

Samsung Electronics Presents Innovative New Air Conditioning Technology to Europe at MCE – Mostra Convegno Expocomfort 2016

*New 360 Cassette, DVM Chiller, DVM S 30HP and DVM S Eco 14HP
showcase innovation in HVAC engineering*

SEOUL, Korea – March 16, 2016 – Samsung Electronics Co. Ltd., today introduced industry leading 360 Cassette air conditioning unit, DVM Chiller, next generation DVM S 30HP, and new side discharge VRF unit – the DVM S Eco 14HP – to the European HVAC market at MCE (Mostra Convegno Expocomfort) 2016. Together, these innovations in HVAC engineering will transform air conditioning by boosting energy efficiency and performance, maximizing space, and increasing cooling speed.

“With the introduction of these new technologies to the AC market, we are confident that the needs of our European customers and market demands have been met, as well as the new EU regulations,” said BK Yoon, President and CEO of Consumer Electronics Business, Samsung Electronics. “At Samsung we are committed to continuously evolving our technologies to offer the best products and user experience possible to our customers.”

Samsung invites MCE 2016 attendees to receive special product briefings by its technical team at the Samsung booth (Hall 15, Stand P31 S40), the largest exhibition space covering 800m². Visitors can see the new AC range in situ in four different spaces – retail, hotel, residential and office – as well as experience the latest IoT technology demonstration in the Smart Home section, which further showcases Samsung’s digital innovation.

Samsung received recognition for four initiatives as part of MCE’s “Efficiency & Innovation Path 2016”, which recognizes the efforts made by companies in the areas of research, innovation and efficient energy use. The “Efficiency & Innovation Path (Percorso Efficienza & Innovazione)” by MCE, in collaboration with the Polytechnic University of Milan, aims to help visitors discover the most efficient and innovative products on the market.

Two out of four Samsung AC products have been recognized in MCE’s “Beyond Class A” initiative for product excellence. These are:

- **Efficiency & Innovation Path** : Samsung 360 Cassette & Samsung DVM Chiller
- **Efficiency & Innovation Path, Beyond Class A** : Samsung DVM S 30HP & Samsung 8-pole Inverter (UG9AJ3090FER)

Samsung’s new 360 Circular Cassette Design

The innovative design of the 360 Cassette unit transforms air flow. The unique and revolutionary booster fan inside the 360 Cassette guides air to form a complete horizontal flow, generating layers of chilled air. Samsung’s circular air wave consistently controls the temperature of the room by providing an even distribution of air in a full 360 direction. Bladeless flow control ensures fast and comfortable cooling without the cold draft by ensuring 100 percent of air volume compared to traditional four-way Cassette units, which can lose up to 25 percent of air volume. The resulting cooling speed is increased by 34 percent.

The 360 Cassette combines revolutionary performance with an elegant design that will blend in and enhance any setting. The unit features a stylish panel and intuitive display that allows users to change the air flow depending on preference. Users can choose from three settings including horizontal, vertical, and separate zone control air flow.

The air conditioner can be fitted within the ceiling or exposed, offering ultimate flexibility to suit the style of any room. In addition, users have the option of a wheel dial remote controller with a dedicated button

for comfort cooling. Additionally the Samsung Virus Doctor kit can be added to eliminate dust, airborne contaminants, allergens, bacteria and viruses.

The next generation of high-performance VRF: Samsung DVM S 30HP

Samsung boosts efficiencies and performance capabilities of air conditioners with the new DVM – the Digital Variable Multi air conditioner. The DVM S 30HP combines the DVM S with cutting-edge innovation for enhanced performance, efficiency and reliability.

The new Samsung DVM S 30HP features a number of revolutionary factors to boost performance, including a new Super Inverter Scroll Compressor with flash injection technology and an optimized bypass valve location, which increases heating capacity by 29 percent compared to conventional VRF unit.

The further addition of a hybrid heat exchanger increases the heat exchange area while an optimized refrigerant control delivers greater efficiency (10 percent) and a new oval-shaped diffuser application improves the airflow path and increases the airflow rate by 17 percent.

The Samsung DVM S 30HP also has an innovative leak detection system. When a leak is detected, the system automatically begins an active pump down process to collect the refrigerant and close all valves to isolate it within the unit.

The DVM S Eco 14HP: Samsung's new side discharge VRF unit

The DVM S Eco 14HP is a new side discharge VRF air conditioner engineered to deliver a single outdoor unit solution for apartment and office buildings.

The improved performance of the Samsung DVM S Eco 14HP ensures it meets the growing need for a specialized single outdoor unit to reduce the cost of previous multiple loading and sub-duct installation in multi-room buildings.

The innovative design of the DVM S Eco 14HP features a robust Inverter Scroll Compressor and corrugate fin, which improves heating performance by 20 percent and increases air flow by 10 percent compared to standard side discharge VRF units.

The increased horse power of the DVM S Eco (maximum 14HP) enables a single outdoor unit to manage the air conditioning of an apartment or an office building, in place of multiple costly units. All areas of the building can be covered as the new unit also provides an extended piping length of up to 160 meters and an installation height of up to 50 meters. The width of the new DVM S Eco 14HP is less than one meter (940mm), maximizing capacity with a better use of space, while the four-way piping enables convenient installation.

Samsung's cutting-edge energy efficient DVM Chiller

The new DVM Chiller is a powerful system that combines an air-cooled chiller with Variable Refrigerant Flow (VRF) in a compact unit.

Responding to the growing demand for water-source HVAC following the tightening of EU regulations on F-gas levels, Samsung has engineered an air-cooled chiller that offers greater energy efficiency and ease of use in an innovative compact design.

By reducing the system refrigerant levels significantly more than a conventional chiller, the Samsung DVM Chiller not only complies with current refrigerant quota levels but also adheres to the further upcoming reduction in levels (35 percent in 2018).

In the revolutionary DVM Chiller, Samsung has embedded the world-class BLDC Inverter Scroll Compressor with Flash Injection technology, ensuring more than 75 percent of heating capacity at -20°C ambient temperature and greater energy efficiency. The Chiller enables users to reduce annual utility costs by 36 percent to 50 percent compared to conventional chillers.

The Samsung DVM Chiller also delivers powerful heating performance while providing cold water through thermal ice storage with an in-built pressure and temperature sensor, which prevents device breakdown from freeze-bursts.

Samsung Air Conditioner 8-pole Motor

The new Samsung Air Conditioner series is engineered to consume less power and produce exceptional cooling comfort. Equipped with an advanced technology in the form of 8-pole motor – the world's first – in its Digital Inverter Compressor, the Samsung Air Conditioner series ensures faster cooling performance of up to 43% while using up to 68%* less energy as compared to conventional air conditioners.

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**Based on Samsung internal testing*

For more information, as well as related Samsung Newsroom articles including photos and videos, please visit news.samsung.com/global/samsung-electronics-presents-innovative-new-air-conditioning-technology-to-europe-at-mce-mostra-convegno-expocomfort-2016.

About Samsung Electronics Co., Ltd.

Samsung Electronics Co., Ltd. inspires the world and shapes the future with transformative ideas and technologies that redefine the worlds of TVs, smartphones, wearable devices, tablets, cameras, digital appliances, printers, medical equipment, network systems, and semiconductor and LED solutions. We are also leading in the Internet of Things space with the open platform SmartThings, our broad range of smart devices, and through proactive cross-industry collaboration. We employ 319,000 people across 84 countries with annual sales of US \$196 billion. To discover more, and for the latest news, feature articles and press material, please visit the Samsung Newsroom at news.samsung.com.

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