YORK®

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# YORK® YD DUAL CENTRIFUGAL CHILLERS

## Superior Performance and More Capacity Combined with the Smallest Footprint

Johnson Controls

# Optimum design. Optimized real-world efficiency.

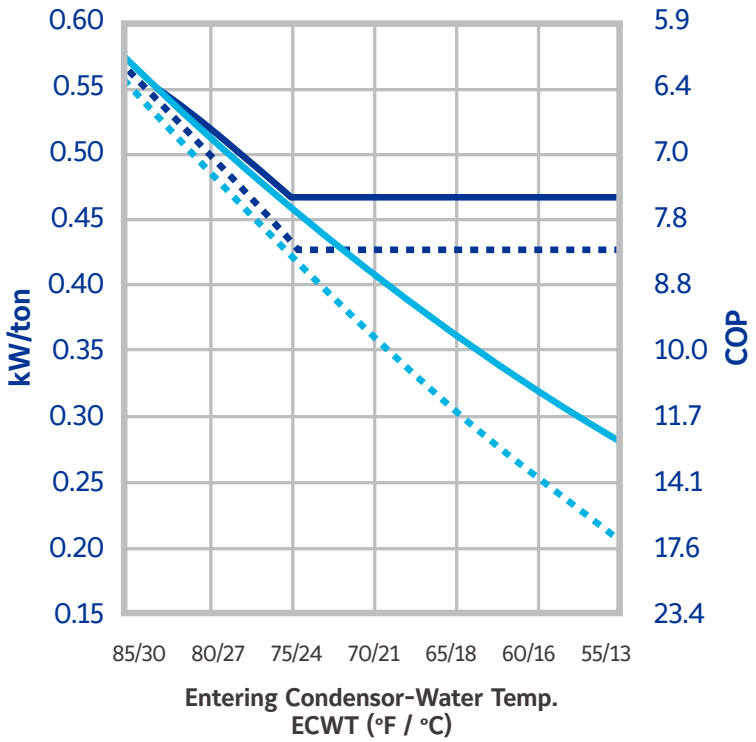
**It pays to cut energy costs by selecting a chiller that can operate efficiently at all operating hours, including off-design conditions.** That's why across its capacity range of 1,500 to 6,000 TR (5,300 to 21,100 kW) the YORK® YD centrifugal chiller line provides unsurpassed Integrated Part Load Value (IPLV) energy efficiency.

In real-world operation, chillers spend nearly 99% of their operating hours at less than design conditions. That's when lower entering condenser water temperatures (ECWT) are available to reduce the compressor work load to save energy. Equipped with an OptiSpeed™ variable-speed drive, a YD chiller can further reduce energy usage as low as 0.20 kW/TR at off-design conditions.

The Air-Conditioning, Heating, and Refrigeration Institute (AHRI) chiller certification program endorses the validity of off-design performance to compare chiller energy consumption.

To save more energy and improve reliability, the YD chiller motor employs an open-drive design that can be either air or water cooled – avoiding the need for cooling by refrigerant flow. A variable-orifice design in conjunction with our exclusive OptiView™ Control Panel further optimizes refrigerant flow.

**High-strength shrouded impeller** can be optimized for specific operating conditions.




Variable-speed competitive chiller with 75°F / 24°C minimum ECWT
**100% Load**
**60% Load**

YORK YD chiller with OptiSpeed™ drive and 55°F / 13°C minimum ECWT
**100% Load**
**60% Load**

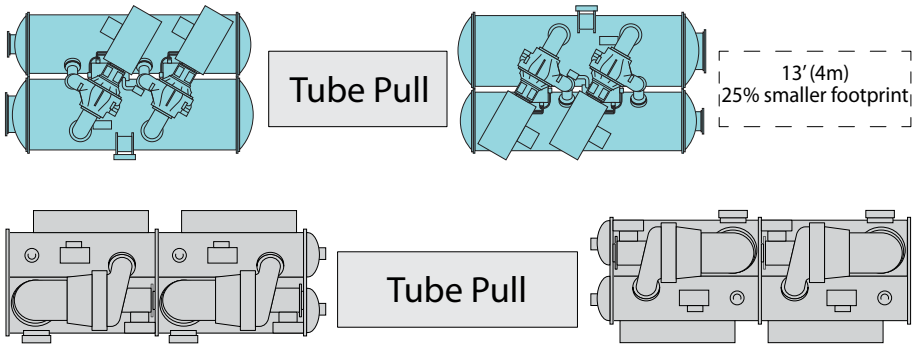
**Optimizing the chiller design** lets you take maximum advantage of energy savings available at off-design conditions.

# More capacity. Less space.

**Compared to competitive designs, the YD chiller features the smallest footprint** of any packaged chiller in the 1,500 to 6,000 TR (5,300 to 21,100 kW) capacity range. It employs single evaporator and condenser shells, a single refrigerant circuit, and two compressors piped in parallel to create a very compact configuration.

Depending on the site and chiller size, compressors can be shipped completely packaged to reduce shipping, rigging and site assembly costs. For larger chillers, the compressors, drivelines, evaporator and condenser can be shipped as modules for easy assembly.

The result is better space utilization in your equipment room, which reduces the need for expensive modifications to your building. Compared to typical centrifugal chillers running inside the equipment room, the YD chiller is at least 5 dBa quieter at full load – and comes standard with OptiSound™ Control to minimize sound at off-design conditions.




**The most compact configuration in its class** makes the YD chiller a perfect fit for comfort, industrial or process installations.

**Do more in less space** with the YD chiller's smaller footprint.


Highly efficient chillers, such as the YD chiller, **use less energy, reducing the necessary energy production and reducing the carbon emissions** resulting from this process.

# Superior sustainability. For your plant – and the planet.

The YD chiller will make your chiller plant more sustainable. It enables plant owners to use energy, refrigerant and water in an environmentally responsible way.

The chiller uses R-134a – and it is future compatible with R-513A, a low GWP and non-flammable refrigerant – which eliminates any concerns about uncertain regulations. The total global warming impact is low, because the chiller's efficiency reduces the indirect effect – or the greenhouse gases generated in the production of electricity to run the chiller. Reducing the indirect effect is significant. It can account for 95% of the total global-warming impact of a chiller.

# Simple control. Maximum reliability.

**Very large chiller applications manage a lot of information.** This is simplified with the advanced OptiView™ Control Center that gives you expert chiller control management in full color. The OptiView™ Control Center combines state-of-the-art control logic, industrial-grade hardware and fingertip-activated control display designed with the chiller operator in mind.

Operation is practically foolproof. Data and parameters are automatically saved on a flash memory card – no battery backup is required. Data outputs are completely described with illustrations of the appropriate chiller components. Native *Metasys*® compatibility and an SC-EQ (Smart Chiller Equipment) Gateway to simplify BAS and control-system integration. And you get full monitoring and trending capabilities, plus the flexibility to select parameters critical for your operation.

To maintain the efficiency and performance of the YD chiller, Johnson Controls factory service technicians can provide all necessary on-site service. With Smart Connected Chiller technology, Johnson Controls can increase productivity and chiller uptime with unprecedented insight into the equipment. Smart Connected Chillers have averaged a 66% reduction in shutdown issues. Through a secure connection, this cloud-based analytics platform combines remote monitoring and predictive diagnostics, allowing our chiller experts to pro-actively respond to emergencies and diagnose issues before they become problems.


The OptiView™ Control Center provides convenient, **full-color control and monitoring capabilities** with the touch of a fingertip.


Gear-shift proximity probe provides a monitoring capability for **ultimate assurance of driveline reliability**.

# Why install anything but YORK®?

**You want high performance. You expect efficiency.**

That's why you want a centrifugal chiller that is designed to give you confidence. When it's your reputation at stake, demand nothing less than YORK® technology. To learn more about the YD centrifugal chiller and how it can help you meet your chiller plant goals, visit our website, JohnsonControls.com, or contact your nearest Johnson Controls branch office.

SMART EQUIPMENT™

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It is a part of the Johnson Controls product portfolio.

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