

Johnson Controls introduces YORK YVWA and YMC2 chillers - unique solutions for customers investing in low-GWP refrigerants

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As part of its long-term refrigerant roadmap, Johnson Controls has announced two platforms of high efficiency chillers available with low GWP (global warming potential) options.

Building on the industry renowned legacy of its product line, Johnson Controls has extended its portfolio of YORK chillers to include two key product families that use the refrigerant alternative R-513A—the YORK YVWA water-cooled screw chiller and the YORK YMC2 magnetic bearing water-cooled centrifugal chiller.

The offering covers a broad range from 433 to 1,055 kW (120 to 1,000 tons) for water-cooled applications. This represents Johnson Controls' continued commitment to choose solutions that will best meet the needs of its customers and the environment based on safety, efficiency, reliability, availability and cost.

"This is the first major chiller family to be offered with low-GWP alternatives. We will continue to expand our chiller portfolio with highly efficient chillers and additional low-GWP offerings," says Laura Wand, vice president of global chillers, Johnson Controls Building Efficiency Business.

"R-513A was selected after extensive testing and evaluation because it is a non-flammable, high efficient, low-GWP alternative refrigerant that reduces the direct refrigerant GWP by 56 percent," says Wand.

Neil Cameron, Johnson Control's Area General Manager for Africa believes the local market is ready for these environmentally friendly chillers. He says, "South Africa is a dynamic market where we are seeing an increase in environmentally conscious customers. Johnson Controls is at the fore of new, more environmentally friendly technology and solutions and our latest offering can be regarded as the future of chiller technology with cutting edge refrigerant gas. Companies now have a choice with the option of 'greener' technology, enabling them to lower their impact on global warming.

Additionally, Johnson Controls is leading the industry-wide discussion on the use of other low-GWP refrigerant alternatives which have an A2L (mildly flammable) safety rating. They accelerated research on this topic through their donation of \$100,000 (R1 430 600.00) to ASHRAE Research to facilitate and accelerate the safe use of flammable refrigerants. This research will help determine when and how to establish standards and building codes which address customers' flammability concerns. Johnson Controls' work to develop and launch broad offerings using R-513A and to advance research on the use of mildly flammable refrigerants is part of its overall environmental commitments to the White House Council on Environmental Quality.

R-513A, or Chemours' Opteon™ XP10, is a non-flammable (A1) azeotropic alternative to R-134a, providing lower GWP and comparable performance. XP10 was commercialized as a part of a broad portfolio of Opteon refrigerants, which represent a breakthrough line of low-GWP solutions. They were developed to help meet proposed HFC regulations, such as the European F-gas regulation and the U.S. EPA SNAP ruling, while maintaining or improving performance compared to incumbent products.

By providing efficient R-134a chillers that are future compatible with R-513A, Johnson Controls is protecting the long-term investment customers make in its chillers. "Although low-GWP refrigerants

play an important role, the greatest contribution to reducing CO2 emissions and operating costs is by investing in highly efficient equipment,” said Wand. “The YORK chiller portfolio addresses the larger impact of emissions, reducing energy consumption, which can represent 95 percent or more of a chiller’s lifetime carbon emissions. And the YORK R-134a global chiller offering provides peace of mind as customers can use R-513A.”

As Johnson Controls looks to the future, choosing solutions that will best meet the needs of its customers and the environment based on safety, efficiency, reliability, availability and cost, it will continue to expand its chiller platform with highly efficient chillers and additional low-GWP offerings.