

Proven Performance in a Compact Size

YORK® CYK-400 Water-to-Water Compound Centrifugal Heat Pump

The world-class performance of our YORK® CYK heat pump will soon be available in a smaller, 400-ton cooling capacity to help jump-start your path to decarbonization in buildings with lesser heating and cooling loads. Just like its larger siblings, the YORK® CYK-400 Water-to-Water Compound Centrifugal Heat Pump is the ideal, high-efficiency electric heating solution for HVAC systems delivering high-temperature water. Unlike most heat pumps, the CYK can deliver high-temperature hot water – as high as 170 °F (77 °C). And, unlike a separate boiler and chiller, the CYK has two electric motor-driven centrifugal compressors to deliver simultaneous hot water and chilled water from the same equipment.

Performance and Specifications

Designed specifically for high-head conditions, the YORK® CYK heat pump delivers high-temperature water with superior efficiency. The two-compressor design also provides unique adaptability, with each compressor capable of being optimized to match specific operating conditions and requirements.

- Simultaneous cooling and heating mode capacities
 42 °F (5 °C) / 170 °F (77 °C):
 - 400 tons (1,406 kW) cooling
 - · 7,000 MBH (2,051 kW) heating
- Combined COP (simultaneous mode):
 4.9 @ 42 °F (5 °C) / 170 °F (77 °C)
- Turndown: 40% of design capacity (with VSD option)
- · Refrigerants: R-1234ze or R-515B
- · Certifications: ASME, UL/ETL
- Optional, patented double-bundle condenser for the most efficient management of part-load conditions
- · Optional, variable-speed drives for flexibility of operation
- Ideal for commercial buildings, universities, hospitals, industrial processes and district energy



CYK-400 Fast Facts

- A smaller-capacity unit extending the application range of the existing CYK product line.
- Delivers high-temperature water up to 170 °F (77 °C).
- 3 5x more efficient than conventional systems, reducing operational costs up to 50% vs.
 a traditional boiler and chiller combination.
- Optional, patented double-bundle condenser for the most efficient management of part-load conditions.
- Available with low-GWP (global warming potential) refrigerants R-1234ze and R-515B.



