

## **New Emerson solutions for commercial and industrial cooling applications at Mostra Convegno 2018**

**MILAN (ITALY), March 13, 2018** – Emerson (NYSE: EMR) is presenting a range of new solutions for commercial and industrial cooling applications at Mostra Convegno 2018. This new offering will help manufacturers build more performant cooling systems that are suitable for upcoming challenges in the commercial comfort market.

Increasingly stringent regulations, like the shift towards low GWP refrigerants in conjunction with the requirements for maximizing the energy efficiency are driving the HVACR market towards more sustainable choices. On one hand, OEMs need to review their equipment to meet minimum seasonal performance levels and on the other hand, they have to choose the best refrigerant option for mid as well as for long-term. At the same time, end-users insist on lowering energy consumption and operating costs.

To support the new market needs of customers, Emerson is investing in the development of a complete range of variable and fixed speed scrolls with high efficiency at part load condition, both equipped with new low GWP refrigerants.

For commercial comfort applications, OEMs are converging to using R32 as the main refrigerant to replace R410A, but for industrial cooling applications there is a demand for medium and low-pressure refrigerants, and so far, there is not a clear preference towards one candidate. However, among all the alternatives, there is an increasing interest around R513A, due to its non-flammability.

During Mostra, Emerson will showcase the new series of R32 optimized fixed speed Copeland<sup>™</sup> compressors designed for chillers, heat pumps, rooftops and all the other air conditioning applications. With a cooling capacity up to 150 kW for a single scroll, this new complete range is developed to meet the demands for high-performing compressors, designed for low GWP refrigerants. To assure the best interchangeability, and minimize engineering efforts during system re-design, Emerson will limit modifications of the fittings location, foot mounting and dimensions, compared to today's ranges. All the new compressors will be equipped with VVR technology, to increase the performance at part load, and consequently, to improve SEER by 5%. Furthermore, these compressors are fitted with a new Emerson electronic protection module, which provides compressor diagnostic via RS485 Modbus communication. Featuring these electronics, the compressors enable the system controller to define an advanced compressor protection strategy without compromises between down time and system reliability.

In the future, a further evolution of these embedded electronics will bring additional advantages to system manufacturers: the system controller will be able to optimize system performance even more, by getting access to real time compressor data that enables smart compressor management. As a result, system reliability will be improved, leading to reduced warranty costs.

Emerson is also releasing new variable speed models with brushless permanent magnet motors, designed for R32. This new line-up with a capacity range up to 60 kW can also be used in tandem configurations with fixed speed compressors, for larger system capacities and optimized applied costs, without compromise on efficiency. Along with close-coupled Emerson inverter drives, the variable speed compressors deliver a widened modulated speed variation from 15 to 120 Hz. The new compressors are set up with VVR (variable volume ratio) technology, allowing for an enhanced part load efficiency. A wide operating map to address reversible as well as modern data center applications, together with superior performances are extra features which characterize the new ranges. The scroll capability can be extended and the superheat optimized when a complete Emerson integrated solution is used: the addition of Emerson valves and controllers with proprietary algorithms increases seasonal efficiency and provides a wider map for heating applications.

Visit Emerson's booth March 13 to 16 at Mostra Convegno in hall 24, booth R29/S30, to find out more about these and other commercial and industrial comfort solutions.



*New generation Copeland Scroll™ Compressor for R32*

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### **About Emerson**

Emerson (NYSE: EMR), headquartered in St. Louis, Missouri (USA), is a global technology and engineering company providing innovative solutions for customers in industrial, commercial, and residential markets. Our Emerson Automation Solutions business helps process, hybrid, and discrete manufacturers maximize production, protect personnel and the environment while optimizing their energy and operating costs. Our Emerson Commercial and Residential Solutions business helps ensure human comfort and health, protect food quality and safety, advance energy efficiency, and create sustainable infrastructure. For more information visit [www.Emerson.com](http://www.Emerson.com)

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