

Accuchiller TCFW375 Central Chiller



50-ton Single-Circuit Chiller

Standard Features

Variable Speed Compressor

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 low noise.

Low Global Warming Potential (GWP)

513A Class A refrigerant, low toxicity and low flammability.

Rotary Circuit Breaker

A through-the-door rotary circuit breaker allows easy maintenance of the chiller.

C-UL 508A Industrial Control Panel

Every chiller has a C-UL label certifying our panel design and components comply with C-UL 508A standards ensuring the panels are safe and consistent for reliable operation.

Hybrid Film Evaporator

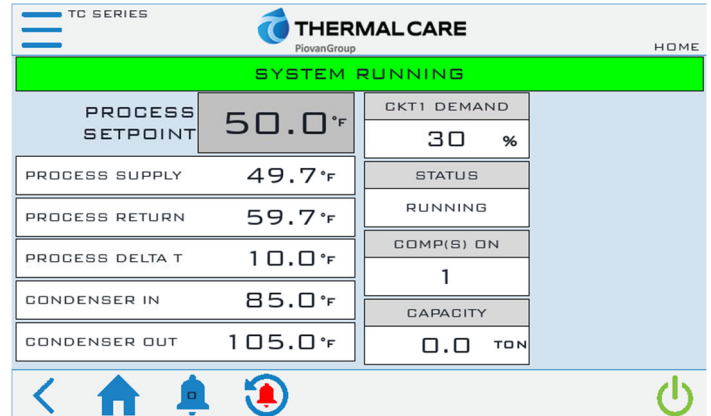
Advanced design provides the most efficient heat transfer while minimizing the refrigerant charge requirement results in a compact, extremely energy-efficient unit. Standard with both ASME and CRN certifications.

Slim Footprint

Unit has a slim design and can fit through a 34" opening.

Advanced Controls with Color Touch Screen

7-inch color touch screen shows chiller operation for quick and easy monitoring and control of the system. Our advanced PLC system can control up to six chillers.



PROCESS SETPOINT		50.0 °F	CKT1 DEMAND	30 %
PROCESS SUPPLY		49.7 °F	STATUS	RUNNING
PROCESS RETURN		59.7 °F	COMP(S) ON	1
PROCESS DELTA T		10.0 °F	CAPACITY	0.0 TON
CONDENSER IN		85.0 °F		
CONDENSER OUT		105.0 °F		

Modular Expandable System

Modular system design allows for flexible system design and provides for system expansion to over 300 tons using up to six chillers.

CONNEX4.0 Ready Controls

Every chiller is equipped with an Ethernet port and is fully compatible with the CONNEX4.0 plant-wide equipment control and monitoring system.

Warranty

1 year parts
1 year labor

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Available Option

BACnet Communication Port

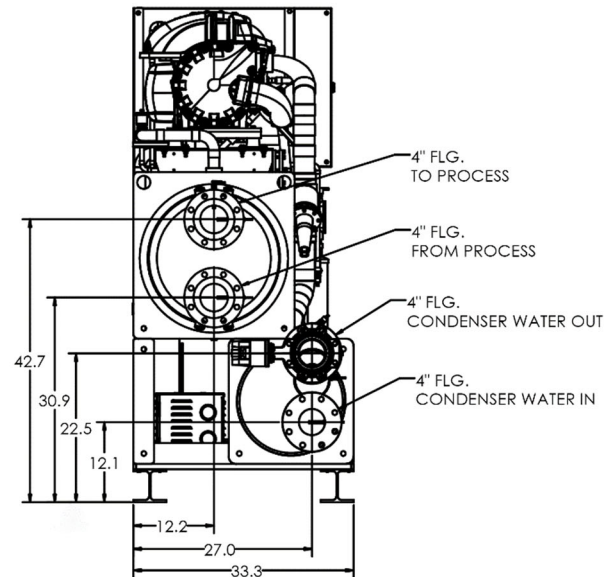
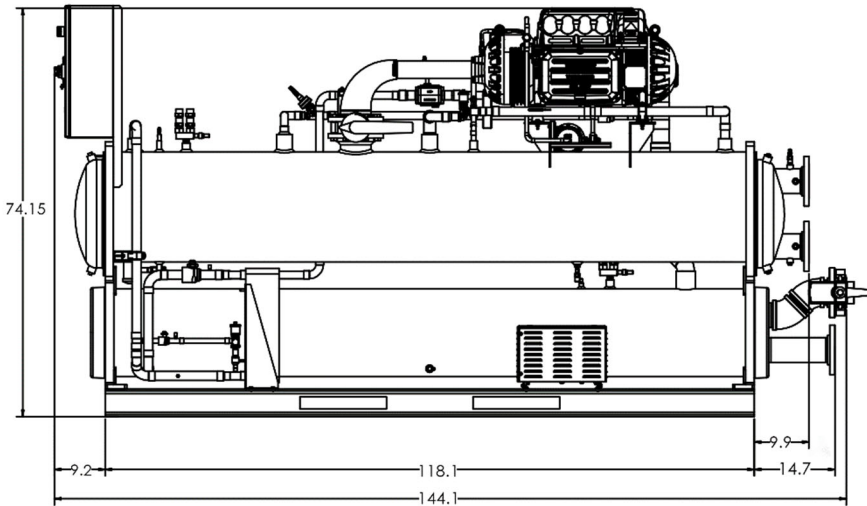
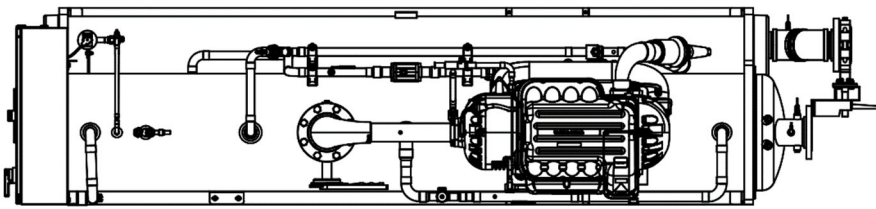
Adds a Modbus to BACnet gateway wired to a RS-485 connector on the control panel.

Model TCFW375	
Cooling Capacity Range (ton)	45 to 55
Nominal Capacity (ton) ¹	50
Set Point Range (°F)	10 to 55
Intended Operating Range (°F)	10 to 15
Compressor (qty)	1
Process Fluid	40% ethylene glycol
Evaporator Flow @ 10°F / 15°F	467 gpm / 427 gpm
Shipping Weight (lbs)	6,000
Operating Weight (lbs)	5,600
MCA @ 460/3/60 (amps) ²	230
MOP @ 460/3/60 (amps) ³	400

¹Cooling capacity when cooling water with 13°F set point, 16°F return, 85°F condenser water, R513A refrigerant.

²MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.

³MOP is Maximum Overcurrent Protection, used for sizing main power protection device.



THERMAL CARE

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Thermal Care is ISO 9001 Certified
 Manufacturer reserve the right to change specification
 or design without notification or obligation

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