



NEWS RELEASE

Johnson Controls previews YORK YK-HT two-stage economized centrifugal chiller at AHR Expo, delivering energy, water and space savings

2026-02-02

- *High lift compressor enables the use of dry coolers in place of traditional cooling towers, eliminating water consumption entirely.*
- *Expanded operating range supports high temperature heat pump and heat recovery applications.*
- *Ultra-high condenser water temperature facilitates deployments of large data center campuses with fewer dry coolers, lower noise and water-free operation.*
- *Compact single-driveline design cuts failure points by 50%, and a nearly 30% smaller footprint eases legacy-space retrofits, reducing cost, time and labor amid skilled-labor shortages.*

MILWAUKEE, Feb. 2, 2026 /PRNewswire/ -- [Johnson Controls](#) (NYSE: JCI), the global leader for smart, healthy and sustainable buildings, is previewing the high-density, compact YORK YK-HT two-stage economized centrifugal chiller at AHR Expo 2026 in Las Vegas. Engineered for data centers and large industrial, pharmaceutical and healthcare campuses, the YK-HT delivers the industry's widest operating range from a single driveline, operating with condenser leaving fluid temperatures up to 165°F and up to 110°F of lift.

This extended operating range supports efficient closed-loop heat rejection with dry coolers and enables heat-pump and heat-recovery applications. By reusing thermal energy that would otherwise be wasted, these systems can offset more than 35 MMBtu per hour, equivalent to the heating demand of approximately 350 single-family homes per hour, while lowering carbon emissions and reducing energy costs.

"Water conservation, energy efficiency and decarbonization are priorities for our customers," said Aaron Lewis, vice president and general manager, Applied Equipment, Johnson Controls. "The YK-HT expands what is possible by enabling high-temperature operation in a compact and efficient platform, helping customers move beyond traditional water-intensive heat rejection and unlock new opportunities for efficient electrified heating. With its expanded operating range, mission-critical facilities can scale with confidence while advancing sustainability, performance and long-term operating efficiency."

These capabilities translate to significant real-world impact on water and noise as well. For example, a typical 2,000-ton chiller operating in Las Vegas, where the YK-HT will be previewed, consumes approximately 8 to 9 million gallons of cooling-tower water annually. When paired with dry coolers, the YK-HT eliminates that water use entirely. For large data centers, including AI factories facing water conservation constraints and strict noise limits, the YK-HT's enhanced lift capability enables up to a 60% reduction in dry coolers and enough fan power reduction to lower onsite noise by as much as 20 dBA.

Beyond advanced heat-rejection performance, the YK-HT delivers expanded functionality in a single packaged unit. As a unified heating and cooling platform for large buildings, it can produce 44°F chilled water and 140°F hot water at the same time, a normal operating condition for heat pumps, while delivering efficiency levels that exceed ASHRAE requirements. This unified feature eliminates the need for cascaded systems, extra electrical infrastructure or major mechanical room redesigns. By using a single driveline and reducing rotating components by 50%, the YK-HT simplifies installation and service, while improving uptime, a critical advantage as data center operators face skilled-labor shortages. With a footprint nearly 30% smaller than most alternatives, the unit is well suited to fit more easily into existing legacy chiller spaces, helping reduce retrofit investment in cost, time and labor.

Other efficiency and performance features include:

- Low-GWP refrigerants R-1234ze and R-515B
- An integrated lubrication system and dual variable geometry diffuser control
- Flash tank economizer for enhanced efficiency
- Optional variable speed drives for increased efficiency and BESS compatibility
- Factory-equipped with Smart Ready connectivity for seamless integration

YK-HT chillers are tested against the most extreme real-world conditions, ensuring unmatched performance and reliability at the state-of-the-art Johnson Controls Advanced Development and Engineering Center (JADEC) in New Freedom, Pennsylvania, as well as in Wuxi, China. The chillers are planned for global distribution and will be manufactured in San Antonio, Texas and Wuxi, China, backed by a robust network of resources, including dedicated support teams and fast service and parts delivery.

To learn more, visit <https://www.johnsoncontrols.com/events/ahr-2026>.

MEDIA CONTACT:

Kari Pfisterer

Direct: +1 414-217-1488

Email: kari.b.pfisterer@jci.com

About Johnson Controls:

At Johnson Controls (NYSE:JCI), we transform the environments where people live, work, learn and play. As the global leader in smart, healthy and sustainable buildings, our mission is to reimagine the performance of buildings to serve people, places and the planet.

Building on a proud history of 140 years of innovation, we deliver the blueprint of the future for industries such as healthcare, schools, data centers, airports, stadiums, manufacturing and beyond through OpenBlue, our comprehensive digital offering.

Today, Johnson Controls offers the world's largest portfolio of building technology and software as well

as service solutions from some of the most trusted names in the industry.

Visit johnsoncontrols.com for more information and follow @Johnsoncontrols on social platforms.

View original content to download multimedia:<https://www.prnewswire.com/news-releases/johnson-controls-previews-york-yk-ht-two-stage-economized-centrifugal-chiller-at-ahr-expo-delivering-energy-water-and-space-savings-302676310.html>

SOURCE Johnson Controls International plc