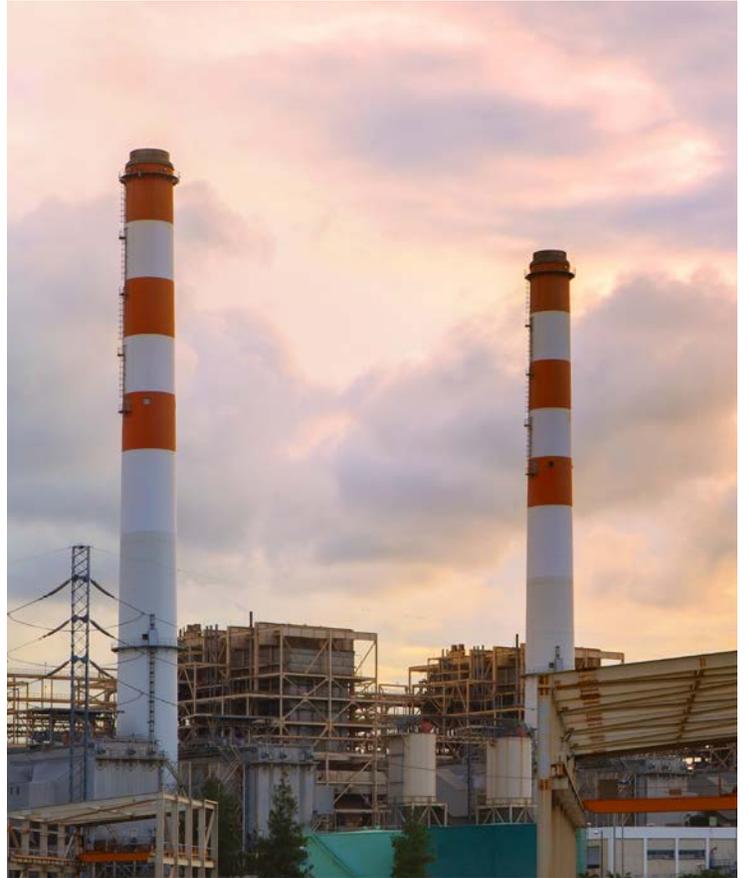




INSTALL CONFIDENCE



YORK® YHAU-CL/CH HOT WATER ABSORPTION CHILLERS

Ideally Suited for Combined Heat and Power (CHP) Applications

Advancing Efficiency by Design

The YORK® YHAU-CL/CH Single-Effect Hot Water absorption chiller uses an innovative two-step evaporator and absorber cycle that is more efficient than conventional cycles. By splitting the absorption process into two steps, lithium-bromide solution concentrations are lower in the system, resulting in:

-  **Higher system efficiency:** Lower source hot-water temperature into the generator can be used to drive the absorption cycle.
-  **Superior reliability:** Virtually eliminates crystallization risk and reduces the potential for corrosion.
-  **Lower total operating cost:** Can operate with lower hot water flow rates and reduced pumping energy.

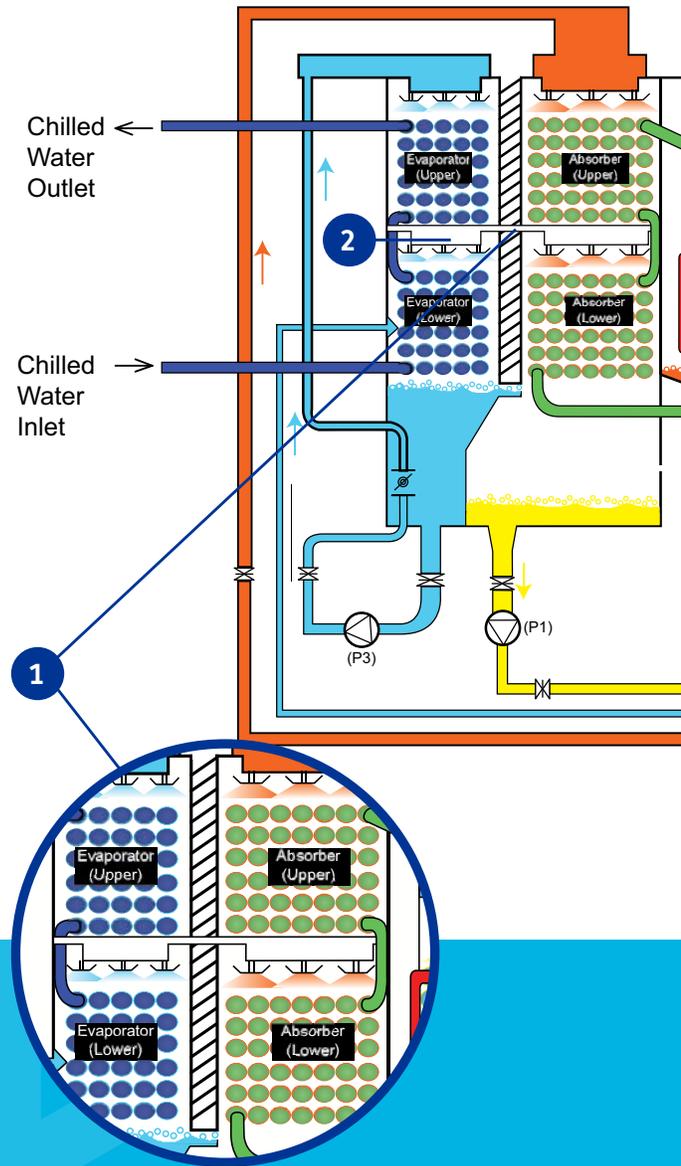
Flexible Operating Envelope

The YHAU-CL/CH single-effect absorption chiller's two-step design provides a wide operating envelope utilizing waste heat as low as 70°C (158°F) where typically competitive offerings cannot operate. YORK® technology provides the flexibility to handle combined heat and power (CHP) systems, comfort or industrial-process cooling applications with outstanding efficiency and reliability.

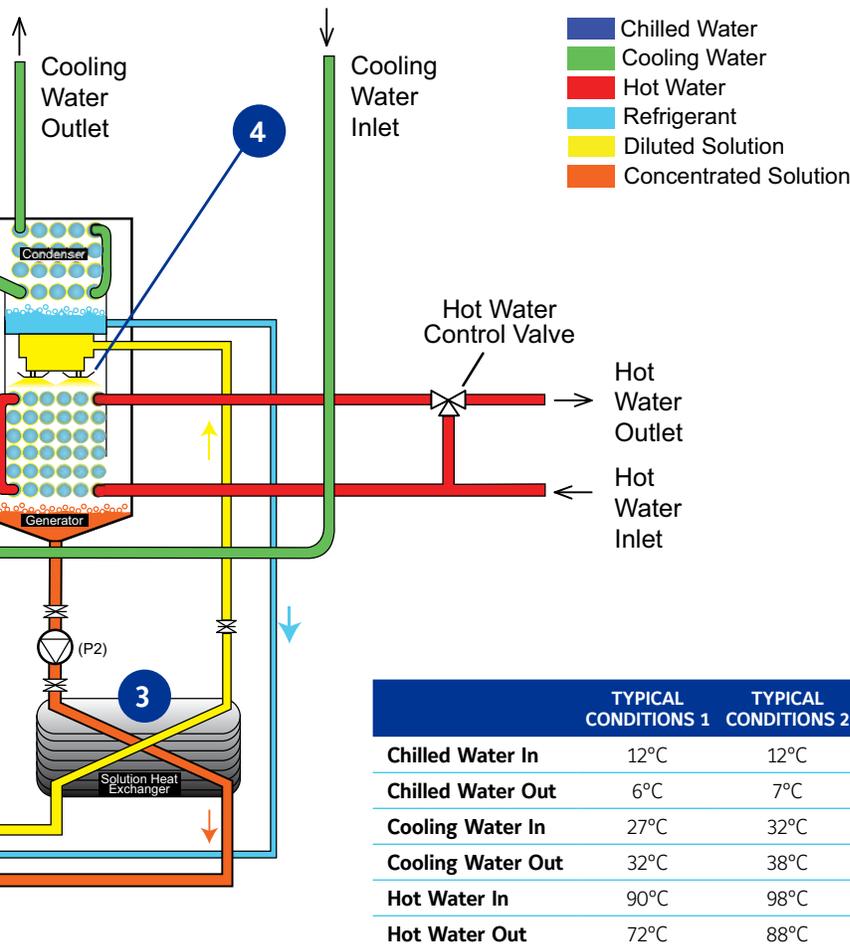
Available YHAU-CL/CH water temperature ranges

WATER CHARACTERISTIC	TEMPERATURE RANGE
Entering cooling-water temperature	As high as 37°C (98°F)
Leaving chilled-water temperature	As low as 4°C (39°F)
Entering-hot-water temperature	As low as 70°C (158°F) As high as 160°C (320°F)
Leaving-hot-water temperature	As low as 60°C (140°F)

Single-effect hot water cycle with innovative YORK® two-step evaporator and absorber design



1. Two-step evaporator and absorber design has two pressure levels that uniquely divide the absorption process into two steps. The chilled water flows through the tubes in series through the two evaporators while the concentrated lithium-bromide solution is distributed in the absorber shell side in the opposite direction. This enhances absorption of the refrigerant into the concentrated solution, reducing solution concentrations and overall pressure. This makes the unit more efficient and reliable than conventional designs.



Minimizing Total Cost of Ownership

World-class YORK® engineering, support and service reduce the cost of ownership by simplifying startup and chiller operation over the life of the system. Here's how:

Better optimized for low condenser or cooling water flow thanks to the two-step design and parallel flow cycle that minimizes cooling water flow rates—series flow designs require high flow rates.

Fully automatic purging system provides trouble-free operation by purging and removing non-condensable gases without operator intervention.

Superior hermetic integrity is ensured by high quality processes and rigorous helium leak detection technique.

Tubes made with de-oxidized low phosphorus (DLP) copper protect against corrosion cracking. Water boxes are coated with epoxy paint for added corrosion resistance.

Control center with graphical animated LCD display lets the user see several operating parameters at once. Present and past operational status, data recording and chiller safeties are accessible at a touch.

Isolation valves on the suction and discharge of the solution and refrigerant pumps allow quick and easy servicing of pumps, which typically have a 60,000-hour life.

Factory functional testing on single-piece shipments, ensures control-panel and safety-device operation to reduce on-site startup time in the field.

2. Gravity-fed distribution system for the evaporator/absorber employs stainless steel material that prevents corrosion and ensures performance and long life.

3. High-efficiency plate heat exchanger provides increased efficiency over conventional shell and tube.

4. Falling-film generator design provides superior heat transfer compared to a conventional flooded generator. This design also reduces the required amount of lithium-bromide solution to be circulated, decreasing startup time from a cold start. Stainless steel tubes are adopted to prevent stress corrosion cracking, and intermediate tube supports reinforce and extend unit life.



Why install anything but YORK®?

You want high performance. You expect efficiency. And you need a chiller that gives you confidence.

When your reputation is at stake, it's smart to demand nothing less than YORK® technology and service. That's because we provide local service and parts to keep your equipment operating at peak performance year after year. Enjoy the peace of mind knowing that trained service experts and Original Equipment Manufacturer parts are available from Johnson Controls – the largest HVAC service and preventative maintenance organization in the world.



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