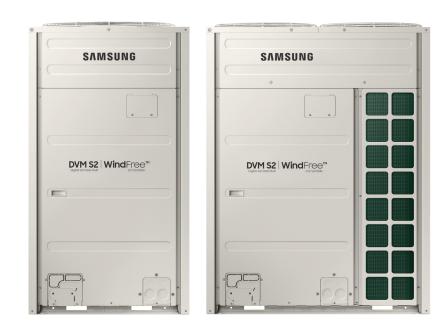
# Rebuilt on all new innovations. The ultimate in efficiency and reliability.



True innovation is a rare thing.

So, the multiple new technologies in the Samsung DVM S2 make it truly unique.

#### **DVM S2** Line-up



\* The available line-up, including capacities and models, may vary by region.

#### Samsung Electronics

Standard

Heat Pump

Heat Recovery

129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677 Republic of Korea

http://www.samsung.com

### SAMSUNG

The next era is not so far away







#### **Maximized Efficiency** Minimizes Wasted Energy

The DVM S2 has been radically redesigned to reduce the operating costs with unique technologies that are significantly more efficient. As a result, it is proven to be around 11% more energy efficient across a range of capacities\*, on average.













#### **Less Refrigerant** Reduces Environmental Risks

The DVM S2 uses less refrigerant as it has a slimmer liquid line. So, it has less Ozone Depletion Potential (ODP) and a lower Global Warming Potential (GWP), and reduces CO<sub>2</sub> emissions.





#### **Artificial intelligence Controls More Efficiently**

The DVM S2 optimizes itself intelligently, based on machine learning about the installation conditions and usage patterns, so it always works efficiently and











#### **Superior Heating Performance Keeps You Comfortable**

The DVM S2 features the AFI Compressor™, which delivers an incredible heating performance. It also performs well at even lower temperatures, providing non-stop comfort in the coldest conditions.









## M High Energy-Efficiency Features

The DVM S2 delivers more performance while consuming less. By improving the design of every single part, it delivers a surprisingly high level of efficiency like never before.

The enlarged Heat Exchanger can transfer more energy at once, and its **optimized refrigerant path** maximizes the the air vortex, which reduces the air transfer rate while minimizing any loss.

→ The aerodynamic Multi-serration **Fan** minimizes the turbulence of resistance.

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







The 7th Generation of IGBT



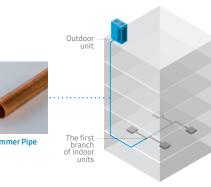
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#### Slimmer Liquid Line

The DVM S2 requires less refrigerant as it uses a slimmer liquid line\*. So, it saves costs on the installation and maintenance of refrigerant and piping materials. In addition, by using less refrigerant, it is more environmentally friendly, as it has less Ozone Depletion Potential (ODP) and reduces CO<sub>2</sub> emissions.







#### 

Active Al Technology

The revolutionary Samsung AFI Compressor™ includes a host of brand-new innovations created by Samsung. By combining Flash Injection technology with a strengthened Triple Profile Wrap and Optimal Discharge Superheat Control technology, it delivers a new level of comfort by maintaining pleasantly cool or warm conditions in every corner of a building all year round.

By learning usage patterns from recent operations and the surrounding conditions, the DVM S2 proactively creates,

Active Al Defrost

analyzes various

operating data and defrosts

reduces wasted energy and

increases the continuous

heating time.

more precisely. As a result, it

optimizes and maintains the most comfortable environment, while reducing energy consumption.

Active Al Pressure

adjusts the compression

pressure to suit the

installation site and to

reduce energy usage.

conditions of each

**Control** automatically



#### Flash Injection Technology increases the flow of refrigerant. So, the compressor continues working reliably,

improving the heating performance at even lower temperatures.



**7** Active Al Refrigerant

**Analysis** monitors the

refrigerent level by analyzing

various operating data from

the outdoor unit, and helps

of refrigerant.

maintain the optimal amount

**Triple Profile Scroll** creates a much larger chamber and can withstand higher pressure, while rotating reliably at high speed. Combining it with a **Dual Magnet Motor**, which increases the rotary power, creates the world's largest displacement volume\*.



3 Optimal Discharge Superheat (DSH) Control automatically adjusts the degree of discharge superheat to heat more efficiently and effectively.



<sup>\*</sup> A slimmer liquid line can be used between an outdoor unit and the first branch of indoor units. The diameter of the slimmer pipe will vary depending on the diameter of the pipe that is normally used. It may not be available in certain installation conditions, and is not compatible with certain AI functions of outdoor units. Please contact Samsung's technical professionals regarding its availability and for more detailed information.

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