

Central Chillers TS Series

With over 40 years of process cooling experience, Thermal Care is the dependable choice for industrial process chillers.

Our TS Series is just one of several central chiller designs that have made us a leader in providing compact central chilling systems for industrial applications. TS Series central chillers are available in both water-cooled and remote condenser models.

Units come standard with easy-to-use PLC controls and are both easy to install and operate.

Available in sizes from 20 to 100 tons



This remote air-cooled central chiller (Model TSR50A) is shown with an integral stainless steel reservoir, process pump, and chiller pump. It also features a dual standby pump with a dual standby discharge manifold.

Time-proven design and money-saving efficiency

Every TS Series chiller is built using energy-efficient, trouble-free scroll compressors. The stainless steel brazed plate evaporators are compact, provide higher heat transfer coefficients and protect against corrosion. These rugged chillers also feature two completely independent refrigeration circuits and are available with two or four compressors that use an environmentally friendly refrigerant.

Mechanical features

- Scroll compressors
- Stainless steel evaporators
- Two completely independent refrigerant circuits
- Evaporator water supply and return manifolds
- Y-strainers protect evaporators from contamination
- Water-cooled units include:
 - Supply and return condenser manifolds.
 - Generously sized, cleanable, shell-and-tube condensers for industrial environments.
 - Regulating valves for condenser water that maintain constant refrigerant head pressures.

Electrical features

- NEMA-4 enclosure
- Control transformer that provides 115/1/60 control voltage
- Compressor starters are mounted in control panel and wired to motors
- Pump starters are mounted in control panel and wired to motors when chiller includes optional stainless steel pump tank
- Single-point main power block for simple wiring connection
- Alarm horn and silence switch

Easy-to-use Operator Control System (OCS)



The TS Series standard controller is an OCS PLC with integrated HMI (Human Machine Interface). The interface is designed using clear text English language menus.

Powerful integrated control for TS Series central chillers

Every TS Series chiller comes standard with a compact OCS that combines PLC control with an easy-to-operate user interface. Included is an integrated Intel-based microprocessor controller, operator interface and solid state input/output relays. A PLC with touch screen display is available as an option.

Features

- Two line, 20 character alphanumeric display
- Ten menu selector keys
- Real-time clock
- °F or °C temperature display scales
- Set point temperature display
- Process water supply and return temperatures
- Compressor automatic lead/lag and run times
- Password protected digital set point and temperature deviation alarm adjustment
- Circuit alarms include:
 - Low flow
 - Freezestat
 - High refrigerant pressure
 - Compressor low pressure
- Water temperature readouts include:
 - Process water supply
 - Process water return
 - Set point
- System alarms include:
 - Compressor fault
 - Pump fault
 - Chiller tank low level
 - Supply temperature high
 - Process return sensor fault
 - Process supply sensor fault
 - E-Stop pressed
- High and low temperature alarms
- Alarm history screen
- User selectable lead/lag of refrigerant circuits
- Compressor anti-cycle timers
- Easy front panel alarm reset button

For additional specifications and system information, please visit us on the web at www.thermalcare.com



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Every Thermal Care central chiller comes with factory authorized start-up service. Our TS Series central chillers come standard with the industry's best warranties.

- One full year on parts
- One full year on labor
- Three full years on PLC controller and interface.

Count on Thermal Care to be your one source for a complete line of dependable process cooling equipment. From system design through equipment start-up, to exceptional service and repair parts – Thermal Care does it all.



A remote condenser, as shown here, is used when a cooling tower is not available.