THERMAL CARE
Superior equipment, Exceptional service

Accuchiller TC Central Chiller

Single-Circuit Chiller with Optional 12" Touch-Screen

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 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
The evaporator inlet strainer removes any debris present in the process fluid to prevent costly downtime and repair due to a clogged chiller evaporator.

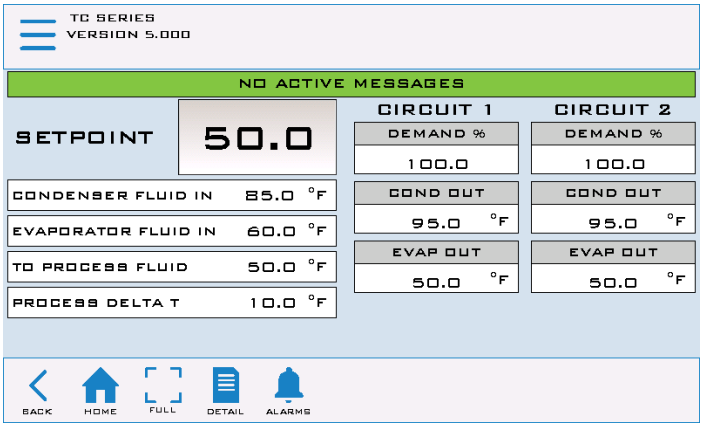
Fits through Doors
Single circuit chillers up to 90 tons are compact and easily fit through standard 36-inch wide doors for easy maneuvering into tight installation spaces.

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
Our modular system design provides for system expansion to over 1,400 tons 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 touch-screen with English text clearly shows chiller operation for quick and easy monitoring and control of the system.



Standard PLC Home Screen

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.

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 our panel design and components comply with UL 508A standards ensuring the panels are safe and consistent for reliable operation.

Warranty
3 year PLC controller parts
1 year entire unit parts
1 year labor
One-day factory authorized start-up supervision

Available Options

10-inch HMI
Replaces the standard 7-inch screen with a 10-inch, high resolution, color screen for larger presentation of the same menus and functions as the standard screen.

12 inch HMI
Replaces the standard 7-inch screen with a 12-inch, high resolution, color screen with a built-in industrial computer to allow for remote monitoring and control using TeamViewer software installed on any remote Windows based PC or smart phone.

12-inch HMI and CONNEX4.0 Master Controller
Replaces the standard 7-inch screen with a 12-inch, high resolution, color screen with a built-in industrial computer to allow for remote monitoring and control using TeamViewer software installed on any remote Windows based PC or smart phone. This package also adds a second PLC to allow for connection of up to 15 total Thermal Care Connex4.0 ready devices for many ways to interact with the connected equipment such as smart phone/tablet control, configurable email and text alerts for alarms, warnings, event alerts, and data collection.

BACnet or Lon Works Communications Port
Adds a Modbus to BACnet or Lon Works gateway which is wired to a RS-485 connector on the chiller control panel.

Water Cooled Condenser Single-Circuit Chillers

	TCW300C	TCW300E	TCW300J	TCW300M	TCW350Q	TCW350S
Cooling Capacity Range (ton)[1]	30 to 90	30 to 90	30 to 90	30 to 90	40 to 120	40 to 120
Set Point Range (°F)	40 to 75	40 to 75	40 to 75	40 to 75	40 to 75	40 to 75
Compressor (qty)	1	1	1	1	1	1
Condenser Water Inlet & Outlet Flange (in)	4	4	4	4	4	4
Process Water Inlet & Outlet Flange (in)	3	3	4	4	4	4
Length (in)	118	118	120	120	141	145
Width (in)	29	29	29	29	37	37
Height (in)	77	77	77	77	75	75
Shipping Weight (lbs)	1,800	1,900	2,100	2,400	2,774	2,825
Operating Weight (lbs)	2,000	2,100	2,300	2,600	3,071	3,208
MCA @ 460/3/60 (amps)[2]	104	104	129	154	229	229
MOP @ 460/3/60 (amps)[3]	175	175	225	250	400	400

[1]Cooling capacity when cooling water with 50°F set point, 60°F return, 85°F condenser water, R134a refrigerant.
[2]MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.
[3]MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

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Water Cooled Condenser Dual-Circuit Chillers

	TCW600C	TCW600E	TCW600J	TCW600M	TCW700Q	TCW700S
Cooling Capacity Range (ton)[1]	30 to 180	30 to 180	30 to 180	30 to 180	40 to 240	40 to 240
Set Point Range (°F)	40 to 75	40 to 75	40 to 75	40 to 75	40 to 75	40 to 75
Compressor (qty)	2	2	2	2	2	2
Condenser Water Inlet & Outlet Flange (in)	6	6	6	6	6	6
Process Fluid Inlet & Outlet Flange (in)	4	4	6	6	6	6
Length (in)	124	124	124	126	139	164
Width (in)	54	54	54	54	73	73
Height (in)	77	77	77	77	63	63
Shipping Weight (lbs)	3,700	3,800	4,100	4,700	5,548	5,650
Operating Weight (lbs)	4,000	4,200	4,600	5,200	6,588	6,863
MCA @ 460/3/60 (amps)[2]	184	184	229	274	409	409
MOP @ 460/3/60 (amps)[3]	250	250	300	350	500	500

[1]Cooling capacity when cooling water with 50°F set point, 60°F return, 85°F condenser water, R134a refrigerant.
[2]MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.
[3]MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

Remote Air-Cooled Condenser Single-Circuit Chillers

	TCR300C	TCR300D	TCR300H	TCR350K	TCR350Q	TCR350S
Cooling Capacity Range (ton)[1]	30 to 80	30 to 80	30 to 80	40 to 120	40 to 120	40 to 120
Set Point Range (°F)	45 to 75	45 to 75	45 to 75	45 to 75	45 to 75	45 to 75
Compressor (qty)	1	1	1	1	1	1
Refrigerant Liquid Line (in)	1⅜	1⅜	1⅝	1⅝	2⅛	2⅛
Refrigerant Discharge Line (in)	2⅛	2⅛	2⅝	2⅝	3⅛	3⅛
Process Fluid Inlet & Outlet Flange (in)	3	3	4	4	4	4
Length (in)	105	105	109	109	129	129
Width (in)	29	29	29	29	37	37
Height (in)	77	77	77	77	75	75
Shipping Weight (lbs)	1,800	1,900	2,100	2,400	2,067	2,129
Operating Weight (lbs)	2,000	2,100	2,300	2,600	2,176	2,286
MCA @ 460/3/60 (amps)[2]	173	173	173	192	229	229
MOP @ 460/3/60 (amps)[3]	300	300	300	300	400	400

[1]Cooling capacity when cooling water with 50°F set point, 60°F return, 95°F condenser air, R134a refrigerant.
[2]MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.
[3]MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

Remote Air-Cooled Condenser Dual-Circuit Chillers

	TCR600C	TCR600D	TCR600H	TCR700K	TCR700Q	TCR700S
Cooling Capacity Range (ton)[1]	30 to 160	30 to 160	30 to 160	40 to 240	40 to 240	40 to 240
Set Point Range (°F)	45 to 75	45 to 75	45 to 75	45 to 75	45 to 75	45 to 75
Compressor (qty)	2	2	2	2	2	2
Refrigerant Liquid Line Per Circuit (in)	1⅜	1⅜	1⅝	1⅝	2⅛	2⅛
Refrigerant Discharge Per Circuit (in)	2⅛	2⅛	2⅝	2⅝	3⅛	3⅛
Process Fluid Inlet & Outlet Flange (in)	4	4	6	6	6	6
Length (in)	112	112	120	120	139	145
Width (in)	56	56	56	56	73	73
Height (in)	77	77	77	77	63	63
Shipping Weight (lbs)	3,700	3,800	4,100	4,700	4,134	4,258
Operating Weight (lbs)	4,000	4,200	4,600	5,200	4,526	4,746
MCA @ 460/3/60 (amps)[2]	308	308	308	342	409	409
MOP @ 460/3/60 (amps)[3]	400	400	400	450	500	500

[1]Cooling capacity when cooling water with 50°F set point, 60°F return, 95°F condenser air, R134a refrigerant.
[2]MCA is Minimum Circuit Amps under full load, used for minimum wire size requirement.
[3]MOP is Maximum Overcurrent Protection, used for sizing main power protection device.

Remote Condensers

	LEVF-16410	LAVF-24310	LAVF-24410	LAVF-25312	LAVF-25412	LEVF-26410
Quantity Required	1 for TCR300C 1 for TCR300D	1 forTCR300H 2 for TCR600H	1 for TCR350K 2 for TCR700K	1 for TCR350Q 2 for TCR700Q	1 for TCR350S 2 for TCR700S	1 for TCR600C 1 for TCR600D
Number of Fans	6	8	8	10	10	12
Inlet Line Per Circuit (in)	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
Outlet Line Per Circuit (in)	3⅛	3⅛	3⅛	3⅛	3⅛	3⅛
Length (in)	342	234	234	290	290	342
Width (in)	45	91	91	91	91	91
Height (in)	61	61	61	61	61	61
Shipping Weight (lbs)	2,800	2,700	2,900	4,100	4,100	5,300
Operating Weight (lbs)	Varies based on refrigerant piping design, refrigerant charge, and operating conditions					
MCA @ 460/3/60 (amps)[1]	22	29	29	36	36	43[3]
MOP @ 460/3/60 (amps)[2]	30	35	35	45	45	55[3]

[1]MCA is Minimum Circuit Amps, used for minimum wire size requirement.
[2]MOP is Maximum Overcurrent Protection, used for sizing main power protection device.
[3]This is a dual-circuit condenser with two panels, one per circuit; each requires a power feed for 50% of the MCA and MOP shown.

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