-015VE1	DVM S 2 Large
PDM (Pressure Drop Modulation) Kit		MXD-A38K2A	8~12HP
		MXD-A12K2A	14 ~16HP
		MXD-A58K2A	18 ~ 26HP
3rd party FCU Accessories		ACL-A60V3	3-Way Valve Kit
		ACL-ADP	Drain pipe
		ACL-A0**HC	Heating coil 4-pipe
		ACL-A0**V3	3-Way Valve Kit 4-pipe
		ACL-ADV	Auxiliary Drain Pan Vertical
		ACL-ADH	Auxiliary Drain Pan Horizontal



一方面が Desig and 2 TO G 18 S TO G G G G M



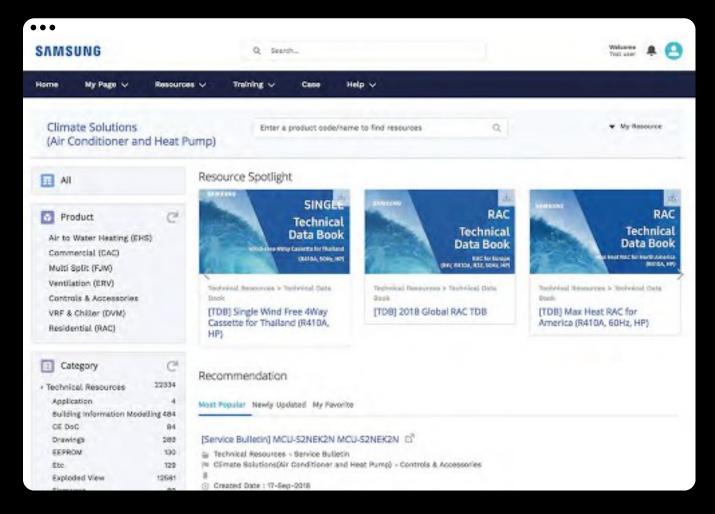
# Samsung Climate Solutions Partner Portal

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 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

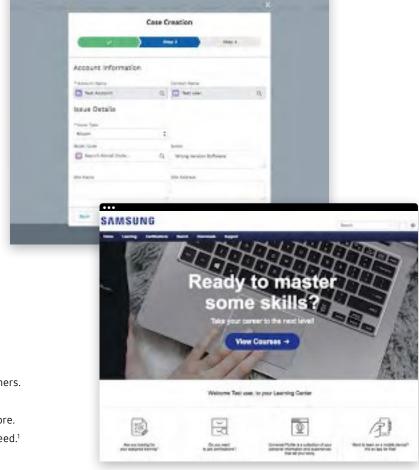
The Technical Resources section provides you with all of the relevant information you need to understand the product's functionality and to prepare and design projects. A library full of

technical information is at your fingertips, ranging from technical data books, BIM files and certificates to exploded views, drawings and different kinds of manuals.



## 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.

#### How to access



#### 1. Register

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.



#### 2. Access

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



### 3. Manage account

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



### 4. Search and download

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

<sup>&</sup>lt;sup>1</sup>The registration process for and availability of training courses may vary per country. Please contact your direct Samsung contact person for more information.

<sup>&</sup>lt;sup>1</sup> Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal

## Samsung DVM Pro 2.0

Samsung DVM Pro 2.0 is an advanced design automation programme which helps you to select the most suitable equipment for easily and precisely designing your HVAC 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 2.0 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

#### Piping schematics

Basic or manual selection with system check and capacity simulation

#### Control systems

Automatic control unit selection

#### Wiring schematics

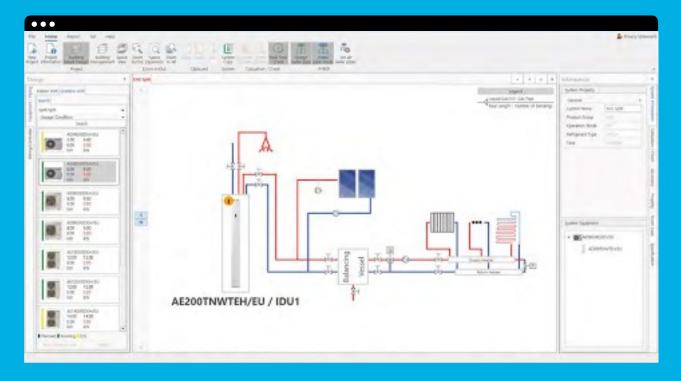
Automatic diagrams including communication wiring for indoor/outdoor control units and electric power meters

#### **Updated Toolbar**

User-friendly tool bar helps to guide intuitively

#### Reports

Specifications, diagrams in DWG & BMP format, quotations



#### **CAD Mode**

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

#### Pipe sizing & lengths

Automatic pipe drawing and selection

#### **Automatic selection and report**

Piping installation

#### System check

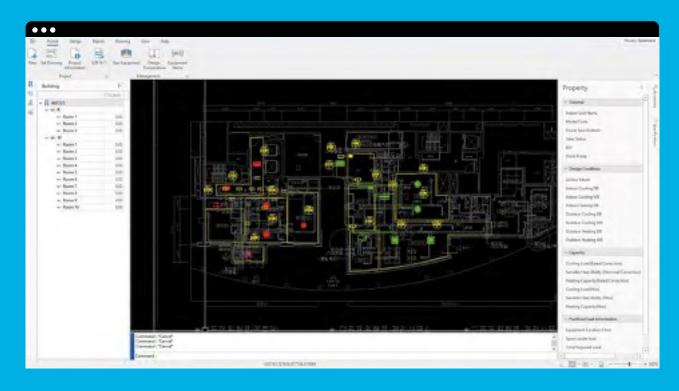
Installation regulation & refrigerant charging

#### **Design without AutoCAD**

Compatible with AutoCAD and AutoCAD LT for DWG.

#### Performance simulation

Capacity correction tool against specific design conditions



 $^{\rm 1}\textsc{Google}$  Chrome is the recommended web browser for using the Samsung DVM Pro 2.0 Porta

#### How to access



#### 1. Register

Go to dvmpro.mkt.samsung.com to access the Samsung DVM Pro 2.0 Portal<sup>1</sup>. If you do not have access yet, complete the registration process and you will be sent the access details.



#### 2. Select

Click on DVM Pro 2.0 via the main menu and scroll to the end of the page to select the option DVM Pro 2.0 download.



#### 3. Download

Download the DVM Pro 2.0 installation file, view the user manuals, and start designing your project.

## 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.



## 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



#### 1.Access

To access the HVM Selection Tool, open your web browser<sup>1</sup> and go to **hvm.openforce.com**. No additional software installation is required.



#### 2. Design

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



#### 3. Support

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

 $<sup>^1</sup> Google\ Chrome\ is\ the\ recommended\ web\ browser\ for\ using\ the\ Samsung\ Climate\ Solutions\ Partner\ Portal\ Chrome\ Partner\ Portal\ Partner\ Partner\ Portal\ Partner\ Partn$ 

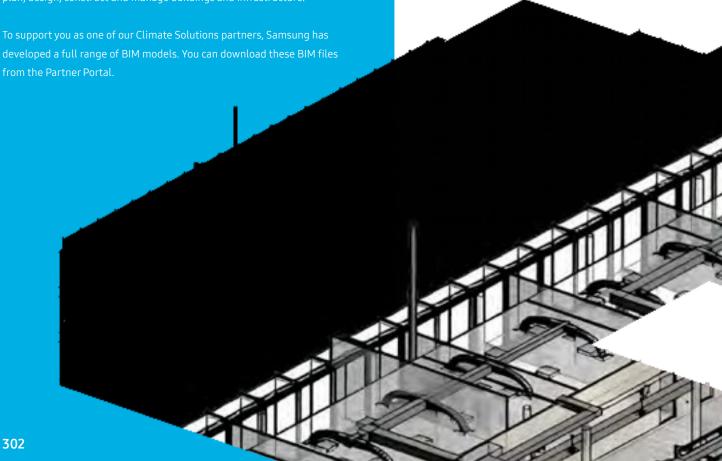
## Samsung specialist design support

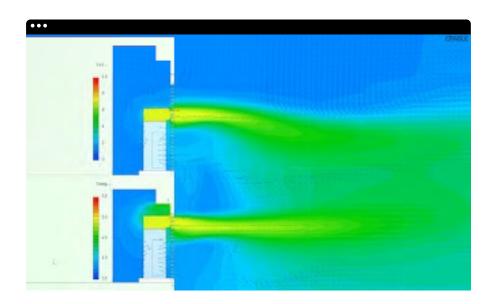
Bringing together technical expertise and practical experience in climate system design, Samsung provides a single point of contact for the design and management of cooling and heating installations in buildings. With assistance ranging from 3D visualisations with BIM support to CFD analysis to optimise 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.



302

Building Information Modelling (BIM) is an intelligent 3D model-based 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.





#### **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** advice

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.

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

#### How to obtain support



#### 1. BIM support

To download Samsung BIM models, go tho Technical Resources on partnerhub.samsung.com/climate<sup>1</sup>. To request dedicated project design support from Samsung, please contact your Samsung representative.



#### 2. CFD analysis

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



#### 3. BREEAM advice

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



<sup>1</sup> 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.

#### 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 2.0 Samsung's advanced design tool
- Case studies



#### Samsung training centres in Europe

**Amsterdam** 

The Netherlands

**Athens** 

Greece

Lisbon

Portugal

Lyon

France

Manchester

United Kingdom

Chertsey

**United Kingdom** 

Madrid

Spain

Milan

Italy

Warsaw

Poland

**Zagreb** 

Croatia







#### How to register for training



#### 1. Select

Go to partnerhub.samsung.com/ climate and search the online event calendar to select the training course you want to attend.



#### 2. Register

After identifying the training course you would like to attend, follow the registration process.



#### 3. Participate

You will be trained by one of our specialised Master Trainers or Product Specialists in one of our training centres.



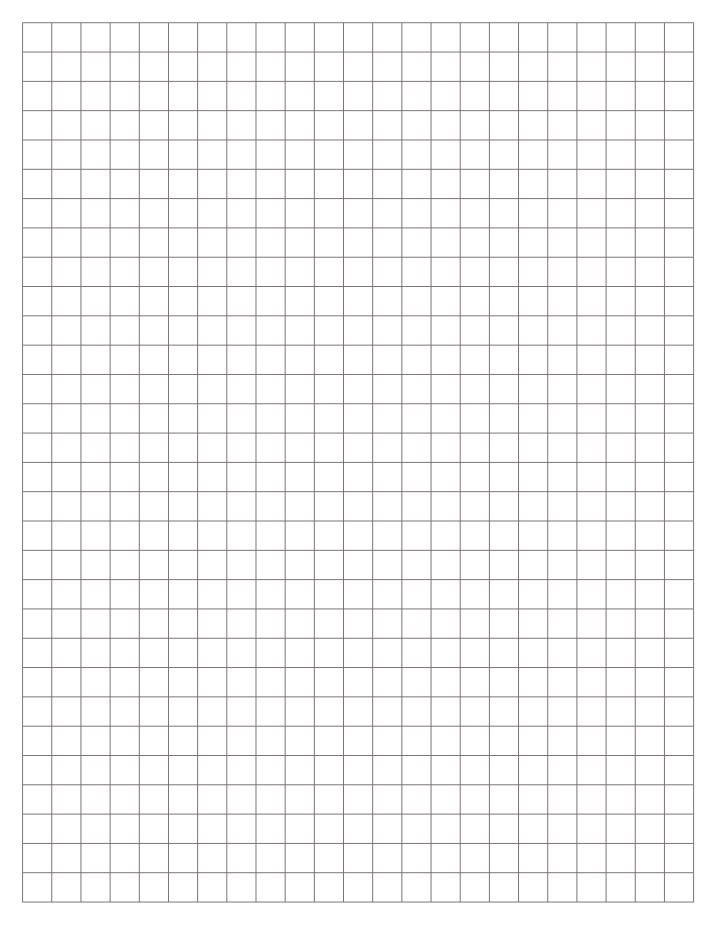
#### 4. Get certified

After completing the training, you will receive a Certificate of Completion.

<sup>&</sup>lt;sup>1</sup> Google Chrome is the recommended web browser for using the Samsung Climate Solutions Partner Portal.

## **Notes**

## Notes



## SAMSUNG

## Find your flow. Create your perfect environment

#### Learn more about Samsung Climate Solutions at: samsung-climatesolutions.com

Copyright © 2025 Samsung Electronics Air Conditioner Europe B.V. All rights reserved. Samsung is a registered trademark of Samsung Electronics Co., Ltd. Specifications and designs are subject to change without notice and may include preliminary information. Non-metric weights and measurements are approximate. All data was deemed correct at the time of creation. Samsung is not liable for errors or omissions. Some images may be digitally altered. All brand, product, service names and logos are trademarks and/or registered trademarks of their respective owners and are hereby recognised and acknowledged.



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

#### Samsung Electronics Air Conditioner Europe B.V.

Evert van de Beekstraat 310, 1118 CX Schiphol P.O. Box 75810, 1118 ZZ Schiphol +31 (0)8 81 41 61 00 The Netherlands