

Accuchiller

TC Series



Delivers exceptional part load efficiency



Intuitive PLC control with a user-friendly text display



One of the most energy efficient central chillers ever built

CENTRAL CHILLER

Single Circuit

Up to 120 tons (422 kW)

Dual Circuit

Up to 240 tons (844 kW)

Thermal Care is at the forefront of process cooling technology. TC Series industrial central chillers feature revolutionary, frictionless, magnetic bearing Turbocor compressors for optimal performance and unmatched part load efficiency. The oil-free design eliminates oil management systems, reducing costs and environmental impact while enhancing reliability. This translates into the quietest, most reliable, and most energy efficient chillers ever built.

TCF Series chillers feature an intuitive PLC system with a 7" HMI high resolution LCD color touch screen for precise control and monitoring. The user-friendly interface provides real-time system data, allowing users to monitor system operating conditions, adjust parameters, and troubleshoot with ease. Clear text displays, graphics, and time stamped fault logs, simplify operation and maintenance. The PLC system can manage up to six refrigeration circuits, optimizing performance and diagnostics.

Available in capacities from 60 to 240 tons (211 to 844 kW), the TC Series offers a high-performance, low-maintenance cooling solution.



Low GWP Refrigerant	EPA approved low GWP R-513A refrigerant or energy efficient R-134A refrigerant.
Variable-Speed Compressors	Direct-drive variable-speed centrifugal compressor technology continuously adjusts speed to match load to reduce operating costs.
Magnetic Bearing	A magnetic field levitates the drive shaft and eliminates the friction of conventional bearings for higher efficiencies and an oil-free refrigeration system.
Integral Variable Speed Drive	High-efficiency brushless DC motor with built-in variable-speed drive technology is refrigerant cooled, compact, and energy efficient.
Soft Start	The variable-speed drive limits soft-starts to 2 amps inrush current per compressor to reduce peak energy demand and extend compressor motor life.
Low Noise Operation	The magnetic bearings keep the drive shaft in position under high-speed operation for virtually no structural vibration and noise levels as low as 72 dBA.
Stainless Steel Evaporator	High-efficiency stainless steel plates with copper brazing provide maximum performance, long life, and an enhanced level of protection from harsh process conditions.
Evaporator Inlet Strainer	Removes any debris present in the process fluid to prevent costly downtime and repair due to a clogged chiller evaporator.
Fits Through Doors	Single circuit chillers up to 90 tons (317 kW) are compact and easily fit through standard 36-inch (914 mm) wide doors for easy maneuvering into tight installation spaces.
Dual Circuit Manifolds	Dual circuit chillers include evaporator manifolds and water-cooled condenser units include condenser water manifolds for quick and easy installation.
Modular Expandable System	Allows for system expansion to over 1,400 tons (4,924 kW) using up to six chillers and twelve refrigeration circuits.
Single or Multiple Circuit Configurations	Dual-circuit chillers for redundancy and back up for critical processes or systems and single-circuit chillers for dedicated loads
Color Touch-Screen Display	A high-resolution, high-speed, 7-inch color touchscreen with English text clearly shows chiller operation for quick and easy monitoring and control of the system.
CONNEX4.0 Ready Controls	Equipped with an Ethernet port and fully compatible with the CONNEX4.0 plant-wide equipment control and monitoring system
Compressor Rotary Circuit Breaker	A through-the-door rotary circuit breaker for each compressor allows easy maintenance of a compressor without the need to shut down power to the chiller.
UL 508A Industrial Control Panel	Every chiller has a UL label certifying the panel design and components comply with UL 508A standards ensuring the panels are safe and consistent for reliable operation.
Warranty	1 year entire unit parts and labor.

