

SAMSUNG
Climate Solutions

**A brief guide
through our EHS**

2024 edition

Here is our philosophy:

We exist to create human-driven innovations for a better world. From the phone in your pocket to the air you breathe.

We do not see obstacles, we see opportunities; we are not afraid of the unknown; we imagine and create technology that blaze a new trail. That is how we have paved the way so far with our innovative smartphones, TVs, and household appliances. And we are here for more.

With our climate solutions we help you to find your flow and create the perfect environment to calm, inspire and energise you. Choose the best solution for you and your lifestyle, with intuitive function and innovative form that are designed around the way you want to live.





Global Citizenship

We have always been there for you, with you

We believe that creating a better place for everyone means impacting people in their everyday lives in delightful and uplifting ways. We go beyond convention through our relentless focus on pushing the boundaries of technology, innovation and design.



Smart connectivity

Think smart, live smart

With seamless connectivity at all times, our goal is to connect different smart technology together so you can have the experiences you want all year round.





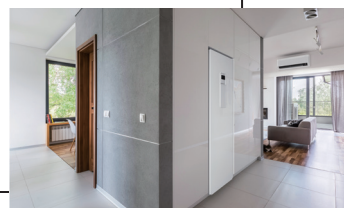
Read on to..

Know more about
the Samsung philosophy



Why choose Samsung EHS?

Save valuable space
in your home



Integrate a suitable climate system
into your home renovations

Control your comfort
with Smart Connectivity



Relax with reliable comfort,
all year round

and to read all about our new
EHS Mono R290 heat pump



Understanding EHS

Why choose EHS?

Traditional gas boilers operate on fossil fuels, such as natural gas or heating oil, to heat buildings or provide hot water.

Samsung's EHS, on the other hand, are Air Source heat pumps that use electricity and free energy available in outside air to generate heat and produce domestic hot water.

There are two types of Air Source heat pumps:

- Air-to-Air heat pumps use the outside air as a source to heat or cool your home via an air conditioning indoor unit.
- Air-to-Water heat pumps take heat from the outside air to produce domestic hot water and heat via radiators and underfloor heating.

A heat pump typically consists of an outdoor unit, a domestic hot water tank and a controller connected to an hydronic system. To maximise its potential and make it an even more sustainable option, the system can also be connected to Smart Grid or Solar Power (PV).





Get year-round comfort at home with our EHS

Samsung's EHS are the culmination of years of research into the best ways of providing heating, hot water and air conditioning for your home. Our EHS help to warm a home during the colder months of the year, and keep the indoors cool during summer, offering you year-round climate comfort. Moreover, with our smart connectivity, maintaining home comfort is now easier than ever before.





What are the unique benefits of EHS?

Optimise energy usage

Our EHS use heat pump technology to heat and cool your house and produce hot water. Their range of advanced technologies is designed to help optimise your energy usage.

Save space without compromising on design

When you choose our compact TDM Plus or ClimateHub solution, you save indoor and outdoor space. Our Samsung EHS range extends its offering with the addition of the EHS Mono HT Quiet. This outdoor unit appeals to the aesthetic sense. The dark grey colour elevates the premium look and feel.

Connect and operate - remotely

With our SmartThings App, you get to manage your EHS remotely. You can turn it on and off, control the functions and schedule its operation from anywhere, at any time.

Feel year-round comfort

Our EHS are designed to provide year-round comfort with their reliable performance. They are also equipped with back-up systems to ensure consistent supply of hot water without interruption.

Choose what suits you best

With Samsung EHS, you get to choose from three types of units to cater to your specific comfort and space requirements.

Split

The split unit is an Air-to-Water heat pump with a single outdoor unit that is connected to an indoor hydronic unit which is then connected to the hydronic system and a third-party domestic hot water tank.

Radiator



Floor heating



Hot water



Mono

With Mono, the outdoor unit already includes the hydronic unit and does not have to be installed indoors, thus saving space.

Radiator



Floor heating



Hot water



Indoor space saving



TDM Plus

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.

Radiator



Floor heating



Hot water



Indoor space saving

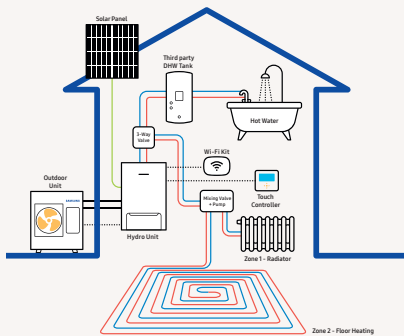


Air conditioner



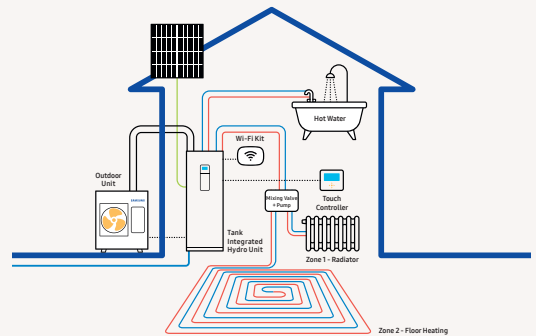
ClimateHub

It is good to note that our Mono, Split and TDM Plus systems are all compatible with ClimateHub – combining the hydronic system and domestic hot water tank in a compact design to save space in your home.



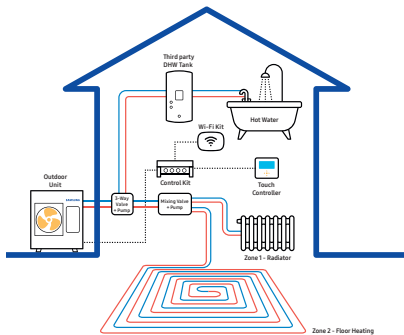
Split

Outdoor Unit + Hydro Unit + Water Tank



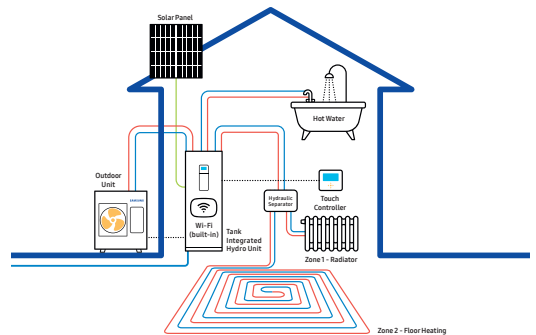
ClimateHub Split

Outdoor Unit + Tank Integrated Hydro Unit



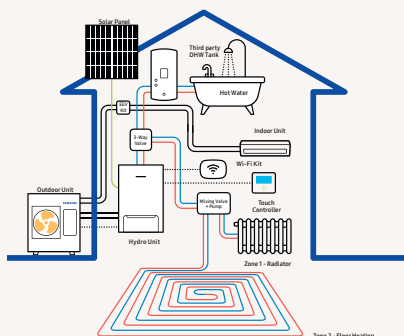
Mono

Outdoor Unit + Control Kit + Water Tank



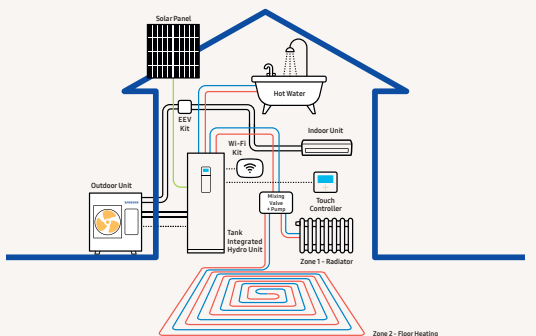
ClimateHub Mono

(Built-in Wi-Fi)¹



TDM Plus

Outdoor Unit + Hydro Unit + Water Tank + Indoor Unit



ClimateHub TDM Plus

Outdoor Unit + Tank Integrated Hydro Unit + Indoor Unit

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

Optimise your energy usage

Our EHS include a range of advanced technologies that help optimise your energy usage. They have an energy efficiency rating of up to A+++* across the entire range of capacities and are also compatible with solar PV systems and Smart Grid Ready to further help reduce CO₂ emissions and electricity demand compared to traditional gas boilers.

* Based on Seasonal Coefficient of Performance (SCOP) for 35 °C. Based on testing defined in EN14825. May vary depending on the system configuration, temperature and actual usage conditions.

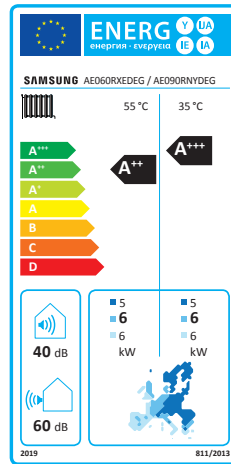


| Optimise your energy usage

Enhanced energy efficiency

A+++

The Samsung EHS have an energy efficiency rating of up to A+++ across the entire range of capacities.* Therefore, they are proven to operate with a high level of efficiency.



Rating	SCOP Range
A+++	SCOP ≥ 5.10
A++	4.60 ≤ SCOP < 5.10
A+	4.00 ≤ SCOP < 4.60
A	3.40 ≤ SCOP < 4.00
B	3.10 ≤ SCOP < 3.40
C	2.80 ≤ SCOP < 3.10
D	2.50 ≤ SCOP < 2.80
E	2.20 ≤ SCOP < 2.50
F	1.90 ≤ SCOP < 2.20
G	SCOP ≤ 1.90

Reduce energy usage in various ways

Renewable with PV

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



Smart Grid Ready

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



* Based on Seasonal Coefficient of Performance (SCOP) for 35 °C. Based on testing defined in EN14825.

May vary depending on the system configuration, temperature and actual usage conditions.

** Not available on the Samsung EHS TDM Plus, which uses a third-party DHW tank.

*** Not available on the Samsung EHS Mono and TDM Plus, which use a third-party DHW tank.



Improved heat exchange performance that lasts longer

Optimised Heat Exchanger

Our EHS outdoor units have an optimised Heat Exchanger, which combines Corrugated Fins with a newly designed fan to enhance the efficiency of heat exchange.

Durafin™ Ultra

Our EHS have two layers that improve the quality of the system by dispersing water and reinforcing its corrosion-resistance.*

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

| Optimise your energy usage

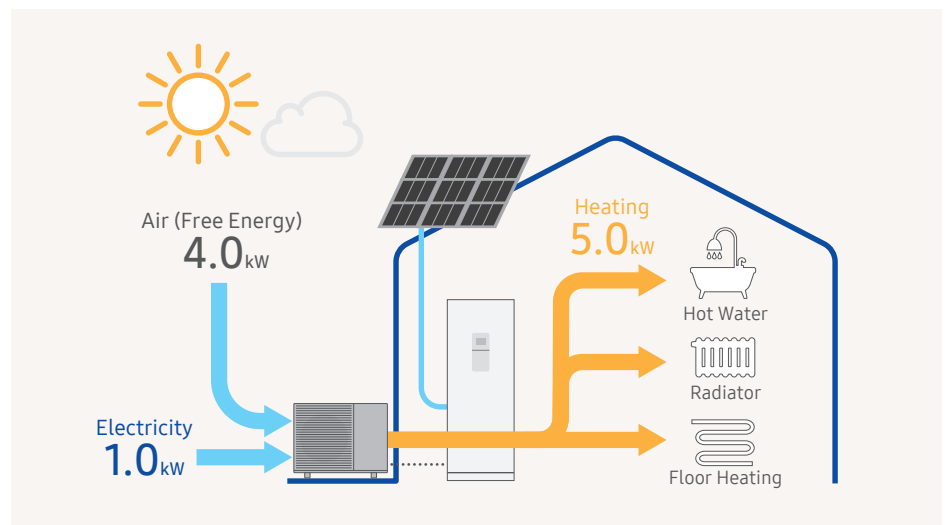


Heat pumps can secure a more sustainable future

Heat pump technology

Our heat pumps provide energy efficient, all-in-one heating, hot water and air conditioning for your home. To generate 5.0kW of energy, they consume about 1.0kW of electricity and generate the rest of the energy from the outside air.*

Heat pumps will play a considerable role in reaching the sustainability targets set out by the European Union. Advanced economies, primarily the European Union and the United States, can reduce their heating-related emissions by three-quarters due to heat pumps by 2030.** Are you ready to join us in this journey?



Our heat pumps use refrigerants - a fluid that serves as a heat transfer medium to move heat from the outdoor unit. While most of our EHS units make use of the R32 refrigerant, this year we are giving our end-users not just a wider choice, but a more sustainable heating solution with the introduction of the R290 refrigerant. R290 refrigerant is a natural gas and in comparison to R32 (675 GWP), R410A (2,088 GWP) has a lower Global Warming of just 3 which help mitigate the depletion of the ozone layer.***

* Based on internal analysis. The average COP (Nominal Heating) of the Samsung EHS products is 4.52, this is lower compared to conventional boiler systems, which generally have a COP of approximately 1.0.

** Source: EHPA.org. 2023. Heat Pumps in Europe Key Facts & Figures - EHPA. [online] Available at: <https://www.ehpa.org/news-and-resources/publications/heat-pumps-in-europe-key-facts-and-figures/> [Accessed 13 March 2024].

*** Global Warming Potential rating: R32 refrigerant = 675 vs. R410A refrigerant = 2,088. 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.

Make more space in your home

Our EHS units have been designed to stand out – by fitting in. Its compact size allows it to fit into the most limited of space and the minimal design blends harmoniously with the interiors of your home.

Our ClimateHub solution saves space inside your home as it combines a hydro unit and a domestic hot water tank in a single, compact design. And if you are looking to save space on the outside, our TDM Plus solution can be the right option as it needs only one outdoor unit for heating and cooling, whereas traditional heat pumps require two outdoor units.

Whether you are developing a new build or looking for heat pumps for a renovation solution, our latest EHS offering comprising of the EHS Mono HT Quiet and the R290 Mono heat pumps seamlessly blend into the building's exterior and comes in a dark grey colour which complements the current design trend for modern building exteriors. The outdoor units, approximately 1m in height, are fitted with a new horizontal black grille composition which screens their inner mechanics from sight.*

* Based on a viewing height of 1,700mm.



| Make more space in your home

A single, integrated unit

ClimateHub

A compact and modular Tank Integrated Hydro Unit comes with a control kit (ClimateHub Mono) or a Hydro Unit (ClimateHub Split and ClimateHub TDM Plus) and a large hot water tank of either 200 or 260 litres. As everything is installed in one place, it gives you more freedom to choose the set-up location.



Minimal Design

Flat, neat, and minimal in design. Heat pumps do not have to be bulky units that take up space. Our ClimateHub can blend in harmoniously everywhere - from the kitchen to the laundry room or even the utility room.



Compact Size

Although our ClimateHub includes a domestic hot water tank, its dimensions let it fit into almost any space. If you are thinking of replacing a conventional system to free up space, this can be a good option.

Multiple capacities

With ClimateHub, you get a choice between two types of built-in water tanks – 200 or 260 litres. So, you can select the option that better suits the size of your family or your expected water usage.

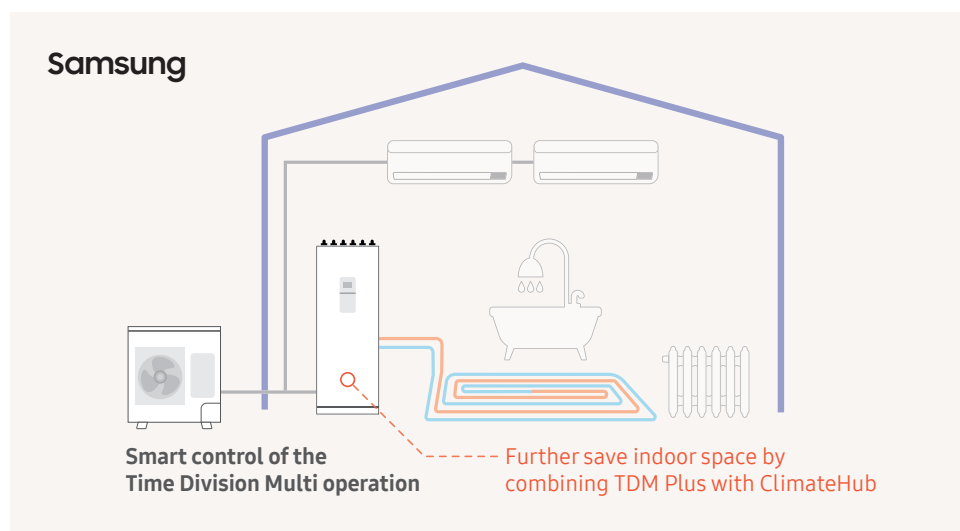
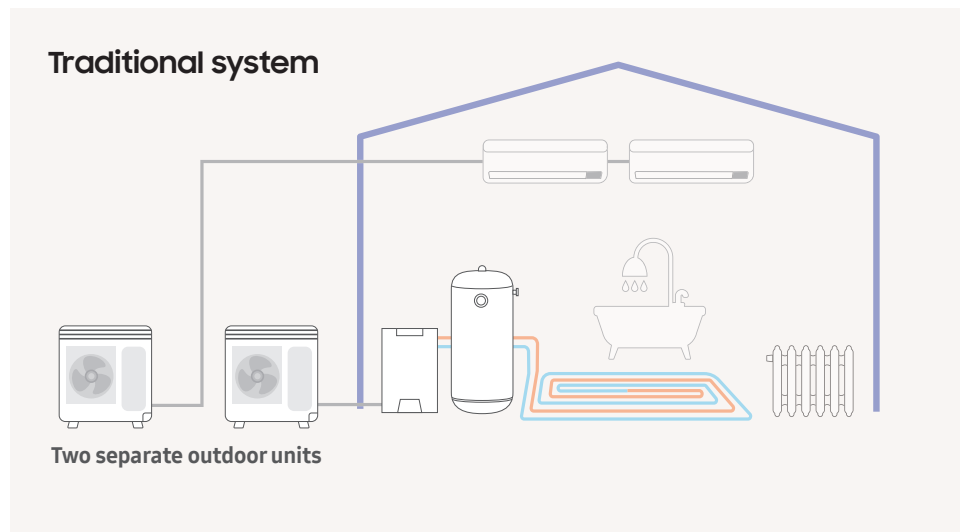


Hot water and air conditioning: one outdoor unit does all you need

TDM (Time Division Multi) Technology

Traditionally, heat pumps operate via radiator and underfloor heating. Our unique TDM technology comes with the added advantage of cooling and heating via an air conditioning indoor unit, using only a single outdoor unit.

The smart controls of the heat pump system optimally distribute the load and energy to ensure a stable supply of domestic hot water, while also maintaining a comfortable indoor temperature with air conditioners. This lets you free up valuable space outside your home.



Outdoor Unit

Air Conditioner



Hot Water Supply



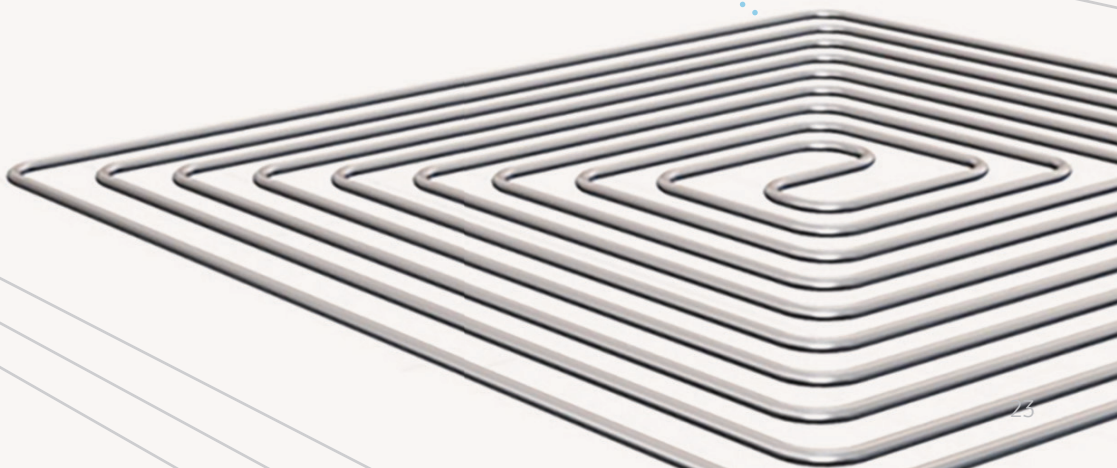
Radiator



ClimateHub



Underfloor Heating



Be truly in control

At Samsung, we believe that smart connectivity means fully integrated control of all compatible smart appliances with a display, such as the Samsung EHS, along with your oven, refrigerator, robot vacuum, TV and any other smart device you may have your home. You can simply monitor and adjust your heating and air conditioning using a Wired Remote Controller, or a smartphone with SmartThings.* With SmartThings, you also can monitor your energy usage daily, weekly and monthly at a glance, as well as check the energy usage of multiple devices in your home. You can also explore ways to save on your energy usage with the help of SmartThings Energy.

Alternatively, you can control them via any other device with a display, like your TV or a Family Hub refrigerator,** or simply speak to Bixby,** our friendly voice recognition assistant.

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

** Only available on certain models that have the SmartThings App. A Wi-Fi connection and a Samsung account are required.

*** Bixby is Samsung's brand of artificial intelligence (AI) / 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.



Intuitive and gentle

Wired Remote Controller

Our EHS comes with a Wired Remote Controller with a large and bright colour display, touch control and a choice of languages,* so it is very user-friendly. As it is separate from the main unit, it can also be installed in your preferred location for more convenient access.

Using the controller, you can:

- Monitor and adjust the indoor temperature as well as that of the domestic hot water in the water tank.
- Set a limit for energy consumption and be alerted once the limit has been reached.**
- See details of any malfunction displayed as an error code on the remote controller. This makes it easy for installers to address the issue and helps shorten the service time.

Built-in modes for simple operation



Various DHW Modes

Choose from a selection of four modes for hot water operation to suit your needs and the environmental conditions. If you do not need much hot water, simply select the Economic mode to save energy. And, if you need hot water quickly, you can select either the Power or Forced modes.



Quiet Mode

With one touch on the remote controller, you can immediately select the Quiet Mode to reduce the ambient noise level. You can also schedule it to run automatically in Quiet Mode at a set time.

* Available languages: English, German, Spanish, French, Italian, Polish, Portuguese, Dutch, Greek, Czech, Slovak, Finnish, Swedish, Norwegian, Danish and Lithuanian.

** Only available only when the MWR-WW10* wireless remote control is installed in the tank-integrated product. The consumption strategy displayed on the remote controller only indicates the power consumption used to operate the outdoor unit.





Outing Mode

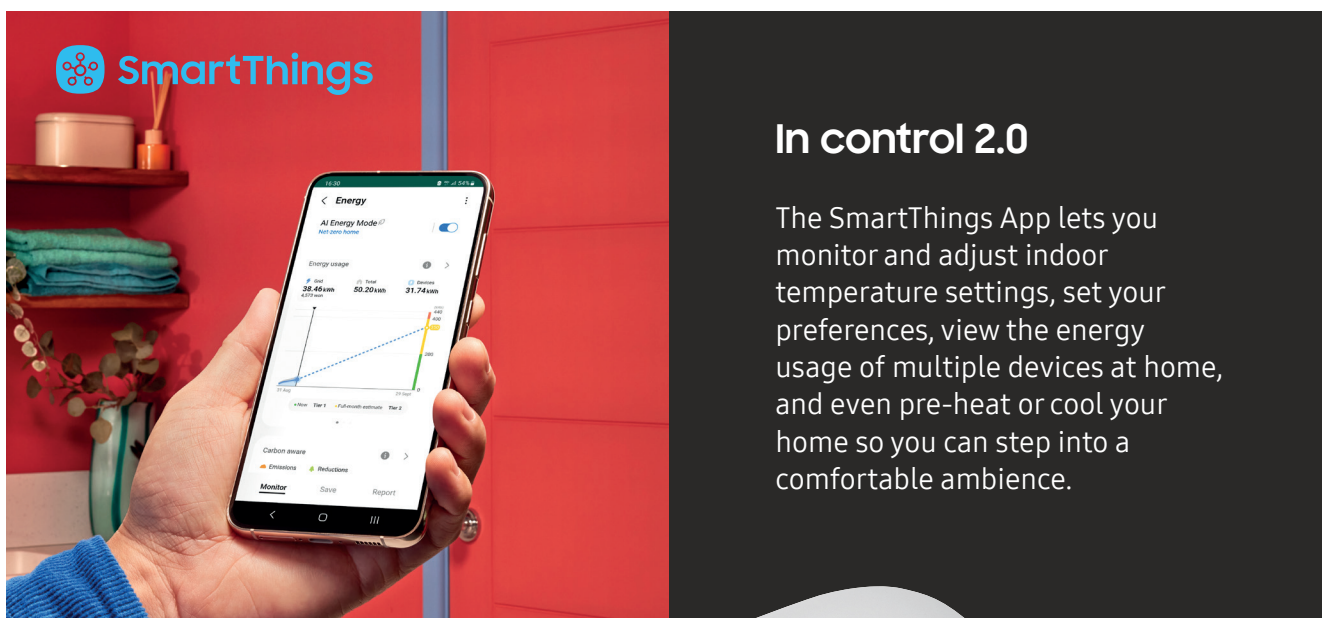
When you go out, you can save energy by using the Outing Mode. When selected, all operating temperatures are automatically set to the minimum levels. Once you return home, you can restore the set temperatures by simply selecting the 'Outing' button again.

| Be truly in control

Anytime, anywhere: it's all in your hands

SmartThings + Wi-Fi Kit 2.0

Control your comfort on the go. With the Wi-Fi Kit 2.0, the Samsung EHS' smart connectivity lets you monitor the status of up to 16 indoor units, turn them on/off and adjust their settings using the SmartThings App* on a smartphone. Or simply tell Bixby what you want.**



In control 2.0

The SmartThings App lets you monitor and adjust indoor temperature settings, set your preferences, view the energy usage of multiple devices at home, and even pre-heat or cool your home so you can step into a comfortable ambience.

works with **amazon alexa**

works with the **Google Assistant**

Bixby



* 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 (AI) / 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 automatically sets the room temperature at the desired level when you come within a pre-set distance of the building.



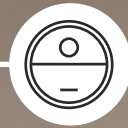
Scenario:
Home Coming



ClimateHub
ON



Washing Machine
ON



Robot Vacuum
ON



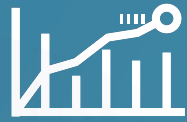
Samsung is in a unique position to provide the most dynamic Home Energy Management System

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



**Intuitive
Energy
Insights**



**Wide Device
Portfolio**

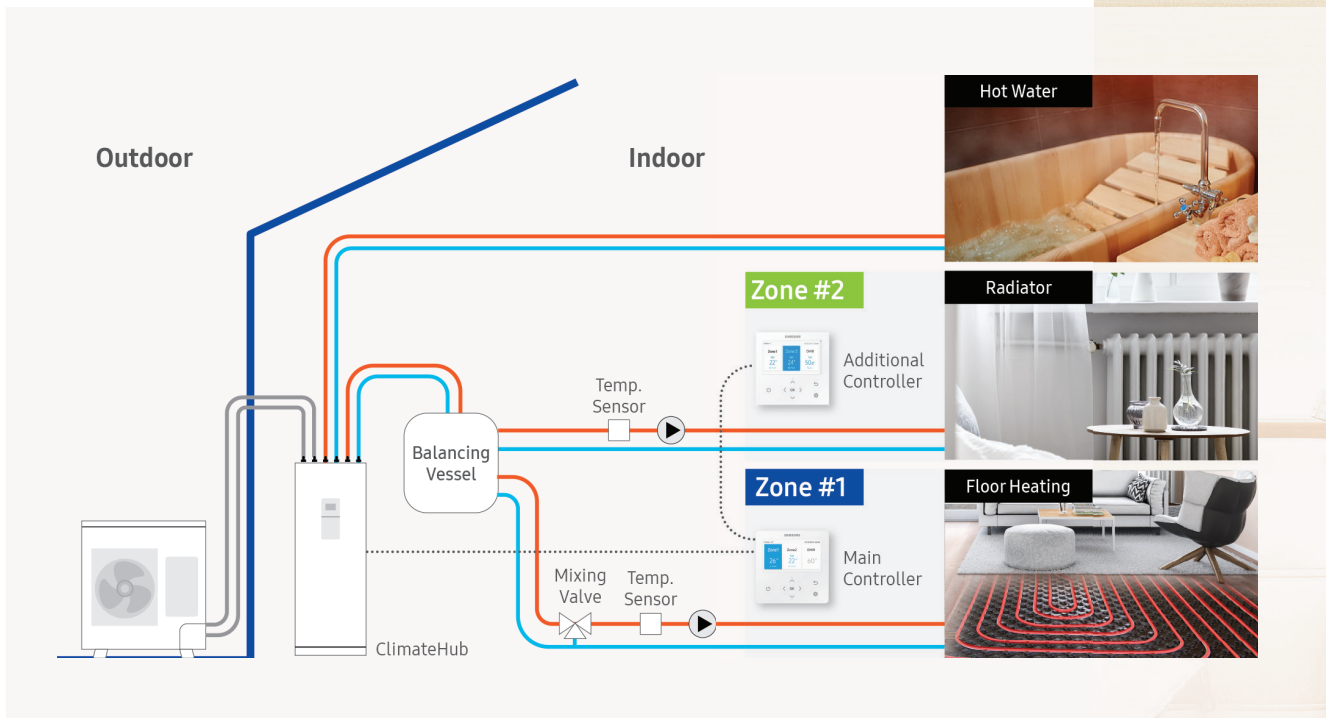


**Leading
IoT
Platform**

Optimised heating

2-Zone Control

The 2-Zone Control* lets you heat efficiently with two different water temperature demands simultaneously, so you can optimally heat multiple spaces.



* Only available on the ClimateHub series, which uses a Tank Integrated Hydro Unit. When using a Control Kit or a Hydro Kit, the system requires an optional third-party component to use this function.



Remain comfortable, without exception

Our EHS range provides you with year-round comfort by meeting every heating and cooling need, including domestic hot water. And they do so while operating quietly, so as not to disturb your daily life. (Our high temperature heat pump, the EHS Mono HT Quiet, is Quiet Mark-certified.*) They also include backup solutions to ensure there is enough hot water, even in severely cold weather.

Additionally, should there be any sudden problem with the system, the emergency operation keeps providing you with domestic hot water, while the self-diagnosis function helps resolve the issues quickly.



* The Quiet Mark certificate is applicable for UK and EU territories only.



| Remain comfortable, without exception

Smooth and durable performance

Twin Rotary BLDC Compressor

Enjoy greater efficiency and reliability with the Twin Rotary BLDC Compressor of the Samsung EHS outdoor units. The design and premium moving parts deliver a balanced performance, fully complying with EU regulations for enhanced efficiency.* The use of high-quality moving parts also ensures better stability and durability.

Designed to perform in freezing climates

Dedicated Cabinet Design and a Base Heater

The outdoor unit of the EHS Mono and Split is specially designed to provide optimal performance even in extremely cold environments. The Base Heater** prevents water condensation from freezing, while the enlarged Cabinet Grid prevents damage from snow drifts.



* All Samsung EHS products comply to EU EcoDesign's Minimum Energy Performance Standards (MEPS).
** Only available in certain models.



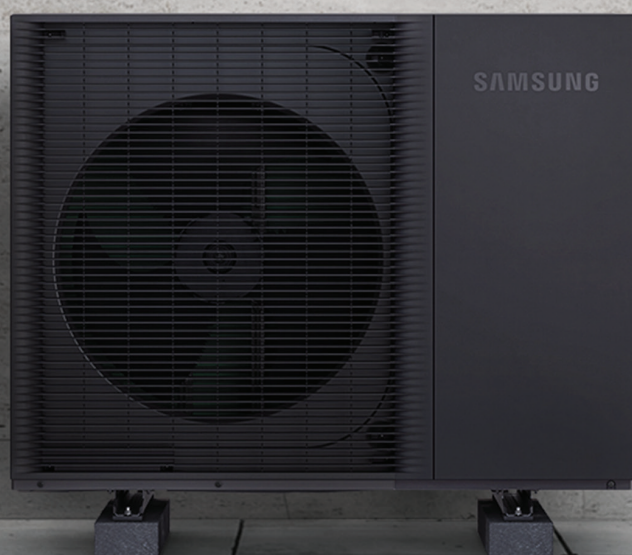
True comfort cannot be heard

4-step Quiet Mode

The 4-Step Quiet Mode enables adjustable, low-noise operation to meet strict sound level requirements.* Simply select from four different steps to reduce the sound level.

Double-layered Sound Insulation

The compressor is fully covered in double-layered sound insulation material that absorbs and reduces noise. The Mono HT Quiet range harnesses new technologies to operate at noise levels as low as 35dB(A),** using a 4-step quiet mode.



* Based on internal testing of the 6 kW and 9 kW Split outdoor units (AE060RXEDEG, AE090RXEDEG, AE090RXEDGG). 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.

** Based on internal testing. 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.

| Remain comfortable, without exception





Never run out of hot water

Emergency Operation

With two Emergency Operation Modes, the Samsung EHS can provide continuous radiator and underfloor heating and domestic hot water – even in case of a malfunction.

Heating emergency operation mode

Continues to heat water using a Backup Heater.

Daily hot water emergency operation mode

Maintains a continuous hot water supply using a Booster Heater.

Self-diagnosis

The Samsung EHS perform self-diagnosis of the operating status in real time while the product is operating. And, if any error occurs, the diagnosis result is displayed as an error code on the Wired Remote Controller, making it easier for your installer to resolve the issue, and thus shortening the service time.





Project: Atico en el Retiro (Spain)
Project Architecture: ÁBATON
Interior Design: BATAVIA
Photography: Belén Imaz

Integrate a suitable climate system into your home renovations

Many houses in Europe are using older radiators that require a hot water temperature of 65°C or higher to heat rooms effectively. Most regular heat pumps operate at temperatures between 55°C–60°C. The EHS Mono HT Quiet on the other hand, is able to consistently provide hot water of up to 70°C for domestic heating purposes.* This can make it a suitable replacement for gas boilers, as it provides a high leaving water temperature.

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



| Integrate a suitable climate system into your home renovations

High temperature, low noise and stylish design

EHS Mono HT Quiet

A premium high temperature heat pump that provides a sense of ease and comfort as it meets all the heating needs of your household while quietly operating in the background.

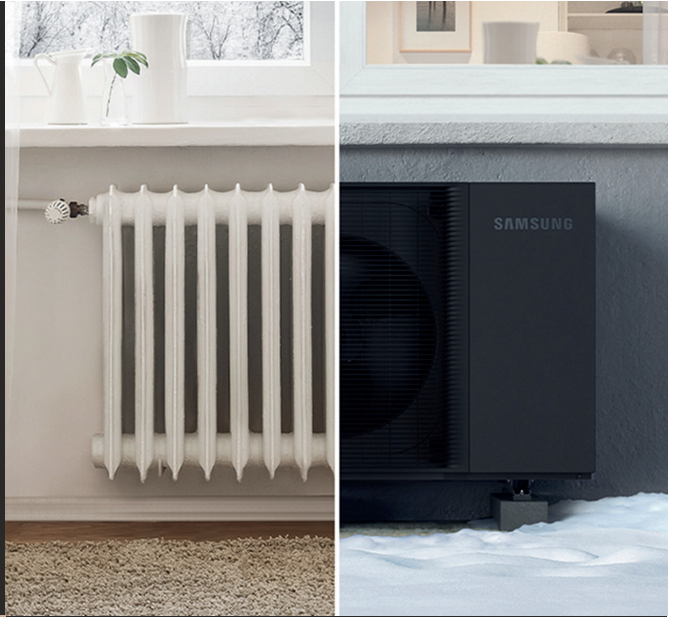


* The Quiet Mark certificate is applicable for UK and EU territories only.



High temperature

This heat pump combines advanced features and new technologies to achieve hot water temperatures of up to 70° C for domestic heating purposes.*



Low noise

Powered by innovative noise reducing technologies, the Quiet Mark certified EHS Mono HT Quiet, operates at noise levels as low as 35 dB(A)** using a 4-step Quiet mode.



Stylish design

The unit seamlessly blends into any building's exterior and comes in a dark grey colour which complements the current design trend for modern building exteriors. The outdoor unit, approximately 1m in height, is fitted with a new horizontal black grille composition which screens its inner mechanics from sight.***

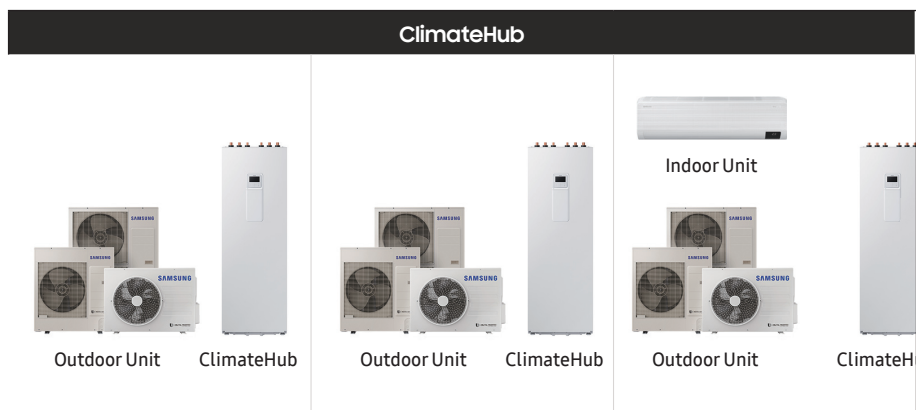


* Leaving water temperature, when the outdoor temperature is between -15°C-43°C. Results may vary depending on the actual usage conditions.

** Based on internal testing of the EHS Mono HT 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 environmental factors and individual use.

*** Based on a viewing height of 1,700mm.

Line-up



		ClimateHub Mono R32	ClimateHub Split R32	ClimateHub TDM Plus R410A
Main function	Air-to-Water cooling	•	•	•
	Radiator and underfloor heating	•	•	•
	Domestic hot water	•	•	•
	Cooling and heating via air conditioning	-	-	•
	Capacity (kW)	5.0 / 8.0 / 12.0 / 16.0	4.0 / 6.0 / 9.0	4.4 / 6.6 / 9.0 / 12.0 / 16.0
	Leaving water temperature	Heating (°C) Cooling (°C)	15-65 5-25	15-65 5-25
Efficiency	SCOP (35 °C / 55 °C)*	A+++ / A++	A+++ / A++	A+++ , A++ / A+
Control	SmartThings (Wi-Fi Kit 2.0)	•	•	•
	Wired Remote Controller	•	•	•
	2-Zone Control	•	•	•
Comfort	Twin Rotary BLDC Compressor	•	•	•
	4-Step Quiet Mode	•	•	-
	Emergency Operation	•	•	•
	Self-Diagnosis	•	•	•
Versatility	Photovoltaic Enabled	•	•	•
	Smart Grid Ready	•	•	•

* SCOP rating differs per model

Controls



SmartThings
Bixby

Wi-Fi Kit 2.0

- SmartThings and Bixby (mobile and voice control)
- Up to 16 indoor unit connection
- Welcome cooling/heating with geofencing
- Customised control with a variety of execution rules
- Energy monitoring



Wired Remote Controller

- 4.3" colour LCD display
- Dynamic navigation with simplified buttons
- Operation Mode: Heating, Cooling, Auto, DHW
- Smart Grid Ready, PV Enabled, 2-Zone Control, Energy consumption monitoring, Energy saving
- Multiple language support
 - MWR-WW10N: EN, DE, FR, IT, ES, PL
 - MWR-WW10JN: EN, PT, NL, EL, CS, SK
 - MWR-WW10KN: EN, FI, SV, NO, DA, LT

Third Party DHW Tank solutions

Mono R32		Split R32		Split R410A		TDM Plus R410A	
•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•
•	•	•	•	•	•	•	•
-	-	-	-	-	-	•	•
5.0 / 8.0 / 12.0 / 16.0	4.0 / 6.0 / 9.0	12.0 / 16.0	4.4 / 6.6 / 9.0 / 12.0 / 16.0				
15-65	15-65	15-55	15-55				
5-25	5-25	5-25	5-25				
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Indoor units for air conditioning compatible with TDM Plus and ClimateHub TDM Plus



WindFree™ Deluxe

- WindFree™ Cooling
- Fast Cooling
- Easy Installation
- Auto Clean
- Temperature Display



Slim Duct

- Compact size (199mm height)
- Flexible Design
- High Lift-up Drain Pump
- Easy Access
- Easy Filter Cleaning



MSP Duct

- Auto ESP Adjustment
- Compact & Lightweight
- 3-way Service Access
- Plug-and-Connect Drain Pump



Console

- Slim Design
- Intuitive Control
- 2-way Air Outlets
- Silent Mode

Features and specifications are subject to change without notice.



EHS Cloud Service

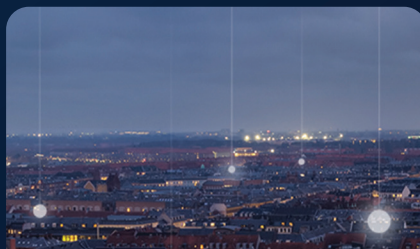
The all-new remote cloud service console for EHS.

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.



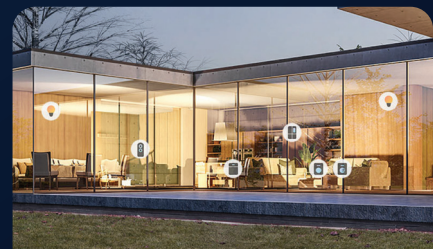
Your customers

- ☑ Enjoy peace of mind
- ☑ Automatic notification in case of issues
- ☑ Easily request service



Technical partners specialist

- ☑ Helps you to save time and costs
- ☑ Assess errors from a distance
- ☑ Prepare service visits



Technical partners managers

- ☑ Maintain control from a distance
- ☑ Keep an overview of issues solved and actions taken by specialists
- ☑ Keep overview of connected and served customers



| Integrate a suitable climate system into your home renovations

Check out the new Samsung EHS Mono R290 heat pump and discover its benefits:

- Future-focussed
- Efficient energy use
- Exceptionally reliable heating
- Puts safety first
- Easy to install and maintain
- Quiet operation
- Smart energy
- Elegant design
- Engineered to last longer

The wide range of capacities – from the 5kW all the way to 16kW makes it suitable for a multitude of different homes and residential projects.





Future focussed

Everyone's personal impact on the planet matters. According to the new EU F-Gas regulations, refrigerants used in heat pumps must not exceed 150 Global Warming Potential (GWP) from 2027. Not only is the R290 a natural refrigerant but it has a GWP of only 3¹ – a very low impact compared to solutions using other refrigerants such as R32 and R410a.



Efficient energy use focussed

This heat pump has an enhanced SCOP (Seasonal Coefficient of Performance) A+++ energy efficiency rating across the entire range of capacities.² What's more, it provides up to 15% greater energy efficiency than the normal criteria required for A+++ rating.³



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

2. 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].

3. Based on internal testing when generating 35°C water using an EHS Mono R290 AE050CXYDEK/EU model (SCOP: 5.10), compared to the criteria of A+++ (SCOP ≥ 4.45). AE050CXYDEK/EU model (SCOP: 5.10), compared to the criteria of A+++ (SCOP ≥ 4.45).



Reliable heating

If you live in an older house, your radiators may require a hot water temperature of 65°C or higher to heat your rooms effectively. The new EHS Mono R290 will provide hot water up to 75°C¹ for domestic heating, and domestic hot water up to 70°C² even when the outdoor temperature is as low as -10°C, without using a booster heater.



Putting safety first

Our EHS Mono R290 outdoor is built with your safety in mind. This unit comes with built-in safety features that detect but also prevent leakage. The exhaust system ventilates, while the air separator prevents any leaked gas from flowing to the house. It has been carefully designed to seal off potential ignition sources which are therefore located higher in this unit, keeping it away from any leaked gas.

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.



Easy to install and maintain

A water pressure sensor and easily accessible internal parts save time for installation and service. This can be done by a professional without the requirement for F-gas certification.

You will stay warm and continue to use hot sanitary water, even when you are waiting for a service. Using the EHS Cloud Service app, your installer can monitor the performance of the outdoor unit and assess malfunctions from a distance, and if a visit is needed, they should already be prepared.



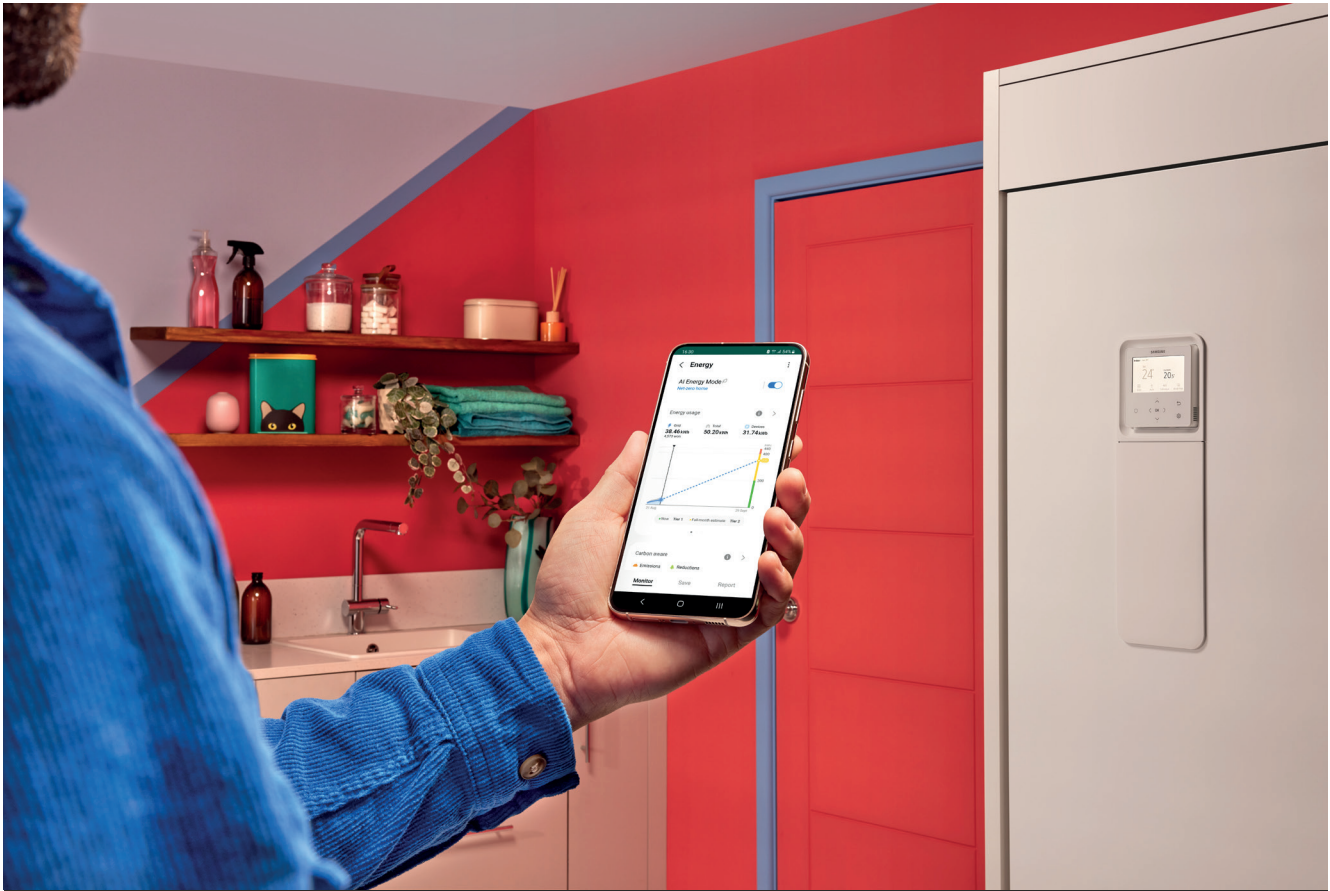
Quiet operation

You will be pleasantly surprised by how little noise this heat pump makes in a 4-step Quiet Operation Mode.

Powered by a combination of innovative noise reducing technologies and built in insulation layers, the EHS Mono Outdoor unit runs with noise as low as 35 A-weighted decibels – $d(BA)^2$ – using a 4-step Quiet Mode, operating quietly in the background.

1. 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 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 does not constitute advice regarding installation, maintenance or other topics, and the information provided through EHS Cloud Service does not confer any right.

2. 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.



SmartThings Energy

Saving energy starts with understanding how much you spend and where you spend it. SmartThings Energy¹ offers you the ultimate home energy management systems through rich insights, energy saving automations, and support. Once you are connected, you can monitor your energy consumption and with the saving AI Energy mode you could reduce the energy consumption within your home.

SmartThings Energy adopts your user behaviour. It automates and schedules itself based on your usage patterns. The SmartThings app¹ puts you in control by letting you remotely control your appliances wherever you are.

SmartThings Energy¹ allows you to monitor your energy consumption and compare it to the previous month.

Once connected, users can monitor their energy usage and with the saving AI Energy mode potentially reduce their energy consumption.²

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. The Climate Hub is only compatible with the EHS Mono R290. The actual savings vary and depend on, amongst others, usage and operating conditions. The AI Energy mode may impact the product performance. All savings are estimates and can deviate from actual usage and costs. End user may deactivate the AI Energy mode at any time.



Elegant design

Styled in dark grey, the colour blends into any building exterior. It adds elegance to a multitude of outdoor facades from renovation builds to luxury homes. The outdoor unit, approximately 1018mm or 850mm in height,¹ is fitted with a new slanted black grille composition which screens the mechanics from sight.²



Engineered to last

It's reassuring to know your outdoor unit is engineered to last with improved anti-corrosion for harsh environments.³ It is built from galvanized Iron Steel Plate and PE powder coating.⁴

An Antifreeze Protection Control system continuously monitors the operation, preventing the water pipe from freezing by forcibly pumping water when needed.⁵

Finally, the raised base with slanted gutters drains condensed water⁶ to prevent it freezing. And a base heater as standard makes sure the heating operation continues even in extremely cold weather.

1. Height depends on capacity chosen. 5 and 8 kW capacity 850mm height. 12 and 16 kW/1018mm height.

2. Based on a viewing height of 1700mm and a viewing distance of 1m.

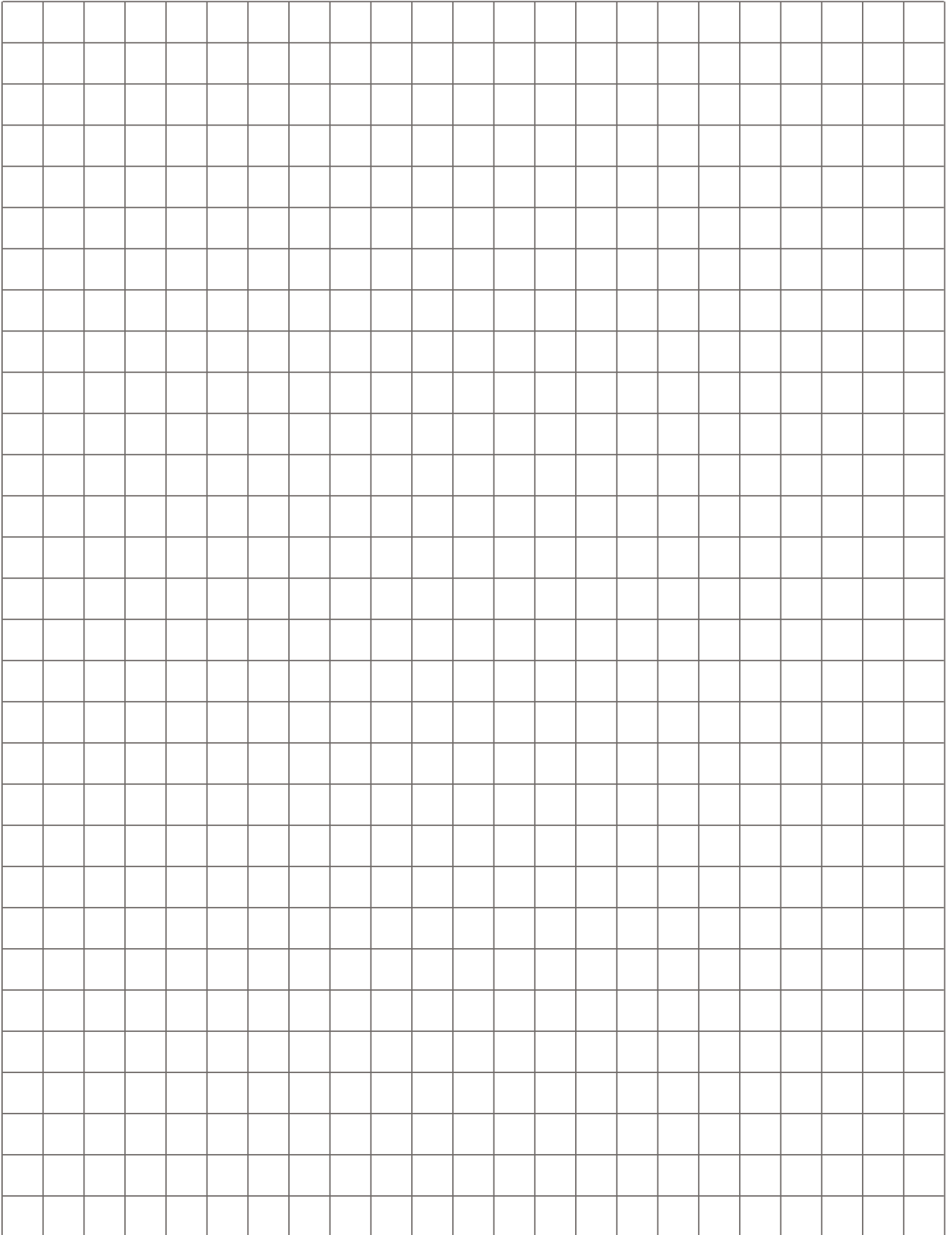
3. Based on internal testing, in accordance with ISO 9227, ISO 14993 and ISO 21207 using specimens from the heat exchanger of an EHS outdoor unit. For more details, please contact your local Samsung representative.

4. Based on internal testing using corrosion chambers, Q-FOG and CCT-1100. The Complex Cycle Test (CCT) includes cycles of spray (for 2 hours at 35°C), dry (for 4 hours at 60°C with 30% Relative Humidity) and damp (for 2 hours at 50°C with 95% Relative Humidity) conditions. As a result, the Galvanized Iron Steel Plate (GI) formed red rust after 240 hours, which is 43% slower than general Electro-Galvanized Steel Plate (EG) which forms red rust after 168 hours.

5. 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.

6. Based on internal testing on the EHS R290 Mono outdoor unit compared to a conventional EHS outdoor unit.

Notes



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Find your flow.

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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Print Version: February 2024
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