YORK® MODEL YD
DUAL CENTRIFUGAL CHILLERS

Superior performance with a smaller footprint

Johnson Controls

Performance

Footprint

Sustainability

Reliability and Control

YORK® YD Dual Centrifugal Chillers

1,500 to 6,000 TR (5,300 to 21,100 kW)

Compact configurations delivering higher capacity and higher efficiency at real-world conditions for large central plants.

- Save even more energy with the OptiSpeed™ variable-speed drive
- Reduce your equipment footprint by approximately 25% for better plant utilization
- Significantly reduces plant CO_2 emissions compared to a conventional large chiller plant
- A full-color monitoring control panel provides superior reliability and control with one touch

Designed with efficiency in mind

Optimum design. Optimized real-world efficiency.

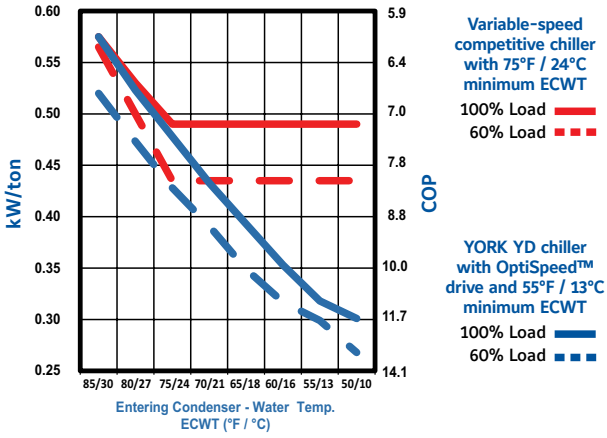
Time is money. That's why it pays to cut energy costs by selecting a chiller that can operate more efficiently at all the operating hours spent at off-design conditions – the YORK® model YD centrifugal chiller.

In real-world operation, chillers spend nearly 99% of the operating hours running at less than design conditions. That's when a chiller can often take advantage of lower entering condenser water temperatures (ECWT) that reduces the compressor work load to save energy.

The Air-conditioning, Heating, and Refrigeration Institute (AHRI) Chiller Certification Program endorses the validity of off-design analysis to compare chiller energy consumption. Measured with AHRI's Integrated Part Load Value (IPLV), YD centrifugal chillers are unsurpassed in energy efficiency. Equipped with an OptiSpeed™ variable-speed drive, they can reduce energy usage as low as 0.20 kW/TR at off-design conditions.

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, which saves energy and improves reliability.

Performance is further improved by a variable-orifice design that works in conjunction with the OptiView™ Control Panel to optimize refrigerant flow.



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

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

Only the YORK YD chiller provides so many adaptable components that pay off in optimum performance for comfort- and process-cooling applications.


Smaller footprint to create more space

More performance. Less space.

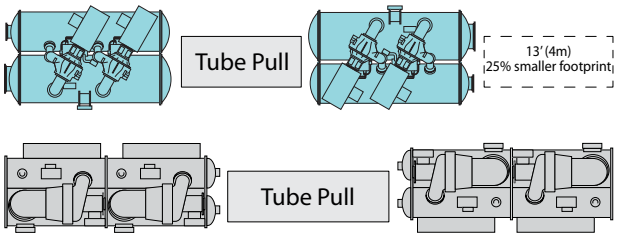
FOOTPRINT

Now large chiller capacity doesn't require a large amount of floor space. That's because the YORK YD chiller is significantly shorter and narrower than competitive designs to give you more room in the mechanical room.

In fact, 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 – and reducing the need for expensive modifications to your building. Plus, the compact configuration makes it easy to fit the space requirements of comfort, industrial, or process installations in diverse applications ranging from commercial cooling, district cooling, central utility plants, as well as high rises, campuses, medical centers, and more.



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.


Reduce CO_2 emissions

Make your central plant greener. Reduce your carbon footprint.

SUSTAINABILITY

Superior energy efficiency isn't important just for your plant. It's also important for our planet.

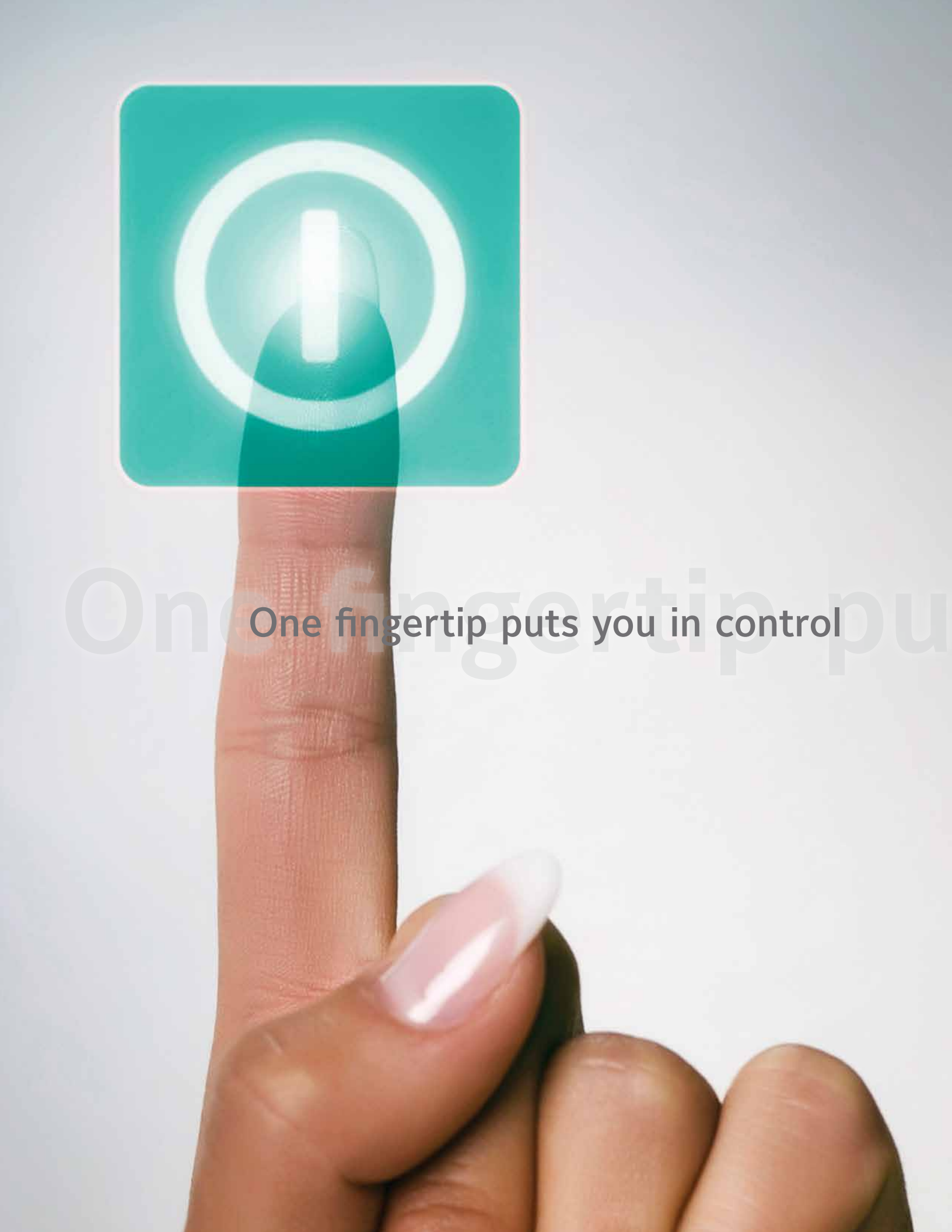
A chiller impacts the climate in two ways: directly, by the release of refrigerant emissions into the atmosphere, and indirectly, by power plant CO_2 emissions – which are responsible for 98% of the Global Warming Potential (GWP) associated with chillers.

To reduce the direct affect, the YD chiller uses HFC-134a refrigerant, which has no ozone-depletion potential and no phase-out date in compliance with the Montreal Protocol. We also utilize "leak free" sealing technology to keep refrigerant inside the system, as well as employ leak-tight construction practices validated during the manufacturing process.

To reduce the indirect affect, the YD chiller reduces utility CO_2 emissions because it can be so easily optimized to minimize kW consumption. That's why the YD chiller reduces your facility's total climate impact and earns points in the LEED® building certification program.

Compared to typical centrifugal chillers, 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 – improving the indoor environment as well as the outdoors.

To reduce the impact on the ozone layer and global warming, the YD chiller uses HFC-134a refrigerant in compliance with the Montreal Protocol.


One fingertip puts you in control

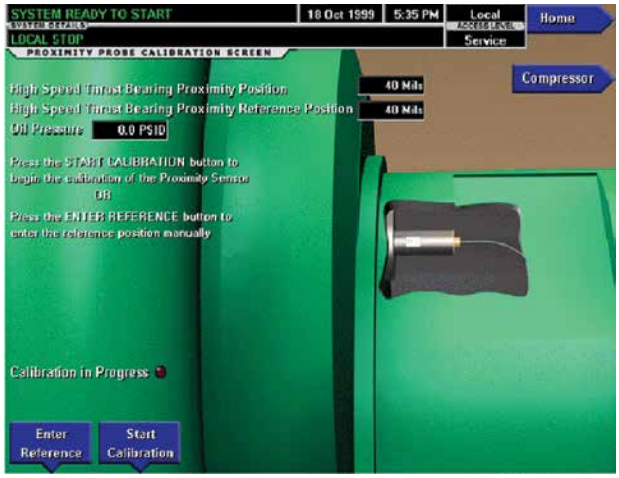
Simple control. Maximum reliability.

Very large chiller applications have a lot of information to manage. But it's simple with the YD chiller thanks to advanced control technology and industrial components to ensure reliable performance.

The full-color OptiView™ Control Center gives you expert control management combining 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 to be perfectly clear. Native Metasys® compatibility and an ELink communication card simplify BAS and control-system integration. And you get full monitoring and trending capabilities, plus the flexibility to select parameters critical for your operation.

Johnson Controls has the industry's largest service and preventive maintenance organization – 5,000 technicians worldwide in 169 local service branch offices – high-quality professionals with the training and experience to keep you up and running.

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



Gear-shaft proximity probe provides a monitoring capability for ultimate assurance of drive line reliability.

We are in the business of building efficiency for you.

Johnson Controls creates buildings and environments that help *people* achieve. We do that by making environments healthier. Saving energy. Enhancing operations. And creating sustainable solutions for our partners all over the world. Building on a legacy over 125 years in the making, we're experts at delivering solutions for commercial buildings, institutions, hospitals, schools, district cooling plants, process facilities and more. And as challenges arise for greater energy efficiency and more sustainable facilities, we'll help you respond with the widest technology and service portfolio in the world.

Innovation. Partnership. Human Achievement. With Johnson Controls, building efficiency for the future begins today.



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