The future is hybrid
Introducing HVM: the flexible water-based hybrid VRF climate solution
With the Samsung HVM hybrid VRF climate solution you are ready for the future.

The hybrid solution you can rely on for ultimate flexibility – from design to installation to operation.

As a designer or installer for commercial applications like hotels, offices and retail spaces, you need climate solutions you can trust to be reliable and efficient, while also adhering to environmental requirements that are becoming more and more stringent.

The increasing uncertainty that industry professionals are facing due to F-Gas regulations, having an impact on traditional VRF systems, calls for a new solution.

The new Samsung HVM (HydroVariableMulti) is a water-based, hybrid VRF solution that is flexible and environmentally friendly. It offers all the existing benefits of traditional VRF systems, with the added advantage of future-ready versatility.

The entire system provides benefits in the areas of design, installation and operation – making it the optimal solution to take you into the future.
A bespoke selection tool makes the HVM system simple, fast and easy to design.

The easy-to-use Samsung HVM online selection tool has been created with convenience in mind. It will help you design the complete system in a modular way, making it simple and speedy.

The online selection tool provides you with the required information such as efficiency data (SCOP, COP, SEER and EER), and also total water-flow and total system pressure drop, that will enable you to select the appropriate water-pump and piping.

To enable pre-adjustment of balancing valves, the online selection tool includes a detailed list of indoor units with water-flow, pressure drop and pressure difference data for the water line holding the highest pressure drop.

You can opt for an annual energy consumption assessment; high resolution pdf documents of wiring diagrams and piping diagrams that include the pipe dimensions; a tender specification file including full descriptions and complete technical data; and a detailed project report in a layout that is easy to understand.

Note: The recommended web browser for using the HVM online selection tool is Google Chrome.
With its modular structure and standardised control solution, the HVM system is easy to install.

The Samsung HVM offers the same installation benefits of traditional VRF systems, with the added advantage of being able to connect to any kind of water heat exchanger.

Up to sixteen Samsung DVM Chiller units can be combined in a modular way to form a single module with a maximum capacity of 1,040 kW. The modularity and compact size of the DVM Chiller units make transportation and installation easy.

Samsung offers a wide range of cassette Fan Coil Units (FCU) which are compatible with the system, like the stylish 360 Cassette or the ultra slim 1-way Cassette. To enhance its flexibility, any third party Fan Coil Unit can be connected to the system.

The complete system’s integrated and standardised control solution makes for efficient installation and commissioning. Control and maintenance is easy with Samsung's Data Management Server, DMS 2.5, while the control system can also be connected to a third-party Building Management System (BMS)*.

*Compatible with BACnet and LonWorks.
The Samsung HVM is a climate system that is safe, environmentally friendly and future-ready.

The HVM system’s water-based concept eliminates the need for refrigerant inside the building, making it a safe solution. Its refrigerant charging amounts are reduced by up to 65% when compared to traditional VRF systems.

Flash injection technology enables effective heating down to temperatures of -20 °C. When connecting multiple Samsung DVM Chiller units within a single system, the workload is adjusted automatically for maximum efficiency.

Because the Samsung HVM system is water-based, it is not subject to the same future refrigerant restrictions as traditional VRF systems. This makes it a future-ready investment that provides you with complete peace of mind – both today and tomorrow.

*Compared to a Samsung DVM S 60HP holding R410A refrigerant, connected to 12 units of 14kW indoor units and 100 meters of pipes.
System Control

- Fan Coil Interface Module
- Touch Controller
- Wired Controller (On/Off with Chiller)
- Third party devices
- Third party pumps and hydronic components

Central Controller

DVM Chiller

Third party FCU or any other water heat exchanger can be connected.

Indoor

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Image</th>
<th>Nominal Capacity Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung 360 Cassette</td>
<td></td>
<td>2.6 kW 3.0 kW 4.2 kW 6.0 kW 7.2 kW 9.0 kW 10.0 kW</td>
</tr>
<tr>
<td>Samsung 1-Way Cassette</td>
<td></td>
<td>• • • • •</td>
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<tr>
<td>Samsung 4-Way Cassette</td>
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</tbody>
</table>

*Please check the Samsung Product Catalogue, or Climate Solutions Partner Portal on partnerhub.samsung.com/climate, for full information on the technical specifications of Samsung products.

Outdoor

<table>
<thead>
<tr>
<th>Model Type</th>
<th>Image</th>
<th>Nominal Capacity Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samsung DVM Chiller (modular system)</td>
<td></td>
<td>42 kW 56 kW 65 kW</td>
</tr>
</tbody>
</table>

*By combining DVM Chiller modules, each product enables high capacity. Up to 16 modules can be combined.