



Brand Value

A name that you can really trust.

Samsung is one of the most recognized brand and household names. Our services and presence span over kitchen appliances, TV and mobile phones.

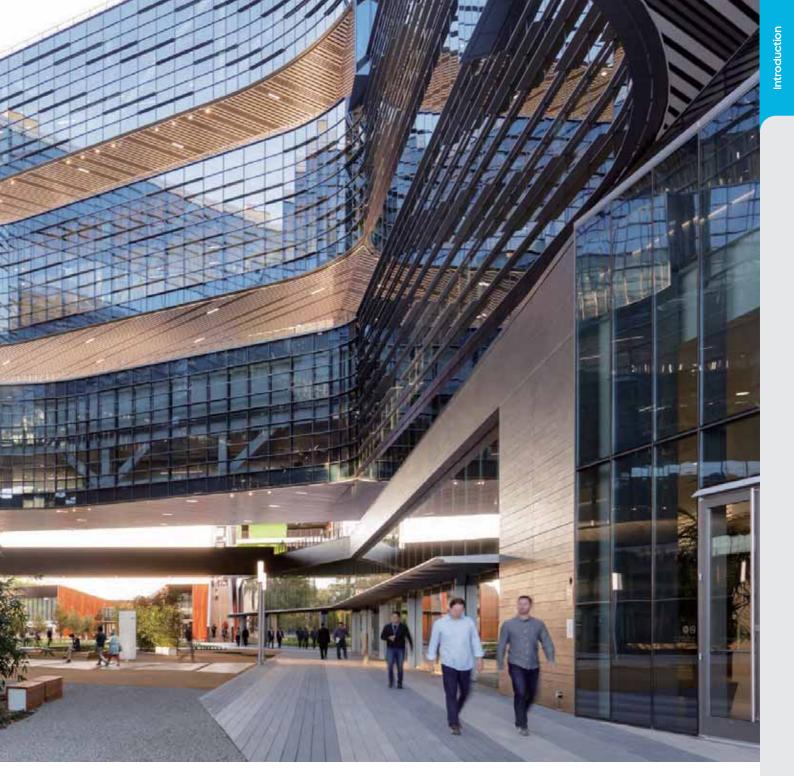


Global Citizenship

We have always been there for you.

Our aim is to empower future generations to achieve their potential and pioneer positive social change, while pursuing innovations that improve the world.

Please visit the Samsung sustainability website (www.samsung.com/sustainability) for more detailed information.





Innovation Leadership

Relentlessly innovating the things around you.

We provide a wide variety of climate solutions that enhance many aspects of your daily life. And they are continually evolving to suit your changing needs.

Foreword



Our Route to Success

Dear partners,

Our business landscape is changing fast, offering many opportunities. Three actions will turn these opportunities into success – insight to keep one step ahead, growing partnerships, and constant innovation.

The cost of energy continues to impact our domestic heating market. A recent report from McKinsey concluded: "Prices are expected to remain considerably elevated than in past years for the foreseeable future." Meanwhile, the European Green Deal is driving change. One example is The EU Renovation Wave that requires the renovation of 35 million inefficient buildings, including the need for 10 million extra heat pumps by 2027 – a major opportunity for us all.

European consumers have similar priorities. We recently surveyed seven European markets. Three issues united almost everyone: product longevity, energy efficiency, and sustainability.

So, what are our joint business opportunities for 2024?

First, heat pump sales are booming. The International Energy Agency reported that 2022 was a record year in Europe. Sales grew by nearly 40%. Our market-leading products will help you take full advantage of this demand.

Samsung is also the home of SmartThings Energy, the largest smart home platform. By connecting to our heating systems, consumers can monitor and manage energy usage via the app. Through monitoring and managing energy usage through the SmartThings app, consumers can identify areas to reduce energy consumption, thereby cutting costs and contributing to reducing the household's greenhouse gas emissions. It is a prime example of how Samsung adds value for the consumer.

In the spirit of partnership, our innovative EHS Cloud Service empowers technical partners to remotely optimize an EHS unit's performance, and to resolve issues in real-time. Our new EHS Product Selection Tool makes comparing, selecting, and configuring our products much easier.

This tool was part of Samsung Climate Solutions' first appearance at ISH in Frankfurt. The theme was "Solutions for a sustainable future," and I am delighted that at the launch of our flagship EHS Mono HT Quiet, we won the "Design Plus Powered by ISH" award. It is a great example of our unwavering commitment to innovation.

This heat pump is high temperature and low noise, ideal for new-builds, and the residential renovation market. It achieves hot water temperatures of up to 70°C for domestic heating, providing 100% heating performance even in extremely cold weather, with temperatures as low as -25°C. It is Quiet Mark certified, operating at noise levels as low as 35 dB(A).

Also at ISH, we presented our next generation EHS Mono heat pumps, including the EHS Mono R290 that uses the natural refrigerant, propane. This has a Global Warming Potential of just 3 – a significant sustainability commitment. We encourage you to enjoy its warming potential, while making a responsible choice for your home or business. 2024 is shaping up to be an exciting year, and I am confident that together, we will navigate the route to success.

Warm Regards Wim Vangeenberghe President SEACE

Highlights for 2024

Say hello to our new heat pump featuring R290

Samsung's newest addition to its EHS heat pump line-up, the EHS Mono R290, offers a new home solution for residential homes. The EHS Mono R290 uses R290 as its refrigerant. R290 has a much lower Global Warming Potential (GWP) of only 3 when compared to other refrigerants R32 and R410A. According to the new EU F-Gas regulations, refrigerants must not exceed 150 GWP from 2025.

The EHS Mono R290 is available in a broader range of capacities fitting with varying project requirements – 5, 8, 12, and 16 kW. The 5 and 8 kW units are only 850mm in height, compared to the larger 12 and 16 kW units which measure approximately 1000mm. It complements any outdoor living space with its sleek and compact design.

Higher hot water temperature

Many older houses in Europe are still using radiators which require a hot water temperature of 65°C or higher to heat rooms effectively. The new EHS Mono R290 combines advanced features to consistently provide hot water of up to 75°C1 for domestic heating purposes. This makes it a suitable heating system replacement in older residential spaces that have been previously dependent on gas boilers for their heating needs. Additionally it can supply domestic hot water of up to 70°C2 when the outdoor temperature is as low as -10°C without using

Easy installation and servicing

Installation and servicing of the EHS Mono R290 can be done without needing an F-gas certification. Additionally, the outdoor unit of the EHS Mono R290 is designed to be simple to install and maintain. The heat pump's internal parts are easily accessible via the side panel which can be removed simply by undoing 3 screws. This significantly saves time and effort during the installation as well as the servicing

Quiet operation

Powered by a combination of innovative noise reducing technologies, the EHS Mono R290 operates quietly with noise levels as low as 35 d(BA)³ using a 4-step Quiet Mode. This heat pump's outdoor unit features a double-layered, sound insulation system fitted with a patented Groove Grid Felt design4, which effectively blocks and absorbs noise produced by compression parts and vibrations.

Made to work with R290

The EHS Mono R290 uses R290 as a refrigerant instead of the commonly used R32 refrigerant. As R290 refrigerant is being used, the inside components of the unit have been adapted when compared to a regular mono heat pump. The adaptations i.e. Leakage prevention, Leakage detection, Exhaust system, Ignition prevention support the separation of R290 refrigerant and the rest of the system.

SmartThings energy integration

SmartThings Energy⁵ offers the ultimate home energy management systems, and real energy savings through rich insights, energy saving automations, and support for users to move towards a net zero home. Once connected, users can monitor their energy usage and with the saving mode potentially reduce their energy consumption⁶.

Asses malfunction from a distance

The EHS Mono R290 is compatible with the EHS Cloud Service. EHS Cloud Service can provide professionals with a wealth of technical data and insights⁷ regarding the EHS device being services. From error reports to malfunction types, and from status checks to energy consumption information. EHS Cloud Service allows professionals to know what's going on at a customer's before even making the trip7.

¹ Leaving water temperature when the outdoor temperature is -10~35°C. Results may vary depending on the actual usage conditions.
2 Domestic hot water (DHW) leaving the DHW tank is 70°C when the outdoor temperature is -10~43°C. If the outdoor temperature is lower than -10°C, a booster heater is required. Results may vary depending on the actual usage conditions.
3 Based on internal testing of the EHS Mono R290 outdoor unit. The noise level is measured 3m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7°C. Results may vary depending on environmental factors

S based on Internat resting or the EHS Mono K27U outdoor unit. The noise level is measured 3m away from the front of the outdoor unit, in an anecnoic room with an outside temperature of 7°C. Results may vary depending on environmental factors and individual use.

4 Patent No.: P2022-0012826

5 Available on Android and iOS devices. A Wi-Fi connection, Samsung account and an optional Wi-Fi kit (MIM-H04N) are required.

6 The SmartThings AI Energy mode, when used by the end-user, can provide users with a possibility to save energy and/or costs with regard to their domestic hot water usage based on (repeatable) user patterns. A compatible Samsung Climate Hub is required. All savings are estimates. The actual savings vary and depend on, amongst others, usage, costs and operating conditions. The AI Energy mode may impact the product performance. End user may deactivate the AI Energy mode at any time.

7 Only available on Samsung products which are compatible with this service and to the extent the end-user has agreed to the terms and conditions of the service and consented to the privacy notice applicable. A separate Wi-Fi Kit may be required for the EHS unit.



Highlights for 2024

Samsung is in a unique position to provide the most dynamic Home Energy Management System

With SmartThings energy, Samsung devices can be switched to run on lower energy consumption with minimal impact on functionality. It also allows the user to monitor monthly energy usage.

Furthermore solar systems from partners can be connected to SmartThings energy and Samsung devices can benefit from this connection. SmartThings energy increases the degree of self consumption thus creating dual benefits: decrease energy bill and accelerate the payback of your solar system.



SmartThings Energy





Wide Device Portfolio



Leading IoT Platform

Highlights for 2024



The all-new remote cloud service console for EHS.

Our aim is to provide comfort and convenience for our technical partners to install our products where they're needed, ensure they're in great shape, and keep them in perfect working order. That's why we're launching EHS Cloud Service that helps our technical partners save time & costs.



Your customers

- ⊗ Enjoy peace of mind
- ✓ Automatic notification in case



Technical partners specialist



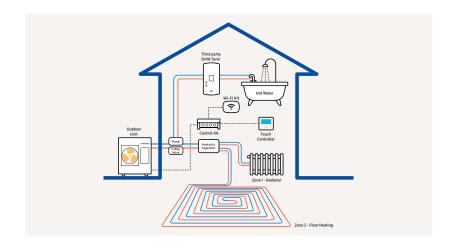
Technical partners managers



Product overview

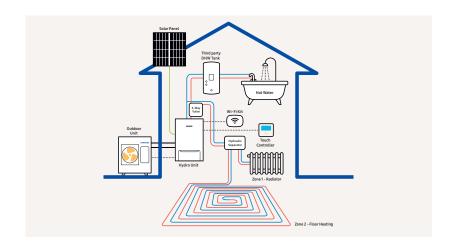
Mono

The EHS Mono can connect to third party equipment such as a Domestic Hot Water (DHW) tank thanks to the Samsung Mono control kit. The Mono Control kit includes a controller, flow sensor, DHW sensor and leaving and return water sensors.



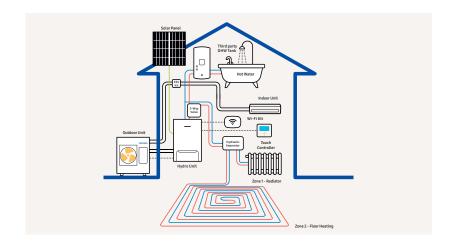
Split

The EHS Split outdoor unit is connected to a wall-mounted Hydro Unit to combine with a third party Domestic Hot Water (DHW) tank to suit all requirements. When used with the Hydro Unit, the Split enables production of domestic hot water and underfloor heating/cooling, and heating of radiators.



TDM Plus

The EHS TDM Plus outdoor unit can connect to a third party Domestic Hot Water Tank (DHW) via a wall-mounted Hydro Unit. TDM Plus offers A2W and A2A home climate comfort.



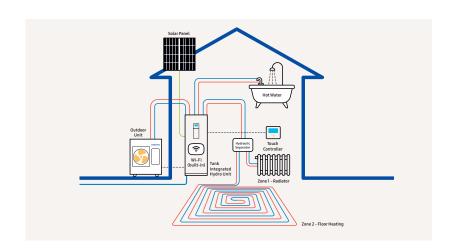
Schematic drawings are for illustrative purposes only. For accurate installation information please consult the technical data book. The selection of the exact product is subject to specific application conditions. Solar panels, underfloor heating panels, radiators and non-integrated components are not provided by Samsung unless specified otherwise. For more detailed product information and technical specifications, please consult the respective product pages of this Product Catalogue.



Product overview

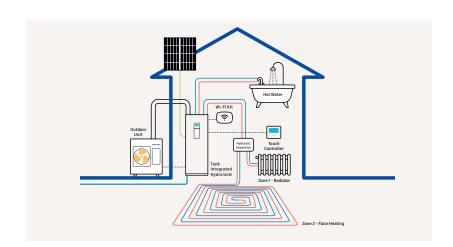
ClimateHub Mono (Built-in Wi-Fi)

The Climate Hub Mono built-in Wi-Fi¹ configuration has a single outdoor unit that includes the hydronic system, making it easy to install and use. The system's potential can be maximised by connecting to Smart Grid or Solar Power (PV).



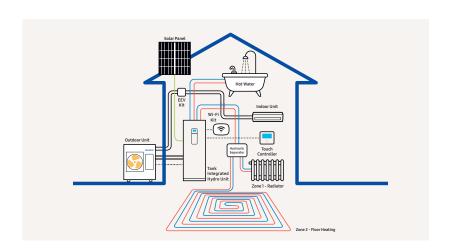
ClimateHub Split

The ClimateHub Split configuration has a single outdoor unit, connected by refrigerant pipes to the tank integrated hydro unit. To maximise its potential, the system can be connected to Smart Grid or Solar Power (PV).



ClimateHub TDM Plus

The TDM Plus system is an 'All-In-One' Airto-Water (A2W) and Air-to-Air (A2A) system for a complete home climate solution. It can be used throughout the year for cooling and heating to meet a variety of different user situations and needs. It enables underfloor heating/cooling and radiator heating, as well as offering A2A cooling support with various options for air conditioning. The system's potential can be maximised by connecting to Smart Grid or Solar Power (PV).



Schematic drawings are for illustrative purposes only. For accurate installation information please consult the technical data book. The selection of the exact product is subject to specific application conditions. Solar panels, underfloor heating panels, radiators and non-integrated components are not provided by Samsung unless specified otherwise. For more detailed product information and technical specifications, please consult the respective product pages of this Product Catalogue.

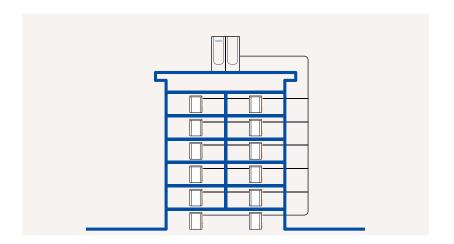
¹ The built-in Wi-Fi is only applicable for the ClimateHub Mono.



Product overview

VRF (DVM)

A Samsung VRF air conditioning system offers high installation flexibility with DVM S Eco and DVM S2 platform outdoor units, which can connect up to 64 indoor units. The system is ideal for multi-family buildings and central heating solutions when installed together with DVM Hydro High Temperature/High Efficiency units that caters to various consumer requirements like cooling, heating or hot water as needed.



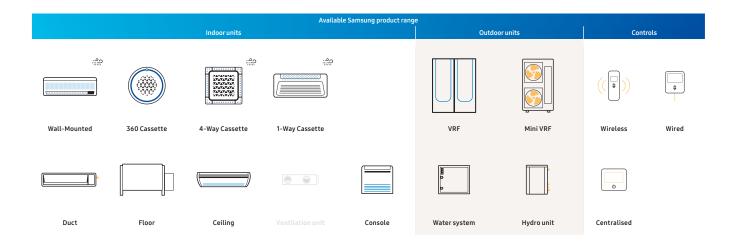


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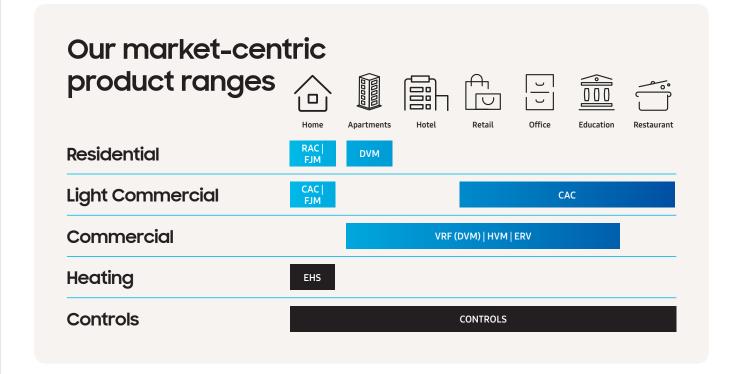
ClimateHub Split

Split with Third Party DHW Tank

Samsung Climate Solutions at a glance

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 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.









Corporate and Technology milestones that make us proud

1974 -

-2005 -

-2017

Samsung introduces its first air conditioner.

Samsung Electronics enters the European market for commercial air conditioning.

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

2014

2015

2017 -









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

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

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.



Samsung introduces its EHS Mono High Temperature (HT) Quiet with the aim to service the growing home

renovations market and expand the offer for new buildings. Its aesthetic design won us the iF Design Awards 2023.

Our flagship innovations that enrich people's lives



WindFree™ Cooling



SmartThings



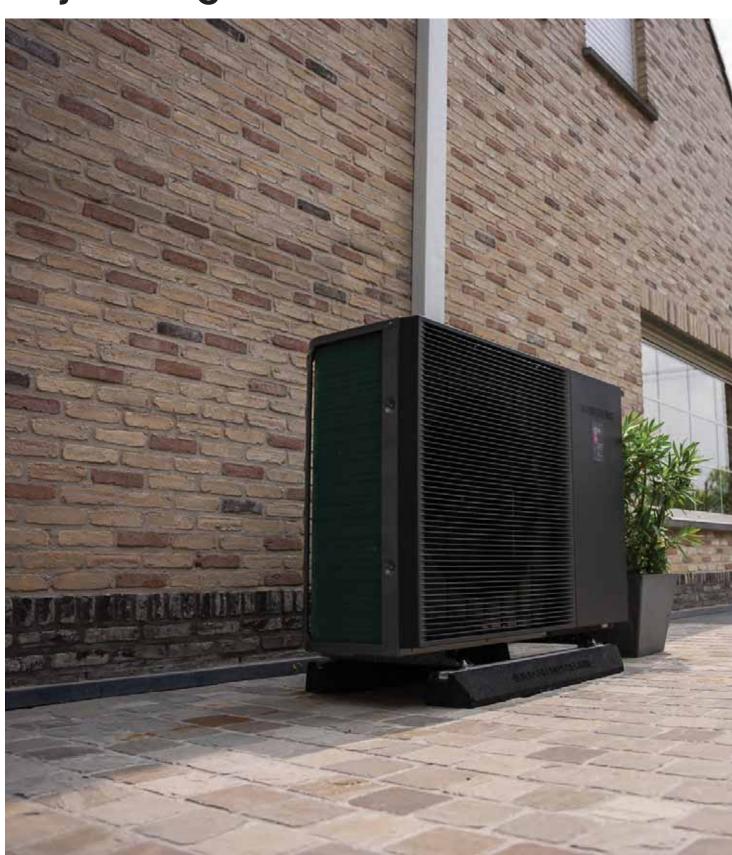
b.loT

Our European footprint with the locations from which we operate

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



Samsung reference projects in the spotlight Homeowner Renovation Project, Belgium







CEO: Mr. Jonas Staelens

Project: Replacement of gas solution – Homeowner, Belgium Installer: Klima Staelens

"One of our end consumers, a homeowner, came to us with the need to replace his existing gas solution with a more, silent and energy-friendly heating solution.

His intention is to gradually upgrade his energy providing devices, starting with a replacement of gas to nurture their existing floor heating and cooling, Samsung's EHS Mono HT Quiet came out to be the ideal solution. In particular the Quiet mode in combination with the sleek finish of the material, its color and its overall design made both the end user and us happily choose for Samsung's EHS Mono HT Quiet. Application: Residential Renovation Samsung products installed: EHS Mono HT Quiet."

Application



Residential

Samsung products installed



EHS Mono HT Quiet

Samsung reference projects in the spotlight Residential Apartments Project Meadow, Belgium







Project manager: Mr. Jeroen Vercammen

Project: Meadow – Belgium Installer: Belcotec

"The challenge in this 68-apartment sized residential new development project was to find a central heating system that is, silent, performs well 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."

Application



Samsung products installed







DVM S2

DVM Hydro Unit

BACnet

Regulations and standards

Samsung strives to provide customers with new product experiences, contributing to the transition to a sustainable future for the global community through innovative products and technology. We monitor applicable environmental standards and laws and regulations in the context of our climate solutions operations. Samsung also conducts ongoing research and development activities across product development, production, distribution, use and disposal phases.

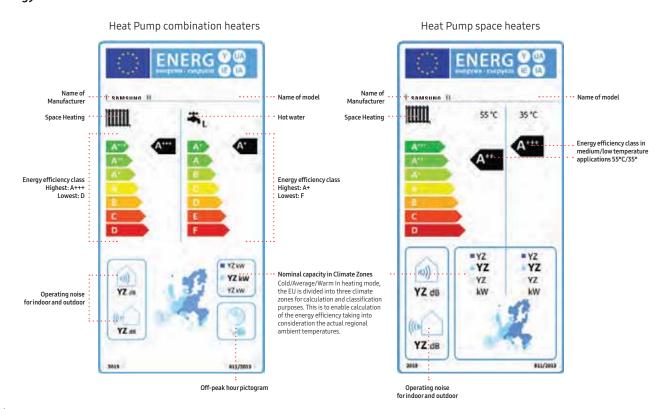
Energy Label

Space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device are subject to Energy labelling EU Regulation No. 811/2013 and Ecodesign EU Regulation No. 813/2013 requirements.

As of September 2019, the energy efficiency scale for seasonal space heating ranges from A+++ to D, with A+++ being the most efficient. The water heating energy efficiency scale for the declared load profile for combination heat pumps ranges from to A+ to F, with A+ being the most efficient.

The energy labels should provide minimum necessary information such as; supplier's name, product model code, the rated output under three European climates (average, colder and warmer) for medium- and/or low-temperature applications (55 °C and 35 °C), European map displaying the three temperature zones, the sound power level indoors and/or outdoors. In addition, just for combination heat pumps, the energy label should also include a pictogram showing to be able to work only during off-peak hours.

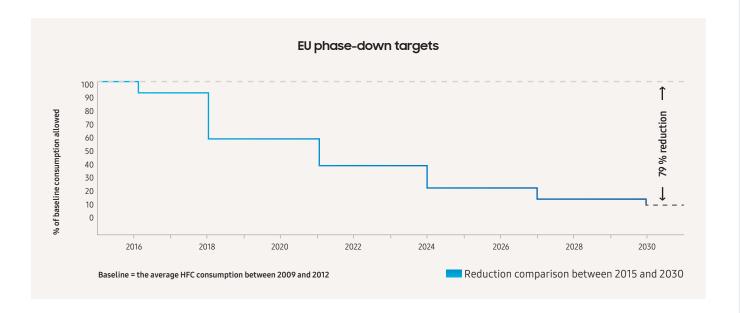
Energy Label



F-Gas regulation

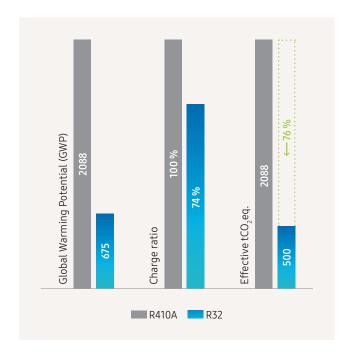
The EU aims to reduce the environmental impact of F-gases through the reduction of the $\mathrm{CO_2}$ equivalent consumption of HFCs (hydrofluorocarbons). EU regulation 517/2014 prescribes a phase-down of HFCs, where the quantities of HFCs that are placed on the market are gradually reduced through the allocation of quotas by the European Commission. The phase-down targets are expressed in $\mathrm{CO_2}$ equivalents (= kg x GWP - Global Warming Potential) and aim to reduce HFC

consumption by 79 % in 2030. For new installations of single split air conditioners with a refrigerant charge below 3 kg, the GWP limit is set at 750 starting in 2025. The regulation has been put into force to encourage the industry and its users to transition to refrigerants with a lower GWP. Samsung is contributing to the transition towards lower GWP refrigerants, such as R290, and will continue to invest in alternatives.



Refrigerants

The R290 natural refrigerant helps conserve the ozone layer and has a low impact on global warming. It has an Ozone Depletion Potential (ODP) of zero and a low Global Warming Potential (GWP) of 3, which is much less than conventional R32 or R410a refrigerants. While refrigerants are an essential part of today's air conditioners, R290 would have up to 99 % lower environmental impact than R32 and R410A, if leaked into the atmosphere. It has an Ozone Depletion Potential (ODP) of zero, a high refrigeration capacity and a high thermal conductivity; meaning a high efficiency and a reduction in charging volume.



 $^{^{\}mbox{\tiny 1}}$ Comparison between R410A and R32 GWP. Source: European Commission.

WEEE: Electronic Waste

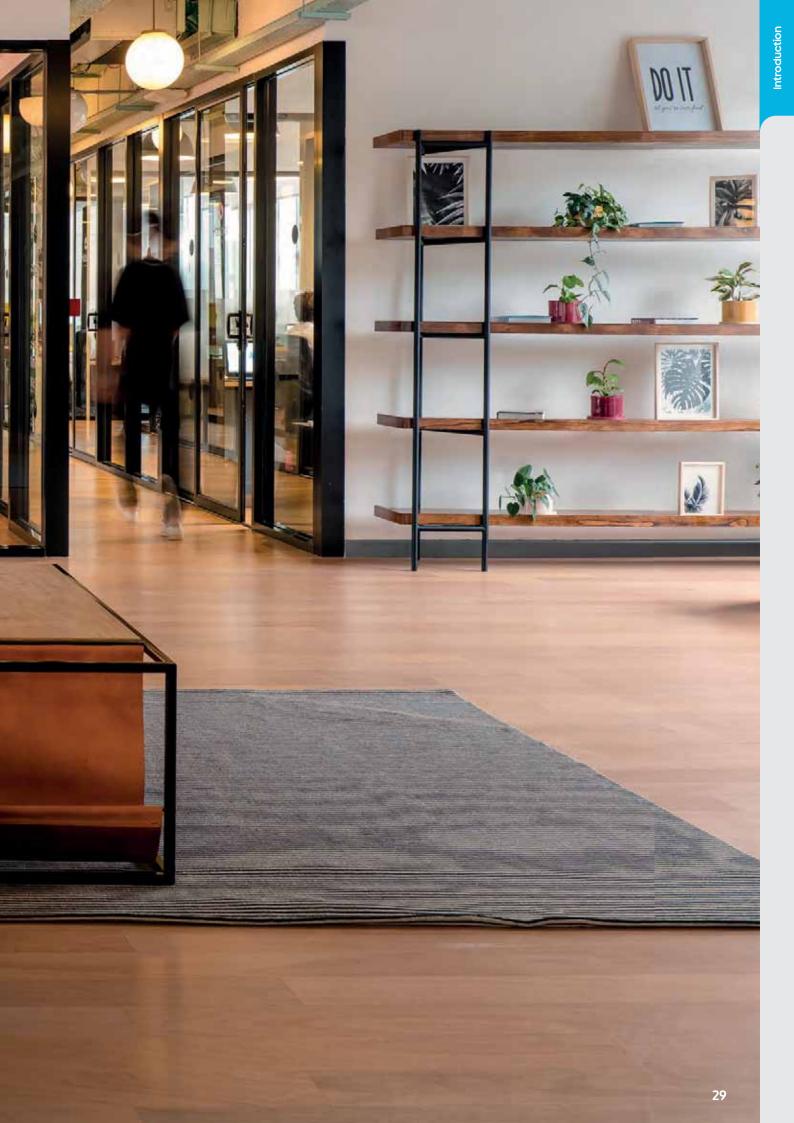
Samsung adheres to the WEEE (Waste Electrical and Electronic Equipment) Directive. This Directive applies to the principles of extended producer responsibility. It stipulates the safe collection, treatment, recycling and environmentally sound disposal of all electrical and electronic equipment. By working 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 reuse all packaging materials at various points in the distribution chain. Many materials can be recycled into new products and recycling helps to save natural resources. Recycling packaging helps to reuse valuable raw materials and to reduce the overall impact on the environment.



Certifications

Heat Pump KEYMARK Certificate

The Heat Pump KEYMARK is a voluntary, independent, European certification mark (ISO type 5 certification) for all heat pumps, combination heat pumps and hot water heaters (as covered by Ecodesign, EU Regulation 813/2013 and 814/2013). It is based on independent, third-party testing and demonstrates compliance with product requirements as set in the Heat Pump KEYMARK scheme rules and with efficiency requirements as set by Ecodesign. It is aimed at certifying the product performances declared by the manufacturers.

The Heat Pump KEYMARK scheme is owned by the European Committee for standardization (CEN). The certificates are granted by independent certification bodies to products fulfilling all requirements of the scheme.

Samsung's EHS and the ClimateHub range are certified with a Heat Pump KEYMARK. This certification is recognised in a number of European countries which include France, Germany, the United Kingdom, Slovakia and Czech Republic.



Eurovent Certificate

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 Residential Air-Conditioning (RAC), Multi Split (FJM), Commercial Air Conditioning (CAC), Digital Variable Multi S (DVM S) 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



Certifications

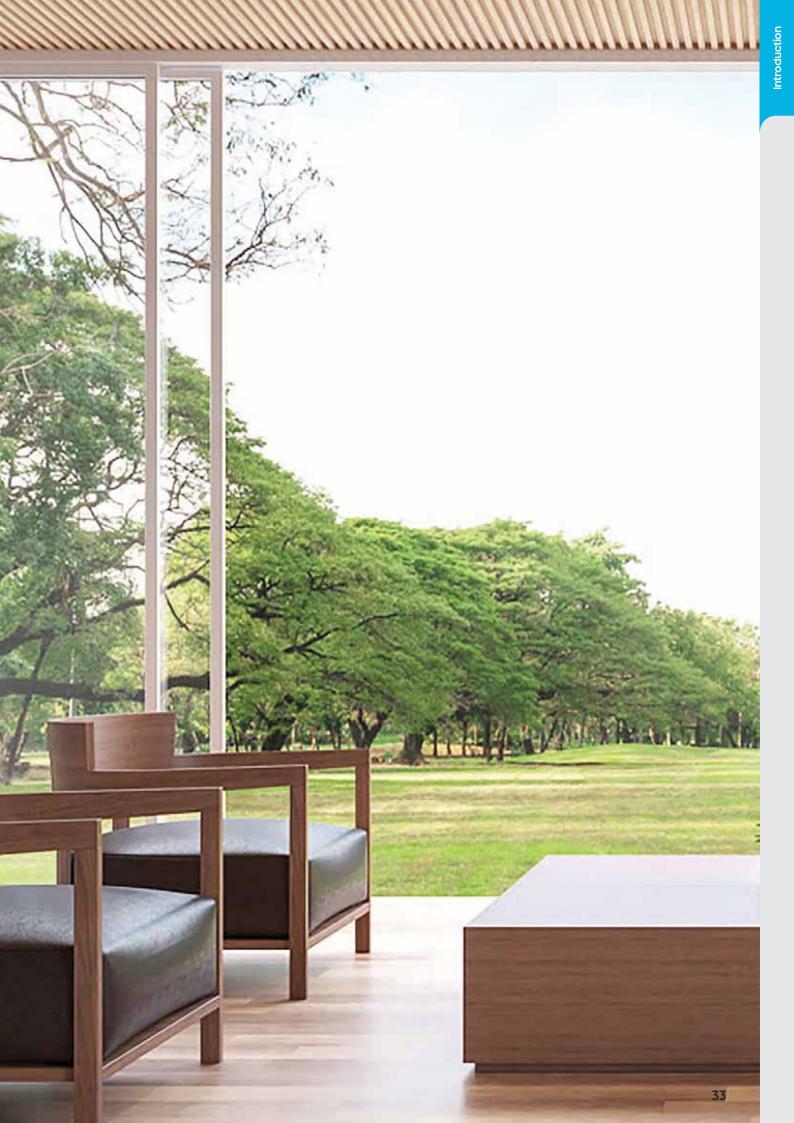
Quiet Mark Certificate

Quiet Mark is the independent global certification programme associated with the UK Noise Abatement Society charitable foundation (est. 1959). Through scientific testing and assessment Quiet Mark identifies the quietest products in multiple categories spanning many sectors, including: home appliances and technology, building sector materials and commercial sector products.



Quiet Mark certification is the unique consumer and trade champion mark of approval and resource platform. It provides reliable and independent information about the sound a product makes and approved noise reduction performance before purchase with the primary focus to improve health and wellbeing. Stimulating manufacturing worldwide to prioritizes responsible acoustic design to reduce noise pollution.

Samsung's EHS Mono High Temperature (HT) Quiet has been certified by Quiet Mark for its low noise. The Quiet Mark is applicable for UK & EU territories only.



Innovations in detail

EHS

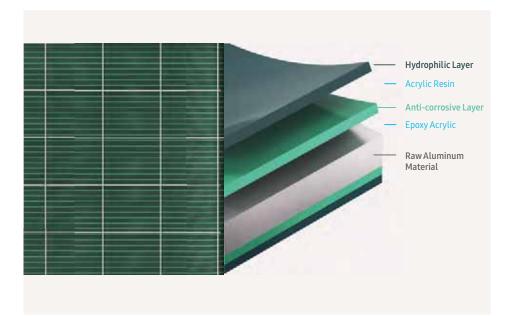
Energy Usage

The Samsung EHS includes a range of advanced functions that help optimize energy usage and are independently certified as delivering enhanced energy efficiency as compared to the previous models.

Various Functions for Energy Saving

The 2-Zone Control enables simultaneous heating with two different water temperature demand. The Photovoltaic Enabled feature checks the status of solar panels and adjusts the temperature to reduce network electricity usage. While the Smart Grid Ready feature helps users take $advantage\ of\ economically\ efficient\ and\ sustainable\ power\ supply\ options.$





Durafin™ Ultra

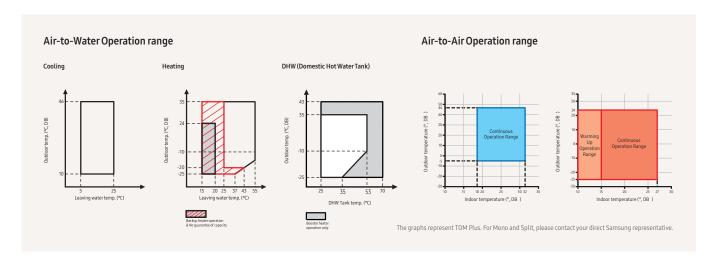
The Samsung EHS outdoor unit's Durafin™ Ultra has an anticorrosive layer of epoxy acrylic and a hydrophilic layer of acrylic resin that disperses water and reinforces its corrosion-resistance. Its improved quality was proven using the Salt Spray Test (SST) over a period of 2,280 hours¹ with no leakage of refrigerant².

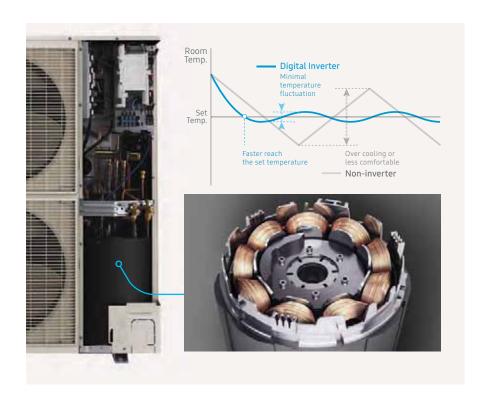
- Based on testing by a third party lab in accordance with ASTM B117, an official test method. For more details, please contact Samsung's technical professionals.
 Based on testing by a third party lab, applying the actual pressure of refrigerant for 1 minute, after a Salt Spray Test (SST) of over 2,280 hours.

Wide Operation Range

EHS Wall-mounted hydro units can discharge cold and hot water from 5 to 55 °C (leaving water temperature), and the ClimateHub (Tank Integrated Hydro Unit) can store up to 70 °C of water (due to booster heater operation).

EHS TDM Plus Air-to-Air indoor units provide you with a quick individual heating of -25 to 24°C and cooling 10 to 46 °C for each room, as well as Air-to-Water heating of -25 to 35°C and cooling 10 to 43 °C. For EHS Mono & EHS Split with R32 refrigerant there is a higher Leaving Water Temperature (LWT) and with the EHS Mono HT Quiet there is a higher Leaving Water Temperature (LWT) at even lower ambient.





Digital Inverter Technology

Unlike conventional fixed-speed compressors, which frequently shut off and switch on, the compressor automatically adjusts its speed in response to changes in the surrounding room temperature. So it helps to ensure optimum comfort by maintaining the desired temperature with little fluctuation. Additionally, the digital inverter technology optimizes power usage which reduces energy consumption.

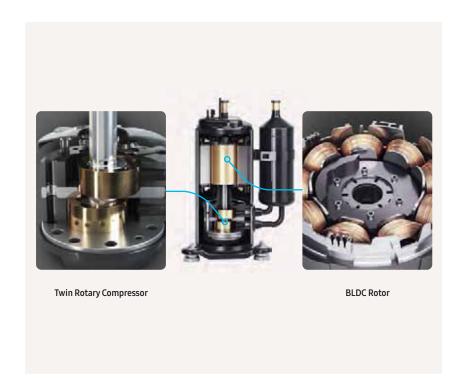
Innovations in detail

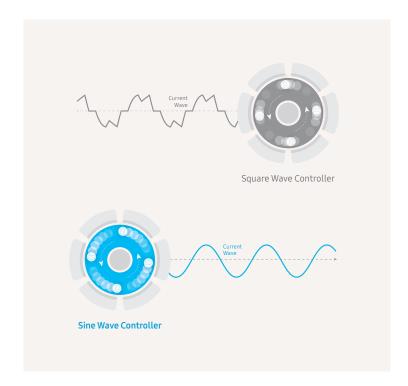
EHS

Twin Rotary BLDC Compressor

The smart compressor design and premium moving parts of the EHS deliver a balanced performance, fully complying with EU regulations for enhanced efficiency¹.

The Twin Rotary BLDC Compressor of the EHS outdoor unit offers you greater efficiency and reliability. Its twin cams and two balance weights create low levels of vibration, contributing to a smoother and quieter all-round performance. The use of high quality moving parts, such as robust bearings and premium matching rollers and vanes, also ensures much better stability and durability.





Quieter Current Wave

The combination of superior insulation and low vibration generates less noise, so it creates a comfortable atmosphere. Due to Samsung's newly developed Sine Wave Controller technology you can hear much less noise when the air conditioner is running as compared to previous versions. Unlike a conventional Square Wave Controller, which emits a noticeable sound, it produces current waves that have a smooth curve with no spikes or ripples. This significantly reduces the noise created by the outdoor unit, so it operates very quietly¹ and creates less disturbance.

¹ All Samsung EHS products comply to EU EcoDesign's Minimum Energy Performance Standards (MEPS).

Based on Samsung's internal test results compared with the Samsung AR09FSSKABENEU model. Individual results may vary.

Double-layered Sound Insulation

The compressor is fully covered in double-layered sound insulation material that absorbs and minimizes noise. When it is applied, the sound becomes about 3 dB(A) quieter¹. So it operates quietly and discreetly, while still delivering high-quality performance.

When testing Split 6 kW and 9 kW models based on internal testing in Samsung Korea. Results may vary depending on environmental factors and individual use.





Anti-Freeze protection control

The Samsung EHS unit which provides the indoors with heating energy is installed outdoors to extract heat from the ambient air. Therefore, whenever the compressor operation is stopped during ambient conditions below 0 °C, the water inside the pipes may freeze and expand, this can damage the water pipes and the components.

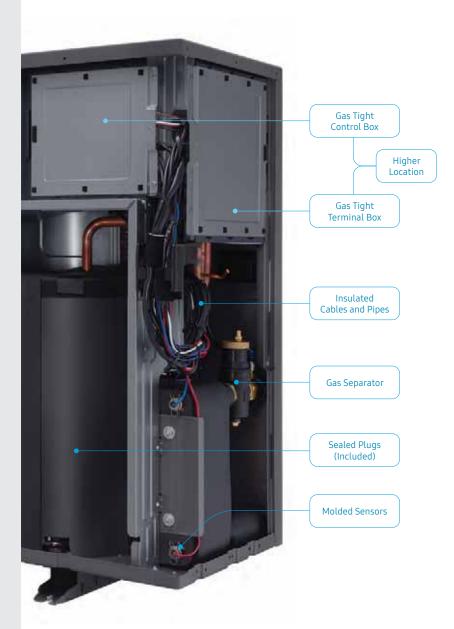
In order to prevent this, the Anti-Freeze Protection control function is activated by default. In non-operation mode, if the outside temperature drops to 3 °C or below, the pump on the water pipe side is forcibly operated to prevent freezing in the water pipe. For external water pipes and Anti-Freeze protection feature use propylene glycol with a toxicity rating of Class 1 as listed in Clinical Toxicology of Commercial Products, 5th Edition¹.

¹ Please refer to the installation manual for detailed anti-freeze specifications. Anti-Freeze Protection control should be used only for auxiliary measure in addition to glycol mixture.

EHS Mono R290

Low Global Warming Potential of only 3

With EHS Mono R290, Samsung is offering an innovative solution for residentials homes. The R290 refrigerant has a much lower Global Warming Potential (GWP) compared to other refrigerants. Only 3. New EU F Gas regulations mean refrigerants must not exceed 150 GWP from 2027.







Leakage Prevention



LAYER 2
Leakage
Detection



LAYER 3 Exhaust



LAYER 4
Ignition Prevention

¹ GWP by refrigerant: R290 = 3, R32 = 675, R410A = 2088.

Made to work with R290

As R290 refrigerant is being used, the inside components of the unit have been adapted when compared to a regular mono heat pump. These adaptations support the separation of R290 refrigerant and the rest of the system. The EHS Mono R290 is designed in a way that alleviates pressure in the pipes and the plugs are sealed to prevent ignition.

A **robust design** alleviates pressure in the pipe to prevent gas escaping.

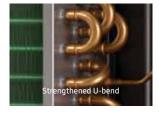
- Reduction of parts that may cause a leakage
- Enhanced thickness of the U-bend
- Hairpin receiver protection
- Freezing and bursting prevention control

Sensors monitor the refrigerant and water pressures to detect leakages.

- Sensor for high pressure compression
- Sensor for low pressure compression
- Sensor for water pressure

A **forced exhaust system** ventilates the inside of the outdoor unit. An **Air Separator** in the leaving water pipe prevents the leaked gas from flowing into the house.

















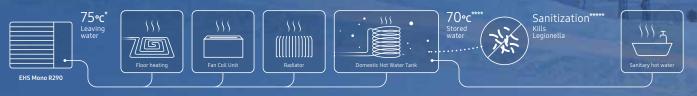




EHS Mono R290

Higher Hot Water Temperature

Many older houses in Europe are still using radiators which require a hot water temperature of 65°C or higher to heat rooms effectively. The new EHS Mono R290 can consistently provide hot water of up to 75°C¹ for domestic heating purposes. The ability of the EHS Mono R290 to provide consistent hot water makes this heat pump a suitable heating system replacement in older residential spaces that have been previously dependent on gas boilers for their heating needs. Additionally, it can supply domestic hot water of up to 70°C² when the outdoor temperature is as low as -10°C without using the booster heater.



Key features to achieve Hot Water Temperature are Enlarged heat transfer area and Strengthened compression parts.

Enlarged Heat Transfer Area

The EHS Mono R290 has an enlarged heat exchanger that is capable of transferring more heat at once compared to a conventional outdoor unit. Its heat transfer area is up to 13% larger¹. As a result, it can consume less energy to achieve the same cooling and heating performance.



Based on Samsung's measurements on an EHS Mono HT Quiet (AE120BXYDGG/EU) model compared to a conventional outdoor unit (AE120RXYDGG/EU) with the same capacity

Leaving water temperature, when the outdoor temperature is between -15°C ~ 43°C. Results may vary depending on the actual usage conditions.
Domestic hot water (DHW) Leaving the DHW tank is 70°C when the outdoor temperature is -10~43°C. If the outdoor temperature is lower than -10°C, a booster heater is required. Results may vary depending on the actual usage conditions

Strengthened Compression Parts

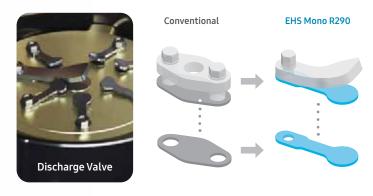
To endure the higher pressure created by a new Scroll Compressor, the EHS R290 Mono uses strengthened compression parts. They have increased compression ratio1, while still maintaining the efficiency and reliability of the compressors.

Compression ratio = Discharge pressure/Suction pressure. Based on internal testing on an EHS Mono HT Quiet outdoor unit, compared to a conventional EHS outdoor unit. As a result, the discharger pressure has increased from 43 to 55kgf/cm²G, and the compression ratio has increased from 13 to 17.

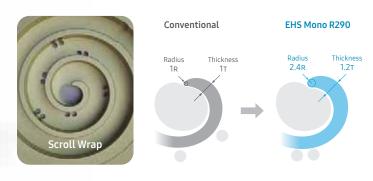
Compression Ratio

 $13.0 \rightarrow 16.5^{***}$ increase





The design and thickness of the valves have been modified to improve their strength and responsiveness.

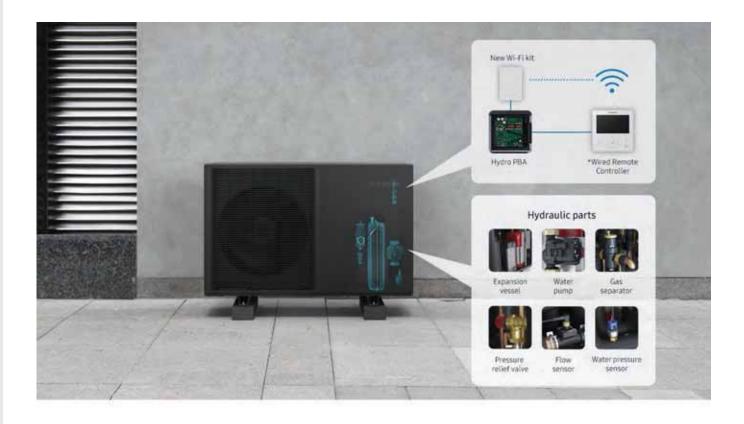


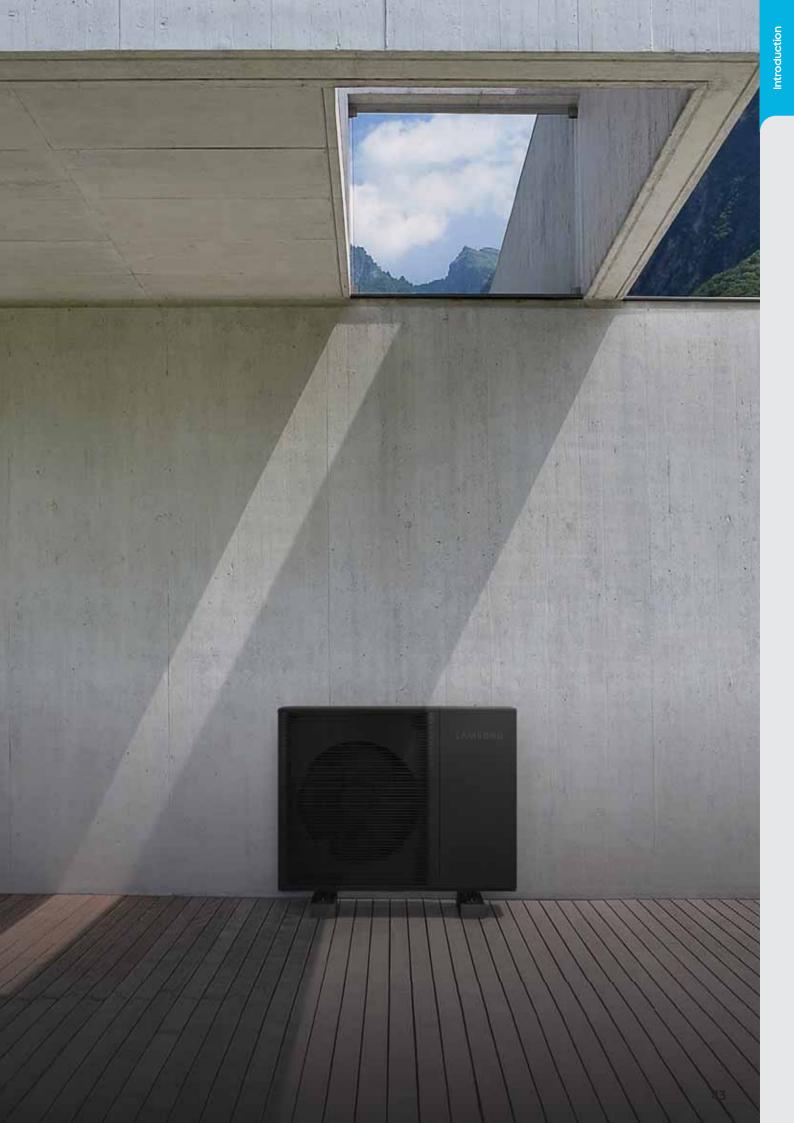
The thickness of the center wrap has been increased to improve its stress endurance by 45%.

EHS Mono R290 With Pump

Convenience in Installation

Install the system and check the water pressure easily. All the parts for the water piping, like the pump and expansion tank, are fitted inside **the unit**, which reduces the installation time and space. And a water pressure sensor lets you conveniently monitor the water pressure on a remote controller.



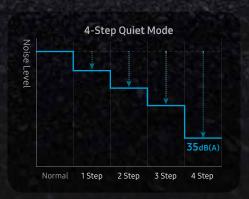






Quiet Operation

Powered by a combination of innovative noise reducing technologies, the EHS Mono R290 operates quietly with noise levels as low as 35 d(BA)¹ using a 4-step Quiet Mode.



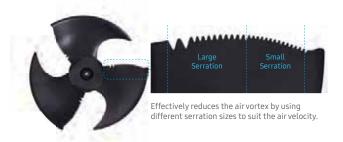
¹ Based on internal testing of the EHS Mono R290 outdoor unit. The noise level is measured 3m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7°C. Results may vary depending on environmental factors and individual use.

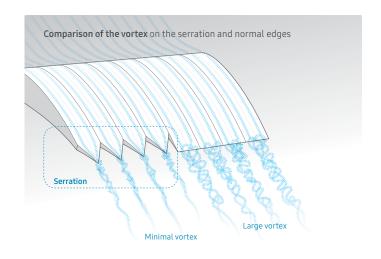
EHS Mono R290

Key features to achieve Low Noise are the Multi-Serration Fan, 2-layered insulation with groove grid felt, Spring grommet for the compressor mounting and Reinforced crank shaft in the compressor.

Multi-serration Fan¹

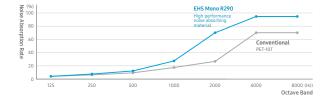
The combination of large serration on the inner part and a small serration on the outer part minimizes the air vortex around the wing tip and significantly reduces the noise generated by the movement of the fan.





2-layered Insulation with **Groove Grid Felt**

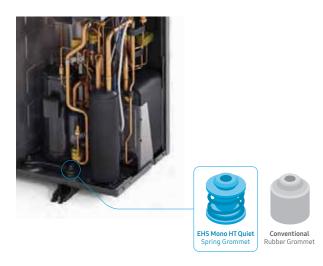
This heat pump's outdoor unit features a double-layered, sound insulation system fitted with a patented Groove Grid Felt design², which effectively blocks and absorbs noise produced by compression parts and vibrations.





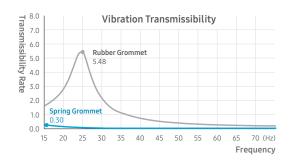
Based on internal testing of the Noiselite-600G, compared to the PET-10T. The results only relate to individual materials and not the whole product, and may vary depending on the actual usage conditions.
Patent No.:P2022-0012826.

EHS Mono R290



Spring Grommet for the Compressor Mounting

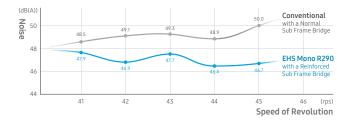
Spring Grommets (instead of rubber grommets) are used for the compressor mounting, thus reducing the vibration transfer rate by 95%. The compressor utilizes a reinforced crankshaft², which decreases low frequency resonant noise, while the outdoor unit employs a multiserration fan which significantly reduces the noise it generates by minimizing the air vortex.

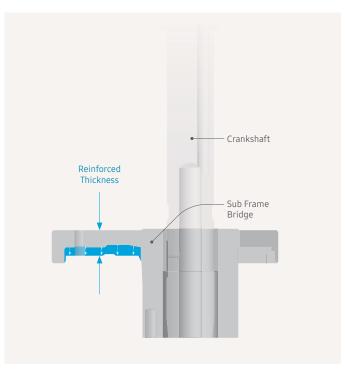


Based on a computational simulation in accordance with the theoretical formula of the spring grommet (EHS R290 Mono unit), compared to the rubber grommet (EHS R32 Mono unit). Results may vary depending on the actual usage conditions.

Reinforced Crank shaft in the Compressor

The compressor in the EHS Mono R290 Quiet introduces a reinforced crankshaft, with a greater diameter and thickness, to shift low frequency noise to a high frequency domain. As a result, it reduces resonant noise of low frequency by approximately 21%¹.





Based on internal testing. In Quiet Mode at 39rps (revolutions per second), noise was reduced from 54.2dB(A) to 42.5dB(A) Results may vary depending on the actual usage conditions.



Innovations in detail EHS Mono R290



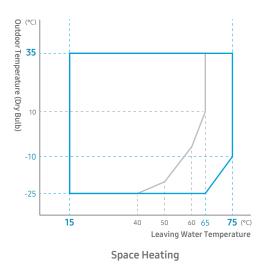


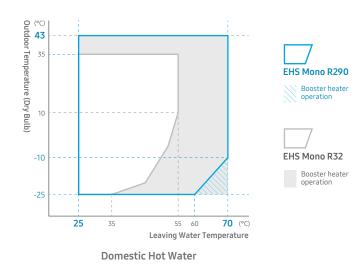
Reliable Heating

Adverse weather conditions can impact the life span and performance of outdoor units. The EHS Mono R290 is both durable and capable of operating effectively in hot and cold environments. The chassis and heat exchanger are corrosion resistant; its base is designed to drain condensed water even in the coldest temperature and it includes antifreeze protection systems to prevent water from freezing and bursting the pipes.

Operates across a Wider Temperature Range

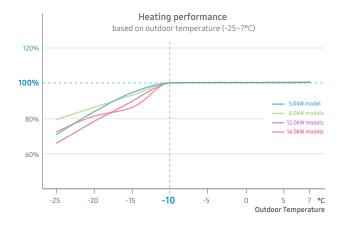
The EHS Mono R290 outdoor unit operates effectively across a much wider range of ambient temperatures. A conventional EHS Mono can generate hot water that is up to 65°C when the outdoor temperature is above 10°C and 40°C when it is -25°C outside. By comparison, the EHS Mono R290 provides hot water of 70° C¹, when the outdoor temperature is as low as -10° C² and can even generate hot water of up to 65° C if the ambient temperature drops to -30° C.





Heating Performance in cold climates

The EHS Mono R290's heating performance has been increased by 13%4, enabling it to deliver a 100% heating performance in temperatures as low as -25°C5. The heat pump has an enlarged heat exchanger that can transfer more heat at once compared to a conventional outdoor unit. The heat transfer area is up to 13% larger⁶. As a result, it can consume less energy to achieve the same cooling and heating performance.



- Leaving water temperature, when the outdoor temperature is between -15°C 43°C. Results may vary depending on the actual usage conditions.

 Based on a leaving water temperature of 55°C. Results may vary depending on the actual usage conditions.

 Based on internal testing, Results may vary depending on the actual usage conditions.

 Based on internal testing, compared to a conventional EHS Mono. Conditions: A-10°C /W35°C, based on 8kW models based on our TDB (technical data book) published as R290 is 8kW, and R32 conventional is 711 so improvement is 13% increase of

- heating capacity.

 Efficiency ratio of heating output (capacity) versus power input (electricity). Internally tested under lab conditions based on EN 14511, results may vary depending on the actual usage conditions.

 Based on Samsung's measurements on an EHS Mono HT Quiet (AEI20BXYDGG/EU) model compared to a conventional outdoor unit (AEI20RXYDGG/EU) with the same capacity.

EHS Mono R290

Key features that makes the product weatherproof are Durafin Ultra & GI Steel plate, Antifreeze protection control, Elevated base design with a base heater, Antifreeze protection heater (PHE) and Heat sink.

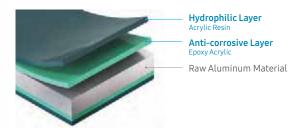
Durafin™ Ultra & GI Steel Plate

Corrosion resistance is an important factor in outdoor units, as they need to withstand a range of climate conditions. The EHS Mono R290 outdoor unit features improved anti-corrosion capabilities on the heat exchanger and chassis to ensure maximum durability in harsh environments.



Durafin™ Ultra

An anti-corrosive layer of epoxy acrylic and a hydrophilic layer of acrylic resin disperse water and reinforce its corrosion-resistance, which was proven using the Salt Spray Test (SST) over a period of 3,000 hours1.



GI Steel Plate

The EHS R290 Mono outdoor unit uses Galvanized Iron (GI) Steel Plate with a PE powder coating of up to 100 µm thickness, which is proven to improve corrosion resistance by 43%, based on the Complex Cycle Test (CCT)2. So, it protects the cabinet from rusting and ensures it can endure harsh conditions.



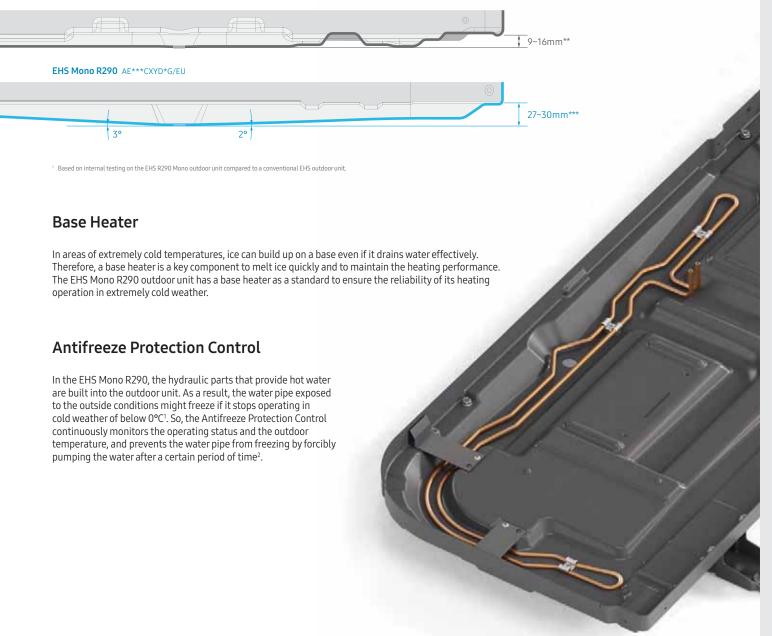
Based on internal testing in accordance with ISO 9227, ISO 14993 and ISO 21207 using specimens from the heat exchanger of an EHS outdoor unit. For more details, please contact your local Samsung representative.

Based on internal testing using corrosion chambers, Q-FOG and CCT-1100. The Complex Cycle Test (CCT) includes cycles of spray (for 2 hours at 50°C), dry (for 4 hours at 60°C with 59% Relative Humidity) and damp (for 2 hours at 50°C with 59% 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.

Elevated Base Design

During the heating operation in cold weather, the defrost cycle used to remove ice on a heat exchanger can cause water to condense on it. The EHS Mono R290 outdoor unit has an elevated base design with deepened and slanted gutters to drain condensed water much faster* to prevent the unit from freezing on the inside of the cabinet.

Conventional AE***RXYD*G/EU



side is forcibly operated to prevent the water from freezing in the water pipe

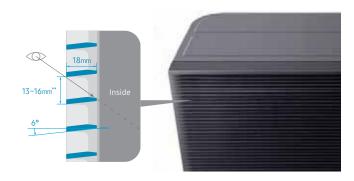
EHS Mono R290

Aesthetic Design

The EHS Mono R290 is a compact and stylish unit. The dark gray color seamlessly blends in and complements the styling of many modern buildings. The matte dark gray horizontal guard grille conceals the internal mechanical parts allowing it to blend with the surrounding environment without drawing attention. The compact design can fit in neatly below a window.

Slanted Grille

A new grille design has a 6° slope and is 18mm deep. The angled slats screen the inside from sight when you pass by it, even from only 1m away.1.



Based on a viewing height of 1,700mm and a viewing distance of 1m.

Low Height

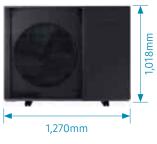
The EHS Mono R290 outdoor unit is approximately 1m in height. So, the unit can be installed beneath a balcony window, enhancing the interior of the home as the unit does not obstruct the view through the window.



5kW, 8kW



5kW, 8kW Pump Integrated



12kW, 16kW Standard, Pump Integrated





EHS Mono R290

Energy Saving using AI Energy Mode

Al Energy mode in the SmartThings App¹ lets you check your power consumption and enables you to reduce energy consumption by adjusting the water temperature and compressor frequency.

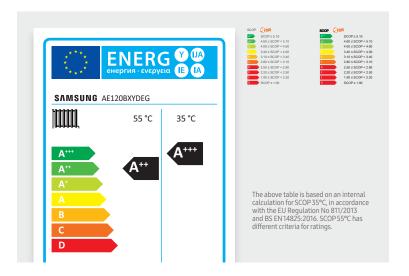
The SmartThings Al Energy mode, when used by the end-user, can provide users with a possibility to save energy and/or costs with regard to their domestic hot water usage based on (repeatable) user patterns. A compatible Samsung Climate Hub is required. All savings are estimates. The actual savings vary and depend on, amongst others, usage, costs and operating conditions. The Al Energy mode may impact the product performance. End user may deactivate the Al Energy mode at any time. 140L 3.689 kWh 40% 2.213 38~40℃ -38~40 ℃

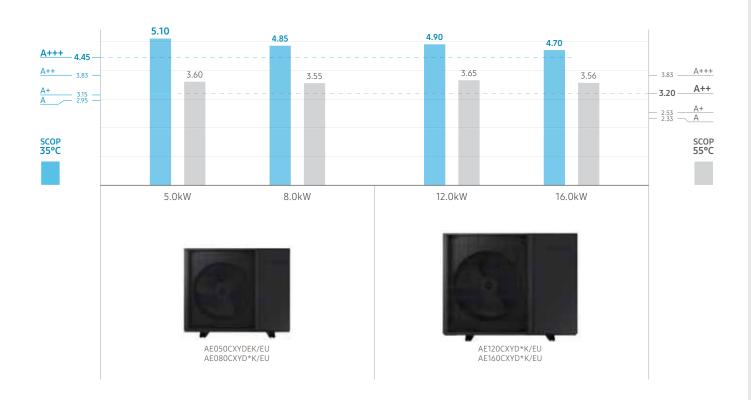
Al Energy Mode

Normal Mode

Energy Saving | SCOP A+++

The EHS Mono R290 has an enhanced Seasonal Coefficient of Performance (SCOP) A+++ energy efficiency rating across the entire range of capacities¹. It has been increased by up to 14%² compared to the conventional models, providing up to 15% greater energy efficiency than the normal criteria required for the A+++ rating. So, it is proven to operate with a high level of efficiency.





Based on internal testing when generating 35°C water, in accordance with EN14825. Results may vary depending on the system configuration and actual usage conditions. Based on internal testing when generating 35°C water using an EHS R290 Mono 5kW model, AE050CXYDEK/EU (SCOP: 5.10), compared to an EHS R32 Mono model of the same capacity, AE050RXYDEG/EU (SCOP: 4.46).

EHS Mono R290

SmartThings & SmartThings Energy Integration

The SmartThings App¹ lets you monitor and control, pre-heat automatically with geo-fencing functionality, set -up routines and scenes based on usage and control the EHS Mono R290 from wherever you are simply using a smartphone. You can also check and adjust settings and receive

SmartThings Energy

 $SmartThings\ Energy^2\ lets\ you\ monitor\ the$ energy consumption of your EHS Mono R290 and compare it to the previous month. In addition, you can set monthly targets and receive alerts if they are likely to be exceeded. If it's determined that your estimated usage exceeds your target or you need to save energy, devices will run in AI Energy mode automatically. By learning your usage patterns, the AI Energy mode can also reduce its energy use by adjusting the water temperature and compressor frequency to suit your expected needs.

EHS Cloud Service

The EHS Cloud Service ensures that the EHS Mono R290 stays in optimal condition, with a reduction in time and effort. The EHS Cloud Service lets the installer monitor its performance and adjust settings, when necessary, even at times, without a site visit³. A plug-in for the SmartThings App1 alerts you and a service engineer if a problem occurs, for fast and accurate response.4

Available on Android and iOS devices. A Wi-Fi connection and a Samsung account are required.

Available on Android and IOS devices. A WI-Fi connection and a Samsung account are required.

Amount of costs saved are dependent on various factors such as a user's electricity plan indoor/outdoor/temperature and other usage conditions. With the SmartThings App, user may for example program the relevant Samsung EHS product when the electricity price is offered at its lowest price offered or turn off the unit when not in use to minimize energy consumption.

EHS systems in installation sites must be connected to the Internet using an optional WI-Fi kit in order to be managed by the EHS Cloud Service.

EHS Cloud Service is only available on Samsung products which are compatible with this service and to the extent the end user has agreed to the terms and conditions of the service and consented to the privacy notice applicable.

A separate Wi Fi Kit may be required for the EHS unit. The information provided through EHS Cloud Service does not confer any right. It also does not constitute or intend to constitute advice regarding installation, maintenance or other topics. No guarantee or representation of any kind is provided on the completeness, accuracy, correctness, suitability, legality or reliability, either express or implied, in using the EHS Cloud Service. You must make your own independent decisions without reliance on the information provided through EHS Remote Service.

Easy Installation and Servicing

The EHS Mono R290 incorporates all of the parts needed for the water piping, including a water pump and water pressure sensor, so the installation process is simplified, saving the installer time and effort. In addition, the internal parts are easily accessible by removing the side panel, making servicing quick and easy for the installer.

Integrated Water Pump¹

The EHS Mono R290 outdoor unit comes completely fitted with water piping, expansion tank, valves and control kit PBA to reduce installation time and space.

Built In Water Pressure Sensor

Water pressure can be easily checked on installing or testing the EHS Mono R290. All models are equipped with a water pressure sensor, which replaces the mechanical manometer in the indoor unit. So, our technical partners do not need to waste time and effort installing one separately and can quickly and conveniently monitor the precise water pressure using a remote controller.

S-Converter

With the S- Converter, the technical installers can access the EHS Mono R290 using a PC or laptop wherever and whenever needed. It's self-diagnosis function not only monitors performance but also detects leakage.

Emergency Operations

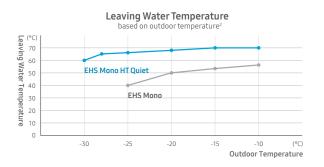
With two emergency operation modes, the EHS Mono R290 outdoor unit can provide continuous water heating and hot water even during a malfunction.

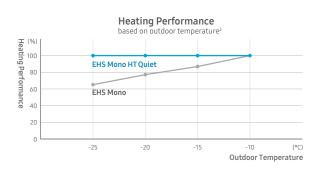


EHS Mono HT Quiet

Hot Water Temperature

The EHS Mono HT Quiet combines advanced features to achieve hot water temperature of 70°C¹ and ensures that it is provided reliably. It combines various advanced features to achieve an incredibly hot water temperature and ensure that it provides a 100% heating performance even in extremely cold weather as low as -25°C2.





Leaving water temperature, when the outdoor temperature is between -15°C ~ 43°C. Results may vary depending on the actual usage conditions.

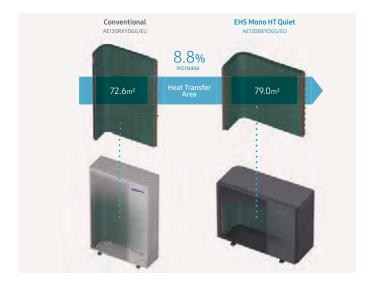
Based on internal testing on an EHS Mono HT Quiet (AE120BXYDGG) outdoor unit, compared to a conventional EHS outdoor unit (AE120RXYDGG). Results may vary depending on the actual usage conditions

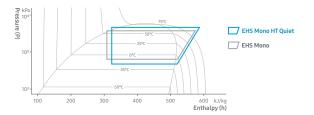
Key features to achieve Hot Water Temperature are Enlarged heat transfer area, Flash injection technology and Strengthened compression parts.

Enlarged Heat Transfer Area

The EHS Mono HT Quiet has an enlarged heat exchanger that is capable of transferring much more heat at once. Its heat transfer area is approximately 11.9% larger¹ to help exchange heat quickly.

Based on Samsung's measurements on an EHS Mono HT Quiet (AE120BXYDGG/EU) model compared to a conventional outdoor unit (AE120RXYDGG/EU) with the same capacity.





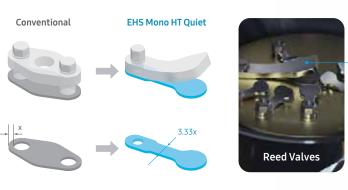
Flash Injection Technology

The EHS Mono HT Quiet outdoor unit has a new Scroll Compressor that can compress refrigerant at much higher pressure, while its Flash Injection Technology increases the flow of refrigerant, so the compressor continues working reliably. Even at -30°C it can supply hot water of up to 60°C for non-stop comfort in the coldest conditions¹.

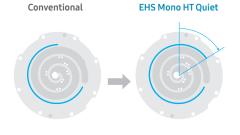
Based on internal testing. Results may vary depending on the actual usage conditions.

Strengthened Compression Parts

To endure the higher pressure created by a new Scroll Compressor, the EHS Mono HT Quiet uses high impact Reed Valves, which are thicker and stronger, and an extended Oil Groove, which provides sufficient lubricant to ensure the performance and reliability of the compressor. As a result, the compression ratio has increased by approximately 31%¹.



With enhanced durability and response rate, the Reed Valves endure much higher discharge pressure, which has increased by approximately 27%.



With a 58° extended Oil Groove on the thrust bearing, the lubrication area has increased by about 24%. So, the compression part keeps working stably even under an increased discharge pressure.



¹ Compression ratio = Discharge pressure/Suction pressure. Based on internal testing on an EHS Mono HT Quiet outdoor unit, compared to a conventional EHS outdoor unit. As a result, the discharger pressure has increased from 43 to 55kgf/cm²G, and the compression ratio has increased from 13 to 17.

thrust bearing

EHS Mono HT Quiet

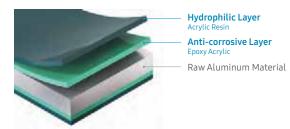
Weather Proof

The EHS Mono HT Quiet outdoor unit features improved anti-corrosion capabilities on the heat exchanger and chassis to ensure maximum durability in harsh environments.

Key features that makes the product weather proof are Durafin Ultra & GI Steel plate, Antifreeze protection control, Elevated base design with a base heater, Antifreeze protection heater (PHE) and Heat sink.

Durafin™ Ultra & GI Steel Plate

An anti-corrosive layer and a hydrophilic layer disperses water and reinforces its corrosion-resistance, which was proven using the Salt Spray Test (SST) over a period of 3,000 hours¹. The outdoor unit uses Galvanized Iron (GI) Steel Plate with a PE powder coating of up to 100µm thickness, which is proven to improve corrosion resistance by 43%, based on the Complex Cycle Test (CCT)².





- sed on internal testing, verified by TUV Rheinland, in accordance with ISO 9227, ISO 14993 and ISO 21207 using specimens from the heat exchanger of an EHS outdoor unit. For more details, please contact
- Dased on internal testing, ventors of control and the property of the property



Antifreeze Protection Control

In the EHS Mono HT Quiet, the hydraulic parts that provide hot water are built into the outdoor unit. As a result, the water pipe exposed to the outside conditions might freeze if it stops operating in cold weather of below 0°C1. So, its Antifreeze Protection Control continuously monitors the operating status and the outdoor temperature, and prevents the water pipe from freezing by forcibly pumping the water after a certain period of time².

For external water pipes, the system must use antifreeze: Propylene Glycol with a toxicity rating of Class 1 as listed in Clinical Toxicology of Commercial Products, 5th Edition. Please refer to the installation manual or detailed antifreeze specifications. For example, if it has stopped operating for 60 minutes when the outdoor temperature is 3°C, the pump on the water pipe side is forcibly operated to prevent the water from freezing in the water pipe.



Elevated Base Design with a Base Heater

During the heating operation in cold weather (-25°C or below), the defrost cycle used to remove ice on a heat exchanger can cause water to condense on it. The EHS Mono HT Quiet has an elevated base design with deepened and slanted gutters, so it drains condensed water much faster¹ to prevent it from freezing inside the cabinet. So, a base heater is equipped as a standard, which can quickly melt ice on the base and ensure the reliability of its heating operation.

Operates across a Wider Temperature Range

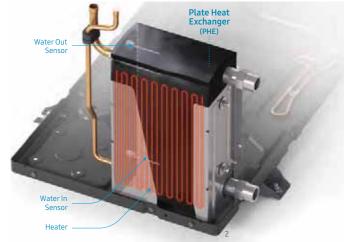
The EHS Mono HT Quiet supplies hot water regardless of the external conditions. Flash Injection Technology ensures that it can maintain its heating performance in cold weather, while a Heat Sink radiates the heat of the inverter circuit more effectively to extend the operating temperature range.

Antifreeze protection heater (PHE)

When an outdoor unit turns off or is malfunctioning in cold weather, water inside it may freeze and burst vital parts. The EHS Mono HT Quiet has a heater on the Plate Heat Exchanger (PHE) that senses the temperature of the water in the PHE and keeps it above zero. So, it prevents the PHE from becoming frozen and bursting when it is not operating, even if the outdoor temperature reaches -30°C1.

- Based on internal testing using an EHS Mono HT Quiet AE140BYXDGG model.
 Operated in an outdoor temperature of -30°C for 20 hours.
 Only illustrative. The heater is not seen from the outside of insulation.





Heat Sink

The inverter circuit generates a lot of heat, which affects the entire system's performance. The Insert Diecasting Heat Sink effectively radiates heat from the inverter circuit. It helps extend the heating operation temperature from 35°C to 43°C1, so it reliably supplies hot water even in severely hot weather.

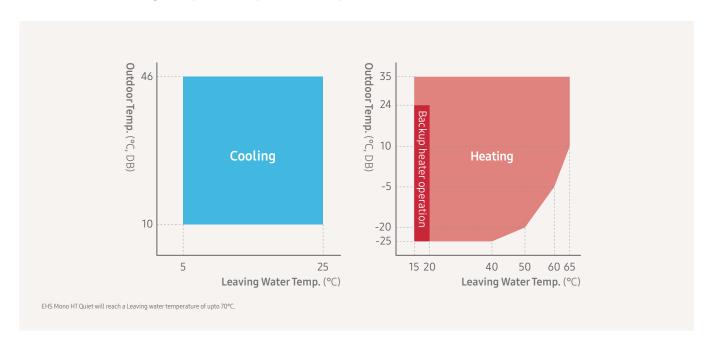
ed on internal testing on the EHS Mono HT Quiet outdoor unit compared to a conventional EHS outdoor unit.

Based on internal testing on the EHS Mono HT Quiet outdoor unit compared to a conventional EHS outdoor unit.

EHS Mono & Split

Hot water temperature

The EHS Mono & Split can produce hot water of up to 65°C, depending on the ambient air temperature. When the discharge temperature is below 20°C and the outdoor temperature is below 24°C, the Backup Heater is operated to help raise the temperature above a certain level. And, using a Booster Heater, the Tank Integrated Hydro Unit can provide water of up to 70°C.



Refrigerant R32



The EHS Mono and Split range uses the next generation of R32 refrigerant, which helps and lower the impact on global warming. It is equipped with an Ozone Depletion Potential (ODP) of zero and a lower Global Warming Potential (GWP) than conventional R22 or R410A refrigerants1. It also reduces the amount of refrigerant needed and cuts CO₂ emissions², so it's much more environmentally friendly.

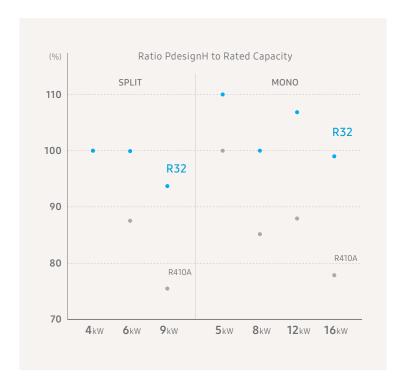
¹ GWP rating: R32 refrigerant = 675 vs. R410A refrigerant = 2,088.
2 The Samsung EHS Mono and Split (R32) only require 83 % of the refrigerant used in a conventional heating system (R410A) of the same capacity. So the level of CO₂ emissions of the EHS is 560 (675 x 0.83), which is 73% less than the 2,088 produced by a conventional heating system.

Energy Efficiency - SCOP A+++

Our EHS Mono and Split include a range of advanced technologies that help optimise your energy usage The Samsung EHS has a Seasonal Coefficient of Performance (SCOP) A+++¹ energy efficiency rating, therefore they are proven to operate with a high level of efficiency.

EHS Mono and Split achieve a good heating performance at low temperature by using R32 refrigerant. The R32 refrigerant has a high PdesignH (kW), and works reliably and efficiently even in cold climate.

¹ Air-to-Water Condition : (Heating) Water In/Out 30 °C/35 °C, Outdoor Air 7 °C[DB]/6 °C[WB]; (Cooling) Water In/Out 23 °C/18 °C, Outdoor Air 35 °C[DB].



Base heater prevents water condensation from freezing.

Base Heater

The EHS¹ outdoor unit is specifically designed to provide an optimal performance in extremely cold environments. It features a Base Heater (150W), which improves the defrost operation duration. Therefore contributes in keeping the base plate of the outdoor unit free from ice build-up. Together with the standard feature of snow prevention control, it helps to prevent damage from snow drifts.

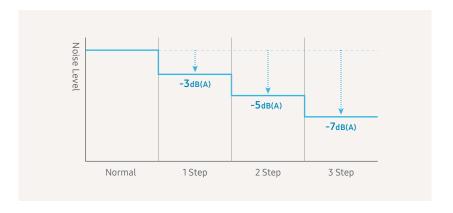
¹ Available only in >8kW Mono and >9kW Split model codes

EHS Mono

Quiet Operation

The 3-Step Quiet Mode enables adjustable, low-noise operation to meet strict sound level requirements by selecting from three different steps to reduce the sound level by 3dB(A), 5dB(A) or 7dB(A)¹.

Based on internal testing of the 6 kW and 9 kW Split outdoor units (AEOGORXEDEG, AEO9ORXEDEG, AEO9ORXEDGG). The noise level is measured 3 m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7 °C. Results may vary depending on the model (capacity), environmental factors and individual use. Sound pressure levels are subject to execution and operating conditions.



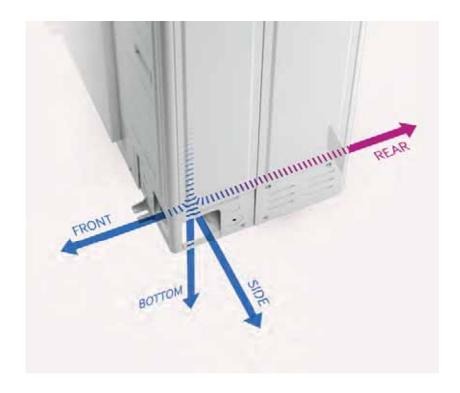


EHS Split

4-way Piping

The EHS Split 4-way piping system¹ has pipe access possibilities at the front, side, bottom and rear, so it provides much more flexibility during installations. It can be configured to suit almost any installation location without additional fittings, while still being discreetly concealed.

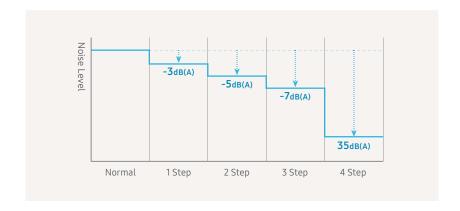
Only available on certain models. Contact your local Samsung representative for complete product information.



Quiet Operation

The 4-Step Quiet Mode enables adjustable, low-noise operation to meet strict sound level requirements by selecting from three different steps to reduce the sound level by 3dB(A), 5dB(A) or 7dB(A) or keep it as low as 35dB(A)¹.

Based on internal testing of the EHS Split outdoor units. The noise level is measured 3m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7°C. Results may vary depending on the model (capacity), environmental factors and individual use.







ClimateHub

Easy Installation

The compact ClimateHub Mono, Split and TDM Plus are easier to handle and require much less space, so they can be installed in many more places. Additionally they are extremely simple to set up and maintain.

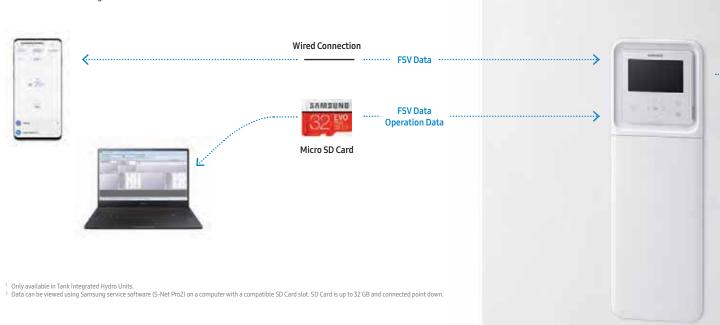


Compact & Integrated Design

A compact and modular Tank Integrated Hydro Unit integrates a conventional hydro unit or control kit, a large hot water tank of either 200 or 260 litres and parts of the water pipes. So it's easier to handle and gives freedom to install it almost anywhere in a building, even in a kitchen or utility room.

Easy Set-up and Servicing

Set up and maintain the ClimateHub system more easily, saving time and effort. With its intuitive servicing options, start-up and maintenance can be done with limited effort through the use of a converter PBA¹ and Micro SD card².



Convenient Control

The ClimateHub Mono, Split and TDM Plus offer a range of easy to use control options that make life much simpler.

Intuitive Control

The touch controller comes equipped with multiple language options and bright colour display – enabling temperature settings, energy monitoring, summer time setting and quick error monitoring.¹ Different temperatures can be set for each zone, meaning high-temperature radiators and low-temperature floor heating can be utilized efficiently.

¹ The image shows an application example and is for illustrative purposes only. Please always check latest information for understanding availability of language versions. Available in 16 languages: English, German, French, Italian, Spanish, Polish, Portuguese, Dutch, Greek, Czech, Slovak, Finnish, Swedish, Norwegian, Danish, Lithuanian.





Smart Connectivity

With the built-in Wi-Fi, the unit can be monitored through the Samsung SmartThings App¹ or EHS Cloud Service account².

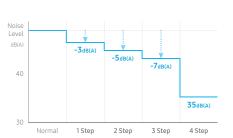
- Wi-Fi connection and Samsung SmartThings application account are required. Wi-Fi Kit to be ordered separately. Requires iOS 10.0 or later. & Android 5.0 or later.
 Only available on Samsung products which are compatible with this
- a National 3.0 in a later.
 2 Only available on Samsung products which are compatible with this service and to the extent the end-user has agreed to the terms and conditions of the service and consented to the privacy notice applicable. A separate Wi-Fi Kit may be required for the ClimateHub Split, TDM Plus unit and older mono versions.



Quiet Operation

The 4-Step Quiet Mode enables adjustable low-noise operation to meet strict sound level requirements¹. Simply select from four different steps to reduce the sound level by 3 dB(A), 5 dB(A), 7 dB(A)¹ or keep it as low as 35 dB(A)¹.

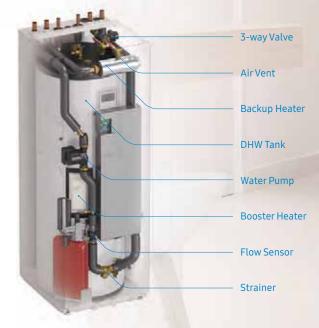
Based on internal testing of the 6 kW and 9 kW Split outdoor units (AE060RXEDEG, AE090RXEDEG, AE090RXEDEG). The noise level is measured 3 m away from the front of the outdoor unit, in an anechoic room with an outside temperature of 7 °C. Results may vary depending on the model (capacity), environmental factors and individual use. Sound pressure levels are subject to execution and operating conditions.



A single integrated unit that combines a control kit and a water tank

The Tank Integrated Hydro Unit incorporates a control kit and a large domestic hot water (DHW) tank available in 200 and 260 litre options. Its compact and modular design means that it fits easily into a wide range of locations, as everything is installed in one place. Its intuitive servicing options also ensure that it can be set-up and maintained with minimal effort.

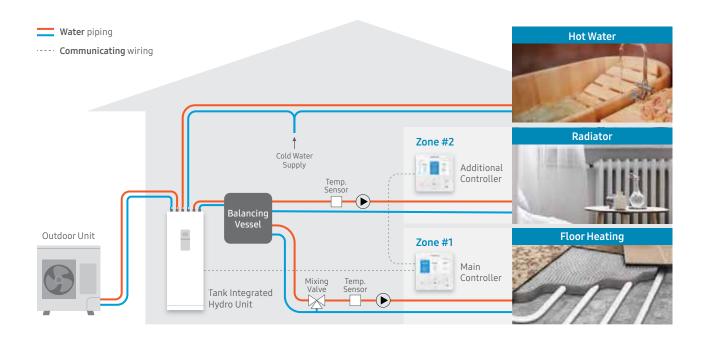
Product Structure



ClimateHub

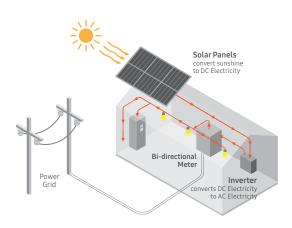
2-Zone Control

The 2-Zone Control can fulfill two different water temperature demands simultaneously, therefore can optimally heat multiple spaces. This in turn saves energy without heating unused areas unnecessarily.



Photovoltaic Enabled

The Photovoltaic Enabled feature checks the status of solar panels and lets you use the solar energy to reduce network electricity usage.



Smart Grid Ready

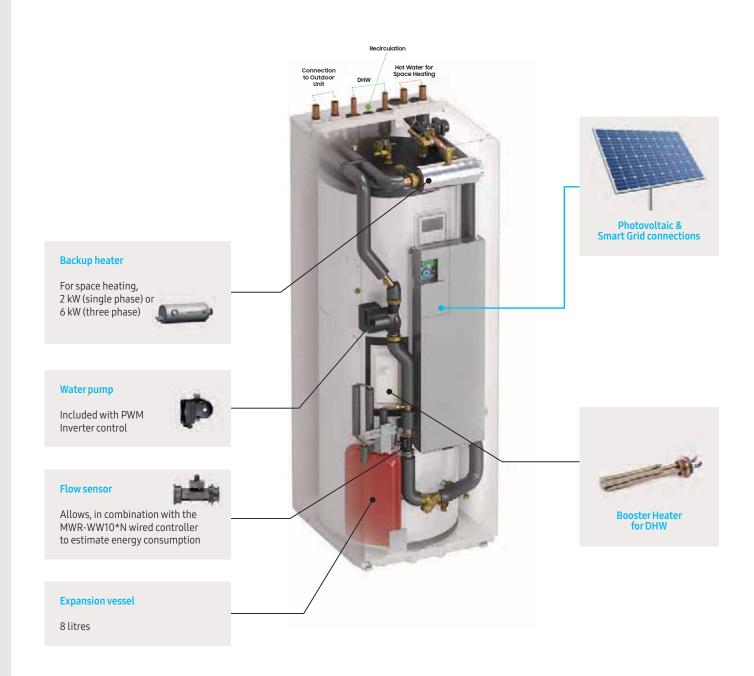
The Smart Grid Ready feature helps you save energy by adjusting the power consumption to suit your supply contract with the local electric power company.



ClimateHub

ClimateHub Components

The ClimateHub system includes all the main hydraulic components: therefore making more free space available in your home.



Complete control using MWR-WW10*N

The ClimateHub system controller allows simplified and intuitive management of all settings.

Estimation of consumption:

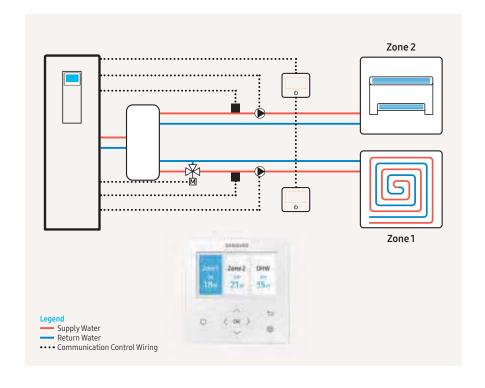
Measure energy consumed and shown directly on the controller menu.

Automatic temperature adjustment:

Maintaining the requested indoor temperature by automatic adjusting the heating water supply temperature based on the ambient temperature. This feature offers enhanced performance and reduces thermal dispersions and energy waste(2).

Multizone management:

Via this command, it is possible to create and manage two zones with different desired temperatures.





Precise control by using a Flow Sensor

The exchange of thermal energy between the refrigerant and water takes place in the plate heat exchanger. In order to have the most efficient exchange, the EHS can control the flow of water over the plate heat exchanger. A flow sensor¹ is built-in to sense the quantity of water supplied to the plate heat exchanger.

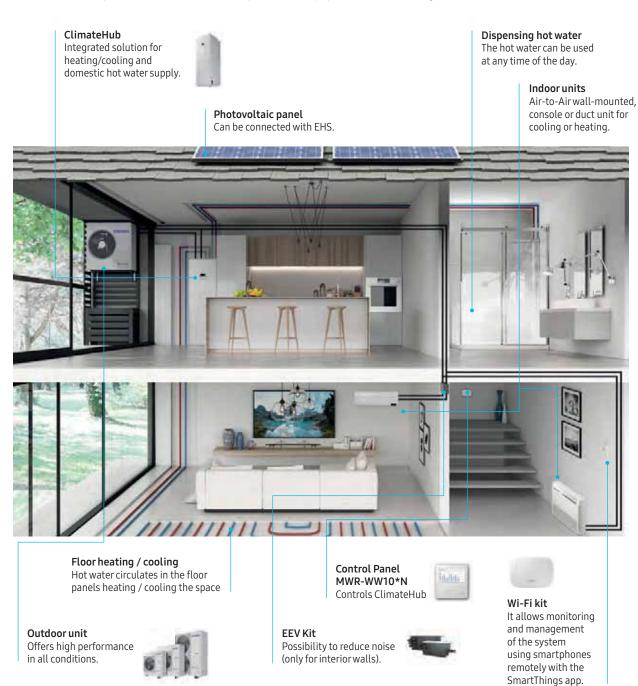
¹ Flow sensor is available in all ClimateHub and 9kW &16kW Split wall-mounted hydro units.



TDM Plus

All-in-one System

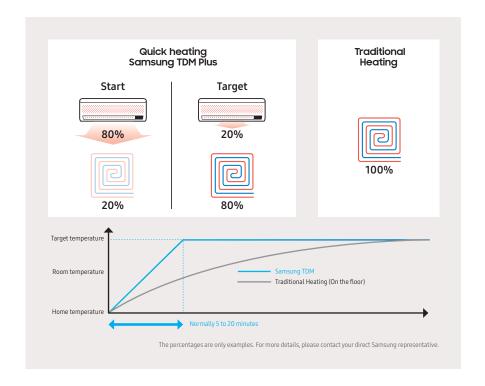
The EHS TDM Plus is a one-stop solution that provides hot water to heat radiators, floors and sanitary systems, along with hot or cool air – to create a comfortable environment all year round. As these heating and cooling sources can be operated separately or together, it is suitable for use in a variety of scenarios. So, it can be adapted to suit any specific needs, ensuring maximum comfort and convenience.



Schematic drawings are for illustrative purposes only. For accurate installation information please consult the technical data book. The selection of the exact product is subject to specific application conditions. Solar panels, underfloor heating panels, radiators and non-integrated components are not provided by Samsung unless specified otherwise. For more detailed product information and technical specifications, please consult the respective product pages of this Product Catalogue.

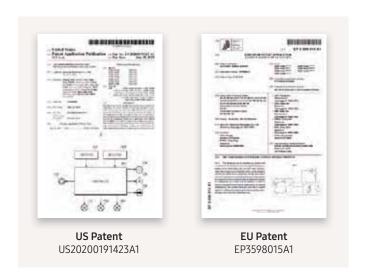
Fast Heating Using TDM Plus technology (Time Division Multi)

Underfloor heating is known to be an optimal system for ideal thermal comfort. It reaches a set temperature 4–8 hours from the moment of its activation. The TDM Plus technology used in the EHS system, also provides for the use of Air-to-Air indoor units, thus drastically reducing the time to reach the desired room temperature.



TDM, the patented technology for optimally controlling energy use

The ability to simultaneously provide hot water along with heating and cooling using only one outdoor unit requires a precise heat pump design and an advanced control algorithm. Samsung's TDM technology uses its own algorithm to optimally control the refrigerant and maximize the efficiency of the heat pump system when heating and cooling. These system and algorithm have been patented in many countries, including the US and Europe.



TDM Plus

Samsung has developed the innovative TDM Plus technology (Time Division Multi) which allows operation of EHS in Air-to-Water mode and in Air-to-Air mode. The possibility of using the two operating modes allows considerable savings both in economic and installation terms.

TDM Plus system

Air-to-Water cooling and heating

In this mode, the TDM Plus system is usable for the production of domestic hot water and heating of the house through radiators or underfloor heating. Thus the heat pumps allow you to heat the house more quickly by consuming even less energy. The TDM Plus can also supply chilled water for cooling purposes during the summer period.

Air-to-Air and Air-to-Water

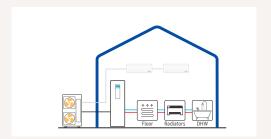
The greatest advantage of the TDM Plus systems is the combined use of Air-to-Air and Air-to-Water modes for heating and cooling. This means that on the coldest winter days it is possible to heat up the space quickly and easily, before the underfloor heating reaches the desired temperature. (As underfloor heating is quite slow but steady in keeping the room temperature, changes to the set temperature can take relatively long.)

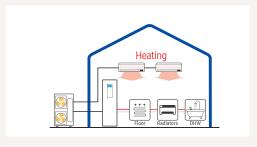
Air-to-Air heating can raise the comfort quickly via heating the air in the room. Both Air-to-Air and Air-to-Water work in the same space to keep the desired room temperature.

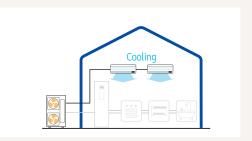
Air-to-Air cooling and heating

An exclusive feature of the TDM Plus systems, in Air-to-Air mode, is that it can operate both in the summer and winter. The cooling phase is also achieved immediately with the Air-to-Air mode. The advantage in the heating mode is the temperature speed control, compared to the use of radiators or fan coil units.



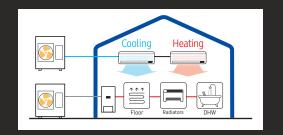






Traditional system

The traditional heat pump system requires two distinct outdoor units for air conditioning and domestic hot water production. Unlike the TDM Plus, the need to use two outdoor units necessarily involves greater electricity consumption and greater installation space.



Customizable operation at any time

You can set the priorities and the operating modes for the TDM Plus heat pump using the control unit. You can also adapt the settings or parameters that suit you.



TDM Plus

High performance even at low temperatures

The TDM Plus system is equipped with an inverter compressor able to deliver up to 90 % of its nominal potential even at an outside temperature of -10 °C. Operation is guaranteed even if outside temperatures drop up to -25 °C.



Quiet Operation

The Silent function allows you to reduce noise levels of the outdoor unit up to 7 DB (in 3-steps), making it ideal for operation even at night. Activation is programmable through the remote controller.



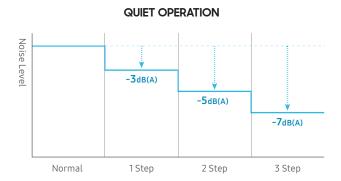
Emergency Mode

Even in case of interruption of the operation of the outdoor unit, the ClimateHub guarantees the production of hot water.

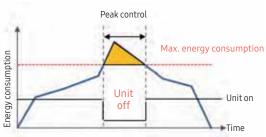


PV enabled & Smart Grid Ready

It allows to optimize the selfconsumption of electricity produced by photovoltaic panels. Connection is already prepared on the hydronic modules and in the ClimateHub and Samsung EHS systems.



SMART GRID MANAGEMENT



Connection is managed internally by turning it off in peak situations. \\



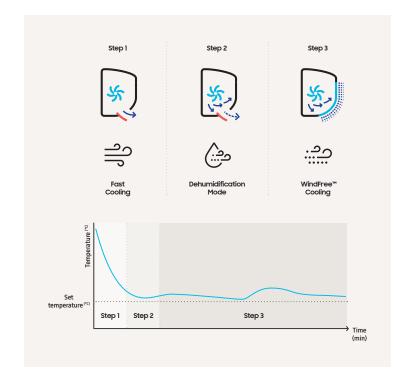
TDM Plus WindFree™ Deluxe

WindFree™ Cooling

WindFree™ Cooling mode keeps the room comfortably cool. It cools gently and quietly, dispersing air through 23,000 microholes so that consumers never have to deal with the unpleasant feeling of a cold draft on their skin. This results in a "Still Air" environment¹ with a very low air speed and limited noise². The advanced airflow structure of this mode also means that it cools a wider and larger area more evenly. And it consumes up to 77 % less energy than Fast Cooling mode³ so consumers 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 AR12TXCAMWKNEU model 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.
 Tested on the AR12TYEAMWKNAP model under specific testing conditions, based on the power consumption of Fast Cooling mode versus Windfreel** Cooling mode.





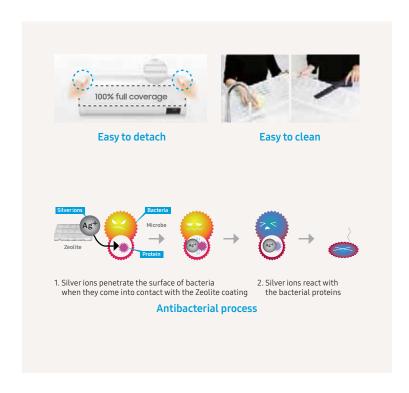
Auto Clean

The Auto Clean functionality enables cleaning of the heat exchanger anytime after you turn off the unit. This function automatically dries the Heat Exchanger using a 3 step process and prevents the build up of bacteria and odors. It can easily be enabled or disabled with the click of the remote controller.

Easy Filter Plus

Unlike conventional filters that may be difficult to access the Easy Filter Plus is located externally on the top of the unit. This means it can be easily removed and cleaned without needing to open a cover or pull hard on it. Thanks to the filter's dense mesh it's very effective at capturing dust and therefore keeping the Heat Exchanger clean and working efficiently. The special coating on the filter helps protect residents from certain airborne contaminants'.

¹ Tested in an external Korean test lab (FITI). Data has been measured under specific testing conditions and may vary depending on environmental factors and individual use. Certain airborne contaminants referred to are Escherichia coli ATCC 25922, Staphylococcus aureus ATCC 6538.





Easy Installation and Servicing

The TDM Plus 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.

TDM Plus Slim Duct

2-way Air Inlet

The TDM Plus Slim Duct has a 2-way air inlet – bottom or rear – that gives much more flexibility in selecting an installation location. It can be configured to provide the optimum airflow to almost any room, while being concealed behind ceilings.





Slim & Compact Design (199 mm Height)

Enhance the look and feel of almost any space with the TDM Plus Slim Duct. Being 199 mm high and 700 mm¹ wide, its slim and compact design is highly elegant, so it can be discretely concealed in many locations. It also makes installation, maintenance and repair quick and easy, so it's ideal for a wide range of businesses and residential homes.

¹ Based on the AM036KNLDEH/EU model. The width of other models may vary.

TDM Plus Duct

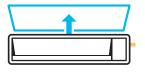
Auto ESP Adjustment

Enjoy maximum comfort and efficiency with minimum effort. The Auto ESP Adjustment automatically optimizes the air volume and pressure and minimizes noise, ensuring consistent cooling and heating in any situation. The external static pressure (ESP) can also be adjusted using a remote control. The Auto ESP adjustment feature is applicable only in MSP Duct lineup.

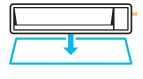


3-way Service Access

Install the ducted air conditioner in various locations, but still enjoy easy access for servicing. It can be accessed from three directions –top, side and bottom– using an easy to remove Slide Fit cover. So it's simple to maintain wherever it is installed in, which saves time and money.







Bottom access



Side access

TDM Plus Console

Slim and Smart Design

The TDM Plus Console has a slim and smart design. Being just 199 mm thick, it will fit into almost any space and helps maintain optimal temperature. An innovative panel also prevents dust from accumulating. The black touchscreen display adds convenience and elegance.





2-Way Air Outlets

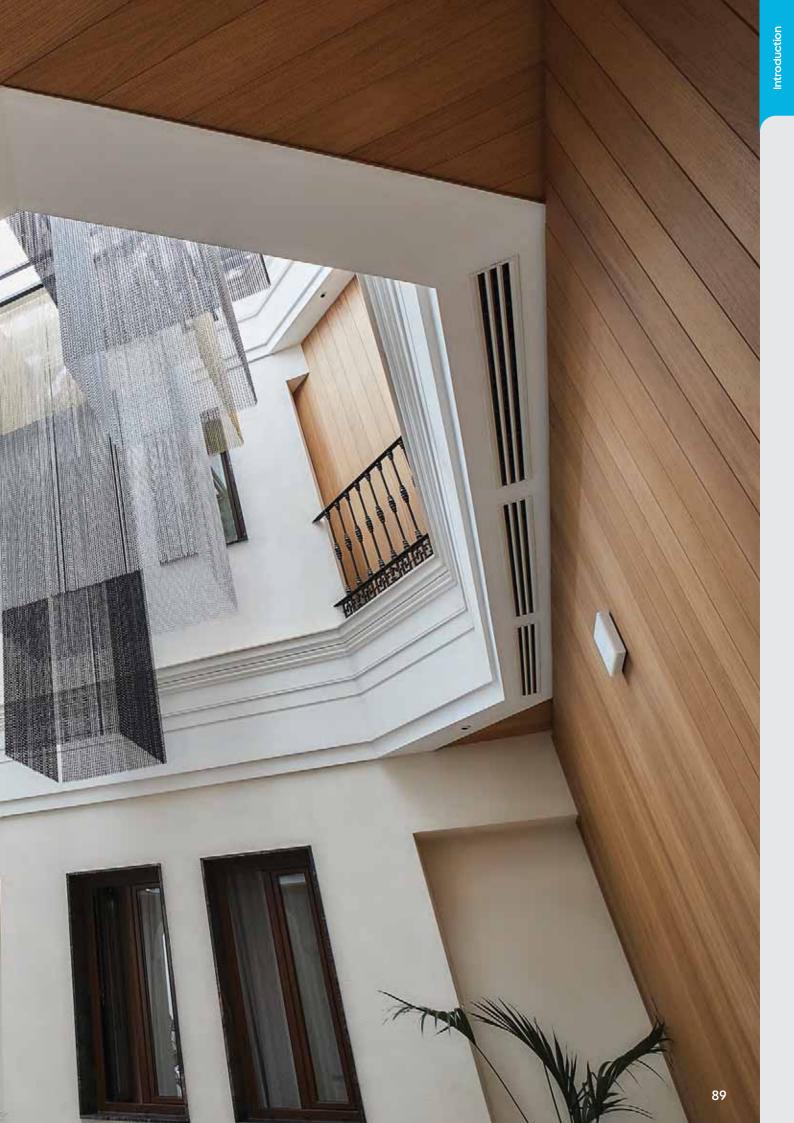
The 2-Way Air Outlets ensure that every inch of space quickly reaches the desired temperature, and stays that way. Warm air is expelled from the bottom air outlet, helping to spread warmth evenly throughout the room.



Silent Mode

The TDM Plus Console allows for a selection of 4 operating modes (High, Medium, Low and Silent) to enjoy optimal heating and cooling in a variety of situations. In Silent mode it generates a quiet, but comfortable airflow with a noise level of 23 dB(A)¹.

 $^{^{\}rm 1}$ Based on internal testing. Results may vary depending on individual use.



Wall-mounted Hydro Unit

Flexibly fits into a limited space, easily expands to optimize your comfort

The Wall-mounted Hydro Unit contains a Plate Heat Exchanger where the heat collected outside is exchanged to the water system to heat your living space or domestic hot water on the inside. The compact design provides a lot of flexibility for installing. It includes a flow sensor and a backup heater to ensure that the required water temperature is always maintained. Single phase 230 V or three-phase 400 V models can be selected to suit the requirements of the house.

Product Structure



Air Vent

Pressure Release Valve

Backup Heater

Plate Heat Exchanger

Flow Sensor

Expansion Vessel

Water Pump

Straine

Requires less space, frees up more floor space

Compact Design

The Wall-mounted Hydro has a compact design that doesn't take up any extra space on the floor, you have much greater flexibility in choosing the right location to install it. In addition, it has similar shape and dimensions as conventional boiler systems, so it makes it simpler to replace or install it instead of a boiler.





Easy to optimize for your needs

A Variety of Pipe Fittings

The Wall-mounted Hydro provides the functionality needed for interlocking control with various accessories that may be used in the design. You may simply choose from a variety of solutions and optimize the design to suit the specific conditions of the house and the needs of the users.

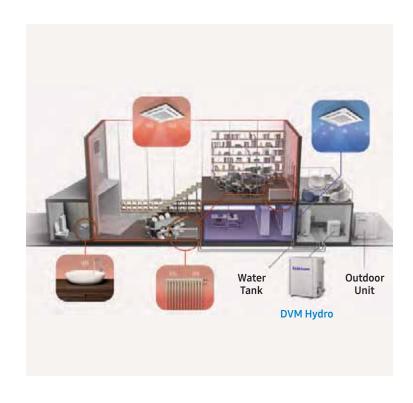
DVM Hydro Unit

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 Eco 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.

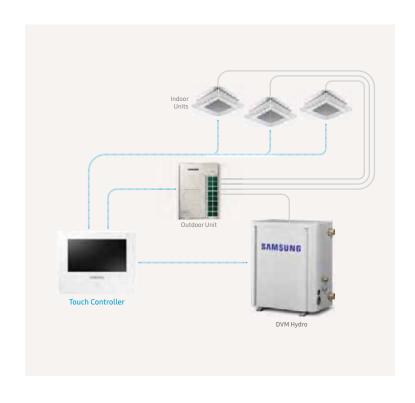
The perfect solution to satisfy the requirements of various sites.

Installation & Control

The Samsung DVM Hydro is easy to install and connect to a range of other devices, and can also be independently or centrally controlled.

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.





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.

SmartThings



New Generation Wireless Smart Home Automation

SmartThings is one of the largest open ecosystems of connected devices worldwide and is available on both Android and iOS. It is compatible with the leading voice assistants and a wide range of different brand devices, giving control over smart devices in one place.

With the SmartThings App much more can be done than just turning devices on and off. The App makes it possible for devices from Samsung and other brands to work together easily at fixed times by creating "Automations" or "Scenes". Additionally, the Geo-Fencing functionality allows the room temperature to be automatically set at the desired level when the user approaches within a preset distance.

A wide range of smart devices can be managed

With the help of the SmartThings Hub a wide range of devices can be integrated into the ecosystem, manageable with a single app, through Zigbee and Z-Wave protocols, and make them interact with evolved logic. The user can receive security notifications, detect water leaks, or schedule lights to come on with SmartThings sensors and plugs. In this way, it is possible to create scenarios and automations by transforming the house into a smart home with simple gestures and without structural interventions.

SmartThings Multipurpose sensor

Easily installable on doors and windows, it recognizes their opening thanks to a magnetic sensor. By using the multi purpose sensor you can reduce heat loss as the air conditioner or EHS will be turned off when the window is open.





SmartThings Motion sensor

Allows to set automatic lighting and other devices when it detects movement. When away from home, the Motion sensor can send an alarm signal to the Smart Phone if it detects unwanted movements.

SmartThings Hub

This is the brain of the Samsung home automation: It communicates with all devices that can be managed via the app and allows for management via SmartThings. Compatible with voice assistants like Bixby¹, Google Home¹ and Amazon Alexa¹.

Voice control is supported by AI speakers such as Samsung Bixby 2.0, Google Assistant (Google Home) and Amazon Alexa. Google Assistant is not available in certain languages and countries. Google is a trademark of Google LLC.

Compatible with:













SmartThings Water Leak sensor

Place this sensor near the ClimateHub water tank, shower and or pipes to detect any water leaks or condensation. This can help to quickly identify leakage when they occur.

SmartThings button

The button can be positioned at any point of the house, allowing to activate any smart device connected to it, depending on the set mode.



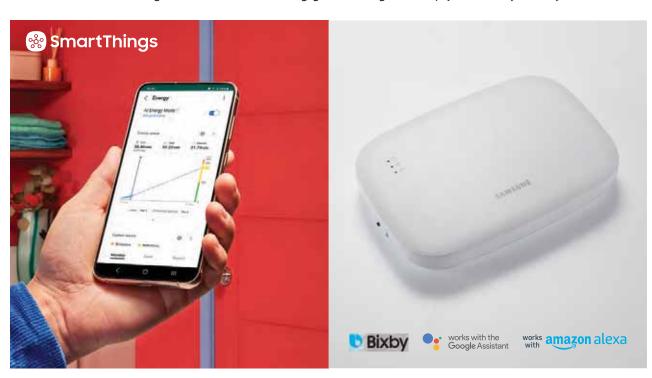


Contact your local Samsung Representative for more information on SmartThings.

Anytime, anywhere: it's all in your hands

SmartThings + Wi-Fi Kit 2.0

Let SmartThings¹ take care of your home so you can focus on what matters most in life. SmartThings¹ Home Care Wizard keeps tabs on your household devices, sends you notifications to replace parts, and offers trouble-shooting solutions if something goes wrong. Or simply tell Bixby what you want².



Adjust settings

Lets you monitor the indoor temperature and settings and adjust them.



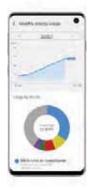
Energy monitoring

Lets you view your daily, weekly, and monthly energy usage at a glance and notifies when you have exceeded your energy usage.



Energy service

Lets you quickly check the energy usage of multiple devices connected to the SmartThings App.



Automation

Automatically operates to suit your preferred home environment.



Welcome heating

Performs pre-heating and/or pre-cooling before you arrive back home.



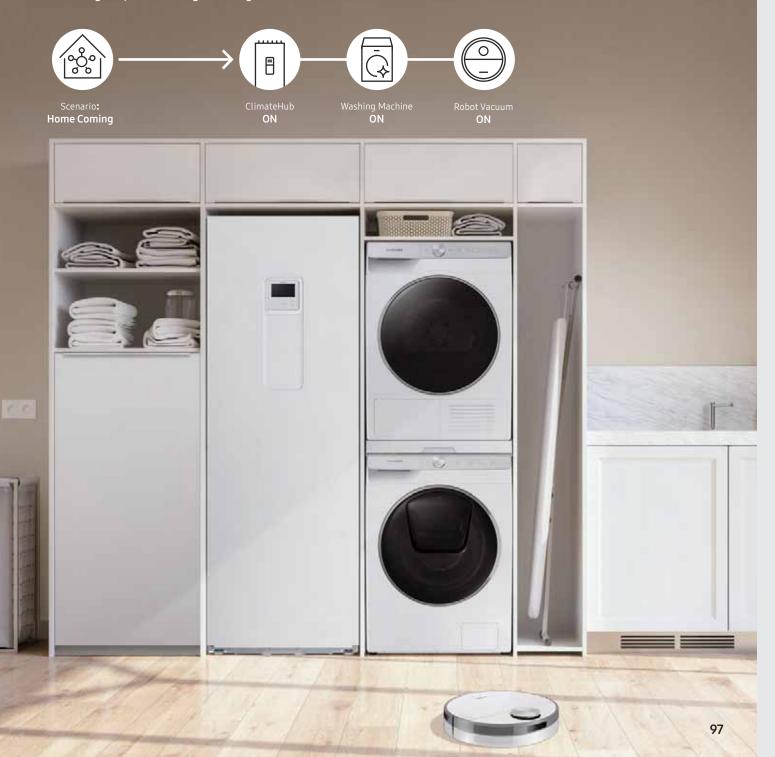
Available on Android and iOS devices. A Wi-Fi connection, Samsung account and an optional Wi-Fi Kit (MIM-H04N) are required. The GUI images on this page may vary by the version of the SmartThings App.

Bixby is Samsung's brand of artificial intelligence (Al)/Internet of Things (IoT) voice assistant. A Wi-Fi connection and a Samsung account are required. Bixby only recognises certain accents and dialects of English (UK), English (US), French (France), German (Germany), Italian (Italy), Korean (South Korea), Mandarin Chinese (China), Spanish (Spain) and Portuguese (Brazil). Other languages to be supported.

Just walk into your home, and comfort welcomes you

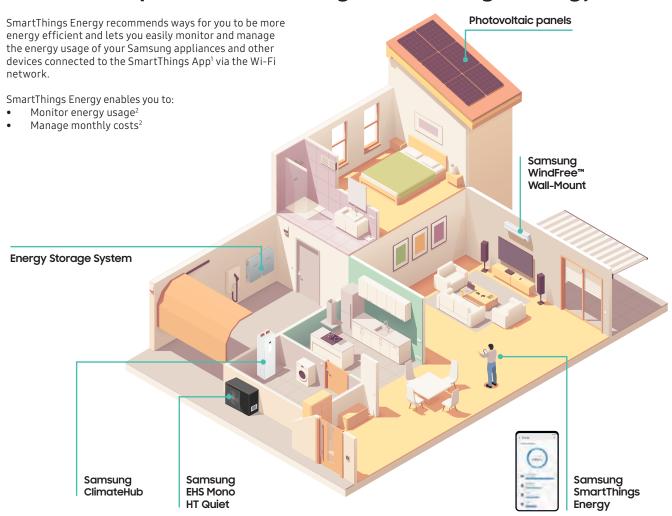
Home Automation with Geofencing functionality

The Samsung EHS will operate in your preferred mode according to the settings you choose. The geofencing functionality will be automatically activated within a pre-set distance of the building so pre-heating/cooling will start.



SmartThings Energy

Net Zero capable Home using SmartThings Energy



- 1 Available on Android and iOS devices. A Wi-Fi connection, Samsung account and an optional Wi-Fi Kit (MIM-H04N) are required.
 2 The SmartThings AI Energy mode, when used by the end-user, can provide users with a possibility to save energy and/or costs with regard to their domestic hot water usage based on (repeatable) user patterns. A compatible Samsung Climate Hub is required. All savings are estimates. The actual savings vary and depend on, amongst others, usage, costs and operating conditions. The Al Energy mode may impact the product performance. End user may deactivate the Al Energy mode at any time.



Energy Insight



Energy consumption insight

Track Carbon **Footprint**



Monitor carbon emissions

Al Saving Solution



Energy saving solutions based on AI

Enabling a Net Zero Home



Maximized use of solar energy

Smart Grid Ready



Utilization & integration with Smart Grid

Energy Consumption Insight



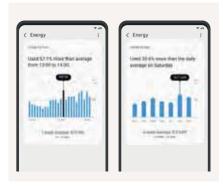
Monitoring

Tangibly shows the energy usage and estimated cost for all connected devices².

C Energy i Processor in the Common of the Co

Analysis

Provides analytic reports for hourly and daily usage patterns, which helps you save more.



Notification

Tracks your use of energy and notifies you to be always aware of it.





AI Energy Mode



One-touch saving

AI Energy mode enables Samsung home appliances to save energy while meeting optimal indoor comfort requirements.

Various options

AI Energy Mode has various options for saving energy more efficiently based on estimated usage through an AI server. If it's determined that your estimated usage exceeds your target or you need to save energy, devices will run in AI Energy mode automatically.



Monthly Energy Target



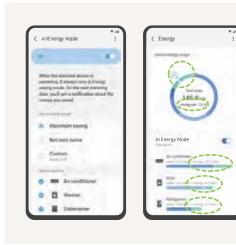




Tariffs (Tier, TOU)



Maximum Saving



² Home Appliances, HVAC and TV.

SmartThings Energy

Maximized use of solar energy

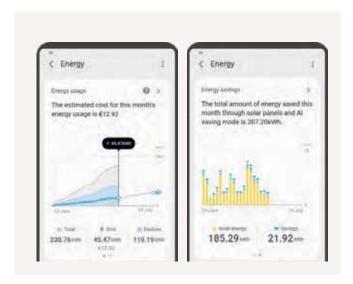


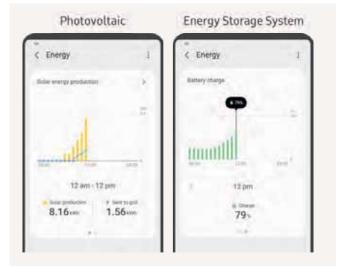
Total/Grid Usage

Track electricity usage and estimated cost. Home energy monitoring is available considering self-generation through PV and ESS.

Photovoltaic and Energy Storage System

Monitor your solar energy production and storage.

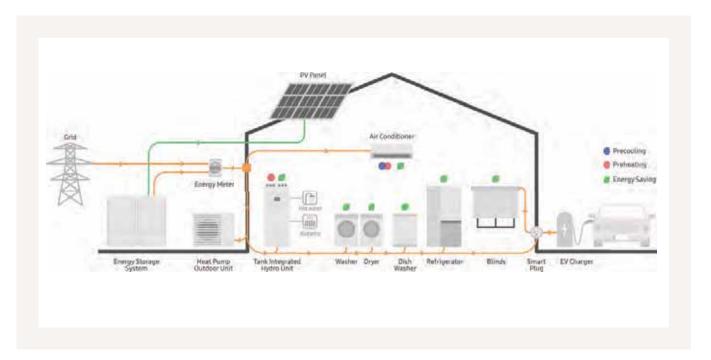




Net Zero Home Integration



 $Create\ a\ Net\ Zero\ Home\ with\ Photovoltaic,\ Energy\ Storage\ system,\ devices\ and\ IoT\ integrated\ with\ SmartThings\ Energy.$

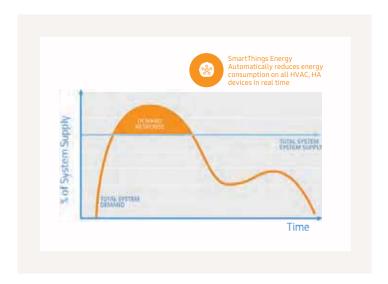


Load Management for Utility Partners



Demand Response

Help utilities prevent grid congestion by reducing energy consumption of our appliances during peak hours.





Line-up

ClimateHub



Outdoor Unit

Tank Integrated Hydro Unit

					Tank Integrated Hydro Unit (Split)			Tank Integrated Hydro Unit (Mono)			Tank Integrated Hydro Unit (TDM Plus)	
					200 L (1Φ)	260 L (1Φ)	260 L (3Φ)	200 L (1Φ)	260 L (1Φ)	260 L (3Φ)	200 L (1Φ)	260 L (1Φ)
Туре		Power	Model Name	Capacity	AE200RNWSEG/ EU	AE260RNWSEG/ EU	AE260RNWSGG/ EU	AE200CNWMEG/ EU	AE260CNWMEG/ EU	AE260CNWMGG/ EU	AE200TNWTEH/ EU	AE260TNWTEH/EU
R32 Outdoor Unit	Mono	1Ф	AE050RXYDEG/EU	5.0 kW				•				
			AE080RXYDEG/EU	8.0 kW				•	•			
			AE120RXYDEG/EU	12.0 kW				•	•			
			AE160RXYDEG/EU	16.0 kW				•	•			
		3Ф	AE080RXYDGG/EU	8.0 kW						•		
			AE120RXYDGG/EU	12.0 kW						•		
			AE160RXYDGG/EU	16.0 kW						•		
	Split	1Ф	AE040RXEDEG/EU	4.0 kW	•	•						
			AE060RXEDEG/EU	6.0 kW	•	•						
			AE090RXEDEG/EU	9.0 kW	•	•						
		3Ф	AE090RXEDGG/EU	9.0 kW			•					
R410A Outdoor	TDM Plus	1Ф	AE044MXTPEH/EU	4.4 kW							•	•
Unit			AE066MXTPEH/EU	6.6 kW							•	•
			AE090MXTPEH/EU	9.0 kW							•	•
			AE120MXTPEH/EU	12.0 kW								•
			AE160MXTPEH/EU	16.0 kW								•
		3Ф	AE090MXTPGH/EU	9.0 kW							•	•
			AE120MXTPGH/EU	12.0 kW								•
			AE160MXTPGH/EU	16.0 kW								•
R32 Outdoor Unit	Mono HT Quiet	1Ф	AE080BXYDEG/EU	8.0 kW				•	•			
			AE120BXYDEG/EU	12.0 kW				•	•			
			AE160BXYDEG/EU	16.0 kW				•	•			
		3Ф	AE080BXYDGG/EU	8.0 kW						•		
			AE120BXYDGG/EU	12.0 kW						•		
			AE160BXYDGG/EU	16.0 kW						•		

TDM Plus Indoor



MWR-WW10KN

Product dimensions (mm) W x H x D

Туре		WindFree™ Deluxe	Slim Duct	MSP Duct	Console
Capacity	2.2 kW	•	•		•
	2.8 kW	•	•		•
	3.6 kW	•	•	•	•
	5.6 kW	•	•	•	•
	7.1 kW	•		•	
	9.0 kW			•	

Optional Controller



Product dimensions (mm) W x H x D



185 x 130 x 29

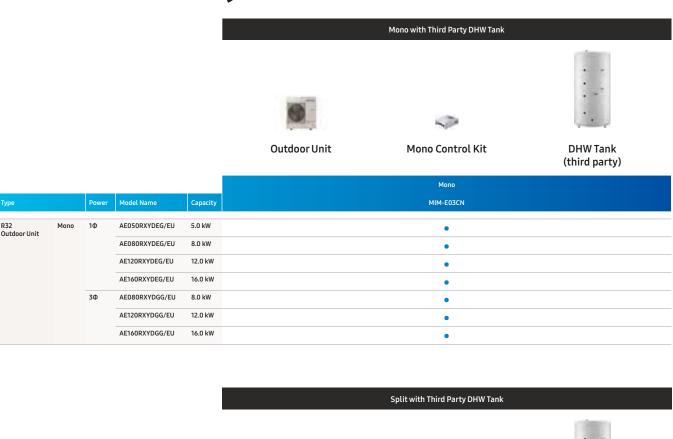


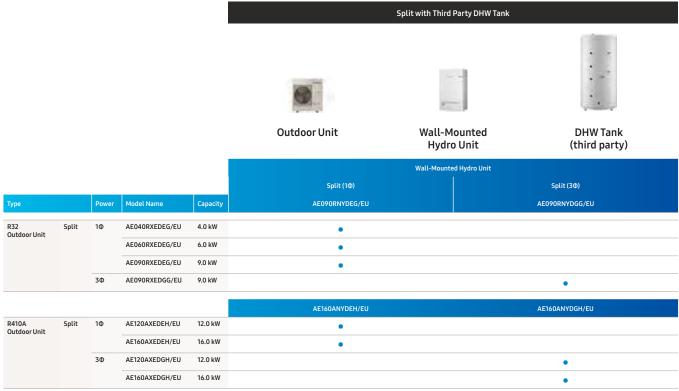


120x120x19

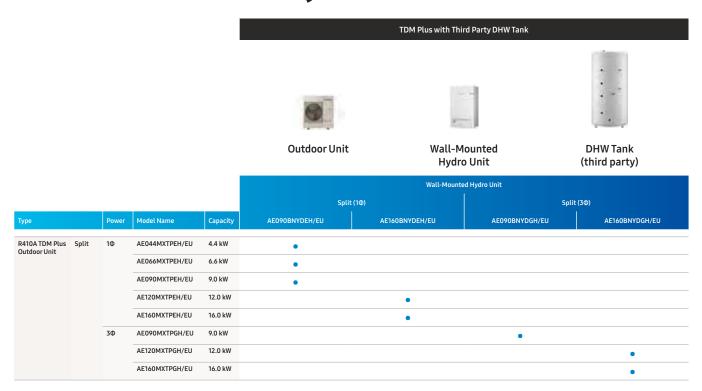
Line-up

EHS with Third Party DHW Tank



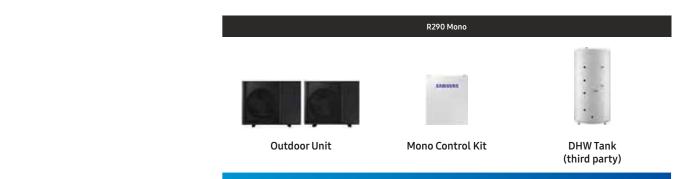


TDM Plus with Third Party DHW Tank



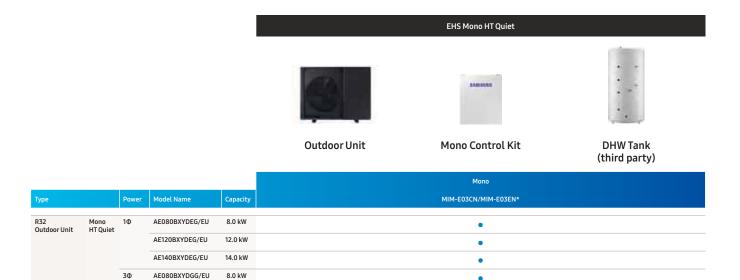
Line-up

Renovation Solutions



					Mono	
Туре		Power	Model Name Capacity		MIM-E03CN/MIM-E03EN*	
R290 Outdoor Unit	Mono	1Ф	AE050CXYDEK/EU	5.0 kW	•	
outuooi oiiit			AE080CXYDEK/EU	8.0 kW	•	
			AE120CXYDEK/EU	12.0 kW	•	
			AE160CXYDEK/EU	16.0 kW	•	
			AE080CXYDGK/EU	8.0 kW	•	
			AE120CXYDGK/EU	12.0 kW	•	
			AE160CXYDGK/EU	16.0 kW	•	

^{*}MIM-E03EN has additional features: Smart Grid ready/PV Enabled/2-Zone control

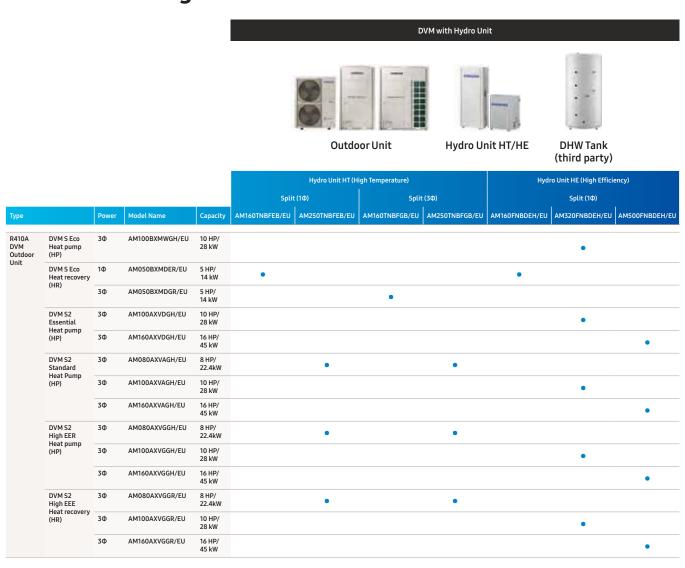


AE120BXYDGG/EU
AE140BXYDGG/EU

14.0 kW

 $^{^{\}star}$ MIM-E03EN has additional features: Smart Grid ready/PV Enabled/2-Zone control

Central Heating Solutions



Selecting the right heating system



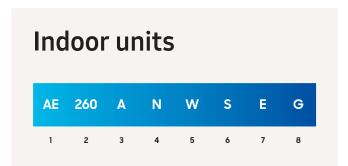
		Mono / Split	TDM Plus (R410A)
Main Function	A2W Cooling	•	•
	A2W Heating	•	•
	A2W Domestic Hot Water	•	•
	A2A Cooling		•
	Maximum Allowable Indoor unit Connections		up to 7 Indoor units
Comfort	Colour Display	•	•
	Low Noise ¹	•	•
	Outing	•	•
	Schedule / Holiday Mode	•	•
	Emergency Operation	•	•
Feature	Wi-Fi Kit SmartThings	•	•
	Wired Remote Controller	•²	•²
	Zone Controller	•	•
	Mixing Valve ⁴	•	•
	3-Way Valve	•	•
	2-Way Valve ⁴	•	•
	Thermostat Control	•	•
	PV Integrated	•	•
	Smart Grid Ready	•	•
	Energy Consumption Monitoring	•	•
	Set FSV with SD Card	•	•
Smart Install	Smart Checking	•	•

	New Built (u	p to 16 kW)		Renovation	n Solutions	Central Heating Solutions
	Third Party DHW	Tank solutions		R290 Mono	EHS Mono HT Quiet	DVM S Eco/DVM S2 with Hydro
Mono (R32)	Split R32	Split (R410A)	TDM Plus (R410A)	Mono (R290)	Mono (R32)	DVM with Hydro (R410A)
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
			•			•
			up to 7 Indoor units			up to 64 Indoor units
•	•	•		•	•	•
•	•	•	•	•	•	• (DVM S2)
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•²	•	•	•	• 2	• 2	•
•3	•	•	•3	• 3	•3	•
•	•	•	•	•	•	•
●4	• 4	• 4	•4	•4	•4	•
•	•	•	•	•	•	•
•	•	•	•	•	•	•
•	•	•		•	•	•
	•	•		•	•	•
•	•	•		•	•	•
						•
•	•	•	•	•	•	•

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

² Wired Remote Controller to be ordered separately. ³ In combination with an external room sensor. ⁴ Not provided by Samsung.

Nomenclature



1 Classification 2 Capacity 3 Year	J M R	DVM x1/10 kW (3 digits) x Litre (3 digits) 2015 2017
	М	x Litre (3 digits) 2015
	М	2015
3 Year	М	
3 Year		2017
3 Year	R	
T G G		2019
	T	2020
	Α	2021
	В	2022
4 Product Type	N	Indoor Unit (NASA)
	A/X	RAC Wall-Mounted
	В	Hydro Unit
	J	Console
5 Product Notation	L	LSP Duct
	М	MSP Duct
_	W	Tank Integrated Hydro Unit
	Υ	Wall-Mounted Hydro Unit
	D	Standard
	P	
6 Feature	F	Flagship
reature	М	Mono
	S	Split
	T	TDM Plus
7 Rating Voltage	E	1Ф, 220~240 V, 50 Hz
Kating voltage	G	3Ф, 380~415 V, 50 Hz
	В	R134 Heat Pump
8 Mode	G	R32 Heat Pump
	Н	R410A Heat Pump

Outdoor units

AE	090	A	X	E	D	E	G
1	2	3	4	5	6	7	8

		AE	EHS			
1	Classification	AM	DVM			
2	Capacity	x1/10 kW (3 digits)				
		F	2013			
		J	2015			
		K	2016			
3	Year	М	2017			
,	rear	N	2018			
		R	2019			
		Α	2021			
		В	2022			
4	Product Type	Х	Outdoor Unit (NASA)			
		E	Split			
5	Product Notation	М	DVM S Eco			
5	Product Notation	T	TDM Plus			
		Υ	Mono			
6	Feature	D	Standard			
	i cacale	Р				
7	Rating Voltage	E	1Ф, 220~240 V, 50 Hz			
	Rating voltage	G	3Ф, 380~415 V, 50 Hz			
		G	R32 Heat Pump			
8	Mode	Н	R410A Heat Pump			
		R	Heat Recovery			





ClimateHub Mono with built-in Wi-Fi



- Integrated solution for heating and domestic hot water.
- Compact unit size with large water tank (200 L & 260 L). Intuitive, colour screen touch controller in multiple languages.
- Energy monitoring through touch controller.
 Smooth servicing through the front-mounted service window.
- PV and Smart Grid ready.
- 2-zone Control, suitable for floor heating and radiators. SCOP rating of A+++*.
- Single Wi-Fi kit module is embedded into the ClimateHub Mono only. A Wi-Fi connection
- and Samsung SmartThings application and EHS Cloud Service account are required. Backup heater is included to ensure a minimum water temperature.









		Indoor Unit			AE200CNWMEG/EU	AE200CNWMEG/EU	AE200CNWMEG/EU
		Outdoor Unit			AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU
		Controller			MWR-WW10N	MWR-WW10N	MWR-WW10N
System	Operation	Nominal Heating A7/W	351 / A7/W55 ²	kW	5.0/4.3	8.0/7.1	12.0/11.3
		Capacity Cooling A35/V	/18¹	kW	5.0	7.5	12.0
		Power Input Heating A7/W: (Nominal)	351 / A7/W552	kW	1.03/1.52	1.77/2.53	2.65/3.73
		Cooling A35/V		kW	1.14	1.90	2.77
		COP (Nominal Heating) A7/W3		W/W	4.85/2.83	4.52/2.81	4.53/3.03
		EER (Nominal Cooling) A35/W	18¹	W/W	4.39	3.95	4.33
		SCOP LWT 35°C/ 55°C		W/W	4.46/3.2	4.44/3.23	4.69/3.51
		Seasonal Space Heating enr.efficiency ηs LWT 35°C/55	°C	ETA%	175/125	175/126	185/138
		Seasonal Space Heating Eff. class * LWT 35°C/ 55°C		-	A+++ / A++	A*** / A**	A*** / A**
		Current	MCA	A	16.00	22.00	28.00
			MFA	A	20.00	27.50	35.00
		Water Flow Rate	Low / Medium temperature	l/min	14.4/7.8	23.1/12.8	34.6/20.4
		Leaving Water Temperature ³	Heating	°C	15~65	15~65	15~65
F			Cooling	°C	5~25	5~25	5~25
	Functions	Smart Grid Ready / PV Enabled	I	-	•	•	•
		3-Step Quiet Mode		-	•	•	•
		2-zone Control		-	•	•	•
nk Integrated	Power Supply			Ф, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
dro Unit	Water Tank Volu	Water Tank Volume litres			200	200	200
	Declared Load F	Declared Load Profile L/XL			L	L	L
		Average water heating efficiency ŋwh ETA% Average Energy Efficiency Class -			115	115	110
	Average Energy	Average Energy Efficiency Class			A	A	A
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	26	26	30
			Cooling Std	dB(A)	26	26	30
		Sound Power	Heating Std	dB(A)	40	40	44
	Heater	Back-up heater Capacity	Default (Option)	kW	2 (4/6)	2 (4/6)	2 (4/6)
	Piping	Water Pipe (Space Heating)	Inlet/ Outlet	Φ, mm	28/28	28/28	28/28
		Water pipe (DHW)	Inlet/ Outlet	Φ, mm	22/22	22/22	22/22
	Dimensions	Net Weight		kg	130.0	130.0	130.0
		Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
utdoor Unit	Power Supply			Ф, V, Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz
	Compressor	Туре		-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
	Base Heater	Capacity		kW	-	0.15	0.15
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	45	48	50
			Cooling Std	dB(A)	45	48	50
		Sound Power	Heating Std	dB(A)	61	63	64
	Dimensions	Net Weight		kg	58.5	76.0	110.0
		Net Dimensions (WxHxD)		mm	880 x 798 x 310	940 x 998 x 330	940 x 1,420 x 330
	Refrigerant	Туре				2 (Fluorinated greenhouse gas, GWP=6	
		Factory Charging		tCO₂e	0.68	0.78	1.49
				kg	1.00	1.15	2.20
	Piping	Water Pipe (Space Heating)	Inlet/ Outlet	Φ, mm	28/28	28/28	28/28
	Operation	Ambient Temperature	Heating	°C	-25~35	-25~35	-25~35
	operation.	peruture	Cooling	℃	10~46	10~46	10~46
			DHW	°C	-25~43	-25~43	-25~43

Accessories













Touch Controller	Touch Controller	DMS2.5	Wi-Fi Kit	External Room Sensor	Backup Heater (4/6kW)
MWR-WW10*N	MCM-A300N	MIM-D01AN	MIM-H04EN	MRW-TA	MHC-*00FE









Appendix Co.	-	Accessed to the	Appendix 100		
AE200CNWMEG/EU	AE260CNWMEG/EU	AE260CNWMEG/EU	AE260CNWMEG/EU		
AE160RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU	AE160RXYDEG/EU		
MWR-WW10N	MWR-WW10N	MWR-WW10N	MWR-WW10N		
16.0/15.0	8.0/7.1	12.0/11.3	16.0/15.0		
14.0	7.5	12.0	14.0		
3.62/5.18	1.77/2.53	2.65/3.73	3.62/5.18		
3.28	1.90	2.77	3.28		
4.42/2.90	4.52/2.81	4.53/3.03	4.42/2.90		
4.27	3.95	4.33	4.27		
4.48/3.53	4.44/3.23	4.69/3.51	4.48/3.53		
176/138	175/126	185/138	176/138		
A*** // A**	A*** // A**	A*** // A**	A*** // A**		
32.00	22.00	28.00	32.00		
40.00	27.50	35.00	40.00		
46.2/27.1	23.1/12.8	34.6/20.4	46.2/27.1		
15~65	15~65	15~65	15~65		
5~25	5~25	5~25	5~25		
•	•	•	•		
•	•	•	•		
•	•	•	•		
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		
200	260	260	260		
L	XL	XL	XL		
110	123	117	117		
A	A	A	A		
30	26	30	30		
30	26	30	30		
44	40	44	44		
2 (4/6)	2 (4/6)	2 (4/6)	2 (4/6)		
28/28	28/28	28/28	28/28		
22/22	22/22	22/22	22/22		
130.0	140.0	140.0	140.0		
595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700		
1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz		
BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary		
0.15		0.15	0.15		
	0.15	0.13	0.13		
52	0.15 48	50	52		
52 54					
	48	50	52		
54 66	48 48 63	50 50 64	52 54 66		
54 66 110.0	48 48 63 76.0	50 50 64 110.0	52 54 66 110.0		
54 66	48 48 63 76.0 940 x 998 x 330	50 50 64 110.0 940 x 1,420 x 330	52 54 66		
54 66 110.0 940 x 1,420 x 330	48 48 63 76.0 940 x 998 x 330 R32 (Fluorinated gree	50 50 64 110.0 940 x 1,420 x 330 nhouse gas, GWP=675)	52 54 66 110.0 940 x 1,420 x 330		
54 66 110.0 940 x 1,420 x 330	48 48 63 76.0 940 x 998 x 330 R32 (Fluorinated gree 0.78	50 50 64 110.0 940 x 1,420 x 330 nhouse gas, GWP=675) 1.49	52 54 66 110.0 940 x 1,420 x 330		
54 66 110.0 940 x1,420 x 330 1.49 2.20	48 48 63 76.0 940 x 998 x 330 R32 (Fluorinated gree 0.78	50 50 64 110.0 940 x 1,420 x 330 nhouse gas, GWP=675) 1.49 2.20	52 54 66 110.0 940 x1,420 x 330 1.49 2.20		
54 66 110.0 940 x1,420 x 330 1.49 2.20 28/28	48 48 63 76.0 940 x 998 x 330 R32 (Fluorinated gree 0.78 1.15 28/28	50 50 64 110.0 940 x 1,420 x 330 nhouse gas, GWP=675) 1.49 2.20 28/28	52 54 66 110.0 940 x 1,420 x 330 1.49 2.20 28/28		
54 66 110.0 940 x1,420 x 330 1.49 2.20	48 48 63 76.0 940 x 998 x 330 R32 (Fluorinated gree 0.78	50 50 64 110.0 940 x 1,420 x 330 nhouse gas, GWP=675) 1.49 2.20	52 54 66 110.0 940 x1,420 x 330 1.49 2.20		

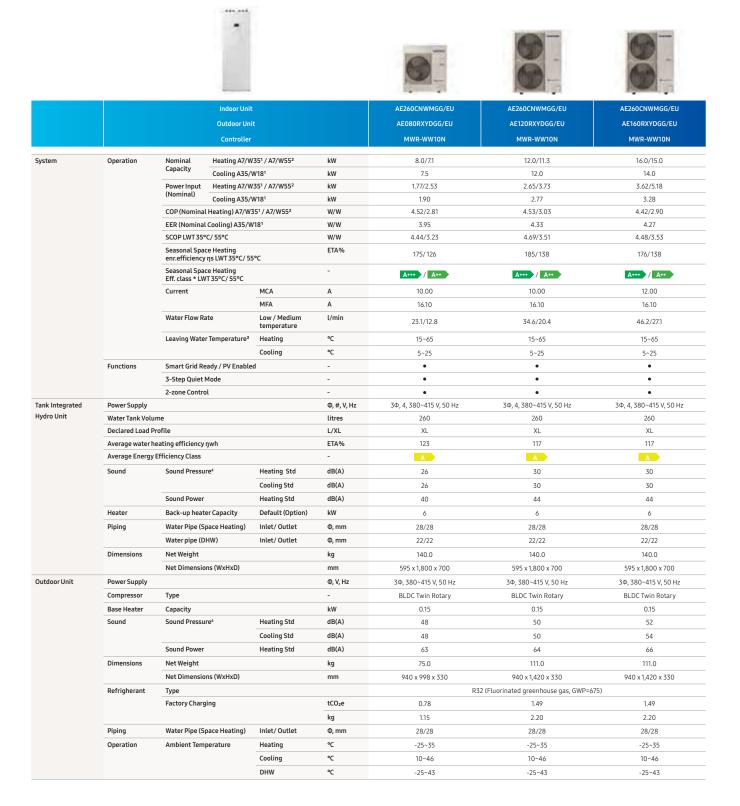




- *A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- $^365^{\circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.

ClimateHub Mono with built-in Wi-Fi (Continued)









- *A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- 3 65°C down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.

Mono with Third Party DHW Tank



- Intuitive, colour screen touch controller in multiple languages.
- Energy monitoring through touch controller. PV and Smart Grid ready.

- 2-zone Control, suitable for floor heating and radiators. SmartThings compatible with optional Wi-Fi kit. Backup heater is recommended to ensure a minimum water temperature.







			Outdoor Unit			AE050RXYDEG/EU	AE080RXYDEG/EU	AE120RXYDEG/EU
			Control Kit			MIM-E03CN	MIM-E03CN	MIM-E03CN
ystem	Operation	Canacity	Heating A7/W		kW	5.0/4.3	8.0/7.1	12.0/11.3
			Cooling A35/V		kW	5.0	7.5	12.0
		(Nominal)	Heating A7/W		kW	1.03/1.52	1.77/2.53	2.65/3.73
		(Nonlinat)	Cooling A35/V	V18¹	kW	1.14	1.90	2.77
		COP (Nominal H	leating) A7/W3	51 / A7/W552	W/W	4.85/2.83	4.52/2.81	4.55/3.03
		EER (Nominal C	ooling) A35/W	181	W/W	4.39	3.95	4.33
		Seasonal space LWT 35°C/ 55°C		ficiency ηs	ETA%	175/125	175/126	185/138
			Seasonal space heating eff. class** LWT 35°C/ 55°C		-	A*** / A**	A*** / A**	A*** / A**
		Current		MCA	А	16.00	22.00	28.00
				MFA	Α	20.00	27.50	35.00
		Leaving Water T	Leaving Water Temperature ²	Heating	°C	15~65	15~65	15~65
					°C	5~25	5~25	5~25
	Functions	Smart Grid Read	dy / PV Enable	i	-	•	•	•
		3-Step Quiet Mode 2-zone Control			-	•	•	•
					-	•	•	•
utdoor Unit	Power Supply	Ф, V,		Ф, V, Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	
	Compressor	Туре			-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
	Base Heater	Capacity		kW	-	0.15	0.15	
	Sound	Sound Pressure	4	Heating Std	dB(A)	45	48	50
				Cooling Std	dB(A)	45	48	50
		Sound Power		Heating Std	dB(A)	61	63	64
	Dimensions	Net Weight			kg	58.5	76.0	110.0
		Net Dimensions	s (WxHxD)		mm	880 x 798 x 310	940 x 998 x 330	940 x 1,420 x 330
	Piping	Water Pipe		Inlet/ Outlet	Φ, mm	25/ 25	25/ 25	25/ 25
	Refrigerant	Туре				R33	2 (Fluorinated greenhouse gas, GWP=6	75)
		Factory Chargin	ıg		tCO₂e	0.68	0.78	1.49
					kg	1.00	1.15	2.20
	Operation	Ambient Tempe	erature	Heating	°C	-25~35	-25~35	-25~35
				Cooling	°C	10~46	10~46	10~46

Accessories Mono Control Kit Touch Controller DMS2.5 Wi-Fi Kit External Room Sensor MIM-E03CN MCM-A300N MIM-D01AN MIM-H04EN MRW-TA









AE160RXYDEG/EU	AE080RXYDGG/EU	AE120RXYDGG/EU	AE160RXYDGG/EU
MIM-E03CN	MIM-E03CN	MIM-E03CN	MIM-E03CN
16.0/15.0	16.0/15.0 8.0/7.1		16.0/15.0
14.0	7.5	12.0/11.3	14.0
3.62/5.18	1.77/2.53	2.65/3.73	3.62/5.18
3.28	1.90	2.77	3.28
4.42/2.90	4.52/2.81	4.53/3.03	4.42/2.90
4.27	3.95	4.33	4.27
176/138	175/126	185/138	176/138
A*** / A**	A*** / A**	A*** // A**	A+++ / A++
32.00	10.00	10.00	12.00
40.00	16.10	16.10	16.10
15~65	15~65	15~65	15~65
5~25	5~25	5~25	5~25
•	•	•	•
•	•	•	•
•	•	•	•
1Ф, 220~240 V, 50 Hz	3Ф, 380~415 V, 50 Hz	3Ф, 380~415 V, 50 Hz	3Ф, 380~415 V, 50 Hz
BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
0.15	0.15	0.15	0.15
52	48	50	52
54	48	50	54
66	63	64	66
110.0	75.0	111.0	111.0
940 x 1,420 x 330	940 x 998 x 330	940 x 1,420 x 330	940 x 1,420 x 330
25/ 25	25/ 25	25/ 25	25/25
	R32 (Fluorinated greer	house gas, GWP=675)	
1.49	0.78	1.49	1.49
	0.76		
2.20	1.15	2.20	2.20
2.20 -25~35			2.20 -25~35
	1.15	2.20	





^{*}A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++

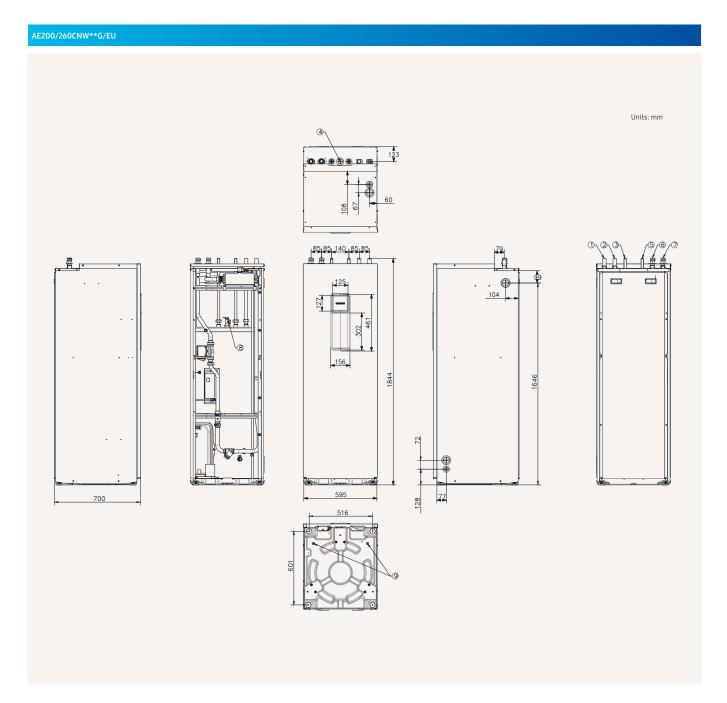
¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].

²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].

 $^{^365^{\}circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)

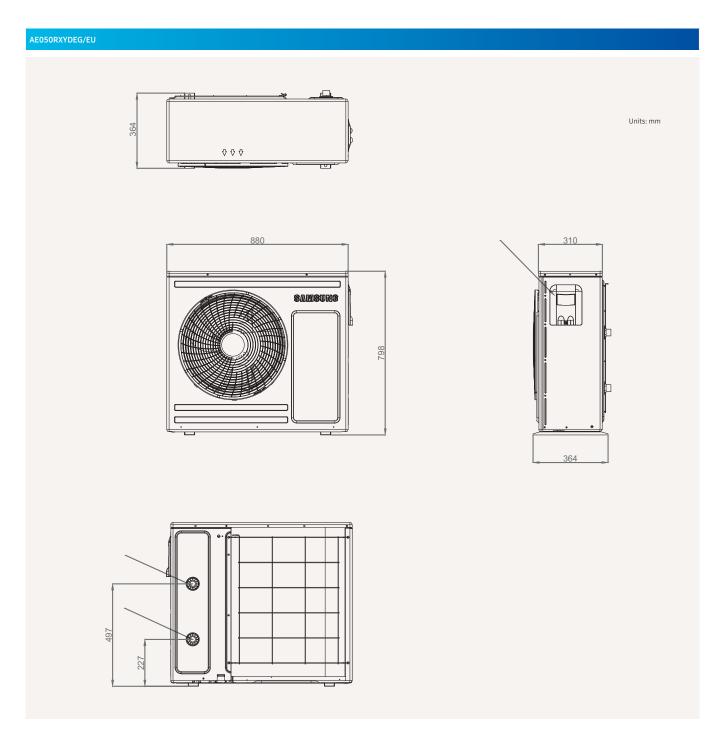
⁴Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

Mono Tank Integrated Hydro Unit



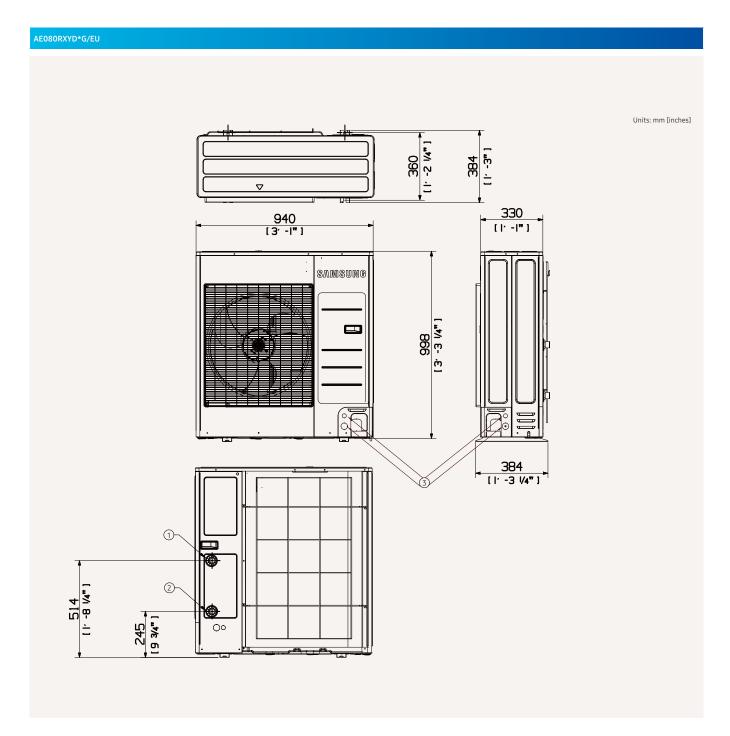
NO	Name	Description				
		AE200RNWMEG/EU	AE260RNWM*G/EU			
1	Space heating Inlet	ø28	ø28			
2	Space heating Outlet	ø28	ø28			
3	DHW Inlet	ø22	ø22			
4	Secondary water return	N/A	ø22			
5	DHW Outlet	ø22	ø22			
6	Heat Pump In	ø28	ø28			
7	Heat Pump Out	ø28	ø28			
8	T/P v/v	Female PT1/2"	Female PT1/2"			
9	Drain Holes	(Option) Connect with the	provided drain plug			

Mono Outdoor



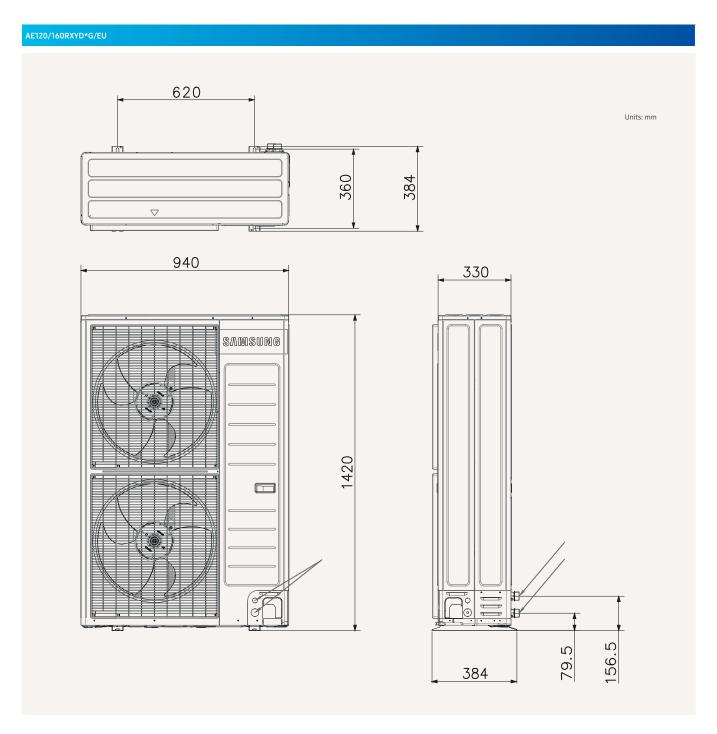
NO	Name	Description			
1	Water Pipe (Out)	BSPP male 1"			
2	Water Pipe (In)	BSPP male 1"			
3	Power & Communication Wiring Conduit Holes				

Mono Outdoor



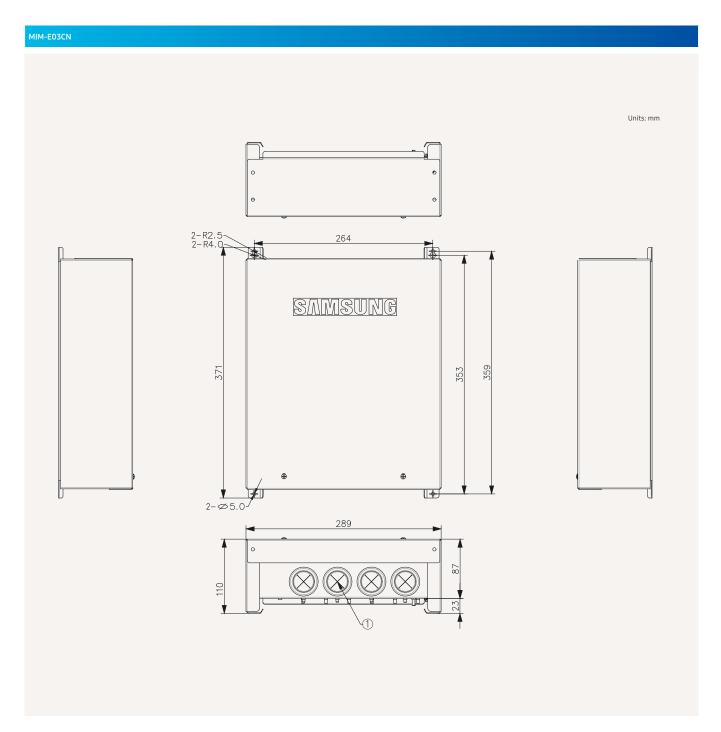
NO	Name	Description
1	Water Pipe (Out)	BSPP male 1"
2	Water Pipe (In)	BSPP male 1"
3	Power & Communicatio	n Wiring Conduit Holes

Mono Outdoor

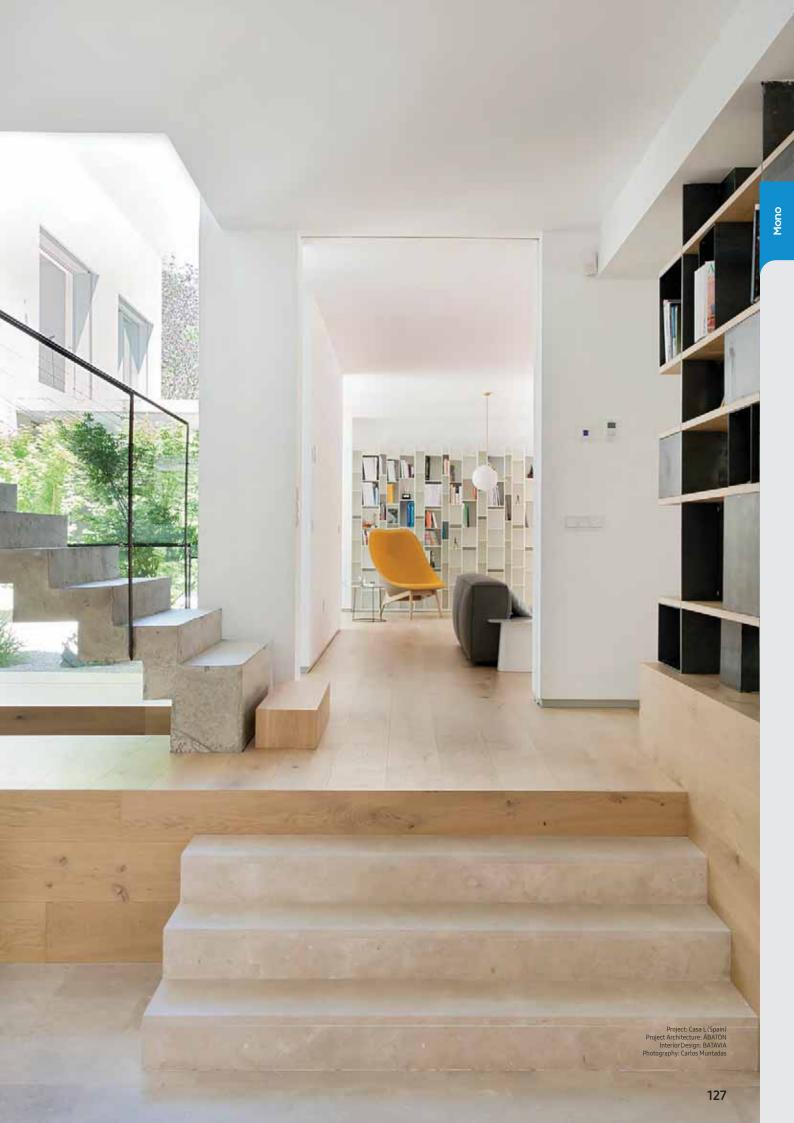


NO	Name	Description			
1	Water Pipe (Out)	BSPP male 1"			
2	Water Pipe (In)	BSPP male 1"			
3	Power & Communication Wiring Conduit Holes				

Mono Control Kit



NO	Name
1	Conduit Holes for Wiring (Rubber)







ClimateHub Split (R32)

- Integrated solution for heating and domestic hot water.
 4-step quiet operation mode (down to 35 db(A)*).
 Compact unit size with large water tank (200 L & 260 L).
 Backup heater is included to ensure a minimum water temperature.









		And the same of th	-		1	1	
		Indoor U	nit		AE200RNWSEG/EU	AE200RNWSEG/EU	AE200RNWSEG/EU
		Outdoor	Unit		AE040RXEDEG/EU	AE060RXEDEG/EU	AE090RXEDEG/EU
		Control			MWR-WW10N	MWR-WW10N	MWR-WW10N
		Control	ter		PIWE WITOK	PINK WITOK	PINK WWICH
ystem	Operation		7/W351 / A7/W552	kW	4.4/3.9	6.0/5.2	9.0/8.0
		Capacity Cooling A3	5/W18 ¹	kW	5.0	6.5	8.7
		Power Input Heating A	7/W351 / A7/W552	kW	0.85/1.32	1.22/1.81	1.87/2.73
		(Nominal) Cooling A3	5/W18¹	kW	1.09	1.47	2.11
		COP (Nominal Heating) A7	/W35¹ / A7/W55²	W/W	5.20/2.95	4.92/2.87	4.81/2.93
		EER (Nominal Cooling) A3	5/W18¹	W/W	4.59	4.42	4.12
		SCOP LWT 35°C/55°C		W/W	4.58/3.25	4.58/3.31	4.45/3.24
		Seasonal space heating enr.efficiency ηs LWT 35°C	/ 55°C	ETA%	180/127	180/129	175/127
		Average Seasonal space he eff. class ** LWT 35°C/ 55°	eating C	-	A*** / A**	A*** / A**	A*** / A**
		Current	MCA	Α	16.00	16.00	22.00
			MFA	Α	20.00	20.00	27.50
		Leaving Water	Heating	°C	15~65	15~65	15~65
		Temperature ³	Cooling	°C	5~25	5~25	5~25
	Functions	Smart Grid Ready / PV Ena	bled	-	•	•	•
		4-Step Quiet Mode		-	•	•	•
		2-zone Control		-	•	•	•
nk Integrated	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
dro Unit	Water Tank Volu	Water Tank Volume			200	200	200
	Declared Load Profile			L/XL	L	L	L
	Average water heating efficiency ŋwh ETA%				120	120	119
	Average Energy Efficiency Class				A+	A+	A+
	Heater Back-up heater Capacity Default (Option)			kW	2 (4/6)	2 (4/6)	2 (4/6)
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	26	26	26
			Cooling Std	dB(A)	26	26	26
		Sound Power	Heating Std	dB(A)	40	40	40
	Piping	Water pipe (Space Heating		Φ, mm	28/28	28/28	28/28
		Water pipe (DHW)	Inlet/Outlet	Φ, mm	22/22	22/22	22/22
	Dimensions	Net Weight		kg	136	136	136
	5 mensions	Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
ıtdoor Unit	Power Supply	Net Dimensions (WATAD)		Φ, V, Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz
itador omit	Compressor	Туре		ψ, v, 112	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
		Capacity		kW	· · · · · · · · · · · · · · · · · · ·		
	Base Heater Sound	Sound Pressure ⁴	Hosting Ctd	dB(A)	-	- 47	0.15
	Sound	Sound Pressure	Heating Std		44	47	
			Cooling Std Night Mode	dB(A)	46	47	49
						35	35
	Dimor-i	Sound Power	Heating Std	dB(A)	58	60	64
	Dimensions	Net Weight		kg	46.5	46.5	73.0
		Net Dimensions (WxHxD)		mm	880 x 638 x 310	880 x 638 x 310	940 x 998 x 330
		Defeirement	T				
		Refrigerant	Туре	-		2 (Fluorinated greenhouse gas, GWP=67	
		Refrigerant Factory Charging	Туре	tCO₂e	0.81	0.81	0.95
		Factory Charging		tCO₂e kg	0.81 1.2	0.81	0.95 1.4
	Piping		Liquid Pipe	tCO₂e kg Φ, mm (inch)	0.81 1.2 6.35 (1/4")	0.81 1.2 6.35 (1/4*)	0.95 1.4 6.35 (1/4")
	Piping	Factory Charging Piping Connections	Liquid Pipe Gas Pipe	tCO₂e kg	0.81 1.2 6.35 (1/4") 15.88 (5/8")	0.81 1.2 6.35 (1/4*) 15.88 (5/8*)	0.95 1.4
	Piping	Factory Charging Piping Connections Piping length (ODU-IDU) ⁵	Liquid Pipe Gas Pipe Max.[Equiv.]	tCO₂e kg Φ, mm (inch)	0.81 1.2 6.35 (1/4")	0.81 1.2 6.35 (1/4*)	0.95 1.4 6.35 (1/4")
		Factory Charging Piping Connections	Liquid Pipe Gas Pipe Max.[Equiv.]	tCO ₂ e kg Φ, mm (inch) Φ, mm (inch) m	0.81 1.2 6.35 (1/4") 15.88 (5/8")	0.81 1.2 6.35 (1/4*) 15.88 (5/8*)	0.95 1.4 6.35 (1/4") 15.88 (5/8")
	Piping Operation	Factory Charging Piping Connections Piping length (ODU-IDU) ⁵	Liquid Pipe Gas Pipe Max.[Equiv.]	tCO ₂ e kg Φ, mm (inch) Φ, mm (inch)	0.81 1.2 6.35 (1/4") 15.88 (5/8") 30.00	0.81 1.2 6.35 (1/4*) 15.88 (5/8*) 30.00	0.95 1.4 6.35 (1/4") 15.88 (5/8") 35.00
		Piping Connections Piping length (ODU-IDU) ⁵ Level difference (IDU-IDU)	Liquid Pipe Gas Pipe Max.[Equiv.] 5 Max.	tCO ₂ e kg Φ, mm (inch) Φ, mm (inch) m	0.81 1.2 6.35 (1/4") 15.88 (5/8") 30.00 20.00	0.81 1.2 6.35 (1/4") 15.88 (5/8") 30.00 20.00	0.95 1.4 6.35 (1/4") 15.88 (5/8") 35.00 20.00

Accessories











Touch Controller	Touch Controller	DMS2.5	Wi-Fi Kit	External Room Sensor	Backup Heater (4/6kW)
MWR-WW10*N	MCM-A300N	MIM-D01AN	MIM-H04EN	MRW-TA	MHC-*00FE









100000000000000000000000000000000000000	SQUITE SATER		
AE260RNWSEG/EU	AE260RNWSEG/EU	AE260RNWSEG/EU	AE260RNWSGG/EU
AE040RXEDEG/EU	AE060RXEDEG/EU	AE090RXEDEG/EU	AE090RXEDGG/EU
MWR-WW10N	MWR-WW10N	MWR-WW10N	MWR-WW10N
4.4/3.9	6.0/5.2	9.0/8.0	9.0/8.0
5.0	6.5	8.7	8.7
0.85/1.32	1.22/1.81	1.87/2.73	1.87/2.73
1.09	1,47	2.11	2.11
5.20/2.95	4.92/2.87	4.81/2.93	4.81/2.93
4.59	4.42	4.12	4.12
4.58/3.25	4.58/3.31	4.45/3.24	4.45/3.24
180/127	180/129	175/127	175/127
A+++ / A++	A*** / A**	A*** / A**	A*** / A**
16.00	16.00	22.00	10.00
20.00	20.00	27.50	16.10
15~65	15~65	15~65	15~65
5~25	5~25	5~25	5~25
•	•	•	•
•	•	•	•
•	•	•	•
1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	3Ф, 4, 380~415 V, 50 H:
260	260	260	260
XL	XL	XL	XL
123	123	123	123
A+	A+	A+	A+
2 (4/6)	2 (4/6)	2 (4/6)	6
26	26	26	26
26	26	26	26
40	40	40	40
28/28	28/28	28/28	28/28
22/22	22/22	22/22	22/22
146.0	146.0	146.0	146.0
595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700
1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	1Ф, 220~240 V, 50 Hz	3Ф, 380~415 V, 50 Hz
BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
-		0.15	0.15
44	47	49	49
46	47	49	49
<35	35	35	35
58	60	64	64
46.5	46.5	73.0	72.0
880 x 638 x 310	880 x 638 x 310	940 x 998 x 330	940 x 998 x 330
	R32 (Fluorinated green		
0.81	0.81	0.95	0.95
1.2	1.2	1.4	1.4
6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
30.00	30.00	35.00	35.00
20.00	20.00	20.00	20.00
-25~35	-25~35	-25~35	-25~35
10~46	10~46	10~46	10~46
	-25~43	-25~43	-25~43





- *35dB(A) is only applicable for 6kW and 9kW outdoor units down to +4°C stated in 3 m distance in an anechoic environment
- **A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- $^365^{\circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.
- $^5\,\mbox{ODU}$: Outdoor Unit, IDU : Indoor Unit

Split with Third Party DHW Tank



- Connectable with R32 Split Outdoor Unit in combination of third party Tank.
- Compatible with thermostats, solar panels and back-up boilers. Intuitive, colour screen touch controller in multiple languages.
- Energy monitoring through touch controller.
 PV and Smart Grid ready.

- 2-zone Control, suitable for floor heating and radiators.
- SmartThings compatible with optional Wi-Fi kit.
 Backup heater is included to ensure a minimum water temperature.









			Indoor Ur			AE090RNYDEG/EU	AE090RNYDEG/EU	AE090RNYDEG/EU
			Outdoor U	nit		AE040RXEDEG/EU	AE060RXEDEG/EU	AE090RXEDEG/EU
ystem	Operation	Nominal	Heating A7/W3	51 / A7/W552	kW	4.4/3.9	6.0/5.2	9.0/8.0
		Capacity	Cooling A35/W		kW	5.0	6.5	8.7
		Power Input	Heating A7/W3	51 / A7/W552	kW	0.85/1.32	1.22/1.81	1.87/2.73
		(Nominal)	Cooling A35/W		kW	1.09	1.47	2.11
		COP (Nominal I	Heating) A7/W351		W/W	5.20/2.95	4.92/2.87	4.81/2.93
			Cooling) A35/W18	1	W/W	4.59	4.42	4.12
		Seasonal space enr.efficiency r	heating ps LWT 35°C/ 55°C		ETA%	180/127	180/129	175/127
		Seasonal Space Eff. Class LWT 3	Heating 55°C/ 55°C		-	A*** // A**	A***	A*** // A**
		Current		MCA	Α	16.00	16.00	22.00
				MFA	Α	20.00	20.00	27.50
		Leaving Water	Temperature ²	Heating	°C	15~65	15~65	15~65
				Cooling	°C	5~25	5~25	5~25
	Functions	Smart Grid Rea	idy / PV Enabled		-	•	•	•
		4-Step Quiet M	lode		-	•	•	•
		2-zone Control			-	•	•	•
all-Mounted	Power Supply	PowerSupply		Ф, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	
Hydro Unit	Heater	Back-up heate	r Capacity	Default (Option)	kW	4	4	4
	Sound	Sound Pressure ³	e ³	Heating Std	dB(A)	26	26	26
				Cooling Std	dB(A)	26	26	26
		Sound Power		Heating Std	dB(A)	40	40	40
	Dimensions	Net Weight			kg	45,0	45,0	45,0
		Net Dimension	s (WxHxD)		mm	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315
	Piping	Water pipe		Inlet/Outlet	Φ, inch	1+1/4"	1+1/4"	1+1/4"
utdoor unit	Compressor	Туре			-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
	Base Heater	Capacity			kW	-	-	0.15
	Sound	Sound Sound Pressure	23	Heating Std	dB(A)	44	47	49
				Cooling Std	dB(A)	46	47	49
		Sound Power		Heating Std	dB(A)	58	60	64
	Dimensions	Net Weight			kg	46.5	46.5	73.0
		Net Dimensions (WxHx			mm	880 x 638 x 310	880 x 638 x 310	940 x 998 x 330
	Refrigerant	Туре				R32 (Fluorinated greenhouse gas, GWP=675)		
		Factory Chargi	ng		tCO₂e	0.81	0.81	0.95
					kg	1.2	1.2	1.4
	Piping	Piping Connect	ions	Liquid Pipe	Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
				Gas Pipe	Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
		Piping length (ODU-IDU)⁴	Max.[Equiv.]	m	30	30	35
		Level difference	e (IDU-IDU) ⁴	Max.	m	20	20	20
		Chargeless Ler			Φ, mm	15	15	15
	Operation	Ambient Temp		Heating	°C	-25~35	-25~35	-25~35
		·		Cooling	°C	10~46	10~46	10~46
				DHW	°C	-25~43	-25~43	-25~43

Accessories Touch Controller (included) Touch Controller DMS2.5 Wi-Fi Kit External Room Sensor MWR-WW10N MCM-A300N MIM-D01AN MIM-H04EN MRW-TA



AE090RNYDGG/EU
AE090RXEDGG/EU

9.0/8.0	
8.7	
1.87/2.73	
2.11	
4.81/2.93	
4.12	

175/127
A*** // A**
10.00
16.10
15~65
5~25
•
•
•
3Ф, 2, 380~415 V, 50 Hz
6
26
26
40
46.5
510 x 850 x 315
1+1/4"
BLDC Twin Rotary
0.15
49
49
64
72.0
940 x 998 x 330
R32 (Fluorinated greenhouse gas,
GWP=675)
0.95

6.35 (1/4")

15.88 (5/8") 35 20 15 -25~35

> 10~46 -25~43





**A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++

¹A2W Condition: (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].

²A2W Condition: (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].

³Sound 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.

⁴ODU: Outdoor Unit, IDU: Indoor Unit

Split with Third Party DHW Tank (R410A)

- Connectable with R410A Split Outdoor Unit in combination with a third party Tank.
 Compatible with room thermostats, solar pumps, 2- or 3-way valves and back-up boilers.









		-					
		Indoor Uni	t		AE160ANYDEH/EU	AE160ANYDGH/EU	AE160ANYDEH/EU
	OutdoorUnit				AE120AXEDEH/EU	AE120AXEDGH/EU	AE160AXEDEH/EU
System	Operation	Nominal Capacity	Heating A7/W35 ¹ / A7/W55 ²	kW	12.00/11.00	12.00/11.00	16.00/14.60
			Cooling A35/W18 ¹	kW	12.00	12.00	15.00
		Power Input (Nominal)	Heating A7/W35	kW	2.59	2.59	3.76
		•	Cooling A35/W18 ¹	kW	3.10	3.10	4.14
		COP (Nominal Heating) A7/W351/		W/W	4.63/ 2.89	4.63/ 2.89	4.26/ 2.74
		EER (Nominal Cooling) A35/W18 ¹		W/W	3.87	3.87	3.62
		SCOP LWT 35°C/ 55°C		W/W	4.59/ 3.12	4.59/ 3.12	4.46/ 3.09
		Seasonal space heating enr.efficiency ηs LWT 35°C/55°C		ETA%	181/122	181/122	175/121
		Seasonal Space Heating Eff. Class LWT 35°C/55°C		-	A*** / A*	A***	A*** / A*
		Water flow rate	Low 35°C temp	l/min	35.0	35.0	46.0
		Current	MCA	Α	28	10	32
			MFA	Α	35.0	16.1	40.0
		Leaving Water Temperature	Heating	°C	15~55	15~55	15~55
			Cooling	°C	5~25	5~25	5~25
	Functions	Smart Grid Ready/PV Enabled		-	•	•	•
		3-Step Quiet Mode		-	•	•	•
		2-zone Control		-	•	•	•
Vall-Mounted	Power Supply			Ф, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	3Ф, 2, 380~415 V, 50 Hz	1Ф, 2, 220~240 V, 50 H
lydro Unit	Heater	Capacity		kW	6	6	6
	Sound		Heating Std	dB(A)	30	30	30
			Cooling Std	dB(A)	30	30	30
		Sound Power	Heating Std	dB(A)	44	44	44
	Piping	Water pipe	Inlet/Outlet	Φ, inch	1+1/4"	1+1/4"	1+1/4"
	Dimensions	Net Weight		kg	45.0	46.5	45.0
		Net Dimensions (WxHxD)		mm	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315
Outdoor unit	Compressor	Туре		-	BLDC Twin Rotary	BLDC Twin Rotary	BLDC Twin Rotary
	Base Heater	Capacity		kW	0.15	0.15	0.15
	Sound	Sound Pressure ³	Heating Std	dB(A)	50	50	52
			Cooling Std	dB(A)	50	50	54
		Sound Power	Heating Std	dB(A)	64	64	66
	Dimensions	Net Weight		kg	100.5	109.0	100.5
		Net Dimensions (WxHxD)		mm	940 x 1,420 x 330	940 x 1,420 x 330	940 x 1,420 x 330
	Refrigerant	frigerant Type			R410A (Fluorinated greenhouse gas, GWP=2,088)		
		Factory Charging		tCO ₂ e	6.22	6.22	6.22
	Piping	Piping Connections	Liquid Pipe	kg Φ, mm	2.98 9.52 (3/8")	2.98 9.52 (3/8")	2.98 9.52 (3/8")
			Gas Pipe	(inch) Φ, mm	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
		Dining length (ODII IDII)	May [Equiv]	(inch)	50	50	50
		Piping length (ODU-IDU)* Level difference (IDU-IDU)*	Max.[Equiv.]	m m	30	30	30
			Max.				
	0	Chargeless Length Ambient Temperature	Heating	Φ, mm °C	15 -25~35	-25~35	-25~35
		Ampient remperature	Heating		-23-33	-20~33	-25~35
	Operation		Cooling	°C	10~46	10~46	10~46

Touch Controller (included) Touch Controller DMS2.5 MWR-WW10N MCM-A300N MIM-D01AN MIM-H04EN MRW-TA



AE160AXEDGH/EU

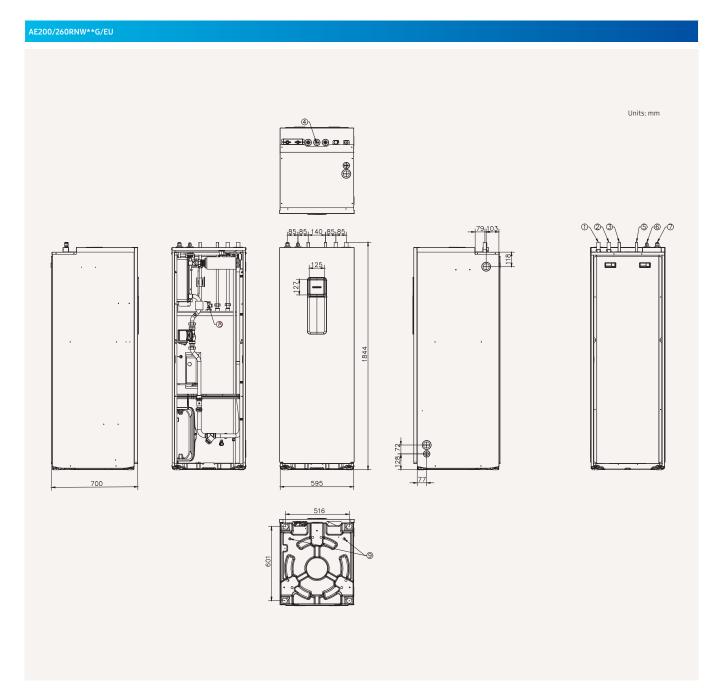
16.00/14.60
15.00
3.76
4.14
4.26/ 2.74
3.62
4.46/ 3.09
175/121
A*** // A*
46.0
12
16.1
15~55
5~25
•
•
•
3Ф, 2, 380~415 V, 50 Hz
6
30
30
44
1+1/4"
46.5
510 x 850 x 315
BLDC Twin Rotary
0.15
52
54
66
109.0
940 x 1,420 x 330
R410A (Fluorinated greenhouse gas, GWP=2,088)
6.22
2.98
9.52 (3/8")
15.88 (5/8")
50
30
15
-25~35
10~46

-25~43



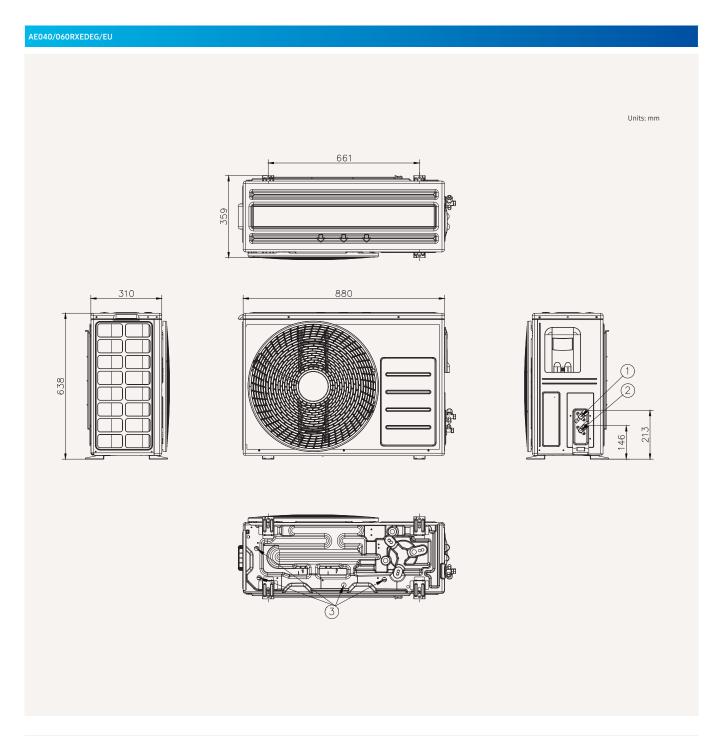
- ¹ A2W Condition: (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- 2 A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- 3 Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.
- 4 ODU: Outdoor Unit, IDU: Indoor Unit

Split Tank Integrated Hydro Unit



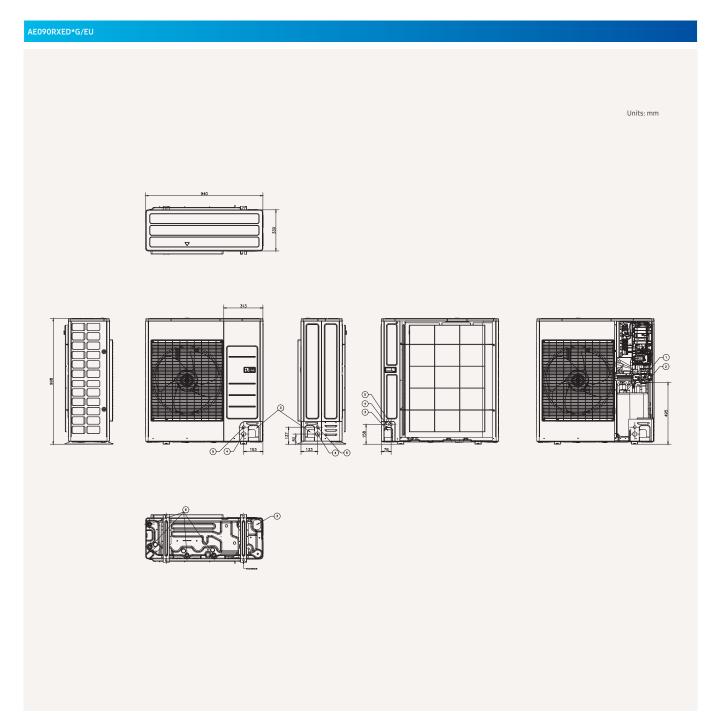
NO	Name	Description		
		AE200RNWSEG/EU	AE260RNWS*G/EU	
1	Space heating Inlet	Ø28	Ø28	
2	Space heating Outlet	Ø28	Ø28	
3	DHW Inlet	Ø22	Ø22	
4	Secondary water return	N/A	Ø22	
5	DHW Outlet	Ø22	Ø22	
6	Refrigerant liquid pipe	Ø6.35	Ø6.35	
7	Refrigerant gas pipe	Ø15.88	Ø15.88	
8	T/P v/v	Female PT1/2"	Female PT1/2"	
9	Drain Holes	(Option) Connect with the provided drain plug		

Split Outdoor



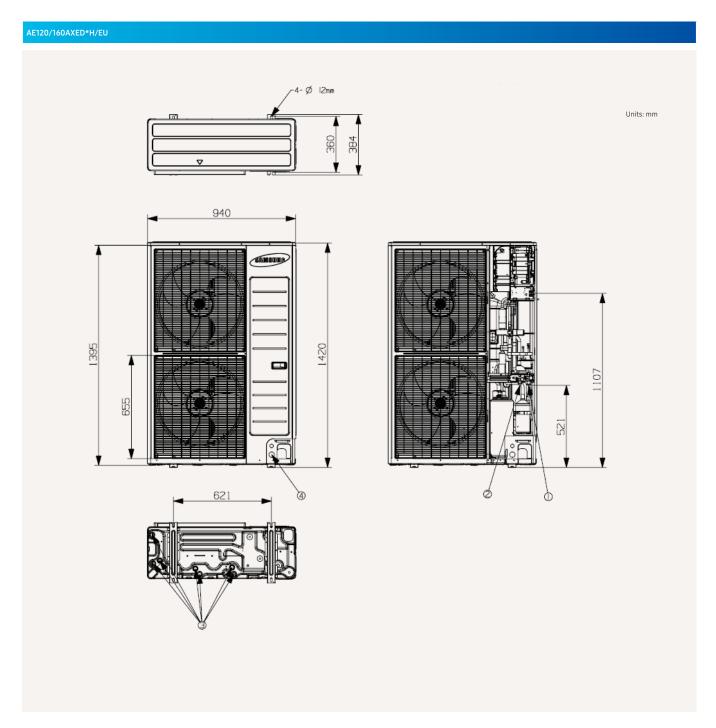
NO	Name	Description
1	Refrigerant liquid pipe	Ф6.35 (1/4")
2	Refrigerant gas pipe	Ф15.88 (5/8")
3	Drain holes	Connect with the provided drain plug.

Split Outdoor



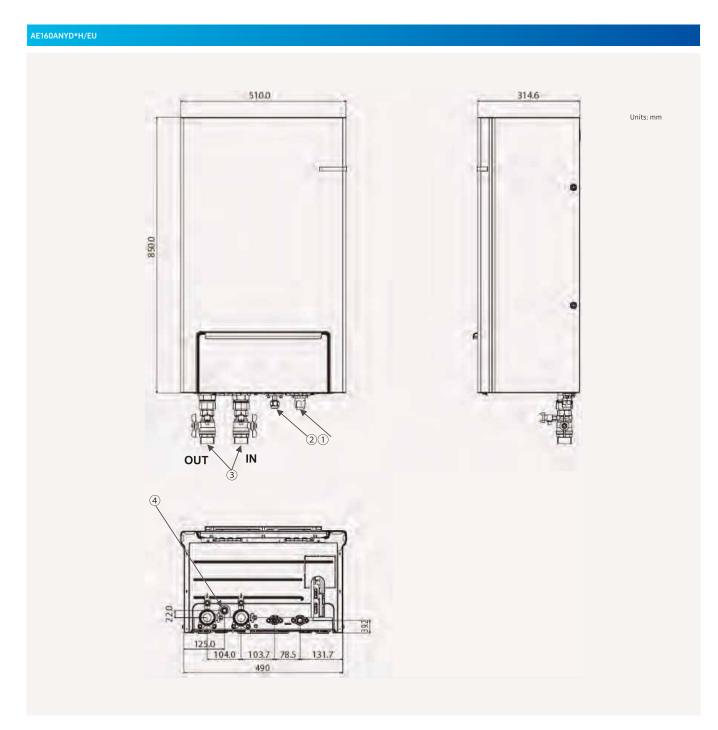
NO	Name	Description
1	Refrigerant gas pipe	Ф6.35 (1/4")
2	Refrigerant liquid pipe	Ф15.88 (5/8")
3	Piping intake knockout hole	Front / Side / Rear / Bottom
4	Power wiring conduit	Front / Side / Rear , Φ34 [1-3/8"]
5	Communication wiring conduit	Front / Side / Rear , Φ22 [7/8"]
6	Drain Hole	Connect with the provided drain plug

Split Outdoor



NO	Name	Description
1	Refrigerant gas pipe	ф 15.88
2	Refrigerant liquid pipe	ф 9.52
3	Drain Hole	Connect with the provided drain plug
4	Power wiring conduit	N/A

Split Wall-Mounted Hydro Unit



NO	Name	Description
1	Refrigerant gas pipe	Ø15.88
2	Refrigerant liquid pipe	Ø9.52
3	Water pipe inlet/outlet	-
4	Drain Hose Connector	-







ClimateHub TDM Plus (R410A)

- 'All in one' Air-to-Water and Air-to-Air system.
 PV and Smart Grid ready.
 Compact unit size with large water tank (200L & 260L).
 2-zone control, suitable for floor heating and radiators.
 Intuitive, colour screen touch controller in multiple languages.
- SCOP rating of A+++**.

- Energy monitoring through touch controller.

 SmartThings compatible with optional Wi-Fi kit.

 Smooth servicing through the front-mounted service window.
- Backup heater is included to ensure a minimum water temperature.

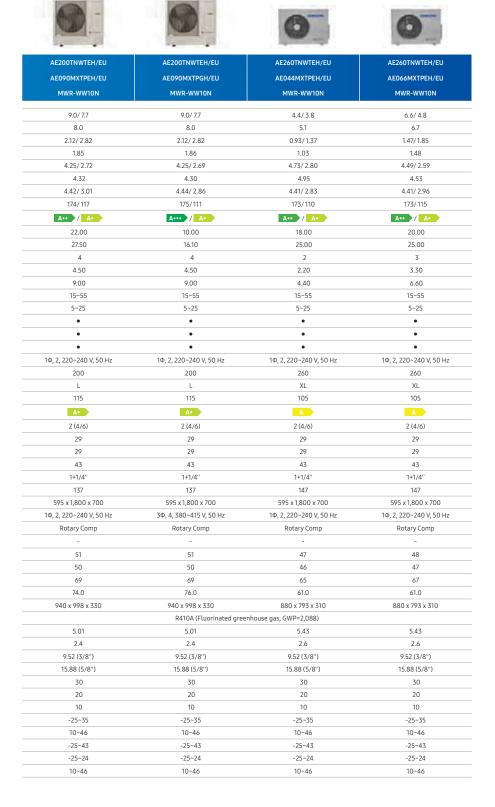






	Indoor Unit Outdoor Unit Controller			AE200TNWTEH/EU	AE200TNWTEH/EU	
				AE044MXTPEH/EU	AE066MXTPEH/EU	
					MWR-WW10N	
			controller		MWR-WW10N	MWR-WWIUN
ystem	Operation	Nominal Heating A7/W	351 / A7/W552	kW	4.4/ 3.8	6.6/ 4.8
		Capacity Cooling A35/V	/181	kW	5.1	6.7
		Power Input Heating A7/W	351 / A7/W552	kW	0.93/1.37	1.47/ 1.85
		(Nominal) Cooling A35/V		kW	1.03	1.48
		COP (Nominal Heating) A7/W3	51 / A7/W552	W/W	4.73/ 2.80	4.49/ 2.59
		EER (Nominal Cooling) A35/W18¹		W/W	4.95	4.53
		SCOP LWT 35°C/ 55°C		W/W	4.41/ 2.83	4.41/ 2.96
		Seasonal space heating enr.efficiency ηs LWT 35°C/ 55°C		ETA%	173/110	173/115
		Average Seasonal space heating eff. class ** LWT 35°C/ 55°C		_	A++ // A+	A++ / A+
			MCA	A	18.00	20.00
		Current				
		Manimum all Lt. 1811	MFA	Α	25.00	25.00
		Maximum allowable IDU ⁵ connections (Hydro A2W unit	Max. number of IDU ⁵	EA	2	3 770
		not included)	Total capacity Min. (Cooling)	kW	2.20	3.30
			Total capacity Min. (Cooling)	kW	4.40	6.60
		Leaving Water Temperature ³	Heating	°C	15~55	15~55
			Cooling	°C	5~25	5~25
	Functions	Smart Grid Ready / PV Enabled		-	•	•
		3-Step Quiet Mode		-	•	•
		2-zone Control		-	•	•
ank Integrated	Power Supply			Ф, #, V, Hz	1ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
ydro Unit	Water Tank Volu	me		litres	200	200
	Declared Load Profile		L/XL	L	L	
	Average water h	eating efficiency ŋwh		ETA%	115	115
	Average Energy	Efficiency Class			A+	A+
	Heater	Back-up heater Capacity	Default (Option)	kW	2 (4/6)	2 (4/6)
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	29	29
			Cooling Std	dB(A)	29	29
		Sound Power	Heating Std	dB(A)	43	43
	Piping	Water pipe (Space Heating)	Inlet/Outlet	Φ, inch	1+1/4"	1+1/4"
	Dimensions	Net Weight		kg	137	137
		Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700
Outdoor Unit	Power Supply		Ф, V, Hz	1ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	
	Compressor	Туре		-	Rotary Comp	Rotary Comp
	Base Heater	Capacity		kW	-	-
	Sound	Sound	Heating Std	dB(A)	47	48
	Dimensions	Pressure ⁴	Cooling Std	dB(A)	46	48
		Sound Power	Heating Std	dB(A)	65	67
	Difficusions	Net Weight		kg		61.0
	Refrigerant Type	Net Dimensions (WxHxD)		mm	880 x 793 x 310	880 x 793 x 310
				Туре	R410A (Fluorinated green	
		Factory Charging		tCO₂e	5.43	5.43
				kg	2.6	2.6
	Piping	Piping Connections	Liquid Pipe	Φ, mm (inch)	9.52 (3/8")	9.52 (3/8")
			Gas Pipe	Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")
		Piping length (ODU-IDU) ⁵	Max.[Equiv.]	m	30	30
		Level difference (IDU-IDU) ⁵	Max.	m	20	20
		Chargeless length		m	10	10
	Operation	Ambient Temperature A2W	Heating	°C	-25~35	-25~35
			Cooling	°C	10~46	10~46
			DHW	°C	-25~43	-25~43
		Ambient Temperature A2A	Heating	°C	-25~24	-25~24

Accessories Touch Controller Touch Controller DMS2.5 Wi-Fi Kit External Room Sensor Backup Heater (4/6kW) MWR-WW10*N MCM-A300N MIM-D01AN MIM-H04EN MRW-TA MHC-*00FE







*35dB(A) is only applicable for 6kW and 9kW outdoor units down to +4°C stated in 3 m distance in an anechoic environment.

***A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++

¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air35°C[DB].

²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].

 3 65°C down to +10°C (max. 60°C down to -5°C)

⁴Sound 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.

 $^5\,\mbox{ODU}$: Outdoor Unit, IDU : Indoor Unit

ClimateHub TDM Plus (R410A) (Continued)







		1	ndoor Unit		AE260TNWTEH/EU	AE260TNWTEH/EU
		0	utdoor Unit		AE090MXTPEH/EU	AE120MXTPEH/EU
			Controller		MWR-WW10N	MWR-WW10N
			Controller		MWK-WW ION	MWK-WWION
/stem	Operation	Nominal Heating A7/W	351 / A7/W552	kW	9.0/ 7.7	12.0/10.7
		Capacity Cooling A35/V	V18¹	kW	8.0	12.0
		Power Input Heating A7/W	351 / A7/W552	kW	2.12/ 2.82	2.72/ 3.91
	(Nominal) Cooling A35/V	V18¹	kW	1.85	2.90	
		COP (Nominal Heating) A7/W3	5 ¹ / A7/W55 ²	W/W	4.25/ 2.72	4.41/ 2.74
		EER (Nominal Cooling) A35/W	18¹	W/W	4.32	4.14
		SCOP LWT 35°C/55°C		W/W	4.42/ 3.01	4.65/ 2.92
		Seasonal space heating enr.ef	ficiency ηs LWT 35°C/ 55°C	ETA%	174/117	183/114
		Average Seasonal space heati	ng eff. class ** LWT 35°C/ 55°C	-	A++ / A+	A+++ / A+
		Current	MCA	Α	22.00	28.00
			MFA	Α	27.50	35.00
		Maximum allowable IDU ⁵	Max. number of IDU ⁵	EA	4	5
		connections (Hydro A2Wunit	Total capacity Min. (Cooling)	kW	4.50	6.00
		not included)	Total capacity Min. (Cooling)	kW	9.00	12.10
		Leaving Water Temperature ³	Heating	°C	15~55	15~55
Functions Smart Grid Ready / PV Enab 3-Step Quiet Mode		Cooling	°C	5~25	5~25	
		d	-	•	•	
		3-Step Quiet Mode		-	•	•
		2-zone Control		-	•	•
ink Integrated	Power Supply			Ф, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
/dro Unit	Water Tank Volu	ime		litres	260	260
Declared Load Profile Average water heating efficiency ŋwh		Profile		L/XL	XL	XL
		neating efficiency ŋwh		ETA%	105	95
	Average Energy	Efficiency Class		-	A	A
	Heater	Back-up heater Capacity	Default (Option)	kW	2 (4/6)	2 (4/6)
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	29	29
			Cooling Std	dB(A)	29	29
		Sound Power	Heating Std	dB(A)	43	47
	Piping	Water pipe (Space Heating)	Inlet/Outlet	Φ, inch	1+1/4"	1+1/4"
	Dimensions	Net Weight		kg	147	147
		Net Dimensions (WxHxD)		mm	595 x 1,800 x 700	595 x 1,800 x 700
utdoor Unit	Power Supply			Ф, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
	Compressor	Туре		-	Rotary Comp	Rotary Comp
	Base Heater	Capacity		kW	-	-
	Sound	Sound	Heating Std	dB(A)	51	52
		Pressure ⁴	Cooling Std	dB(A)	50	51
		Sound Power	Heating Std	dB(A)	69	70
	Dimensions	Net Weight		kg	74.0	107.0
		Net Dimensions (WxHxD)		mm	940 x 998 x 330	940 x 1,420 x 330
	Refrigerant	Туре		Туре	R410A (Fluorinated green	
		Factory Charging		tCO₂e	5.01	7.31
				kg	2.4	3.5
	Piping	Piping Connections	Liquid Pipe	Φ, mm (inch)	9.52 (3/8")	9.52 (3/8")
		Gas Pipe	Φ, mm (inch)	15.88 (5/8")	15.88 (5/8'')	
		Piping length (ODU-IDU) ⁵	Max.[Equiv.]	m	30	70
		Level difference (IDU-IDU) ⁵	Max.	m	20	30
		Chargeless length		m	10	10
	Operation	Ambient Temperature A2W	Heating	°C	-25~35	-25~35
			Cooling	°C	10~46	10~46
			DHW	°C	-25~43	-25~43
		Ambient Temperature A2A	Heating	°C	-25~24	-25~24
			Cooling	°C	10~46	10~46

Accessories











Touch Controller	Touch Controller	DMS2.5	Wi-Fi Kit	External Room Sensor	Backup Heater (4/6kW)
MWR-WW10*N	MCM-A300N	MIM-D01AN	MIM-H04EN	MRW-TA	MHC-*00FE









Annual Co.		Annual Co.	American, and
AE260TNWTEH/EU	AE260TNWTEH/EU	AE260TNWTEH/EU	AE260TNWTEH/EU
AE160MXTPEH/EU	AE090MXTPGH/EU	AE120MXTPGH/EU	AE160MXTPGH/EU
MWR-WW10N		MWR-WW10N	
MWK-WWION	MWR-WW10N	MWK-WWION	MWR-WW10N
16.0/14.6	9.0/7.7	12.0/10.7	16.0/14.6
14.5	8.0	12.0	14.5
3.95/ 5.32	2.12/ 2.82	2.72/ 3.91	3.95/ 5.32
3.84	1.86	2.90	3.84
4.05/2.74	4.25/2.69	4.41/ 2.74	4.05/2.74
3.78	4.30	4.14	3.78
4.63/3.06	4.44/2.86	4.65/2.92	4.63/3.06
182/119	175/111	183/114	182/119
A+++ / A+	A+++ / A+	A+++ / A+	A+++ / A+
32.00	10.00	10.00	12.00
40.00	16.10	16.10	16.10
7	4	5	7
7.70	4.50	6.00	7.70
15.40	9.00	12.10	15.40
15~55	15~55	15~55	15~55
5~25	5~25	5~25	5~25
•	•	•	•
•	•	•	•
•	•	•	•
1Ф, 2, 220~240 V, 50 Hz			
260	260	260	260
XL	XL	XL	XL
95	105	95	95
A	A	A	A
2 (4/6)	2 (4/6)	2 (4/6)	2 (4/6)
29	29	29	29
29	29	29	29
47	43	47	47
1+1/4"	1+1/4"	1+1/4"	1+1/4"
147	147	147	147
595 x 1,800 x 700			
1Ф, 2, 220~240 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz
Rotary Comp	Rotary Comp	Rotary Comp	Rotary Comp -
55	51	52	55
54	50	51	54
73	69	70	73
107.0	76.0	107.0	107.0
940 x 1,420 x 330	940 x 998 x 330	940 x 1,420 x 330	940 x 1,420 x 330
	R410A (Fluorinated gree		,
7.31	5.01	7.31	7.31
3.5	2.4	3.5	3.5
9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
70	30	70	70
30	20	30	30
10	10	10	10
-25~35	-25~35	-25~35	-25~35
10~46	10~46	10~46	10~46
-25~43	-25~43	-25~43	-25~43
-25~24	-25~24	-25~24	-25~24
-23-24	25 21		





- *35dB(A) is only applicable for 6kW and 9kW outdoor units down to +4°C stated in 3 m distance in an anechoic environment
- **A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ¹A2W Condition : (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition : (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- $^365^{\circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.
- $^5\,\mbox{ODU}$: Outdoor Unit, IDU : Indoor Unit

TDM Plus with Third party tank connection (R410A)

- 'All in one' air-to-water and air-to-air system
 Connectable with R410A Split ODU in combination of third party Tank
 Compatible with room thermostats, solar pumps, 2- or 3-way valves and back-up boilers
- PV Enabled and Smart Grid ready.



- 2-zone Control, suitable for floor heating and radiators.
- 2-zone Control, suitable for floor heating and radiators.
 Backup heater is recommended to ensure a minimum water temperature.









						-		
		Indoor Unit			AE090BNYDEH/EU	AE090BNYDEH/EU	AE090BNYDEH/EU	AE090BNYDEH/EU
		Outdoor Unit			AE044MXTPEH/EU	AE066MXTPEH/EU	AE090MXTPEH/EU	AE090MXTPGH/EU
System	Operation	Nominal Heating A7/W	35 ¹ / A7/W55 ²	kW	4.4/ 3.8	6.6/ 4.8	9.0/ 7.7	9.0/7.7
		Capacity Cooling A35/V	V18¹	kW	5.1	6.7	8.0	8.0
	Power Input Heating A7/W	35¹ / A7/W55²	kW	0.93/1.37	1.47/ 1.85	2.12/ 2.82	2.12/ 2.82	
		(Nominal) Cooling A35/V	V18¹	kW	1.03	1.48	1.85	1.86
		COP (Nominal Heating) A7/W3	i5¹	W/W	4.73/2.80	4.49/2.59	4.25/2.72	4.25/2.69
		EER (Nominal Cooling) A35/W	181	W/W	4.95	4.53	4.32	4.30
		SCOP LWT 35°C/ 55°C		W/W	4.41/ 2.83	4.41/2.96	4.42/ 3.01	4.44/ 2.86
		Seasonal space heating enr.efficiency ns LWT 35°C/55	°C	ETA%	173/110	173/115	174/117	175/111
		Seasonal Space Heating Eff. C		C	A++ / A+	A++ / A+	A++ / A+	A*** / A*
		Current	MCA	A	18	20	22	10
			MFA	A	25.0	25.0	27.5	16.1
		Maximum Allowable	Max. Number	EA				
		IDU ⁶ Connections (Hydro A2W Unit Not	of IDU ⁶ Total Capacity	kW	2	3	4	4
inctuded)	Included)	Min. (Cooling)	KW	2.2	3.3	4.5	4.5	
	Total Capacity Min. (Cooling)	kW	4.4	6.6	9.0	9.0		
		Leaving Water Temperature ³	Heating	°C	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)	15~55 (H/P: 25~55)
			Cooling	°C	5~25	5~25	5~25	5~25
	Functions	Smart Grid Ready/PV Enabled		-	•	•	•	•
		3-Step Quiet Mode		-	•	•	•	•
		2-zone Control		-	•	•	•	•
all-Mounted	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	3Ф, 4, 380~415 V, 50 H
/dro Unit	Expansion Ve	ssel		litres	8	8	8	8
Heater Sound	Back-up heater Capacity		kW	4	4	4	6	
	Sound Pressure ⁴	Std	dB(A)	31	31	31	31	
		Sound Power	Std	dB(A)	48	48	48	48
	Piping	Water pipe	Inlet/Outlet	Φ, inch	1+1/4"	1+1/4"	1+1/4"	1+1/4"
	Dimensions	Net Weight		kg	45.5	45.5	45.5	46.5
		Net Dimensions (WxHxD)		mm	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315
utdoor Unit	Power Supply			Ф, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	3Ф, 4, 380~415 V, 50 Н
	Compressor	Туре		-	Rotary Comp	Rotary Comp	Rotary Comp	Rotary Comp
	Base Heater	Capacity		kW	-	-	-	-
	Sound	Sound Pressure ⁴	Heating Std	dB(A)	47	48	51	51
			Cooling Std	dB(A)	46	47	50	50
		Sound Power	Heating Std	dB(A)	65	67	69	69
	Dimensions	Net Weight		kg	61	61	74	76
		Net Dimensions (WxHxD)		mm	880 x 793 x 310	880 x 793 x 310	940 x 998 x 330	940 x 998 x 330
	Refrigerant	Туре		-		R410A (Fluorinated gree	nhouse gas, GWP=2,088)	
		Factory Charging		tCO₂e	5.43	5.43	5.01	5.01
				kg	2.6	2.6	2.4	2.4
	Piping	Piping Connections	Liquid Pipe	Φ, mm (inch)	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
		Gas Pipe	Φ, mm (inch)	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	
	Piping Length (ODU-IDU) ⁵	Max.[Equiv.]	m	30	30	30	30	
	Level Difference (IDU-IDU) ⁵	Max.	m	20	20	20	20	
		Chargeless Length		m	10	10	10	10
peration	Ambient Tem	perature A2W	Heating	°C	-25~35	-25~35	-25~35	-25~35
Operation Ambient Ter			Cooling	°C	10~46	10~46	10~46	10~46
			-					
			DHW	°C	-25~43	-25~43	-25~43	-25~43
	Ambient Tem	perature A2A	DHW Heating	°€	-25~43 -25~24	-25~43 -25~24	-25~43 -25~24	-25~43 -25~24

Accessories











EHS Controller (included)	Touch Controller	DMS2.5	Wi-Fi Kit	External Room Sensor
MWR-WW10*N	MCM-A300N	MIM-D01AN	MIM-H04EN	MRW-TA









AE160BNYDEH/EU	AE160BNYDGH/EU	AE160BNYDEH/EU	AE160BNYDGH/EU
AE120MXTPEH/EU	AE120MXTPGH/EU	AE160MXTPEH/EU	AE160MXTPGH/EU
12.0/10.7	12.0/10.7	16.0/14.6	16.0/14.6
12.0	12.0	14.5	14.5
2.72/ 3.91	2.72/ 3.91	3.95/ 5.32	3.95/5.32
2.90	2.90	3.84	3.84
4.41/2.74	4.41/2.74	4.05/2.74	4.05/2.74
4.14	4.14	3.78	3.78
4.65/ 2.92	4.65/ 2.92	4.63/ 3.06	4.63/ 3.06
183/114	183/114	182/119	182/119
A+++ / A+	A*** / A*	A*** / A*	A*** / A*
28	10	32	12
35.0	16.1	40.0	16.1
5	5	7	7
6.0	6.0	7.7	7.7
	12.1	15.4	15.4
12.1	15~55 (H/P : 25~55)		15~55 (H/P : 25~55)
15~55 (H/P: 25~55) 5~25	5~25	15~55 (H/P : 25~55) 5~25	5~25
•	5-25 •	5-25	•
	•	•	•
•	•	•	•
тф, 2, 220~240 V, 50 Hz		1Ф, 2, 220~240 V, 50 Hz	
8	3Ф, 4, 380~415 V, 50 Hz 8	1Ψ, 2, 220 ⁻² 40 V, 30 H2	3Ф, 4, 380~415 V, 50 Hz
38	38	38	38
55	55	55	55
1+1/4"	1+1/4"	1+1/4"	1+1/4"
46.5	46.5	46.5	46.5
510 x 850 x 315	510 x 850 x 315	510 x 850 x 315	510 x 850 x 315
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
Rotary Comp	Rotary Comp	Rotary Comp	Rotary Comp
52	- 52	- 55	- 55
51	51	54	54
70	70	73	73
107	107 940 x 1,420 x 330	107	107
940 x 1,420 x 330	·	940 x 1,420 x 330 enhouse gas, GWP=2,088)	940 x 1,420 x 330
7.31	7.31	7.31	7.31
3.5	3.5	3.5	3.5
9.52 (3/8")	9.52 (3/8")	9.52 (3/8")	9.52 (3/8")
15.88 (5/8")	15.88 (5/8")	15.88 (5/8")	15.88 (5/8")
70 30	70	70	70
		10	10
10	10	25. 35	00.00
10 -25~35	-25~35	-25~35	-25~35
10 -25~35 10~46	-25~35 10~46	10~46	10~46
10 -25~35	-25~35		





 *35 dB(A) is only applicable for 6kW and 9kW outdoor units down to +4°C stated in 3 m distance in an anechoic environment.

**A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++

¹A2W Condition: (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].

 2 A2W Condition: (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].

 $^{\scriptscriptstyle 3}65^{\circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)

⁴Sound 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.

⁵ODU: Outdoor Unit, IDU: Indoor Unit

TDM Plus WindFree™ Deluxe :::_____



- Three-step cooling: Fast Cooling mode.
 WindFree™ Cooling Mode.
 Wi-Fi Control with SmartThings and Bixby voice controls.
- Equipped with NASA communic
 Equipped with Easy Filter Plus. Equipped with NASA communication protocol.

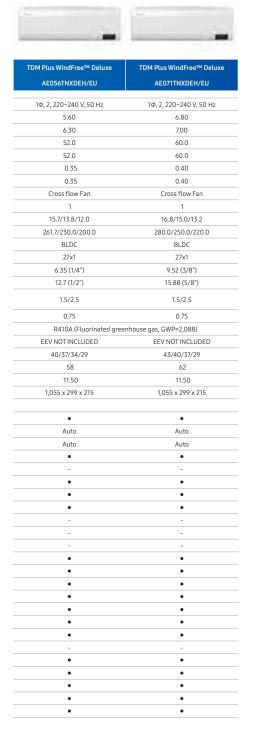






	Туре		TDM Plus WindFree™ Deluxe	TDM Plus WindFree™ Deluxe	TDM Plus WindFree™ Deluxe
	Model Name		AE022TNXDEH/EU	AE028TNXDEH/EU	AE036TNXDEH/EU
Power Supply		Φ, #, V, Hz	1Ф, 2, 220~240 V, 50 Hz	1ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
Capacity	Cooling	kW	2.20	2.80	3.60
	Heating	kW	2.50	3.20	4.00
Power Input (Nominal)	Cooling	W	24.0	30.0	37.0
	Heating	W	24.0	30.0	37.0
urrent Input (Nominal)	Cooling	A	0.16	0.20	0.25
	Heating	A	0.16	0.20	0.25
an	Туре	-	Cross flow Fan	Cross flow Fan	Cross flow Fan
	Quantity	EA	1	1	1
	Air Flow Rate H/M/L	m³/min	5.7/5.0/4.5	8.5/7.7/6.9	10.3/9.1/8.3
	7.11 1 to 11 react 1.77 1.7 2	l/s	95.0/83.3/75.0	141.7/128.3/115.0	171.7/151.7/138.3
an motor	Туре	-	BLDC	BLDC	BLDC
	Output xn	W	27x1	27x1	27x1
iping Connections	Liquid Pipe	Φ, mm(inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
.pg connections	Gas Pipe	Φ, mm(inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
Viring connections	For power supply below 20m/over 20m (min)	mm²	1.5/2.5	1.5/2.5	1.5/2.5
	Communication (min)	mm²	0.75	0.75	0.75
efrigerant	Туре	_		410A (Fluorinated greenhouse gas, GWP=2,08	
	Control Method 1	_	EEV NOT INCLUDED	EEV NOT INCLUDED	EEV NOT INCLUDED
ound	Sound Pressure H/M/L/WF ²	dB(A)	34/32/30/27	34/33/32/26	40/36/34/26
	Sound Power	dB(A)	51	52	56
imensions	Net Weight	kg	8.50	9.00	9.00
ATTICITS OF THE PROPERTY OF TH	Net Dimensions (WxHxD)	mm	820 x 299 x 215	820 x 299 x 215	820 x 299 x 215
unctions	(CC Dillelisions (WX 1XD)		020 X2// X213	020 x 277 x 213	020 X 277 X 213
ir Flow	WindFree™ Cooling		•	•	•
	Air Direction Control (Up/Down)		Auto	Auto	Auto
	Air Direction Control (Left/Right)		Auto	Auto	Auto
ir Purification	Auto Fan speed		•	•	•
	Tri-Care Filter		-	-	-
	Easy Filter Plus		•	•	•
	Auto Clean (Self Cleaning)		•	•	•
perating Mode	2 Step Cooling		•	•	•
,	Al Auto Comfort with Wi-Fi & MDS (direct/	'indirect)		- -	-
	Al Auto Comfort with Wi-Fi			-	
	Auto Mode (without Wi-Fi)		-	-	
	Fast Cooling		•	•	•
	Good Sleep		•	•	•
	Eco Eco		•	•	•
	Dehumidification		•	•	•
	Fan		•	•	•
	Quiet		•	•	•
ther Functions	Samsung SmartThings		•	•	•
and randuons	MDS (Motion Detect Sensor)		<u>.</u>	<u> </u>	<u> </u>
			<u> </u>	•	•
	Indoor Temp. Display Display On/Off	88 Display	•		
			•	•	•
		oo bisptay			
	Beep On/Off Auto Changeover	oo bispilay	•	•	•

1-room EEV Kit 2/3 Room EEV Kit Wireless Remote Controller (included) Touch Controller DMS2.5 Wi-Fi Kit MEV-E**SA MXD-E**K***A AR-EH03E MWR-SH11N MIM-D01AN MIM-H04EN



Capacities are based on (Equivalent refrigerant piping 7.5m,

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

¹EEV Kit is necessary to control the refrigerant flow in the TDM Plus WindFree™ Deluxe (EEV Excluded), please order EEV Kit separately.

²Sound pressure level is obtained in an anechoic room. Sound pressure level is a relative value, depending on the distance and acoustic environment. Sound pressure level may differ depending on operation conditions.

TDM Plus Slim Duct

- Slim design with thickness of just 199 mm.Antibacterial filter included.



	Туре			Slim Duct	Slim Duct	Slim Duct	Slim Duct
	Model Name				AE028ANLDEH/EU	AE036ANLDEH/EU	AE056ANLDEH/EU
Power Supply			Ф, #, 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
Performance	Capacity	Cooling/ Heating	kW	2.2/2.5	2.8/3.2	3.6/4.0	5.6/6.3
Power	Power Input	Cooling/ Heating	W	30/30	34/36	40/42	73/68
	Current Input	Cooling/ Heating	Α	0.25/0.25	0.28/0.30	0.33/0.35	0.62/0.58
Fan	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2	2	2
	Air Flow Rate	H/M/L (UL)	m³/min	6/4.9/3.8	7.05/5.15/4.35	8.20/6.50/4.9	15.5/12.5/9.5
	External Pressure	Max. (Min/	mmAq	0/1/3	0/1/3	0/1/3	0/2/4
		Std/Max)	Pa	0/9.8/29.4	0/9.8/29.4	0/9.8/29.4	0/19.6/39.2
Fan Motor	Туре		-	SSR non-feedback	SSR non-feedback	SSR non-feedback	SSR non-feedback
	Output		W	69	69	69	69
Piping Connections	Liquid Pipe		Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Pipe		Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
Refrigerant	Туре		-		R410A (Fluorinated gree	nhouse gas, GWP=2,088)	
Sound	Sound Pressure	H/M/L	dB(A)	26/24/21	27/25/23	29/26/23	34/30/26
	Sound Power		dB(A)	48	49	51	54
Dimensions	Net Weight		kg	15	15	17	18.9
	Net Dimensions (W×H×D)		mm	700 x 199 x 440			
Optional Accessories	Drain Pump	Model	-	(Built-in)	(Built-in)	(Built-in)	(Built-in)
		Max. lifting Height/ Displace- ment	mm / Litre/h	750/24	750/24	750/24	750/24

		Acce	ssories		
· Has	100 (20)		1		-
Drain Pump (Built-in)	Remote Control	Touch Controller	Wireless Receiver Kit	Touch Controller	DMS2.5
MDP-E075SEE3D	AR-EH00	MWR-SH11N	MRK-A10N	MCM-A300N	MIM-D01AN
		李			
Wi-Fi Kit	External Room Sensor	Y-joint			
MIM-H04EN	MRW-TA	MXJ-YA1509M			

- External static pressure range from 0 to 1.4 mmAq.
 Built-in electronic expansion valve (EEV) for refrigerant flow control (2000 step).
 Long-life washable permanent filter is included.

- Auto Restart function.
 Built-in condensation drain pump (750 mmH₂O).



	Туре			MSP Duct	MSP Duct	MSP Duct	MSP Duct
	Model Name			AE036BNMPEH/EU	AE056BNMPEH/EU	AE071MNMPEH/EU	AE090MNMPEH/EU
Power Supply			Ф, #, 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
Performance	Capacity	Cooling / Heating	kW	3.6/4	5.6/6.3	7.1/8.0	9.0/10.0
Power	Power Input	Cooling / Heating	W	0.045/0.045	0.07/0.07	120/120	145/145
	Current Input	Cooling / Heating	Α	0.4/0.4	0.6/0.6	1.0/1.0	1.2/1.2
Fan	Туре		-	Sirocco Fan	Sirocco Fan	Sirocco Fan	Sirocco Fan
	Quantity		EA	2	2	2	2
	Air Flow Rate	H/M/L (UL)	m³/min	12.0/9.5/7.5	16.0/13.5/9.0	22/19/16	29/25/22
	External Pressure	Max. (Min/	mmAq	0/2.5/15	0/3/15	0/3/15	0/4/15
		Std/Max)	Pa	0/24.5/147.0	0/29.4/147.0	0/29.4/147.2	0/29.4/147.2
Fan Motor	Туре		-	BLDC Feedback	BLDC Feedback	BLDC Feedback	BLDC Feedback
	Output x n		W	153x1	153x1	153x1	153x1
Piping Connections	Liquid Pipe		Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	9.52 (3/8")	9.52 (3/8")
	Gas Pipe		Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	15.88 (5/8")	15.88 (5/8")
Refrigerant	Туре		-		R410A (Fluorinated gree	nhouse gas, GWP=2,088)	
Sound	Sound Pressure	H/M/L	dB(A)	30/27/24	32/29/ 25	37/33/29	38/35/32
	Sound Power		dB(A)	53	57	57	58
Dimensions	Net Weight		kg	27.9	27.9	25.5	33
	Net Dimensions (W×H×D)		mm	32	32	850x250x700	1,200x250x700
Optional Accessories	Drain Pump Model		-	MDP-G075SQ (Built-in)	MDP-G075SQ (Built-in)	MDP-G075SQ (Built-in)	MDP-G075SQ (Built-in)
				MDP-G075SP (External)	MDP-G075SP (External)	MDP-G075SP (External)	MDP-G075SP (External)
	Max. lifting Displacem		mm / Litre/h	750/24	750/24	750/24	750/24

		Accessories		
3				
Drain Pump (Built-in)	External Drain Pump	Remote Control	Touch Controller	Touch Controller
MDP-G075SQ	MDP-G075SP	AR-EH00	MWR-SH11N	MCM-A300N
-			10	=
DMS2.5	Wi-Fi Kit	External Room Sensor	Wireless Receiver Kit	Y-joint
MIM-D01AN	MIM-H04EN	MRW-TA	MRK-A10N	MXJ-YA1509M

TDM Plus Console

- SPi Ioniser device (included). Slim design with 199mm in depth. Built-in electronic expansion valve (EEV) for refrigerant flow control (2,000 step).
- Long-life washable permanent filter.
- Auto Restart function.
 Two separate air outlets, upper (cooling) and bottom (heating) to avoid stratifications.



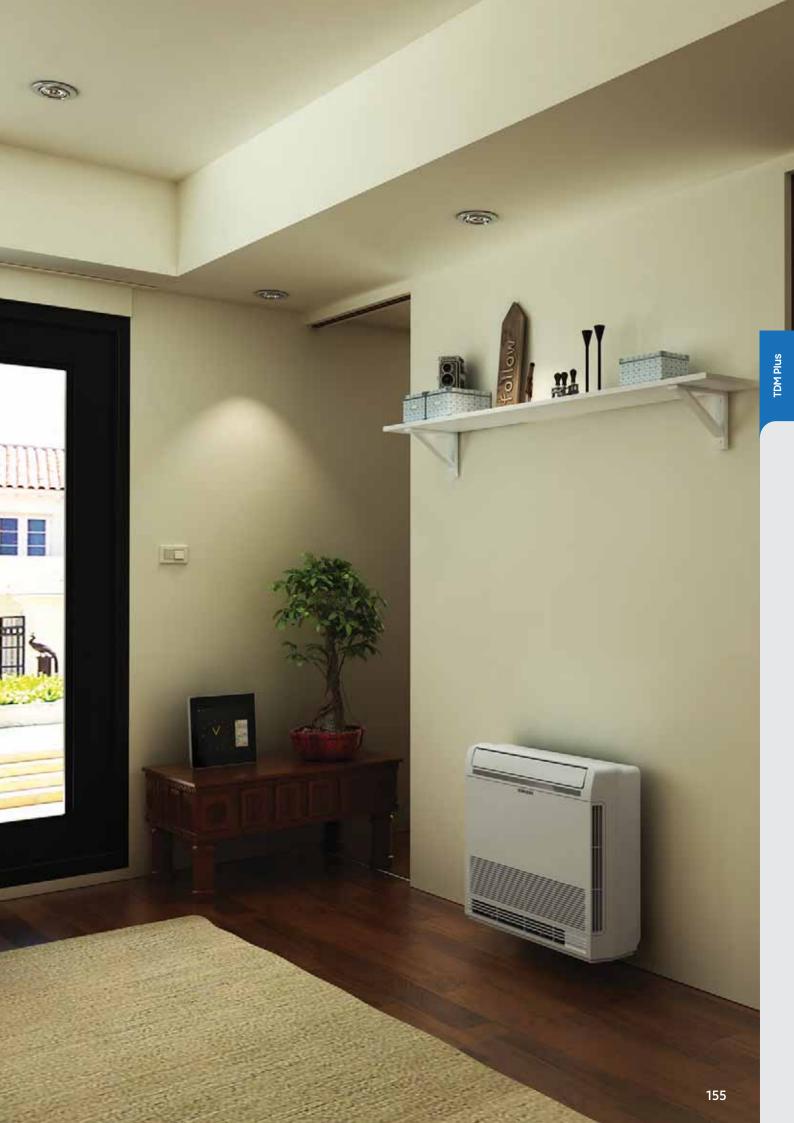




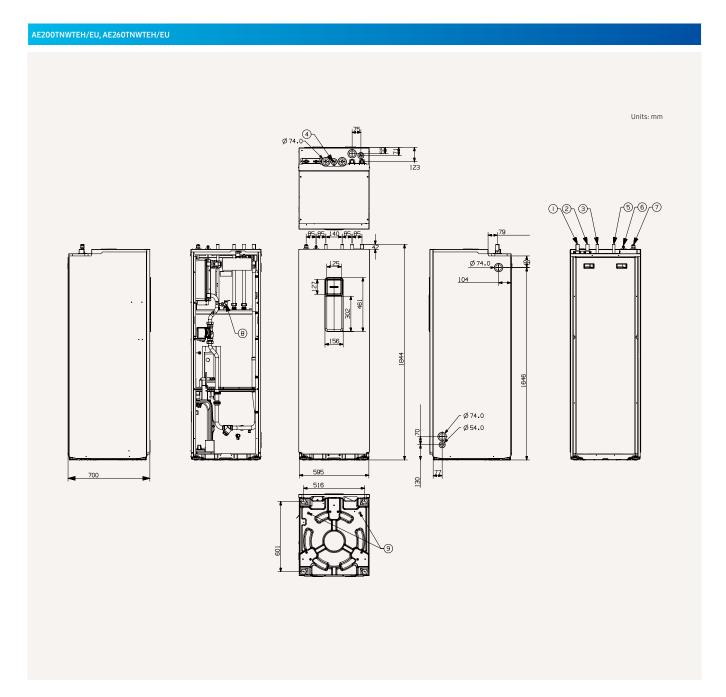


	Туре			Console	Console	Console	Console
	Model Name			AE022MNJDEH/EU	AE028MNJDEH/EU	AE036MNJDEH/EU	AE056MNJDEH/ EU
Power Supply			Ф, #, V, Hz	1ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz
Performance	Capacity	Cooling / Heating	kW	2.2/2.5	2.8/3.2	3.6/4.0	5.6/6.3
Power	Power Input	Cooling / Heating	W	16/16	30/30	35/35	62/62
	Current Input	Cooling / Heating	A	0.13/0.13	0.25/0.25	0.29/0.29	0.49/0.49
Fan	Туре		-	Turbo Fan	Turbo Fan	Turbo Fan	Turbo Fan
	Quantity		EA	1	1	1	1
	Air Flow Rate	H/M/L (UL)	m³/min	6.3 / 5.4 / 4.9	7.0 / 6.0 / 5.0	8.50 / 7.50 / 6.50	13.0 / 11.5 / 10.0
Piping Connections	Liquid Pipe		Φ, mm (inch)	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")	6.35 (1/4")
	Gas Pipe		Φ, mm (inch)	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")	12.7 (1/2")
Refrigerant	Туре		-		R410A (Fluorinated gree	nhouse gas, GWP=2,088)	
Sound	Sound Pressure	H/M/L	dB(A)	34 / 32 / 30	38 / 36 / 34	39 / 37 / 34	43 / 40 / 37
	Sound Power		dB(A)	52	58	59	64
Dimensions	Net Weight		kg	15,5	16	16	16
	Net Dimensions (W×H×D)		mm	720 x 620 x 199			

			Accessories			
m	原		-			奏
Touch Controller	Remote Control (Included)	Touch Controller	DMS2.5	Wi-Fi Kit	External Room Sensor	Y-joint
MWR-SH11N	MR-EH00	MCM-A300N	MIM-D01AN	MIM-H04EN	MRW-TA	MXJ-YA1509M

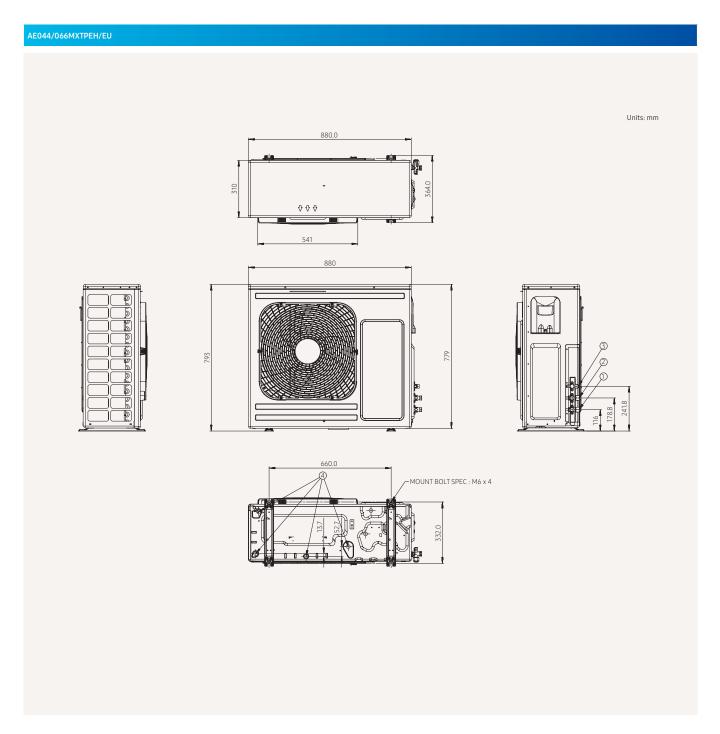


TDM Plus Tank Integrated Hydro Unit



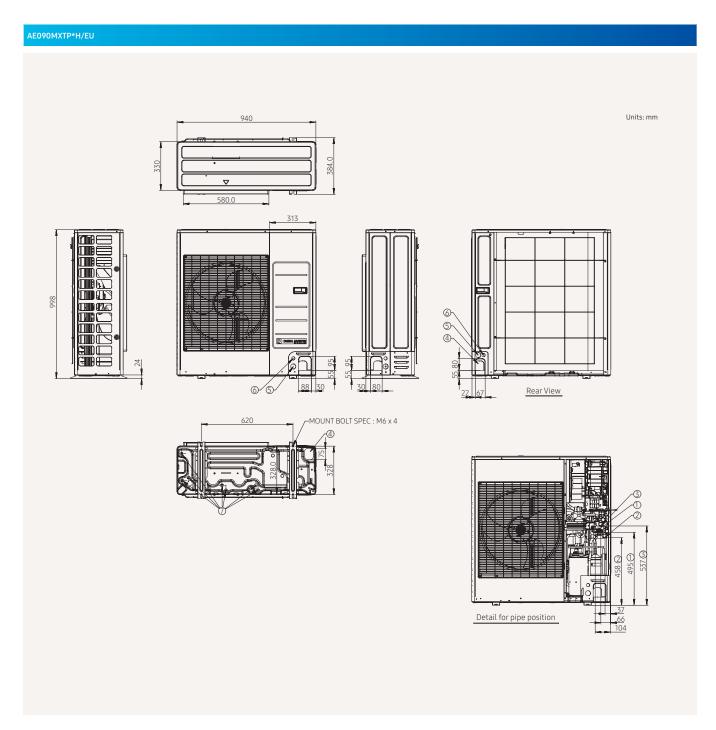
NO	Name	Description	
		AE200TNWTEH/EU	AE260TNWTEH/EU
1	Space heating Inlet	Ø28	Ø28
2	Space heating Outlet	Ø28	Ø28
3	DHW Inlet	Ø22	Ø22
4	Secondary water return	N/A	Ø22
5	DHW Outlet	Ø22	Ø22
6	Refrigerant liquid pipe	Ø6.35	Ø6.35
7	Refrigerant Gas pipe	Ø15.88	Ø15.88
8	T/Pv/v	Female PT1/2"	Female PT1/2"
9	Drain Holes	(Option) Connect with the	provided drain plug

TDM Plus Outdoor



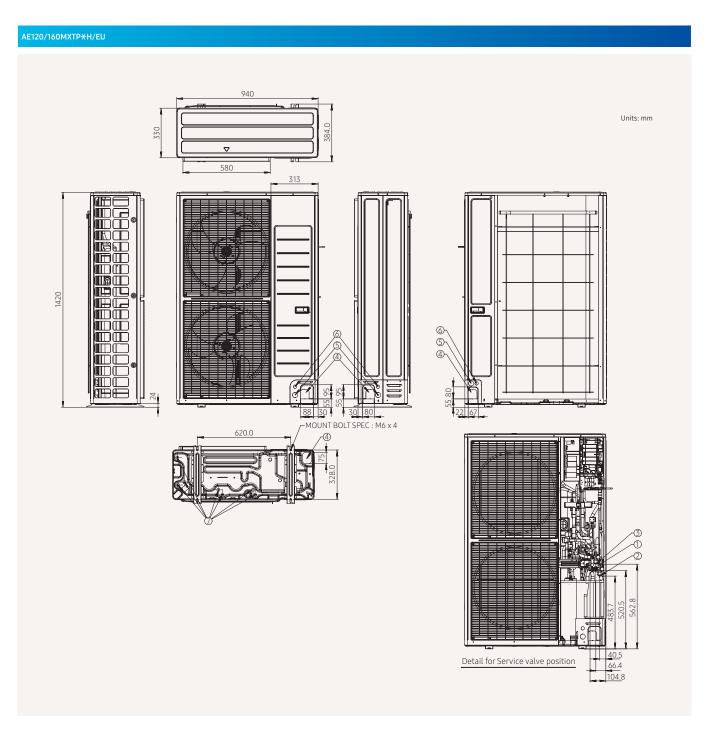
NO	Name	Description	
		4.4 kW	6.6 kW
1	Refrigerant gas pipe for air	Ф15.88 (5/8")	
2	Refrigerant gas pipe for water	Ф15.88 (5/8")	
3	Refrigerant liquid pipe	Ф9.52 (3/8")	
4	Drain holes	Connect with the provided drain plug.	

TDM Plus Outdoor



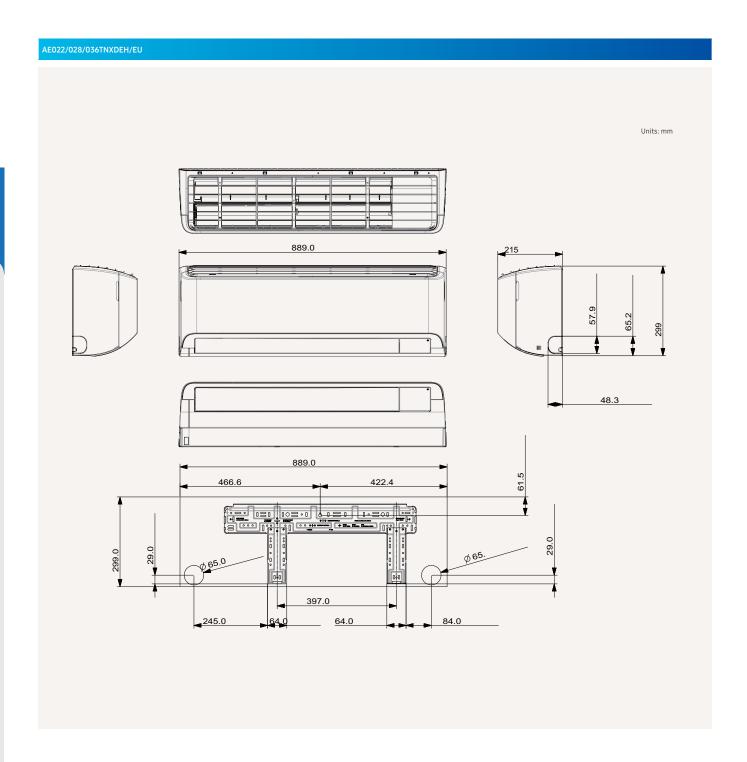
NO	Name	Description
		9 kW
1	Refrigerant liquid pipe	Ф9.52 (3/8")
2	Refrigerant gas pipe for air	Ф15.88 (5/8")
3	Refrigerant gas pipe for water	Ф15.88 (5/8")
4	Knockout hole for pipe intake	Front / Side / Rear / Bottom
5	Power wiring conduits	Front / Side / Rear, Φ34 (1-3/8")
6	Communication wiring conduits	Front / Side / Rear, Φ22 (7/8")
7	Drain holes	Connect with the provided drain plug.

TDM Plus Outdoor

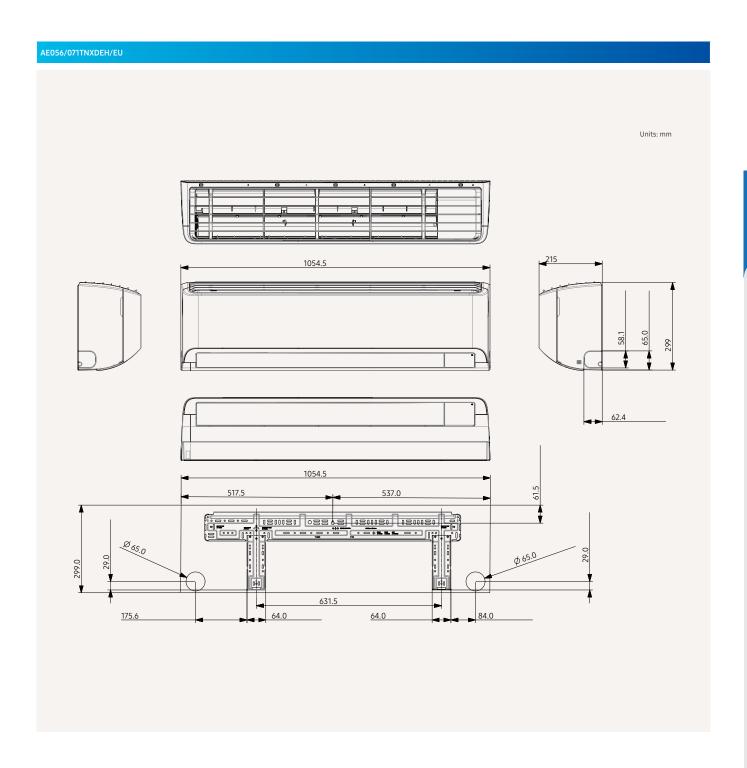


NO	Name	Description	
		12 kW	16 kW
1	Refrigerant liquid pipe	Ф9.	52 (3/8")
2	Refrigerant gas pipe for air	Ф15.88 (5/8")	Ф15.88 (5/8")
3	Refrigerant gas pipe for water	Ф15.88 (5/8")	Ф15.88 (5/8")
4	Knockout hole for pipe intake	Front / Side / Rear / Bottom	Front / Side / Rear / Bottom
5	Power wiring conduits	Front / Side / Rear, Φ34 (1-3/8")	Front / Side / Rear, Φ34 (1-3/8")
6	Communication wiring conduits	Front / Side / Rear, Φ22 (7/8")	Front / Side / Rear, Φ22 (7/8")
7	Drain holes	Connect with the provided drain plug. Connect with the provided drain plug.	

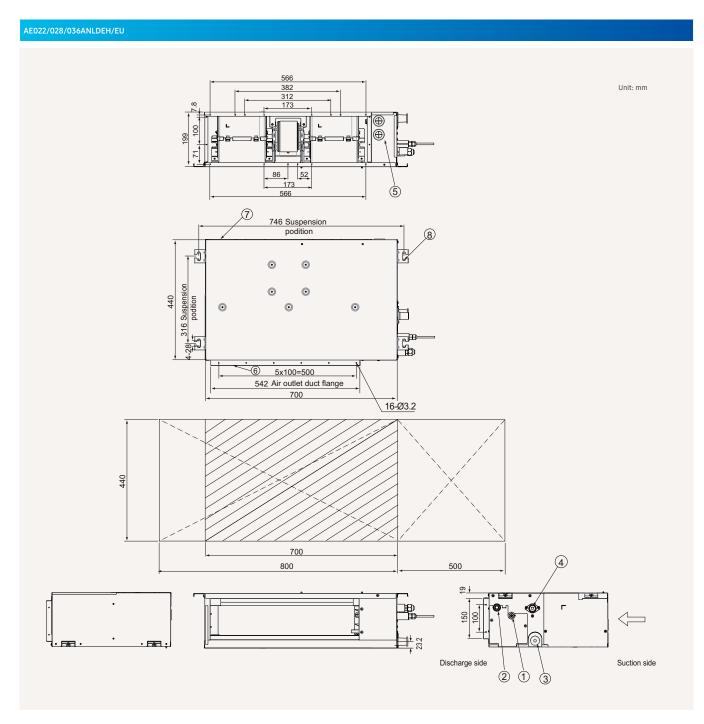
WindFree™ Deluxe



WindFree™ Deluxe

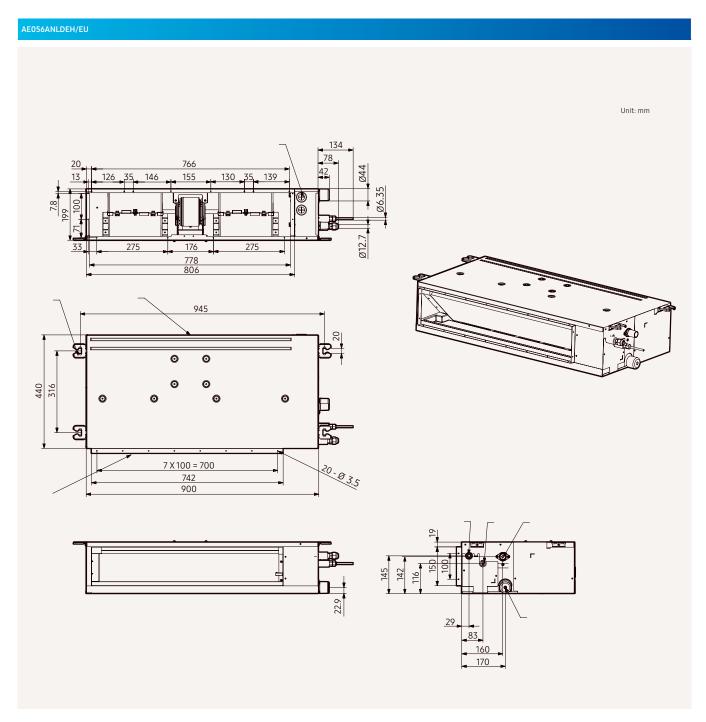


TDM Plus Slim Duct

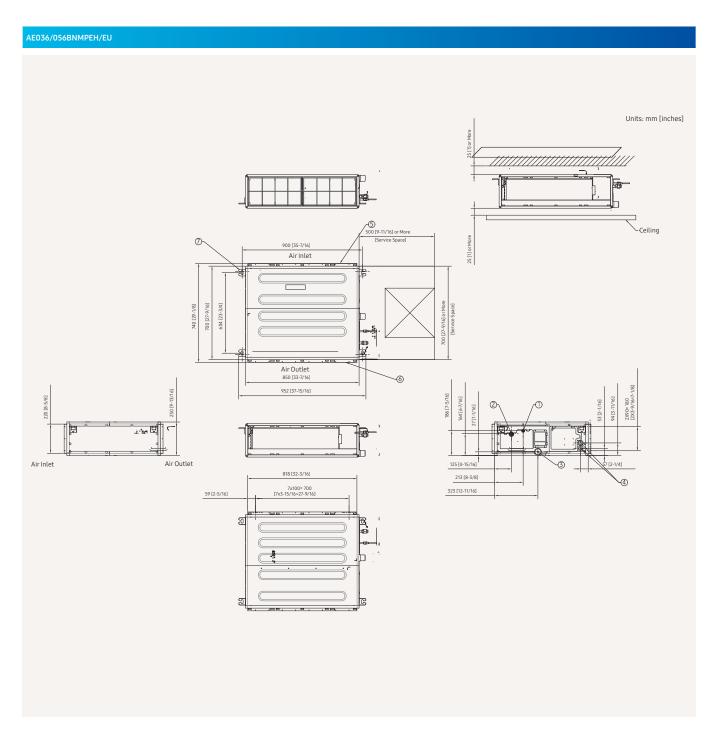


NO	Name	Description
1	Liquid pipe connection	Ф6.35 (1/4")
2	Gas pipe connection	Ф12.70 (1/2")
3	Drain pipe connection without drain pump	VP25 (OD Φ32, ID Φ25)
4	Drain pipe connection with drain pump	VP25 (OD Φ32, ID Φ25)
5	Power supply/Communication connection	-
6	Air discharge grille flange	-
7	Return air side	-
8	Hook	Ф9.52 or M10

TDM Plus Slim Duct

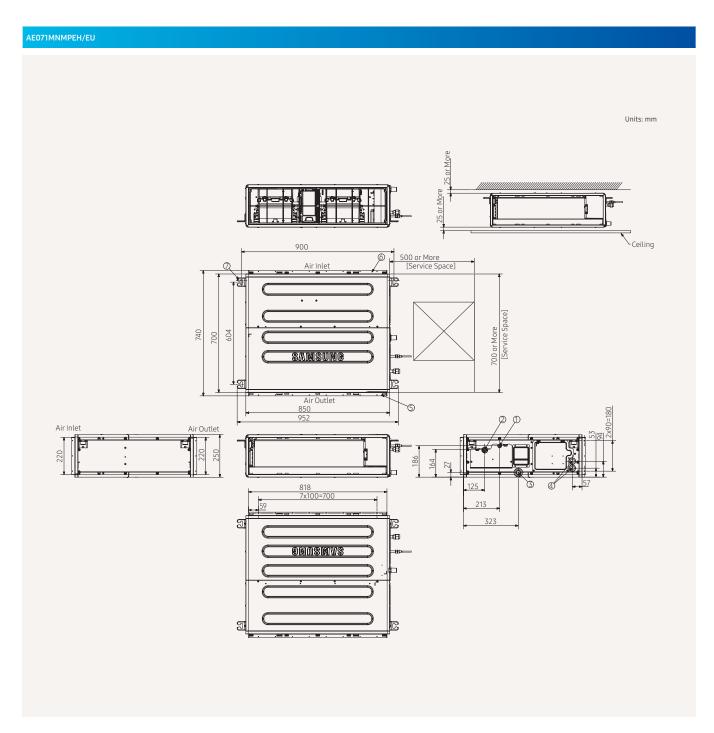


NO	Name	Description
1	Refrigerant liquid pipe	Φ6.35 (1/4") Flare Connection
2	Refrigerant gas pipe	Ф12.70 (1/2") Flare Connection
3	Condensate Drain	VP25(OD Φ32, ID Φ25)
4	Condensate Drain (Option)	VP25(OD Φ32, ID Φ25)
5	Power & Comm. Wiring Conduits	-
6	Supply Air Flange	-
7	Return Air Flange	-
8	Hook	-

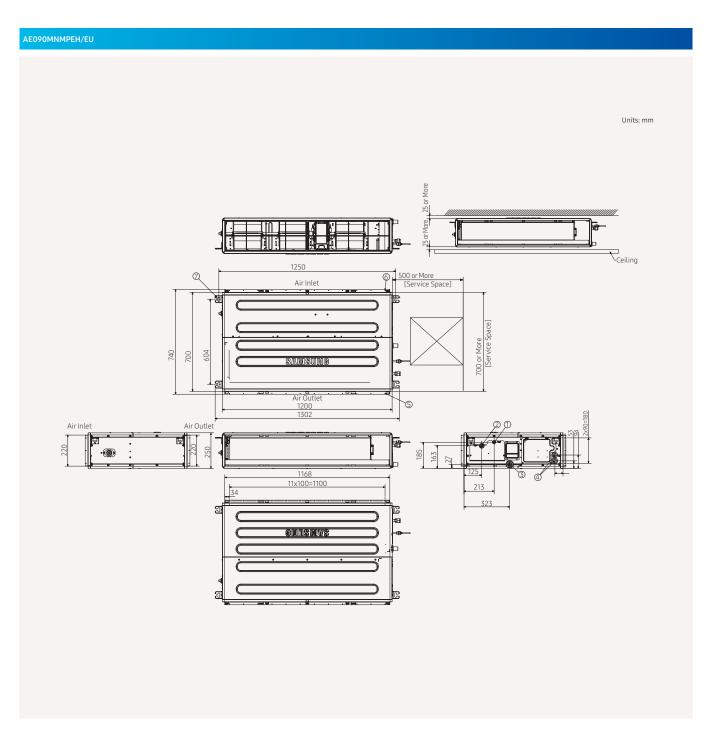


NO	Name	Description
1	Liquid pipe connection	
2	Gas pipe connection	
3	Drain hose	VP25 (OD 32, ID 25)
4	Power & communication conduits	
5	Airinlet	
6	Air outlet	
7	Hook	Use M8~M10 bolt (4ea)



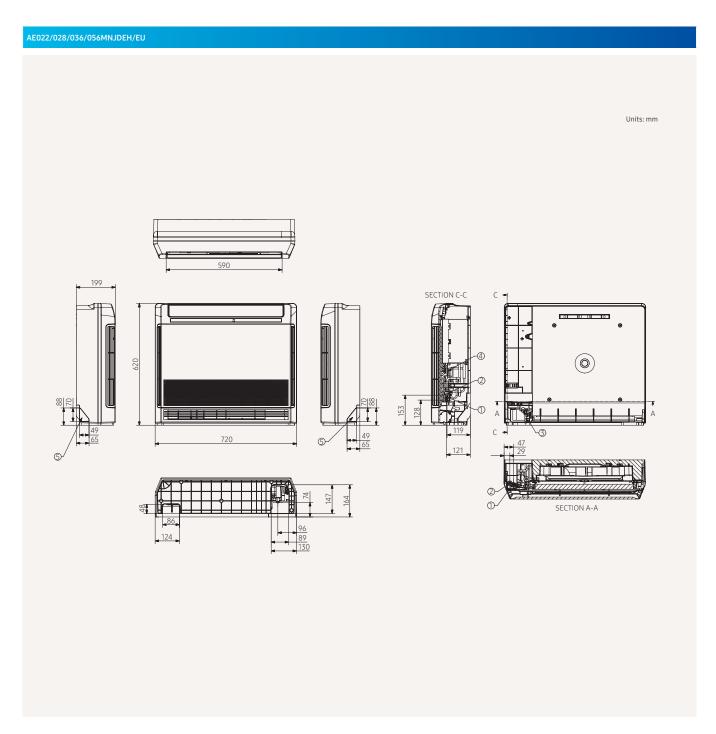


NO	Name	Description
1	Liquid pipe connection	Ф9.52 (3/8")
2	Gas pipe connection	Ф15.88 (5/8")
3	Drain pipe connection	VP-25(OD 32, ID 25)
4	Power supply & Communication wiring conduit	-
5	Air suction flange	-
6	Air discharge flange	-
7	Hook	Use M8~M10 bolt (4ea)



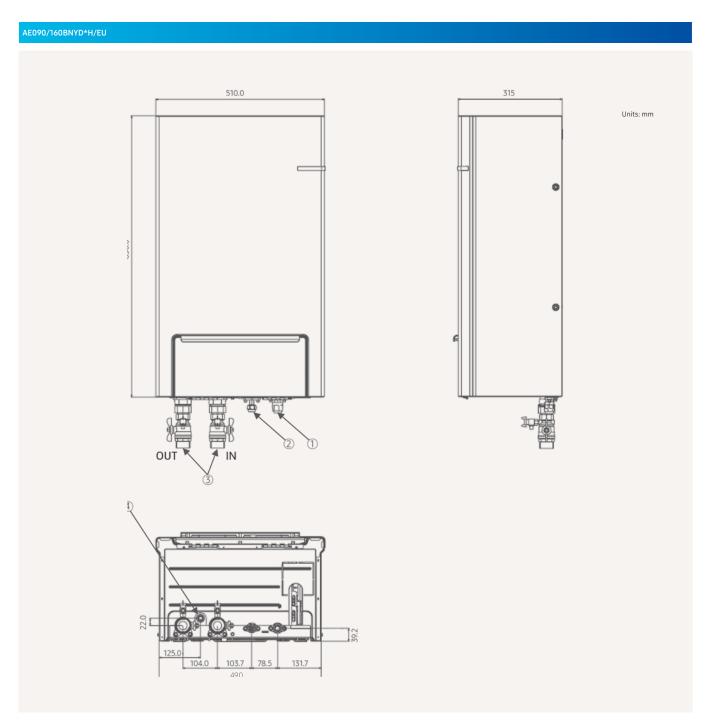
NO	Name	Description
1	Liquid pipe connection	Ф9.52 (3/8")
2	Gas pipe connection	Ф15.88 (5/8")
3	Drain pipe connection	VP-25 (OD 32, ID 25)
4	Power supply & Communication wiring conduit	-
5	Air suction flange	-
6	Air discharge flange	-
7	Hook	Use M8~M10 bolt (4ea)

TDM Plus Console



NO	Name	Description
1	Liquid pipe connection	Ф6.35 (1/4")
2	Gas pipe connection	Ф12.7 (1/2")
3	Drain pipe connection	ID 18mm (11/16") Hose
4	Power supply & Communication wiring conduit	-
5	Knockout hole for drain hose	-

Wall-Mounted Hydro Unit



NO	Name	Description
1	Gas Ref. Pipe	Φ 6.35 (1/4") (9kW), Φ 9.52 (3/8") (16kW)
2	Liquid Ref. Pipe	Ф15.88 (5/8")
3	Water Pipe (Inlet/Outlet)	BSPP male 11/4
4	Drain Hose Connector	

Renovation Solutions





EHS Mono R290

- Production or not.
 Premium Design
 Ideal for renovation applications
 Generates a low noise level (35dB) Production of hot water to a maximum temperature of 75 °C

- 100% Heating Capacity at -10°C

- SmartThings compatible.
 Low Ambient temperature operation
 Easy installation and maintainence
 New Climatehub Mono embedded with Wifi module











			Indoor Unit			AE200CNWMEG	AE200CNWMEG	AE200CNWMEG	AE200CNWMEG
	Outdoor Unit					AE050CXYDEK/EU	AE080CXYDEK/EU	AE120CXYDEK/EU	AE160CXYDEK/EU
	Controller			MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**		
System	Operation	Nominal	Heating A7/W35 ¹ / A7/W55 ²		kW	5.0/5.0	8.0/8.0	12.0/12.0	16.0/16.0
		Capacity	Cooling A35/V		kW	5.0	8.0	12.0	14.0
		Power Input	Heating A7/W35¹ / A7/W55² kW		kW	1.00/1.61	1.63/ 2.67	2.50/4.0	3.55/5.52
		(Nominal)	Cooling A35/W18 ¹		kW	1.280	2.050	3.000	3.680
		COP (Nominal Heating) A7/W351		551	W/W	5.00/3.10	4.91/3.00	4.80/3.00	4.51/2.90
		EER (Nominal Cooling) A35/W18 ¹			W/W	3.91	3.90	4.00	3.80
		SCOP LWT 35°C/ 55°C			W/W	5.00/3.60	4.85/3.55	4.90/3.65	4.70/3.55
		Seasonal space heating enr.efficiency ηs LWT 35°C/ 55°C			ETA%	201 / 141	191 / 139	193 /143	185 / 139
		Seasonal Space Heating Eff. Class* LWT 35°C/ 55°C				A+++ / A++	A*** / A**	A+++ / A++	A+++ / A++
		Current		MCA	A	16.1	26.0	32.0	32.0
				MFA	A	17.6	28.6	35.2	35.2
		Water Flow Ra	te	Low / Medium temperature	EA	14.4/ 7.0/48.0	23.1/7.0/48.0	34.6/7.0/58.0	46.2/7.0/58.0
		Leaving Water	Temperature ³	Heating	°C	15-75	15-75	15-75	15-75
				Cooling	°C	5-25	5-25	5-25	5-25
	Functions	Smart Grid Ready/PV Enabled			-	•	•	•	•
		3-Step Quiet N	4ode		-	•	•	•	•
		2-zone Control			-	•	•	•	•
Tank Integrated Hydro Unit	Power Supply			Φ, #, V, Hz	1Ф, 2Line, 220~240V, 50Hz				
.,	Water Tank Volume litr			litres	200	200	260	260	
	Declared Load Profile L/XL				L/XL	L	L	L	L
	Average water heating efficiency ŋwh				ETA%	115%	115%	115%	115%
	Average Energy Efficiency Class			-	A+	A+	A	А	
	Sound	Sound Pressure ⁴		Heating Std	dB(A)	26	26	30	30
				Cooling Std		26	26	30	30
		Sound Power		Heating Std	dB(A)	40	40	44	44
	Heater	Back-up heate	er Capacity	Default (Option)	kW	2 (4/6)	2 (4/6)	2 (4/6)	2 (4/6)
	Piping	Water Pipe (Sp	ace Heating)	Inlet/Outlet	Φ, mm	28/28	28/28	28/28	28/28
		Water pipe (DI	HW)	Inlet/Outlet	Φ, mm	22/22	22/22	22/22	22/22
	Dimensions	Net Weight			kg	130	130	130	130
		Net Dimension	ns (WxHxD)		mm	595 x 1,800 x 700			
Outdoor Unit	Power Supply	'			Ф, V, Hz	1Ф, 2Line, 220~240V, 50Hz			
	Compressor	Туре			-	Twin Rotary	Twin Rotary	Scroll	Scroll
	Base Heater	Capacity			kW	0.15	0.15	0.15	0.15
	Sound	Sound Pressur	re ⁴	Heating Std	dB(A)	41	45	47	51
				Cooling Std	dB(A)	41	45	47	51
		Sound Power		Heating Std	dB(A)	55	59	60	65
	Dimensions	Net Weight			kg	86	98	140	140
	D. C.L.		Net Dimensions (WxHxD)		mm	998 x 850 x 500	998 x 850 x 500	1270 x 1018 x 530	1270 x 1018 x 530
	Refrigerant	Type Factory Charg	ina		+00 -	0.000	0.007	0.004	R290 (GWP=3)
	Factory Charg		iliy		tCO₂e	0.002	0.003	0.004	0.004
	Dining	Water Dine (C	Water Pipe (Space Heating)		kg 	0.63	0.87	1.25	1.25 BSPP male 1"/BSPP male 1"
Operation	Piping Ambient Tem		ace neating)	Inlet/Outlet	Φ, mm °C	BSPP male 1"/BSPP male 1"	BSPP male 1"/BSPP male 1"	BSPP male 1"/BSPP male 1"	
орегации	Ambient iem	iperature		Heating	°C	-25~35	-25~35	-25~35	-25~35
				Cooling	°C	10~46	10~46	10~46	10~46
				DHW		-25~43	-25~43	-25~43	-25~43

Accessories Touch Controller Touch Controller Mono Control Kit DMS2.5 Wi-Fi Kit External Room Sensor Backup Heater (4/6kW) MWR-WW10*N MCM-A300N MIM-E03CN/MIM-E03EN** MIM-D01AN MIM-H04EN MRW-TA MHC-*00FE







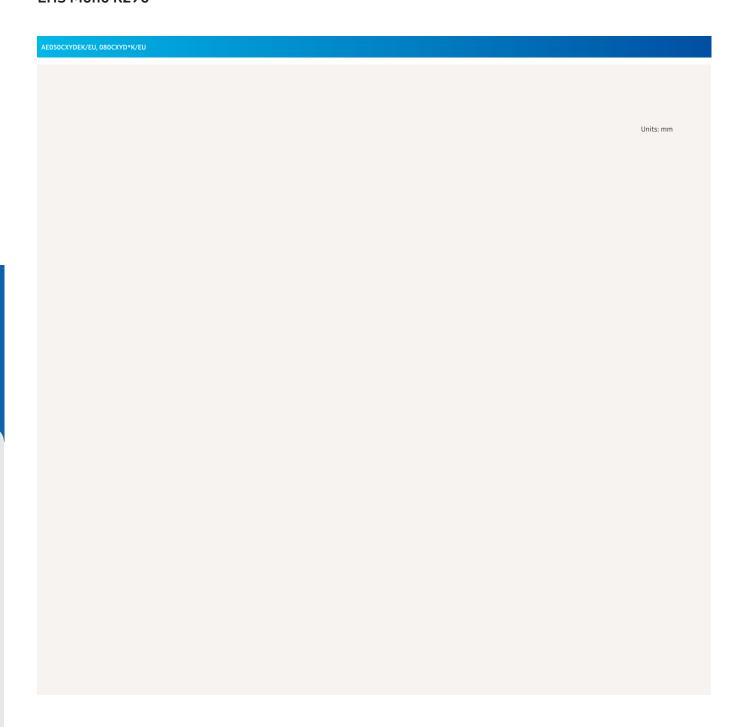
AE340CNWMCC	AE340CNWMCC	AE340CNWMCC	
AE260CNWMGG	AE260CNWMGG	AE260CNWMGG	
AE080CXYDGK/EU	AE120CXYDGK/EU	AE160CXYDGK/EU	
MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	
8.0/8.0	12.0/12.0	16.0/16.0	
8.0	12.0	14.0	
1.63/ 2.67	2.50/ 4.0	3.55/ 5.52	
2.050	3.000	3.680	
4.91/3.00	4.80/3.00	4.51/2.90	
3.90	4.00	3.80	
4.85/3.55	4.90/3.65	4.70/3.55	
191 / 139	193 / 143	185 / 139	
A*** // A**	A*** // A**	A*** // A**	
16.1	16.1	16.1	
17.7	17.7	17.7	
23.1/7.0/48.0	34.6/7.0/58.0	46.2/7.0/58.0	
15-75	15-75	15-75	
5-25	5-25	5-25	
•	•	•	
•	•	•	
•	•	•	
"3Ф, 4Line, 380~415V, 50Hz 1Ф, 2Line, 220~240V, 50Hz "	"3Ф, 4Line, 380~415V, 50Hz 1Ф, 2Line, 220~240V, 50Hz "	"3Ф, 4Line, 380~415V, 50Hz 1Ф, 2Line, 220~240V, 50Hz	
260	260	260	
XL	XL	XL	
103%	103%	103%	
A+	A	A	
26	30	30	
26	30	30	
40	44	44	
2 (4/6)	2 (4/6)	2 (4/6)	
28/28	28/28	28/28	
22/22	22/22	22/22	
140	140	140	
595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	
3Ф, 4Line, 380~415V, 50Hz	3Ф, 4Line, 380~415V, 50Hz	3Ф, 4Line, 380~415V, 50Hz	
Twin Rotary	Scroll	Scroll	
0.15	0.15	0.15	
45	47	51	
45	47	51	
59	60	65	
98	140	140	
998 x 850 x 500	1270 x 1018 x 530	1270 x 1018 x 530	
0.003	0.004	0.004	
0.87	1.6	1.6	
BSPP male 1"/BSPP male 1"	BSPP male 1"/BSPP male 1"	BSPP male 1"/BSPP male 1"	
-25~35	-25~35	-25~35	
10~46	10~46	10~46	





- *A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ** MIM-E03EN has additional features: Smart Grid ready/ PV Enabled/2-Zone control
- ¹A2W Condition: (Heating) Water In/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) Water In/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition: (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- $^365^{\circ}\text{C}$ down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.

EHS Mono R290



AE050CXYDEK/EU, 080CXYD*K/EU	
	Units: mm

EHS Mono HT Quiet (R32)

- Production of hot water at Premium Design
 Ideal for renovation applications
 Generates a low noise level (35 dB(A)) Production of hot water to a maximum temperature of 70 °C

- 100% Heating Capacity at -25 °C SmartThings compatible with optional Wi-Fi kit Low Ambient temperature operation Easy installation and maintenance











			Indoor Unit			AE200RNWMEG	AE200RNWMEG	AE200RNWMEG	AE260RNWMEG
	Outdoor Unit								
					AE080BXYDEG/EU	AE120BXYDEG/EU	AE140BXYDEG/EU	AE080BXYDEG/EU	
			Controller			MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**
System	Operation	Nominal	Heating A7/W351/ A7/W552		kW	8.0/8.0	12.0/12.0	14.0/14.0	8.0/8.0
		Capacity	Cooling A35/V	V181	kW	8.0	12.0	14.0	8.0
		Power Input	Heating A7/W35 ¹ / A7/W55 ² k		kW	1.600	2.353	2.772	1.600
		(Nominal) Cooling A35/		V18¹	kW	1.702	2.637	3.146	1.702
		COP (Nominal Heating) A7/W351		W/W	5.00/3.20	5.11/3.40	5.05/3.35	5.00/3.20	
		EER (Nominal Cooling) A35/W181			W/W	4.71	4.55	4.46	4.71
		SCOP LWT 35°C/ 55°C			W/W	4.64/3.38	4.90/3.78	4.83/3.75	4.64/3.38
		Seasonal space heating enr.efficiency ηs LWT 35°C/ 55°C			ETA%	183/132	193/148	190/147	183/132
		Seasonal Space	Heating Eff. Cla	ass* LWT 35°C/ 55°C		A+++ // A++	A+++ // A++	A*** / A**	A+++ / A++
		Current		MCA	Α	26.0	32.0	32.0	26.0
				MFA	Α	28.6	35.2	35.2	28.6
		Water Flow Rat	e	Low / Medium temperature	EA	7/48	7/58	7/58	7/48
		Leaving Water	Temperature ³	Heating	°C	15~70	15~70	15~70	15~70
				Cooling	°C	5~25	5~25	5~25	5~25
	Functions	Smart Grid Ready/PV Enabled		-	•	•	•	•	
		3-Step Quiet Mode		-	•	•	•	•	
		2-zone Control			-	•	•	•	•
Tank Integrated Hydro Unit	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	1Ф, 2, 220~240 V, 50 Hz
riyaro ome	Water Tank Vo	olume			litres	200	200	200	260
	Declared Load Profile				L/XL	L	L	L	XL
	Average water heating efficiency ŋwh				ETA%	115	110	110	123
	Average Energy Efficiency Class				-	A	A	Α	A
	Sound	Sound Pressure	4	Heating Std	dB(A)	26	30	30	26
				Cooling Std		26	30	30	26
		Sound Power		Heating Std	dB(A)	40	44	44	40
	Heater	Back-up heater		Default (Option)	kW	2 (4/6)	2 (4/6)	2 (4/6)	2 (4/6)
	Piping	Water Pipe (Spa		Inlet/Outlet	Ф, mm	28/28	28/28	28/28	28/28
		Water pipe (DH	W)	Inlet/Outlet	Φ, mm	22/22	22/22	22/22	22/22
	Dimensions	Net Weight			kg	130.0	130.0	130.0	140.0
		Net Dimension	s (WxHxD)		mm	595 x 1,800 x 700			
Outdoor Unit	Power Supply				Ф, V, Hz	1Ф, 2Line, 220~240V, 50Hz			
	Compressor	Type Capacity			kW	Scroll	Scroll	Scroll	Scroll
	Base Heater Sound	Sound Pressure	4	Heating Std	dB(A)	0.15	0.15	0.15	0.15
	3044	200 1 1033010		Cooling Std	dB(A)	42	46	47	42
		Sound Power		Heating Std	dB(A)	56	59	60	56
	Dimensions	Net Weight			kg	131.2	141.2	141.2	131.2
		Net Dimension	s (WxHxD)		mm	1270 x 1018 x 530			
	Refrigerant				R32 (Fluorinated greenhouse gas, GWP=675)				
	Factory Char		Charging tCO₂e		tCO₂e	1.82	2.23	2.23	1.82
				kg	2.7	3.3	3.3	2.7	
	Piping	Water Pipe (Spa	ce Heating)	Inlet/Outlet	Φ, mm	28/28	28/28	28/28	28/28
Operation	Ambient Tem	perature		Heating	°C	-30~43	-30~43	-30~43	-30~43
				Cooling	°C	10~46	10~46	10~46	10~46

Accessories Touch Controller Mono Control Kit DMS2.5 Wi-Fi Kit External Room Sensor Backup Heater (4/6kW) Touch Controller MWR-WW10*N MCM-A300N MIM-E03CN/MIM-E03EN** MIM-D01AN MIM-H04EN MRW-TA MHC-*00FE











AE260RNWMEG	AE260RNWMEG	AE260RNWMGG	AE260RNWMGG	AE260RNWMGG	
AE120BXYDEG/EU	AE140BXYDEG/EU	AE080BXYDGG/EU	AE120BXYDGG/EU	AE140BXYDGG/EU	
MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	MIM-E03CN / MIM-E03EN**	
MIM-EUSCIA / MIM-EUSEN	MIM-EUSCIN / MIM-EUSEIN	MIM-EUSCIN / MIM-EUSEIN	MIM-EOSCIN / MIM-EOSEIV	MIM-EUSCIA / MIIM-EUSEN	
12.0/12.0	14.0/14.0	8.0/8.0	12.0/12.0	14.0/14.0	
12.0	14.0	8.0	12.0	14.0	
2.353	2.772	1.600	2.353	2.772	
2.637	3.146	1.702	2.637	3.146	
5.11/3.40	5.05/3.35	5.00/3.20	5.11/3.40	5.05/3.35	
4.55	4.46	4.71	4.55	4.46	
4.90/3.78	4.83/3.75	4.64/3.38	4.90/3.78	4.83/3.75	
193/148	190/147	183/132	193/148	190/147	
A*** // A**	A+++ // A++	A+++ // A++	A*** // A**	A+++ / A++	
32.0	32.0	16.1	16.1	16.1	
35.2	35.2	17.7	17.7	17.7	
7/58	7/58	7/48	7/58	7/58	
15~70	15~70	15~70	15~70	15~70	
5~25	5~25	5~25	5~25	5~25	
•	•	•	•	•	
•	•	•	•	•	
•	•	•	•	•	
1Ф, 2, 220~240 V, 50 Hz	1Ф, 2, 220~240 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz	3Ф, 4, 380~415 V, 50 Hz	
260	260	260	260	260	
XL	XL	XL	XL	XL	
117	117	123	117	117	
Α	A	A	A	A	
30	30	26	30	30	
30	30	26	30	30	
44	44	40	44	44	
2 (4/6)	2 (4/6)	6	6	6	
28/28	28/28	28/28	28/28	28/28	
22/22	22/22	22/22	22/22	22/22	
140.0	140.0	140.0	140.0	140.0	
595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	595 x 1,800 x 700	
1Ф, 2Line, 220~240V, 50Hz	1Ф, 2Line, 220~240V, 50Hz	3Ф, 4Line, 380~415V, 50Hz	3Ф, 4Line, 380~415V, 50Hz	3Ф, 4Line, 380~415V, 50Hz	
Scroll	Scroll	Scroll	Scroll	Scroll	
0.15	0.15	0.15	0.15	0.15	
46	47	42	46	47	
46	47	42	46	47	
59	60	56	59	60	
141.2	141.2	131.2	141.2	141.2	
1270 x 1018 x 530	1270 x 1018 x 530	1270 x 1018 x 530	1270 x 1018 x 530	1270 x 1018 x 530	
	R32 (F	luorinated greenhouse gas, GW	/P=675)		
2.23	2.23	1.82	2.23	2.23	
3.3	3.3	2.7	3.3	3.3	
28/28	28/28	28/28	28/28	28/28	
-30~43	-30~43	-30~43	-30~43	-30~43	
10~46	10~46	10~46	10~46	10~46	
-30~43	-30~43	-30~43	-30~43	-30~43	



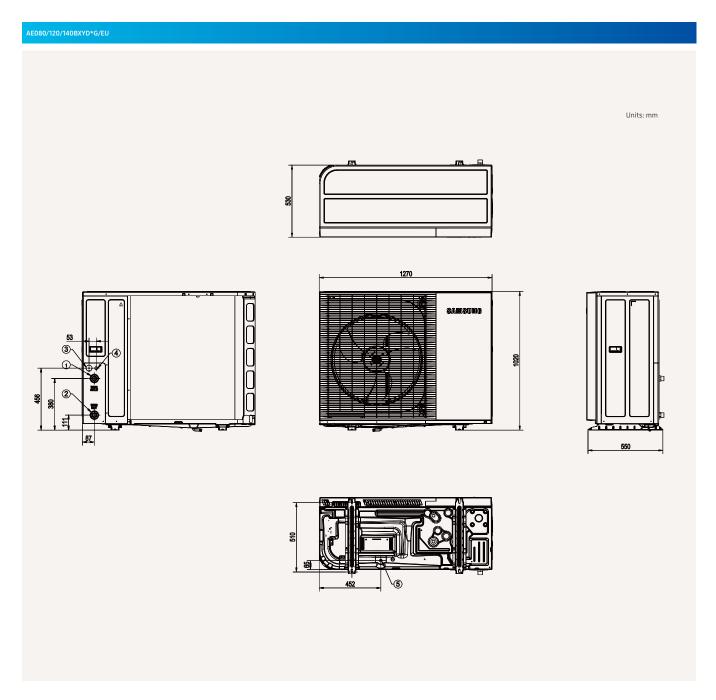
The Quiet Mark is applicable for UK & EU territories only.





- *A+++ energy label is available according to EU No. 811/2013 label classification 2019, on a scale from D to A+++
- ** MIM-E03EN has additional features: Smart Grid ready/ PV Enabled/2-Zone control
- ¹A2W Condition: (Heating) WaterIn/Out 30°C/35°C, Outdoor Air 7°C[DB]/6°C[WB]; (Cooling) WaterIn/Out 23°C/18°C, Outdoor Air 35°C[DB].
- ²A2W Condition: (Heating) Water In/Out 47°C/55°C, Outdoor Air 7°C[DB]/6°C[WB].
- ³65°C down to +10°C (max. 60°C down to -5°C)
- ⁴Sound 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.

EHS Mono HT Quiet



NO	Name	Description
1	Water pipe (Out)	BSPP male 1"
2	Water pipe (In)	BSPP male 1"
3	Power wiring conduit	ø44
4	Communication wiring conduit	ø22
5	Drain holes	Connect with the provided drain plug.







Specifications

Hydro Unit

- Production of low temperature hot water and chilled water.
- Hot water production to a maximum temperature of 50 °C (80 °C for 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).







	Model (HE)			AM160FNBDEH/EU	AM320FNBDEH/EU	AM500FNBDEH/EU	
Power Supply			Ф, #, 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 ¹	kW	14.0	28,0	44.8	
		Heating ²	kW	16.0	31.5	50.4	
Power	Power Input (Nominal)	Cooling	W	10	10	10	
		Heating	w	10	10	10	
	Current Input (Nominal)	O,#,V,Hz	0.05	0.05	0.05		
			0.05	0.05			
	ce Capacity (Nominal) Power Input (Nominal) Current Input (Nominal) MCA (Including External Contact) MFA Type Quantity Pipe Size Water Flow Rate Flow Switch Inections Liquid Pipe Gas Pipe Power Source Wire (L<10 m, Single Installation) Transmission Cable t Type Control Method Sound Pressure ³ Net Weight Net Dimensions (W×H×D) Ambient Control Method Ambient Control Method Control Method		Α	2.2	2.2	2.2	
	MFA		Α	2.75	2.75	2.75	
Heat Exchanger	Туре		-	PHE	PHE	PHE	
Company of the second of the s	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 L	Liquid Pipe		ø, mm	9.52	9.52	12.70	
			ø, inch	3/8	3/8	1/2	
	Gas Pipe		ø, mm	15.88	22.20	28.58	
		A 2.75 - PHE ea 1 ea 1 ea 1 ewhere the permitted of the p	5/8	7/8	11/8		
Field Wiring	Power Source Wire (L<10 m, Single Installation	n)	mm²	2.5	10 V, 50 Hz 10, 2, 220–240 V, 50 Hz 28,0 31.5 10 10 10 55 0.05 55 0.05 55 0.05 55 0.75 5E PHE 1 1 1 5A) PT1 (25A) 92 30 2 9.52 3 3/8 8 22.20 3 3/8 8 22.20 3 3/8 8 22.20 5 3/8 7/8 2.5 50 0.75–1.50 R410A (Fluorinated greenhouse gas, GWP: 7 28 3.0 33.0 518 ×627 × 330 518 ×627 ×	2.5	
	Transmission Cable		mm²	0.75~1.50	0.75~1.50	10, 2, 220–240 V, 50 44.8 50.4 10 10 0.05 0.05 2.2 2.75 PHE 1 PT11/4 (32A) 150 50 12.70 1/2 28.58 11/8 2.5 0.75-1.50	
Refrigerant	Туре		-	R410A (Fluorinated greenhouse gas, GWP=2,088)			
	Control Method		-	EEV	EEV	10, 2, 220–240 V, 50 H 44.8 50.4 10 10 0.05 0.05 2.2 2.75 PHE 1 PT11/4 (32A) 150 50 12.70 1/2 28.58 11/8 2.5 0.75-1.50 2.088) EEV 31 40.0 518 x 627 x 330 -5.0-48.0 -20.0-35.0 (43.0)	
Sound	Sound Pressure ³		dB(A)	27	28	31	
Dimensions	Net Weight	Heating W	40.0				
	Net Dimensions (W × H × D)		mm	518 x 627 x 330	518 x 627 x 330	0.05 0.05 0.05 2.2 2.75 PHE 1 PT11/4 (32A) 150 50 12.70 1/2 28.58 11/8 2.5 0.75-1.50 GWP=2,088) EEV 31 40.0 518 x 627 x 330 -5.0-48.0 -20.0-35.0 -20.0-35.0	
	Ambient	Cooling	°C	-5.0~48.0	-5.0~48.0	-5.0~48.0	
Transmission Cable	°C	-20.0~35.0	-20.0~35.0	-20.0~35.0			
			°C	-20.0~35.0 (43.0)	-20.0~35.0 (43.0)	-20.0~35.0 (43.0)	
oing Connections eld Wiring frigerant und mensions	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	
	1000	
Wired Remote Controller	Wired Remote Controller	Wi-Fi Kit (optional)
MWR-WW00N	MWR-WW10*N	MIM-H04EN

- Specifications may be subject to change without prior notice for product improvement.

 Nominal cooling capacities are based on;

 Water temperature: 23°C inlet, 18°C outlet
 Indoor temperature: 29°C DB, 19°C WB
 Outdoor temperature: 35°C DB, 24°C WB

 Nominal heating capacities are based on;
 Water temperature: 30°C inlet, 35°C outlet
 Indoor temperature: 20°C DB
 Outdoor temperature: 7°C DB, 6°C WB

 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 any differ depending on operation conditions.





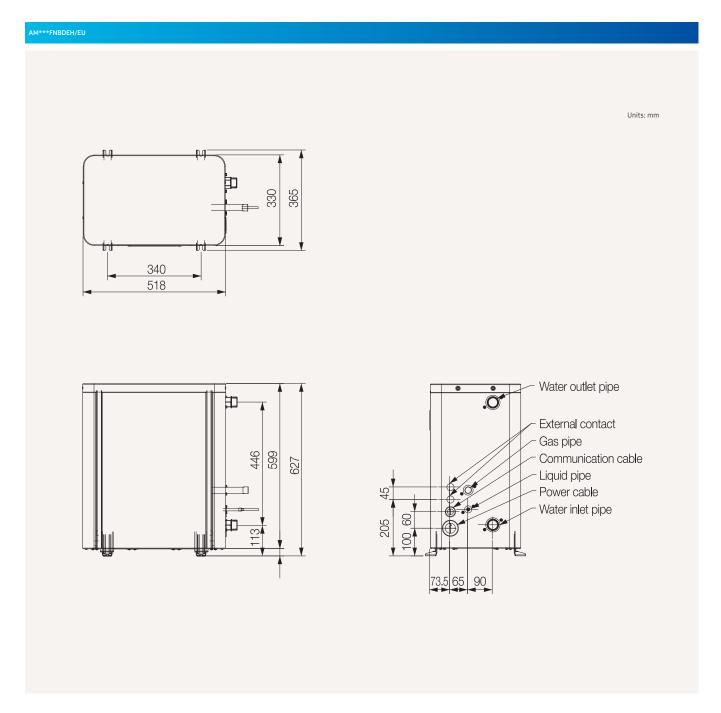




	Model (HT)			AM160TNBFEB/EU	AM160TNBFGB/EU	AM250TNBFEB/EU	AM250TNBFGB/EU
Power Supply			Φ, #, V, Hz	1Ф, 2, 220–240 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz	1Ф, 2, 220–240 V, 50 Hz	3Ф, 4, 380–415 V, 50 Hz
Performance	Capacity (Nominal)	Cooling	Cooling kW		-	-	-
		Heating	kW	16	16	25	25
Power	Power Input (Nominal)	Cooling	W	-	-	-	-
		Heating	W	3.1	3.1	5.0	5.0
	Current Input (Nominal)	Cooling	Α	-	-	-	-
		Heating	Α	14.30	4.85	23.10	7.85
	MCA (Including External Contact)		Α	18.0	16.1	30.0	16.1
	MFA		Α	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 Installati	on)	mm²	4	2.5	4	2.5
	Transmission Cable		mm²	0.75~1.50	0.75~1.50	0.75~1.50	0.75~1.50
Refrigerant	Туре		-		R134A (Fluorinated gree	Hz 10, 2, 220–240 V, 50 Hz 30, 4, 380– 25 25 5.0 55 23.10 7. 30.0 1. 40 2 PHE P 2 PT1 (25A) PT1 36 36 3 12 12 1 9.52 9, 3/8 3 15.88 15 5/8 5 4 2 2 4 0.75–1.50 0.75 Igreenhouse gas, GWP=1,430) EEV E 2.15/3.07 2.15 42 42 42 61 61 66 105.0 10 518 x 1,210 x 330 518 x 1,2 -20–43 -20	
	Control Method		-	EEV	EEV	EEV	EEV
ping Connections eld Wiring efrigerant bund imensions	Factory Charging		kg / tCO₂e	2.15/3.07	2.15/3.07	2.15/3.07	2.15/3.07
Sound	Sound Pressure ¹		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	Ambient	Cooling	°C	-	-	-	-
Iemperature Range		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

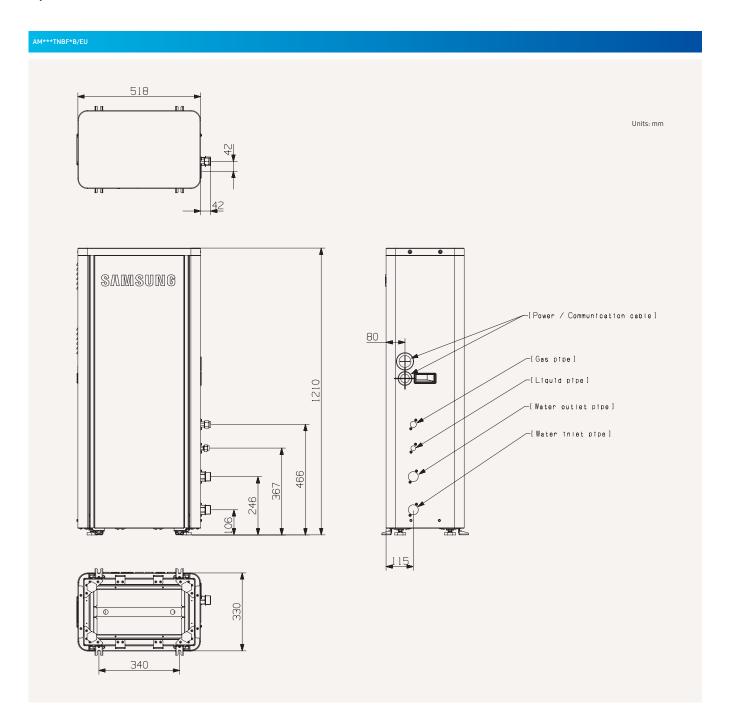
Dimensional drawings

Hydro Unit HE



Name Model name of DVM Hydro unit			Description	
		AM160FNBDEH***	AM320FNBDEH***	AM500FNBDEH***
Defriesrant side	Liquid pipe	Ф9.52 (3/8")	Ф9.52 (3/8")	Φ12.7 (1/2")
Refrigerant side –	Gas pipe	Ф15.88 (5/8")	Ф22.23 (7/8")	Ф28.58 (1-1/8")
Waterside	Water inlet/outlet pipe	PT1 (25 A)	PT1 (25 A)	PT1-1/4 (32 A)

Hydro Unit HT



	Name	Description
Model name of D	/M Hydro unit	AM***TNBF*B
Defriverent side	Liquid side connection part	Ф9.52 (3/8")
Refrigerant side	rant side Gas side connection part 49.52 (3/8") Gas side connection part 49.52 (3/8")	Ф15.88 (5/8")
Water side connec	tion part	PT1 (25 A)





Line-up

						Compatibility Table		
Category	Product	Model		EHS Clim	EHS Split R32	EHS Mono R32	EHS with Third Party Tank EHS Split R32	EHS Split R410A
Individual Control System	Wireless Remote Controller	AR-EH03E	895 (2)					
	dual Control Wireless Remote Controller Wired Remote Controller Wire							
		MWR-WW10JN		•	•	•	••	•*
		MWR-WW00N						
	Touch Controller	MWR-SH11N						
	Mono Control Kit	MIM-E03CN/ MIM-E03EN**	lange of	•		•		
Centralised Control System	Touch Controller	MCM-A300N		•	•	•	•	•
		MCM-A300BN		•	•	•	•	•
	Wi-Fi Kit 2.0	Model	•					
Integrated Control System	DMS 2.5	MIM-D01AN	=	•	•	•	•	•
	b.loT Lite Software	MST-BL1A		•	•	•	•	•
Interface Module & Gateway	External Contact Interface Module	MIM-B14	62 TEST			•	•	•
	Pulse Interface Module (PIM)	MIM-B16N	-	•	•	•	•	•
	Modbus Interface module	MIM-B19N	-	•	•	•	•	•
Others	S-Converter	MIM-C02N		•	•	•	•	•
	External room sensor	MRW-TA	-	•	•	•	•	•
	Receiver Kit	MRK-A10N						

Compatibility Table										
		TDM Plus R410A					on Solutions	Central Heating Solutions		
TDM Plus ClimateHub R410A	Wall-Mounted Hydro Unit	TDM Plus WindFree™ Deluxe	Slim Duct	MSP Duct	Console	R290 Mono	EHS Mono HT Quiet	DVM S / DVM S2	DVM Hydro	
		••						•		
			optional	optional	••					
•	•*					•	•		•	
									•	
									•	
		•	•	•	•			•		
						•	•			
•	•	•	•	•	•	•	•	•		
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•	•	•	•	•	•	•	•	•		
			•	•				•		

^{*} No need to order separately, controller is already included.
** MIM-E03EN has additional features: Smart Grid ready/PV Enabled/2-Zone control

Features

Controls | Individual Control

Wireless / Wired Remote Controllers WindFree™ On/Off Wireless Remote Controller Filter replacement alarm reset Standard with WindFree™ Simple On/Off timer Indoor unit option code setting Temperature setting range Auto/Cool/Dry: 18°C-30°C AR-EH03E Heat: 16°C-30°C Direct/Indirect function On/Off Motion Detect Sensor necessary Net dimensions (W x H x D): 48 x 138 x 24mm Full color 4.3" LCD screen Easy and Intuitive UI 2-zone Control Wired Remote Controller Standard type for EHS LCD Backlight Multiple Language support* MWR-WW10N IR receiver is included Daylight Savings Time MWR-WW10JN MWR-WW10KN °C / °F Convertible Error list display Built-in room temperature sensor SD slot Net dimensions (W x H x D): 120 x 120 x 19mm Available languages: MWR-WV10N: English, German, French, Italian, Spanish, Polish MWR-WV10JN:English, Portuguese, Dutch, Greek, Czech, Slovak MWR-WW10KN: English, Finnish, Swedish, Norwegian, Danish, Lithuanian. 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 Wired Remote Controller MWR-WG00JN Filter cleaning alert and reset alert time Control a maximum of 16 "Indoor unit + ERV" in a group with a single wired controller MWR-WG00KN **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 dayEnergy 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-WG00JN: English, French, Spanish, Portuguese, Dutch, German MWR-WG00KN: English, Italian, Greek, Czech, Slovak, Polish Air conditioner/ERV operation setting (Horizontal air flow, WindFree™) Wired Remote Controller LCD Backlight Air conditioner/ERV error monitoring MWR-WW00N Air conditioner individual blade control Filter cleaning alert/reset alert time Air conditioner/ERV interlocking control Energy saving control Automatic operation stop function Weekly operation schedule setting Button restriction function Built-in room temperature sensor Real time clock (Daylight Savings Time)

Control max. 16 indoor units (Air conditioner + ERV) in group with single wired remote controller Net dimensions (W x H x D): 120 x 124 x 19.5mm

Wired Remote Controller Touch Simple type MWR-SH11N BBI Freceiver is included Away function Quiet mode, Sleep mode Reset filter cleaning alert indicator Air conditioner Individual/group control Operation On/Off timer function WindFree™/Long horizontal wind Button locking function Eliminate Operation Mode function: Auto/Cool/Dry/Fan/Heat mode Built-in room temperature sensor C/ °F Convertible Relative temperature setting function: -3 ~ +3°C setting Control max. 16 indoor units in group with a single wired remote controller Net dimensions (W x H x D): 94.2 x 122 x 19.5mm Mono Control Kit WMIM-E03CN/MIM-E03EN WMIM-E03EN | EHS R32 Mono control Kit Includes remote controller (MWR-WW10N) and flow sensor Outering was with the control printed board assembly Leaving and return water sensor Demestic Hot Water sensor Net Dimensions (W x H X D): 70 x 170 mm MIM-E03EN has additional features: Smart Grid ready/PV enabled/2-Zone control

Controls | Centralised Control

Centralised Control Systems							
 Large Display: 10.1 inch touch LCD controller Ease of use: Provides a familiar user experience thanks to the SmartThings UI style Simple and modern design (Slim bezel 15mm, Resolution (pixels): 1280 x 800 (TFT LCD) Harmony with interior design, easy to select background image Controls max. 128 indoor units Can display energy usage for each device (Hour/Day/Week/Year) Set detailed schedule according to each zone and indoor unit History of error helps to check the cause of failure and take quick action History of energy usage (Function available in RTS Q3'24) Intuitive control (2D layout view) (Function available in RTS Q3'24) Remote control by PC/Tablet (In-site) (Function available in RTS Q3'24) Net dimensions (W x H x D): 245.7 x 164.5 x 30.9 mm 							
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							

Features

Controls | Integrated Control

Integrated Control Systems Built-in web server for PC-independent management and remote access control DMS2.5 Multiple upper-layer control access (S-NET 3, Web-client) Weekly/Daily schedule control Power distribution function MIM-D01AN 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 b.IoT Lite Software 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 MST-BL1A 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

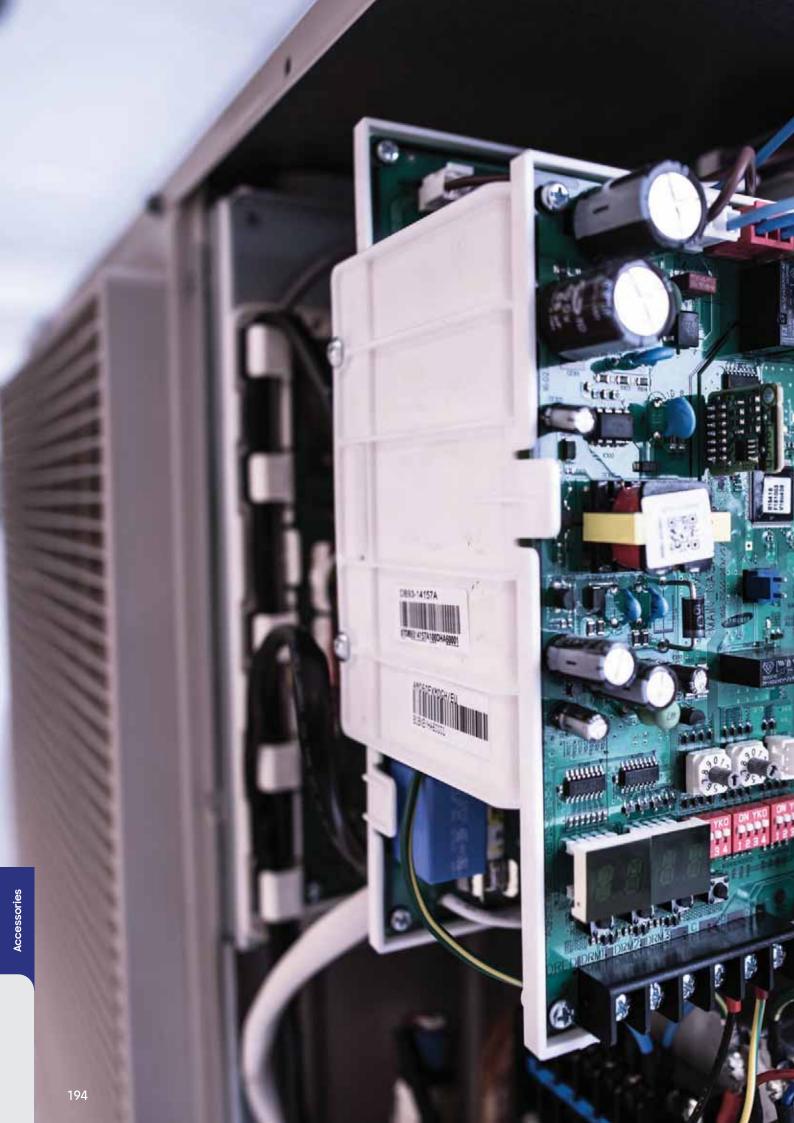
(60.x.x.x or newer)

Controls | Interface devices

		Module, Application Kit, Gateway
External Contact Interface Module MIM-B14		The Samsung Guestroom Management System saves users the energy and money wasted on cooling an unoccupied room. The air conditioner is activated when the Key-Tag is in place and turns off when the Key-Tag is removed. An external contact interface module provides direct indoor unit control via an external contact signa as well as window-synchronised indoor unit control. The emergency control function features simple
	aire di di	contact input. Plus the module generates indoor unit operation/error state output through relay contacts. Direct indoor unit control by external contact signal Window-synchronised indoor unit control Emergency control with simple contact input Indoor unit operation/error state output through relay contacts Net dimensions (W x H x D): 50 x 80 x 35mm
Modbus Interface Module MIM-B19N	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	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 (R1/R2) Max. No. of connection units: 1 outdoor unit (4 outdoor units including
	220	 sub units in the case of modular installation) and 48 indoor units Modbus interface module address range: up to 247 Net dimensions (W x H): 50 x 80mm
Pulse Interface Module (PIM)	-	The Watt-hour Meter Interface Module can be exclusively used for DMS 2.5 power distribution, displaying power consumption for each watt-hour meter.
MIM-B16N		 Exclusive use for DMS 2.5 power distribution Connection with up to 8 watt-hour meters Pulse interface with watt-hour meters Watt-hour meter - by 3rd party Net dimensions (W x H x D): 240 x 255 x 65mm

Controls | Others

Module, Application Kit, Gateway									
S-Converter	HA A	Communication converting module to connect a Samsung system air conditioner to a PC							
MIM-C02N		 Main reasons for use: To connect with test run program [Test run program] - S-NET Pro: Conventional communication S-NET Pro2: New communication Net dimensions (W x H x D): 66 x 92 x 28mm 							
External Room Sensor MRW-TA	Manager P.	 Indoor unit is operated by MRW-TA instead of its own sensor. Wire length: 12 m (39 ft) 							
Receiver Kit MRK-A10N	* *	Concealed wireless signal receiver Filter replacement sign Fan operation display Operation Timer setting display Operation On/Off button Operation On display LED (blue) Defrost operation display LED (red)							

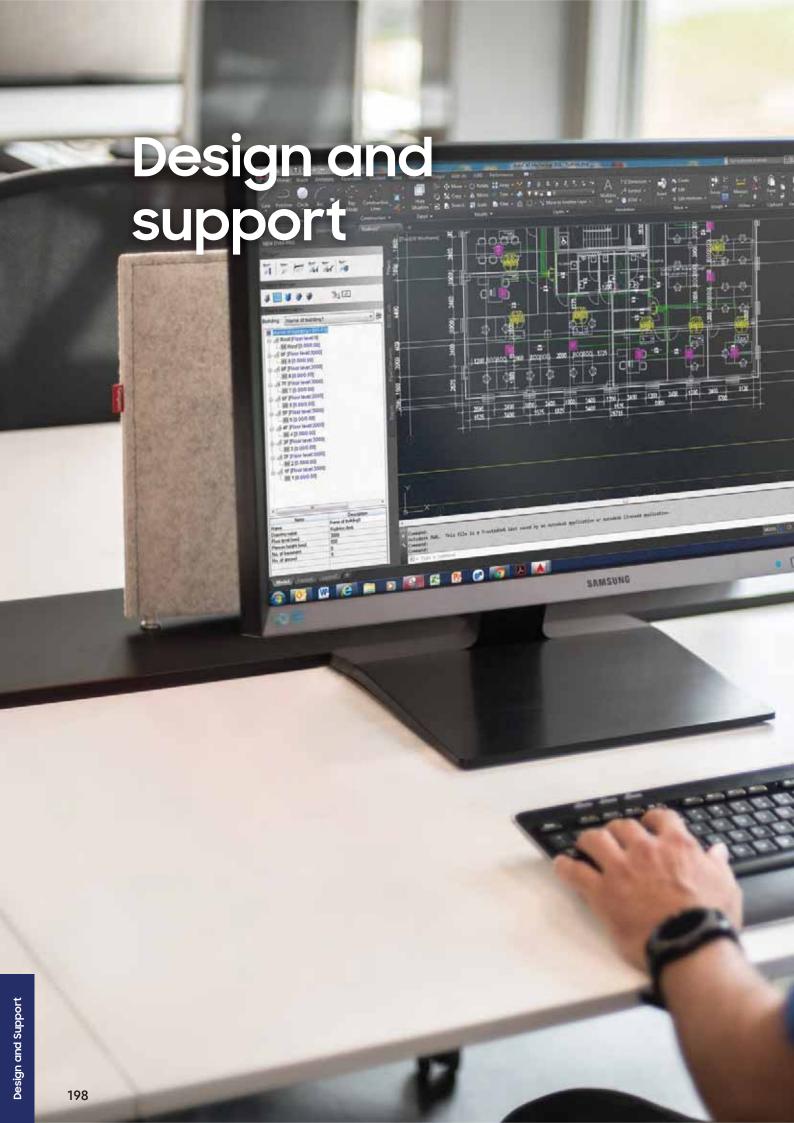




Compatibility

Accessories		Name	Indoor unit	TDM Plus Slim Duct	TDM Plus MSP Duct	TDM Plus WindFree™ Deluxe	TDM Plus Console	Wall-Mounted Hydro Unit	EHS ClimateHub
		Name	Model code	2.2-5.6 kW	7.1-9.0 kW	2.2- 7.1 kW	2.2-5.6 kW	9.0/16.0 kW	200/260 L
EEV Kit (1/2/3 room)		1 Indoor	MEV-E24SA			•			
(1,2,3 130111,	-		MEV-E32SA			•			
	NUMBER OF STREET	2 Indoor	MXD-E24K132A			•			
	347		MXD-E24K200A			•			
			MXD-E32K200A			•			
		3 Indoor	MXD-E24K232A			•			
	4		MXD-E24K300A			•			
36	10		MXD-E32K224A			•			
			MXD-E32K300A			•			
Y-Joint	亭	(≤15.0 kW and below)	MXJ-YA1509M	•	•	•	•	(TDM Plus only)	(TDM Plus only)
Drain Pump	HS	Internal	MDP-E075SEE3D	•					
	-	External	MDP-G075SP		•				
	HS	Internal	MDP-G075SQ		•				
Backup Heater	A	4 kW	MHC-400FE						•
		6 kW	MHC-600FE						•





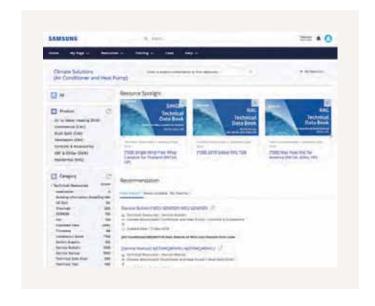


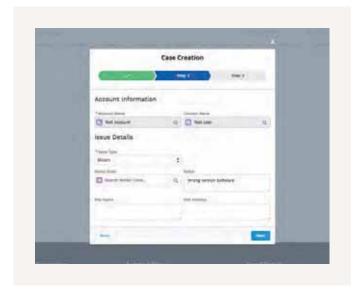
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Access

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



Manage account

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



Search and download

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

Design and Support

 $^{^1} Google\ Chrome\ is\ the\ recommended\ web\ browser for\ using\ the\ Samsung\ Climate\ Solutions\ Partner\ Portal.$





EHS Cloud Service

The all-new remote cloud service console for EHS.

Our aim is to provide comfort and convenience. For your customers, but also for you — our technical partners. You install our products where they're needed, ensure they're in great shape, and keep them in perfect working order. That's why we're launching EHS Cloud Service. Your new remote EHS cloud service console that helps you to save time & costs.

How EHS Cloud Service works

1. Live charts

EHS Cloud Service shows live charts of the EHS's parameters, including download functions.

2. Energy consumption overview

This new remote cloud service console for EHS can provide you with an energy consumption overview.

3. Automatically issue notification

The service generates automatically issue notification of the EHS functioning directly to the end-user.

4. Monitors the correct behaviour

Allows you to monitor the correct behaviour of the EHS and avoid failures.

5. Supports preparation and clearer overview

Technical partners don't need to visit the site to check up on the installation. They can remotely access the EHS systems to check their cycle & status and change the Field Setting Values, and also manage the history of any changes made.

6. Highlights installations on a map

It highlights installations on a map to help arrange field visits.



EHS Cloud Service



Data & insights

EHS Cloud Service can provide you with a wealth of technical data and insights¹ regarding the EHS device you're servicing. From error reports to malfunction types, and from status checks to energy consumption information. Wherever you are. Know what's going on at a customer's before you even make the trip.



Monitoring made simple

It's better to avoid a repair if possible. That's why EHS Cloud Service makes preventive monitoring much easier. With automatic reporting, power usage insights, and live parameter information, you can stay on top of the machines in your care. Allowing you to optimise the performance of the unit.

Only available on Samsung products which are compatible with this service and to the extent, the end-user has agreed to the terms and conditions of the service in the SmartThings app and consented to the privacy notice applicable. A separate Wi-Fi kit may be required for the EHS unit. EHS Cloud does not constitute advice regarding installation, maintenance or other topics, and the information provided through EHS Cloud Service does not confer any right. A separate Wi-Fi kit may be required for the ClimateHub Split and TDM Plus unit.

Knowing the type of malfunction and looking at historic parameters chart, before heading out to a customer allows you to prepare your installation service beforehand. You might just save yourself a trip by collecting the necessary parts before you go. Some adjustments can even be made remotely.



Efficiency

You can save time: assess malfunctions from a distance, optimally manage your parts by making sure you have the right ones during your field visit and advise your customers regarding their usage and energy consumption to keep their devices running smoothly. Happy customers can enjoy peace of mind, knowing you're on top of their machine's performance. How will you use the time and costs you're saving?



EHS Cloud Service for everyone.

EHS Cloud Service makes life easier for any technical partner. Not only the partner specialists but also the partner management as well as their customers will find EHS Cloud Service a helpful companion.



Your customers

- Automatic notification in case of issues



Technical partners specialist



Technical partners managers

- \ensuremath{ullet} Maintain control from a distance
- Keep an overview of issues solved and actions taken by specialists
- ⊗ Keep overview of connected and served customers

EHS Selection Software

Samsung EHS Selection Software is a free of charge, online selection aid for Samsung EHS products. Samsung EHS Selection Software is an advanced design automation program that helps you design your heating system more easily and precisely. You can select the most suitable heating system from the entire range of Samsung EHS products and design the system with its user-friendly interface. It helps to ensure that the system's design complies with Samsung's engineering guidelines.

The ability to calculate the heating load, power consumption, export reports, seasonal efficiency data, water pipe schematics, energy labels and Keymark product fiches and much more makes the EHS Selection Software a powerful tool for an installer, designer and end user.

How to access



Register

The EHS Selection Software is an open web-based platform. No registration process is required. Visit ehs-tool.com



System Selection

Select the type of EHS system most suitable to your purpose from EHS Mono, EHS Split or EHS TDM PLUS.



Design Conditions

Input your design conditions, heating and cooling loads, DHW consumption.

EHS Selection software can also assist you in calculating heating and DHW loads for your project.



Product Selection

Select the most suitable outdoor unit, indoor unit and accessories based on performance charts provided.



Report

Download the EHS Product selection report in PDF or share the link.

System Selection

Select the system configuration based on your requirement.



Design Conditions

Select the purpose of your water solution and its respective piping length, leave in temperature and Domestic Hot Water Solution.



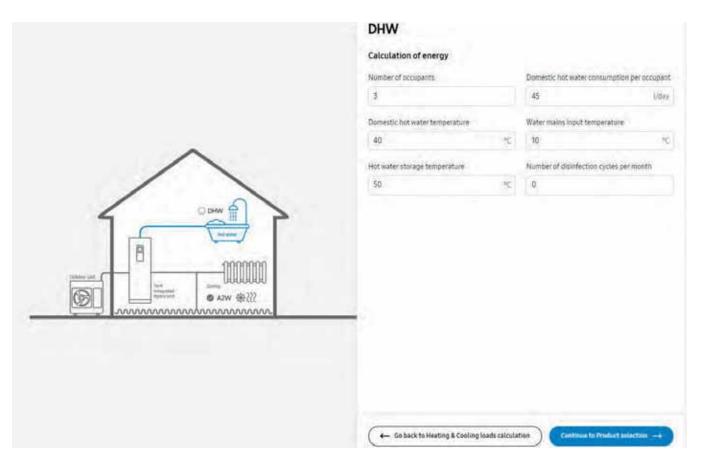
Heating & Cooling loads calculations

Define the expected heating & cooling loads



Domestic Hot Water (DHW)

Define the expected consumption

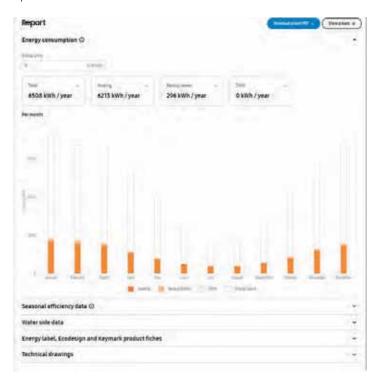


Select the Outdoor Unit, Indoor Unit and System accessories



Report

Download the EHS Product Selection report.

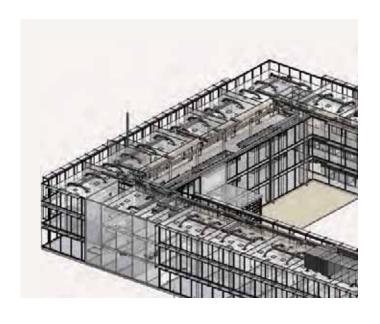


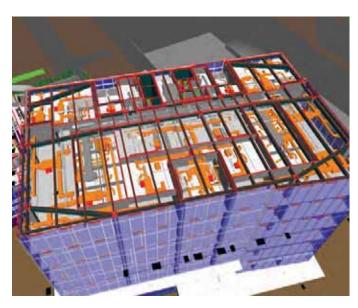
Samsung specialist design support

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 advice to achieve the best environmental performance, Samsung's specialist engineers are ready to support you in making your project a success.

BIM support

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





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

CFD analysis

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

BREEAM 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.

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



How to obtain support



BIM support

2

CFD analysis



BREEAM evaluations

To download Samsung BIM models, go tho Technical Resources on

partnerhub.samsung.com/climate1.

To request dedicated project design support from Samsung, please contact your Samsung representative.

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

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

Design and Support

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

Samsung Climate Solutions Academy

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





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

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

United Kingdom - Mansfield United Kingdom - Chertsey

• Poland - Warsaw

The Netherlands - Amsterdam

France - Lyon •

• Italy - Milan

Portugal - Lisbon

Spain - Madrid

• Greece - Athens





How to register for training



Search

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



Register

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



Get certified

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

Design and Support

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

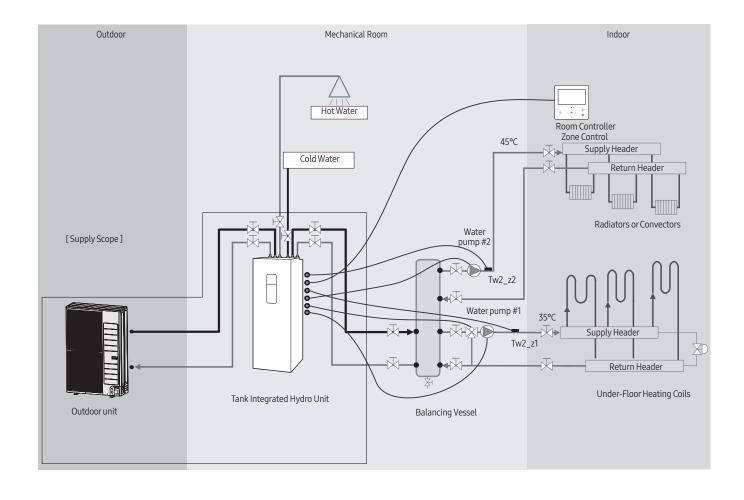




ClimateHub Split

Application examples

Application 1: Space heating + water heating

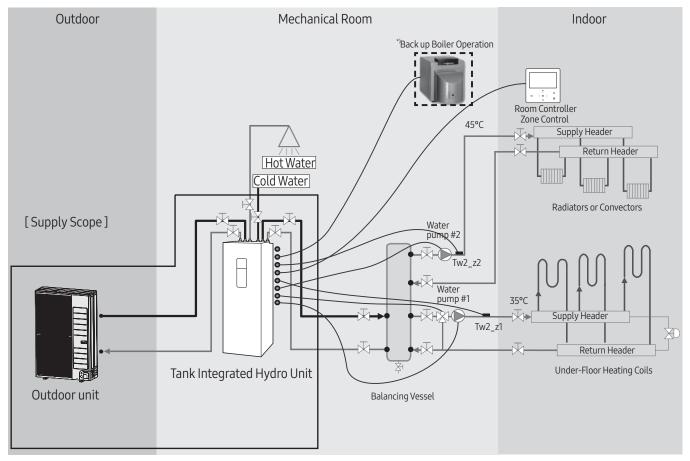


Design and Support

ClimateHub Split

Application examples

Application 2: Hybrid application (backup boiler)

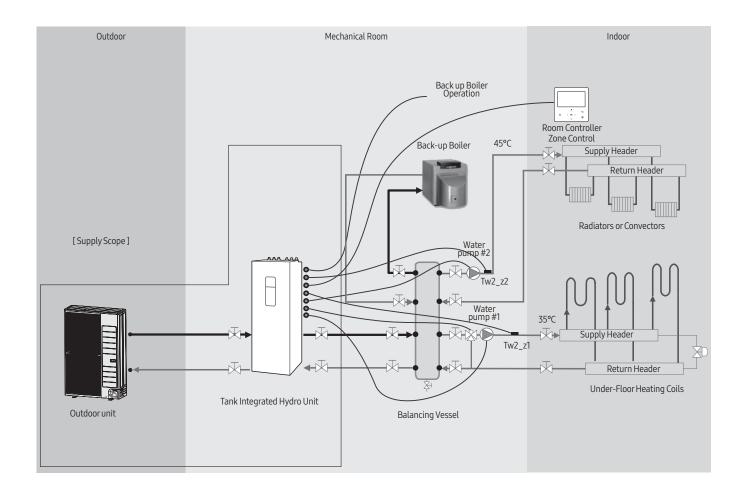


^{*} We control only the on/off signal of backup boiler according to outdoor temperature. Backup boiler should be installed with own device according to the field condition.

ClimateHub Mono

Application examples

Application 3: Space heating + water heating

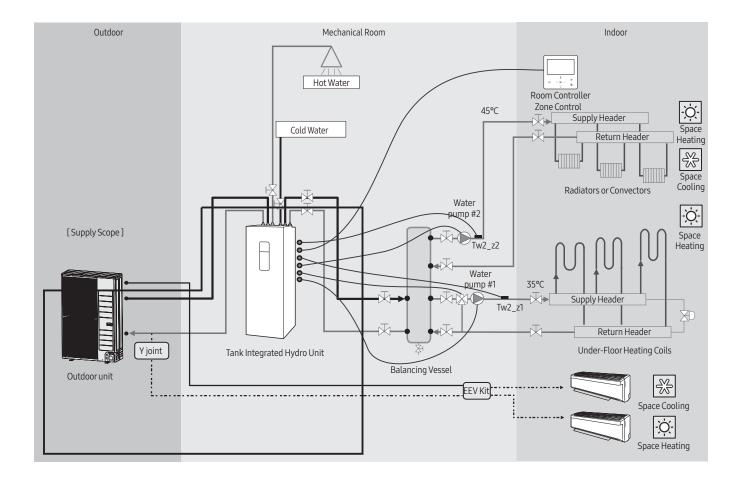


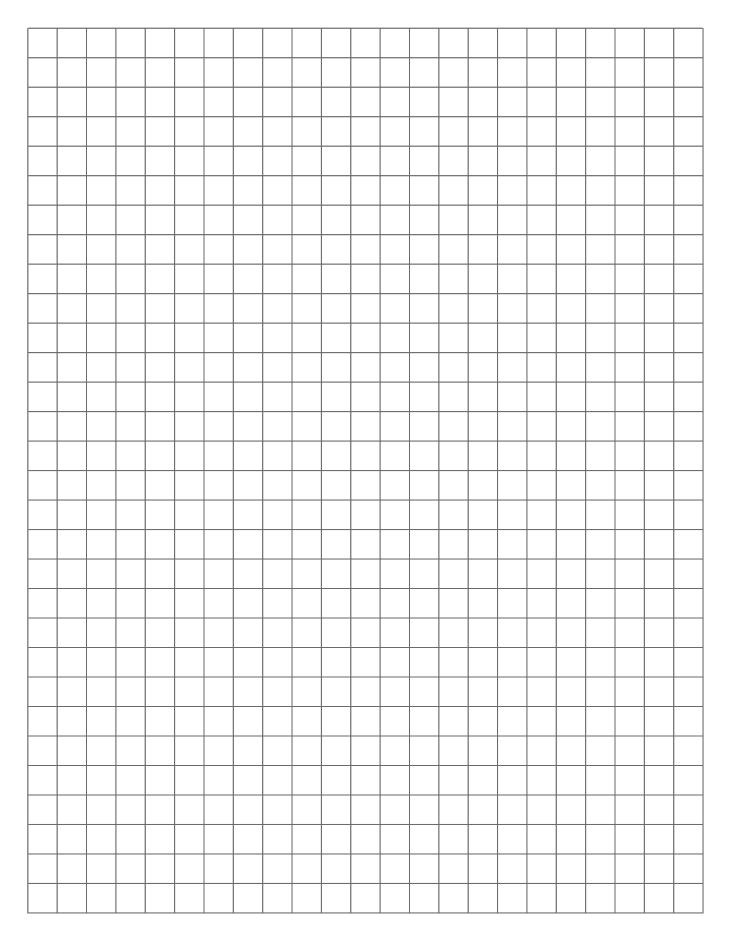
Design and Support

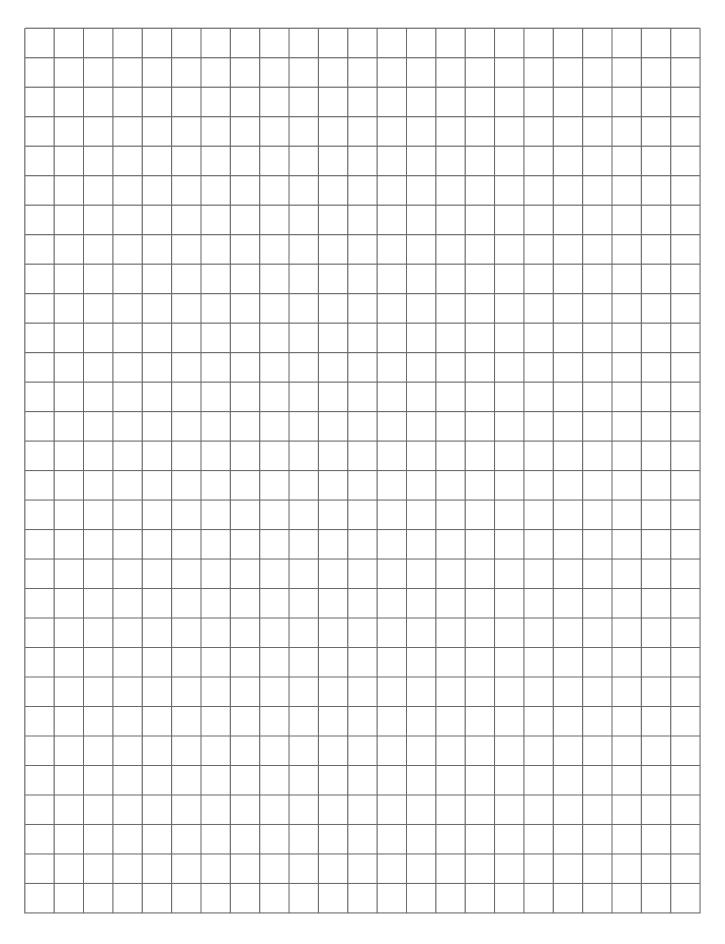
ClimateHub TDM Plus

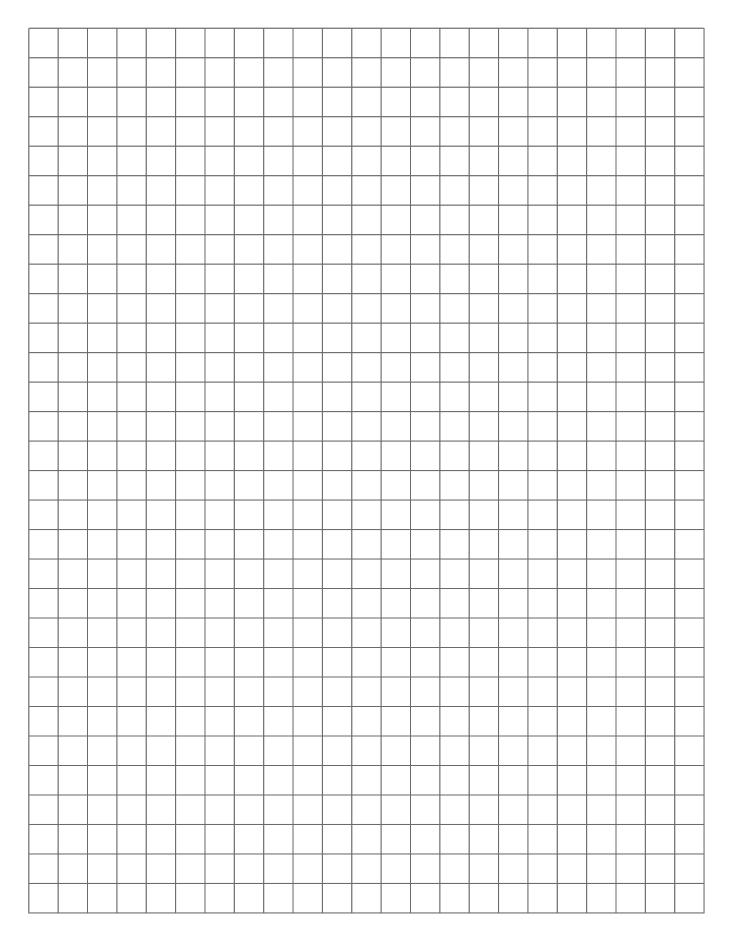
Application examples

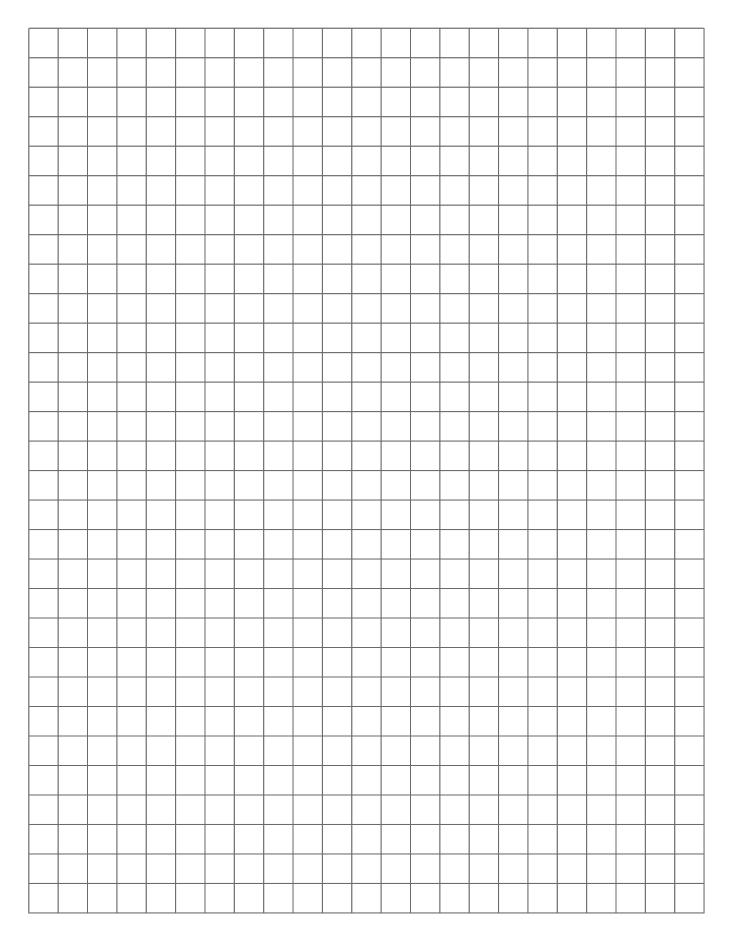
Application 4: Space heating + water heating/A2A cooling













Find your comfort.

Create your perfect environment.

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

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

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