



Product Catalog

Trane Rental Services

460 Volt Temporary Air-Cooled Chillers



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TRANE
TECHNOLOGIES™



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Revision History

- New model RSCA0550F0/F1 ACRC and associated information added.



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Application Considerations

Ambient Limitations

Trane Rental Services CGAM, ACSA, ACXA, ACRC, RTAC, RTAF, and RTAG units can operate outdoors in a wide range of ambient temperatures. Depending on the product, this allows the chiller to perform from -20°F to 130°F (-18°C to 54°C).

- Trane Rental Services sets and enables a low ambient lockout temperature at 25°F. Modifications to the lockout should only be performed by a Trane technician or with the help of Trane Rental Services Technical Support Group.
- The minimum ambient temperatures are based on wind condition not exceeding 5 mph. Higher wind conditions will result in a drop in head pressure, increasing the minimum starting and operating ambient temperatures.
- To keep the chiller online, the adaptive control microprocessor will stage fans on, modulate electronic expansion valves, and modulate slide valve positions as the chiller approaches a high pressure cutout limit.

Trane Rental Services RSPA chillers can only operate indoors at an ambient temperature of 60°F to 95°F.

Important: RSPA0010F0-series chillers cannot be exposed to the elements under any circumstances.

- If there is no place indoors to place the chiller, an enclosure must be placed around the chiller.
- The enclosure must meet clearance requirements and be conditioned to maintain the ambient temperature range this chiller can operate in.

Electrical Connections and Shore Power

All 20 ton and larger Trane Rental chillers utilize Series 16 cam-style electrical power connections, with compatible power cables available for rent through Trane Rental Services. See *Trane Rental Services Electrical Cable Engineering Bulletin* (CHS-PRB005*-EN) for additional cable information.

In addition to the Series 16 cam-style connection, many chillers include a separate conduit entrance cover for optional conversion to conduit entrance. All electrical wiring should be performed in accordance with relevant electrical code requirements.

Each chiller includes a push-to-test phase reversal relay and status indicator which prevent reverse-phased operation.

Table 1, p. 5 below outlines the single point or dual point power configurations available in the Trane Rental Air-Cooled chiller fleet. Contact Trane Rental Services Engineering for additional information.

Table 1. Trane rental air-cooled chiller power configuration

Unit Size (Tons)	Trane Rental Air-Cooled Chiller Model	Power Configuration
10-250	All models	Single point only
300	CSCA0300F0 - RTAA	Unit-specific ^(a)
300	CSCA0300F0 - RTAC	Dual or single point
300	CSCA0300F2-F3 - RTAC	Dual point only
300	RSCA0300F0 - ACRC	Single point only
300	RSCA0300F0 - RTAG	Dual point only
400	CSCA0400F0 - RTAA	Unit-specific ^(a)
400	CSCA0400F0 - RTAC	Dual or single point
400	CSCA0400F2-F3 - RTAC	Dual point only
425	RSCA0440F0 - RTAG	Dual point only
440	RSCA0440F0 - ACRC	Dual point only
500	CSCA0500F0-F4 - RTAC	Dual point only
500	RSCA0500F0 - RTAF	Single point only
550	RSCA0550F0 - ACRC	Dual point only

^(a) Contact TRS Engineering for unit-specific information on these products.

Figure 1. RTAC 300 to 400 ton F0-series single point power configuration

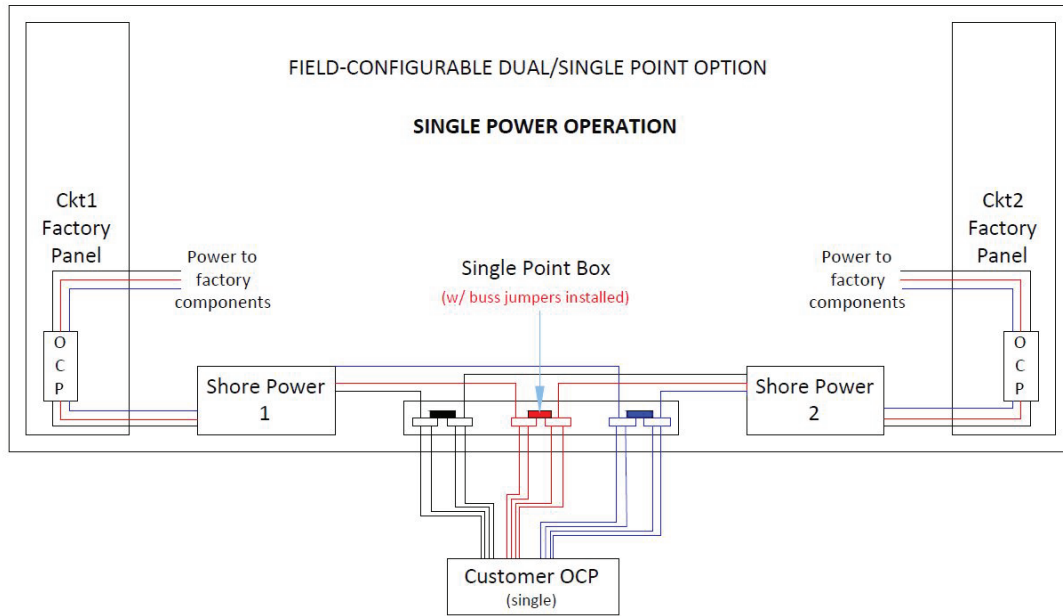
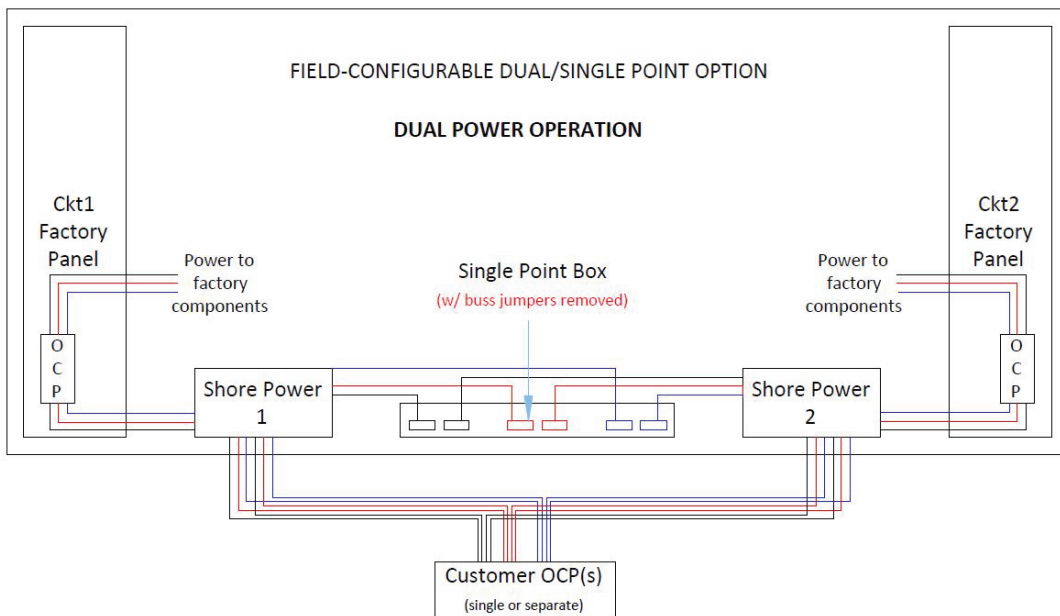


Figure 2. RTAC 300 to 400 ton F0-series dual point power configuration



CGAM, ACSA, ACXA, ACRC, RTAC, RTAF, and RTAG chillers include a shore power connection to energize the oil sump heater. Regardless of ambient temperature, this is required to boil refrigerant out of the oil and is required to be energized 24 hours prior to start-up.

The below table lists components powered by the shore power circuit. The circuit itself is powered via a 115V 60 Hz NEMA 5-15P plug on the enclosure, from the building, with an extension cord.

Table 2. Components powered by shore power circuit

Chiller Model	Compressor Heaters	Supplemental Compressor Heaters (a)	CH530 Controls and Interface	Symbio 800 Controls and Interface	Evaporator Heaters (Freeze Prevention)
CGAM	YES	—	YES	—	YES
ACSA	YES	—	—	YES	460V only
ACXA	YES	460V only	—	YES	460V only
ACRC ^(b)	YES	—	—	YES	460V only
RTAC ^(b)	YES	—	YES	—	460V only
RTAF ^(b)	YES	—	—	YES	460V only
RTAG ^(b)	YES	—	—	YES	460V only

^(a) Additional heaters powered by 460 Vac required when operating in heating mode; optional in cooling mode.

^(b) Larger screw chillers (440 ton and larger for ACRC, 300 ton and larger for other screw chiller models) have two separate shore power plugins, one for each circuit's control panel.

Water Flow Limits Value

Minimum and maximum flow rates are found under the water flow rates and pressure drops section of the desired chiller listing. Verify flow is within these limits.

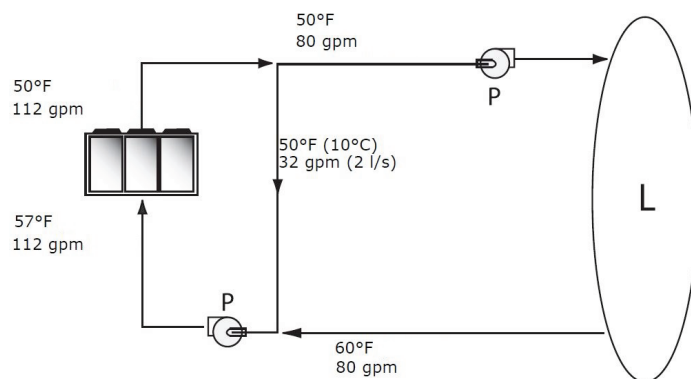
Evaporator flow rates below the tabulated values will result in laminar flow causing freeze up problems, scaling, stratification, and poor control. Flow rates exceeding those listed may result in very high pressure drop across the evaporator and excessive tube erosion.

Flows Out of Range

Many process cooling jobs require evaporator flow rates that fall outside of a rental chiller specifications. A simple piping change can alleviate this problem.

- A plastic injection molding process requires 80 gpm (5.1 l/s) of 50°F (10°C) water and returns that water at 60°F (15.6°C).
- The chiller can operate at these temperatures, but has a minimum flow rate of 112 gpm (7.1 l/s).
- Adding a chilled water bypass as shown in the diagram below allows for sufficient flow through the rental chiller while maintaining the lower flow rate required for the process.

Figure 3. Chilled water bypass



Trane Rental Services offers plate and frame heat exchangers in four tonnage ratings (100, 150, 250, 500). They provide fluid to fluid heat exchange in chilled/hot water applications. If a process requires cooling, but the flow rate is too low or too high for a standard chiller of corresponding tonnage, then the use of a heat exchanger can allow the chiller to operate at a flow rate that meets specification while the customer process can operate at its optimal flow rate.



Application Considerations

Entering Water Temperature Limits

The maximum recommended water temperature that can be circulated through an evaporator when the unit is operating is 90°F for all Trane Rental air-cooled chillers. Contact Trane Rental Services Engineering for applications which require sustained entering water temperatures higher than 90°F.

- When operating with return water temperatures in excess of 75°F, the chiller may operate at reduced capacity to prevent high condenser pressure or compressor overload faults.
- If the entering water temperature is higher than the maximum allowable temperature, consult Trane Rental Services about implementing a bypass to mix supply water with return water to reduce the return water temperature. Adding a bypass may require additional pumps for balancing the temporary chiller plant layout.

The maximum water temperature that can be circulated through an evaporator when the unit is not operating is 108°F for screw compressor chillers (ACRC, RTAC, RTAF, and RTAG) and 125°F for scroll compressor chillers (CGAM, ACSA, and ACXA when not operating in heating mode).

- If there is a need for a dual process application such as comfort cooling (daytime) and ice storage (usually night time), contact Trane Rental Services to discuss equipment configuration options.

Leaving Water Temperature Limits

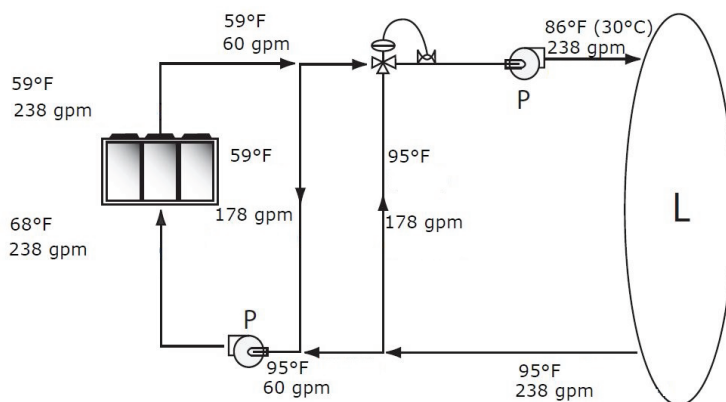
Trane Rental Services chillers have been selected with a low leaving water option. Low temperature machines produce leaving liquid temperatures less than 40°F (4.4°C). However operating with leaving fluid temperatures lower than 40°F results in suction temperatures at or below the freezing point of water. A glycol or other approved freeze inhibitor solution is required for all low temperature machines. Consult Trane Rental Services engineering for any performance selection on chillers.

Leaving Water Temperatures Out of Range

Many process cooling jobs require evaporator flow rates that fall outside of a chiller specifications. Many process cooling jobs require temperature ranges that cannot be met by the published minimum and maximum temperature values for the rental chiller evaporator. A simple piping change can alleviate this problem.

- A laboratory load requires 120 gpm (7.6 l/s) of water entering the process at 85°F (29.4°C) and returning at 95°F (35°C). The accuracy required is better than the cooling tower can give. The selected chiller has adequate capacity, but a maximum leaving chilled water temperature of 65°F (18.3°C).
- In the figure below, both the chiller and process flow rates are equal. This is not necessary. If the chiller had a higher flow rate, there would simply be more water bypassing and mixing with warm water.

Figure 4. Equal chiller and process flow rates



Trane Rental Services offers plate and frame heat exchangers in four tonnage ratings (100, 150, 250, 500). They provide fluid to fluid heat exchange in chilled/hot water applications. They operate in wide temperature ranges (14°F to 250°F) which might allow for standard chiller operation temperatures while customer process can operate at high temperatures needed for proper operation.

Short Water Loops

Adequate water volume is an important chilled water system design parameter because it provides for stable chilled water temperature control and helps to limit unacceptable short cycling of chiller compressors.

Typically, a 2-minute water loop circulation time is sufficient to prevent short water loop issues. As a guideline, confirm the volume of water in the chilled water loop equals or exceeds two times the evaporator flow rate.

Example: An application in which the chilled water flow rate is 240 gallons per minute will require a total system volume of 480 gallons or more.

When operating ACXA Heat Pump chillers in heating mode, heating loop volume recommendations are higher to account for temperature modulation during defrost cycles. When utilizing these units in heating mode, the loop volume should equal 8X the nominal tonnage of the unit (1,600 gallons for a 200 ton nominal heat pump chiller). Contact Trane Rental Services Engineering for additional details.

If the installed system volume does not meet the above recommendations, consider the following items to increase the volume of water in the system and reduce the rate of change of the return water temperature.

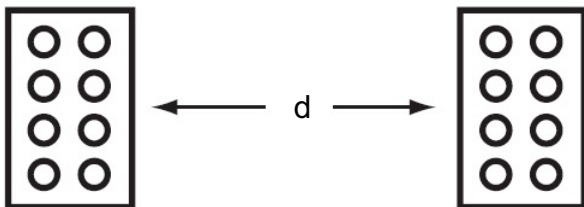
- A volume buffer tank located in the return water piping.
- Large system supply and return header piping (which also reduces system pressure drop and pump energy use).

Close Spacing and Clearances

- Allow for unrestricted access to all service points.
- A minimum of 4 feet is recommended for compressor service.
- Provide sufficient clearance for the opening of control panel doors.
- The chiller should be completely open above the fan deck.
- Ducting individual fans is not recommended.

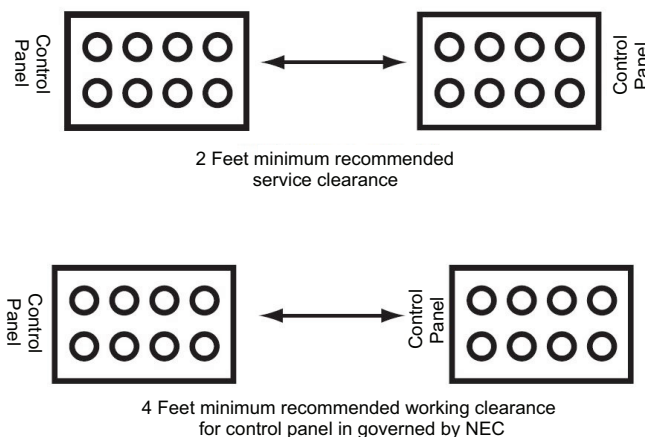
When installation is a concern due to minimal recirculating air and close spacing, consider the following for more than one chiller:

Figure 5. Two chillers located side by side



Note: Spacing chillers side-by-side, less than 4 feet apart is not recommended.

Figure 6. Two chillers may be installed end to end





Application Considerations

There is no performance effect for any spacing of chillers end to end. Minimum spacing is governed by service clearances and working clearance required by the National Electric Code (NEC) near control panels. A 2-foot clearance is recommended on the end opposite the control panel. Article 110-16 of the NEC requires 3 to 4 feet of working clearance, on the control panel end depending on the actual installed conditions. Refer to the NEC for a detailed discussion of requirements.

In all cases, local codes which require additional clearances will take precedence over these recommendations. See *Series R® Air-Cooled Helical Rotary Liquid Chillers - Installation, Operation, and Maintenance* (RTAC-SVX01*-EN) and *Close-Spacing and Restricted Airflow Situations Air-Cooled Scroll Chillers - Engineering Bulletin* (CG-PRB011*-EN) for more information on clearances and close spacing applications.

Trane Rental Services RSPA chillers require a minimum 2-foot clearance at the air intake and a minimum 6-foot clearance at the vertical exhaust air discharge. Adequate ventilation is required to dissipate rejected heat. Do not install the unit in unventilated areas.

Acoustics

In order to minimize noise and vibration transmission, locate outdoor unit away from sound sensitive areas.

For rental ACSA and ACXA 60Hz units, sound pressure levels measured 30 feet from control panel. A-weighted sound pressure level, dBA, ref 20 micro PA.

Table 3. ACSA/ACXA sound pressure data

Unit Size (Tons)	Percent Load				
	100%	67%	50%	33%	17%
200	72	71	70	67	64

For rental CGAM 60Hz units with standard super quiet fans, sound pressure levels measured 30 feet from control panel.

A-weighted Sound Pressure Level, dBA, ref 20 micro Pa.

Table 4. CGAM sound pressure data

Unit Size (Tons)	Percent Load			
	100%	75%	50%	25%
25	56	—	55	—
40	58	57	57	54
60	62	62	61	58
80	63	62	61	58
100	62	62	60	58
120	65	64	62	59

See the table below for overall A-weighted sound pressure levels for rental RTAC chillers.

Table 5. RTAC sound pressure data

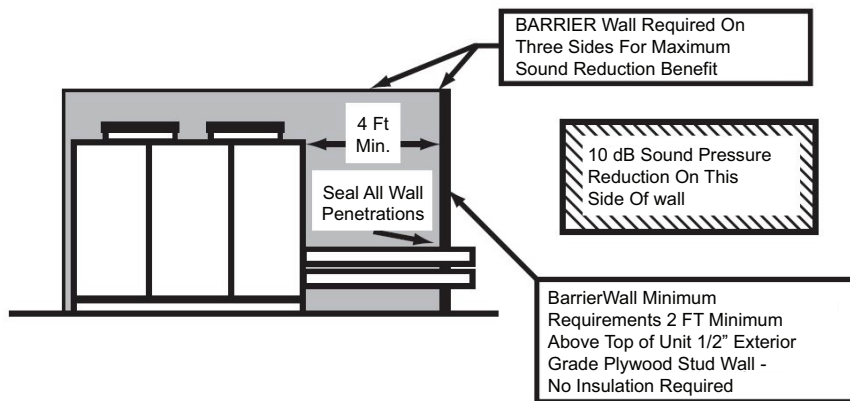
Unit Size (Tons)	A-Weighted Sound Pressure Level, dBA, ref 20 micro Pa (60 Hz @ 30 ft.)
155	72.0
170	74.0
200	75.0
250	75.0
300	76.0
400	78.0
500	78.0

Estimations made using this bulletin are considered typical of what may be measured in a free field with a hand-held sound meter, in the absence of a nearby reflective surface.

One of the techniques used in the field to try attenuate sound is through the use of barrier walls. A barrier wall constructed to only 1/2-inch exterior grade plywood gives 10 dBA reduction in sound. See [Figure 7, p. 11](#).

A minimum distance of 4 feet is recommended, but the chiller may be placed closer than 4 feet to a barrier wall. Some loss of performance will occur.

Figure 7. Minimum wall requirements



Pump Control

All model RSPA, ACSA, ACSC, ACRC, CGAM, RTAC, RTAG and RTAF chillers include fully integrated pumps which are pre-wired, pre-piped and fully integrated into the frame of the chiller. With the exception of F0-series RTAC and RSPA chillers, units with integral pumps include a piping bypass for applications with an external/outboard pump proving flow. In these applications the integral pump bypass valve should be opened and the manual **HAND/OFF/AUTO** toggle switch should be left in the **OFF** position.

RSPA, CGAM, and RTAC model chillers utilize a fixed-speed pump which can be controlled based on chiller operating status (**AUTO** mode) or set to run continuously (**HAND** mode). Balancing valves are provided to assist with adjusting flow rates.

ACSA, ACXA, ACRC, RTAF and RTAG chiller models utilize Variable Frequency Drives (VFDs). In addition to the **HAND/OFF/AUTO** switch to allow users to adjust pump speed and resulting flow rate for specific applications.

For ACSA, ACXA, ACRC and RTAF chillers, pump VFD speed control is accomplished by either:

- Adjusting a potentiometer on the pump control panel, or
- Adjusting a preset reference on the VFD keypad.

For RTAG chillers, the Symbio 800 controller's TD-7 interface is used to control pump VFD speed by adjusting the **Front Panel Evap Water Pump Speed Setpt**, expressed as a percentage in the **Settings** menu.

RTAA model rental chillers may be supplied without an integral pump. Contact Trane Rental Services for unit-specific details. In applications for which a temporary pump solution is required and the RTAA model chiller is not equipped with an integral pump, there are two viable electrical options for incorporating a temporary standalone pump into the installation:

1. Identify an appropriately sized breaker or fused disconnect at the site and connect the pump to it.
2. Trane Rental Services also offers I-line panels to connect through lug or cam-lock type connections.

Freeze Protection

In ambient temperatures between 32°F (0°C) and -20°F (-28°C) it is recommended that a non-freezing, low temperature, corrosion inhibiting, heat transfer fluid be added to the chilled water system. The solution must be strong enough to provide protection against ice formation at the lowest anticipated ambient temperature. As a result of low chilled water setpoints at or below 40°F (4°C), glycol or other antifreeze solution must be used. Trane Rental Services RSPA chillers require at least 30 percent glycol when operating at a chilled water setpoint at or below 48°F. Contact Trane Rental Services Engineering for more information on glycol percentage recommendations.

In addition to using glycol, it is highly recommended that all exposed piping and pumps, integral to the chiller, be heat traced and insulated. Follow the heat-tracing manufacturer's guidelines. In low-ambient applications, heaters alone provide protection down to -20°F (-29°C), but they do not prevent evaporator freezing caused by refrigerant charge migration. Chiller water pump control must also be used with heaters. When chiller pump control is active, the Trane chiller controller can start the pump and initiate flow to protect the evaporator from freeze damage. For this option, the unit must control the pump, and this function must be verified. Review all automated and manual valves in the chilled-water loop to confirm they do not block flow and risk evaporator damage.



Application Considerations

The only failsafe method to prevent evaporator damage in the event of a complete power loss during freezing weather is to have an appropriate freeze-inhibiting fluid mixture in the chilled water loop.

Notes:

- *When decommissioning ACRC, RTAC, RTAG, and RTAF chillers, simply draining the evaporator is not an effective means to prevent freeze damage; sufficient residual water will be retained in the evaporator tubes to expose the machine to freeze damage.*
- *When decommissioning the chiller during freezing weather, Trane Rental Services requires the evaporators of these machines be completely filled with a glycol mixture of appropriate concentration (typically 35 percent propylene glycol) to prevent catastrophic evaporator damage.*

Controls

RTAC and CGAM chillers are equipped with Trane CH530 controls and Trane's weatherproof Dynaview touch screen operator interface. This interface can be utilized to start and stop the chiller, view operating status, and adjust setpoints.

All RTAC and F0-F3 Series CGAM chillers with CH530 controls include BACnet MS/TP adapter modules for Building Automation interconnection, as well as hardwired start/stop, emergency stop, and programmable alarm/status relay. Analog control points are provided in the form of external current limit and external chilled water setpoint inputs, both able to be controlled via 2 to 10 Vdc or 4 to 20mA reference signal.

ACSA, ACXA, ACRC, RTAF, and RTAG and F4-Series CGAM chillers utilize Trane's next-generation Symbio™ 800 control platform with a 7-inch graphical touchscreen display from which the chiller can be started and stopped, operating status and datalogs can be viewed, schedules can be created and updated, and setpoints can be adjusted. The Symbio 800 controls includes native BACnet MS/TP, BACnet IP, and MODBUS support.

LonTalk® integration to any Trane Rental Services air-cooled chillers requires additional hardware. Contact your local Trane Sales Office for additional information.



10 Ton Portable Chiller

Table 6. General – RSPA0010F0 (indoor only)

Labels	Value
Model Number	TempTek CFD 10-A
Nominal Tons	10
Refrigerant	R-410A
Water Connection Size ^(a)	1.5-inch Dixon
Ambient Operating Conditions	60°F to 95°F
Setpoint Limits ^(b)	20°F to 80°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	1

^(a) Chiller ships with two, 25-foot sections of 1.5-inch hose with Dixon couplings, one, 1.5-inch NPT pin Dixon fitting, and one, 1.5-inch NPT receptable Dixon fitting. Dixon to Victaulic adapters will need to be sourced in the field to connect to TRS AHU waterlines.

^(b) When leaving solution is below 48°F, a glycol solution is required.

Table 7. Electrical data

Labels	Value
Voltage ^(a)	460V 3-Phase
Frequency	60Hz
Wire Connection Type ^(b)	8/4 Cable Whip
SCCR	5,000 A
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	32 A
Maximum Overcurrent Protection (MOP)	50 A
Full Load Amps (FLA)	26.6 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	36 A
Maximum Overcurrent Protection (MOP)	50 A
Full Load Amps (FLA)	30.4 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

^(a) RSPA0010B0AA requires 208V, 3-phase power.

^(b) Chiller ships with one, 20-foot section of 8/4 cable whip.

Table 8. Pump data

Labels	Value
Horsepower	3 HP
Min Flow	24 gpm @ 136 ft.
Max Flow	48 gpm @ 113 ft.

Table 9. Cooling capacity (10 tons)

Leaving Water Temp (°F)	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton
		Ambient Air Temp
		95°F
60	0	10.29
50	0	9.80



10 Ton Portable Chiller

Table 9. Cooling capacity (10 tons) (continued)

Leaving Water Temp (°F)	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton	
		Ambient Air Temp	
		95°F	
45	30	8.82	
40	30	7.84	
35	30	6.86	
30	30	5.88	
25	30	4.90	
20	40	3.92	

Table 10. Dimensions and weights

Labels	Value
RSPA0010B0AA; RSPA0010F0AB^(a)	
Length	4 ft. 8-in.
Width	2 ft. 10-in.
Height	5 ft.
Shipping Weight (lbs)	1,100
Operating Weight (lbs)	1,309
RSPA0010F0AC - RSPA0010F0**	
Length	8 ft.
Width	3 ft. 10-in.
Height	6 ft. 8-in.
Shipping Weight (lbs)	1,500
Operating Weight (lbs)	1,809
Fork Pocket Dimensions	8.125-in. x 3.5 in. x 3 ft. 10-in.
Fork Pocket Center to Center Distance	3 ft. 3.875-in.

Note: Lifting device: Crane only

^(a) Units not on a skid.

Table 11. Installation and operating clearances

Labels	Value
Air Intake	24-in.
Vertical Exhaust	72-in.

Note: Unit must not be placed in non-ventilated areas.

Figure 8. Integral pump curve

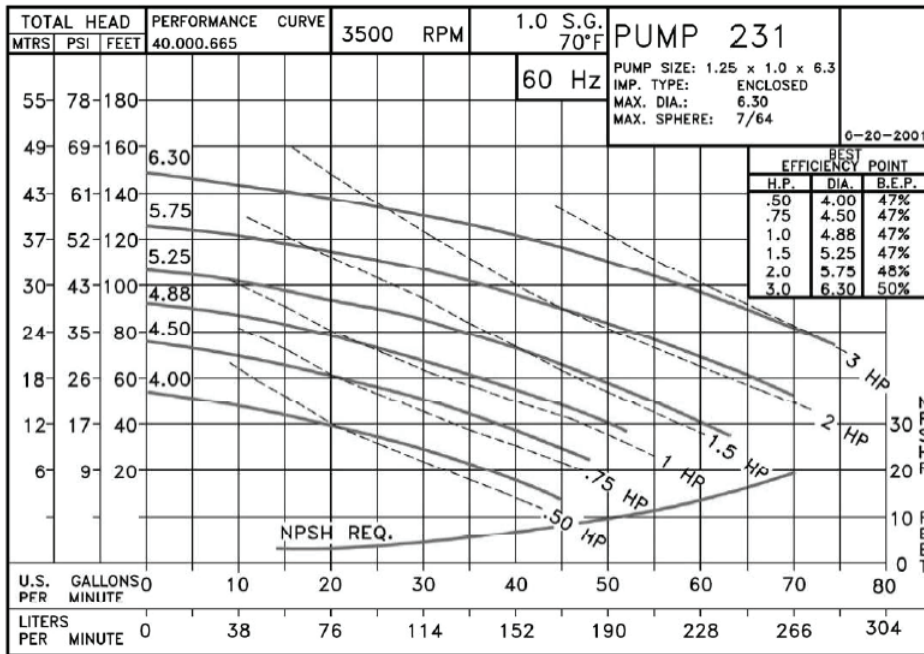
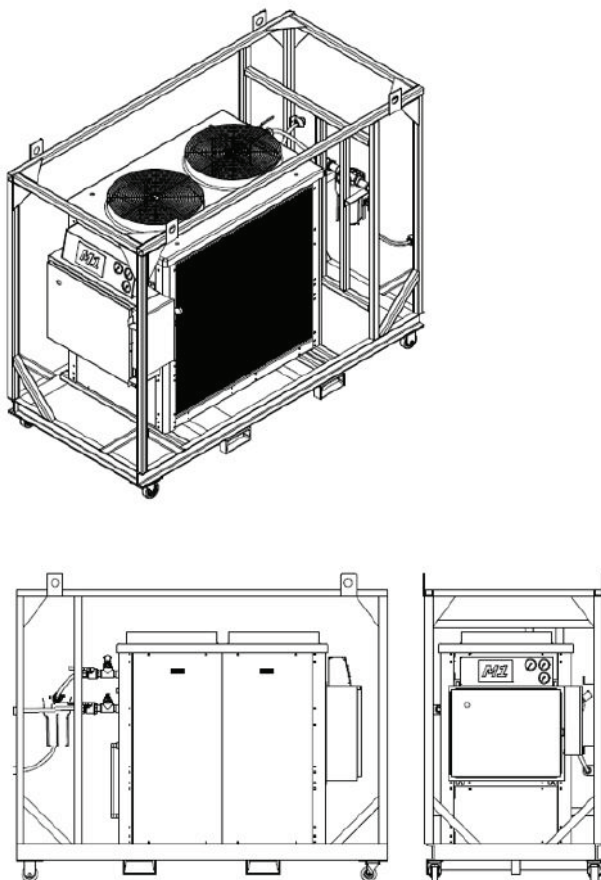


Figure 9. Unit drawings





25 to 120 Ton CGAM

25 Ton Air-Cooled CGAM

Table 12. General – CSCA0025F0-F2

Labels	Value
Model Number	CGAM026
Nominal Tons	26
Refrigerant	R-410A
Refrigerant Charge ^(a)	34 lbs
Microchannel Refrigerant Charge ^(b)	22.5 lbs
Water Connection Size	2.5-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	1

- (a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.
- (b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.
- (c) For CGAM models with microchannel condenser coils.
- (d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 13. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^{(a) (b)}	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	56 A
Maximum Overcurrent Protection (MOP)	75 A
Full Load Amps (FLA)	49 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	64 A
Maximum Overcurrent Protection (MOP)	80 A
Full Load Amps (FLA)	55 A

Note: For additional electrical information, contact Trane Rental Services.

- (a) Maximum wire size lug(s) can accept - 2/0.
- (b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 14. Pump data

Labels	Value
Horsepower	5 HP
Min Flow	25 gpm @ 122.2 ft.
Max Flow	104 gpm @ 89.3 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 15. Cooling capacity (25 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	36.6	34.2	31.6	29.1	—
55	0	31.9	29.7	27.5	25.2	22.9
45	0	27.3	25.5	23.6	21.6	19.6
35	10	22.8	21.3	19.7	18.0	16.3
25	25	18.6	17.4	16.1	14.7	—
15	35	14.8	13.9	12.8	—	—
5	40	11.7	11.0	—	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 16. Water flow rates and pressure drops (25 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
30 (min flow)	3.58
40	6.04
50	9.21
60	13.10
70	17.60
80	22.90
89 (max flow)	28.30

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0025F0

Table 17. Dimensions and weights

Labels	Value
Length	12 ft. 6-in.
Width	4 ft. 11-in.
Height	8 ft. 6-in.
Shipping Weight (lbs)	5,200
Operating Weight (lbs)	5,400
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 4 ft. 2.75-in.
Fork Pocket Center to Center Distance	3 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 10. CSCA0025F0 pump curve

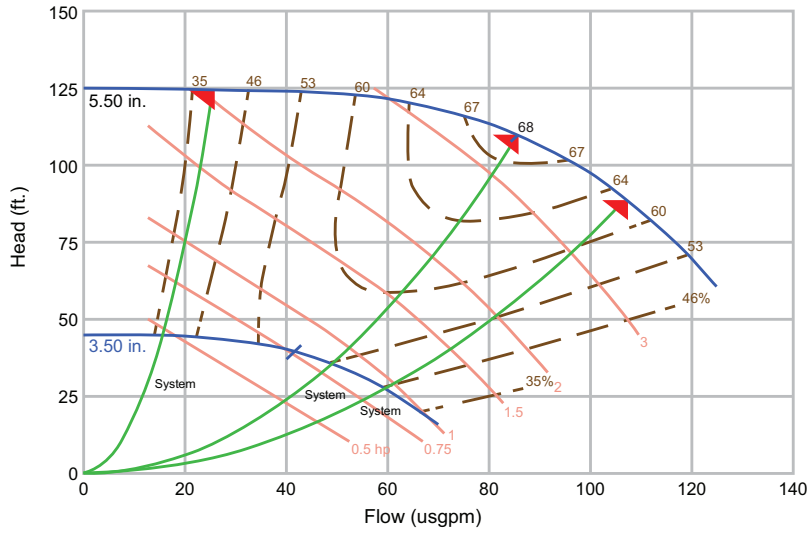
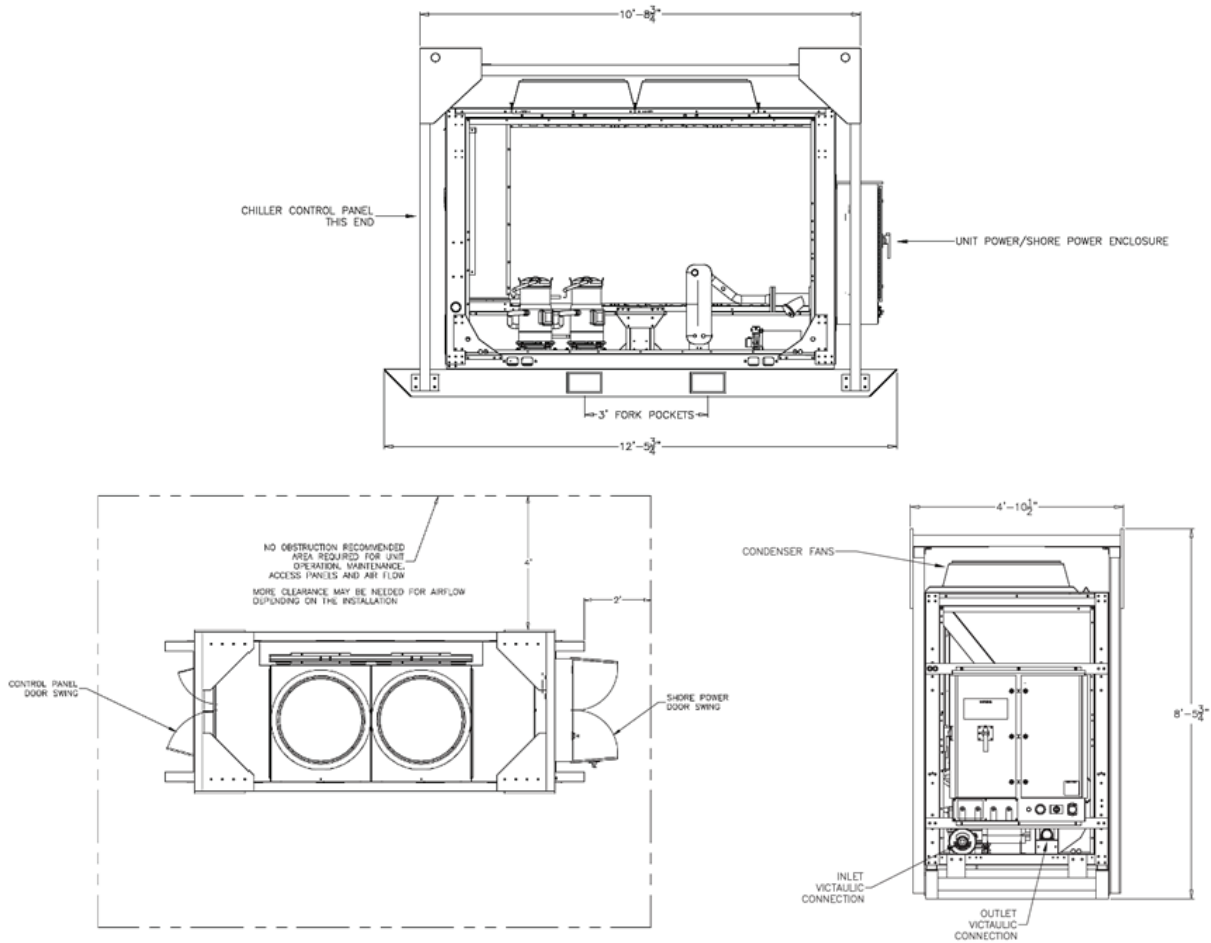


Figure 11. Unit drawings



CSCA0025F2

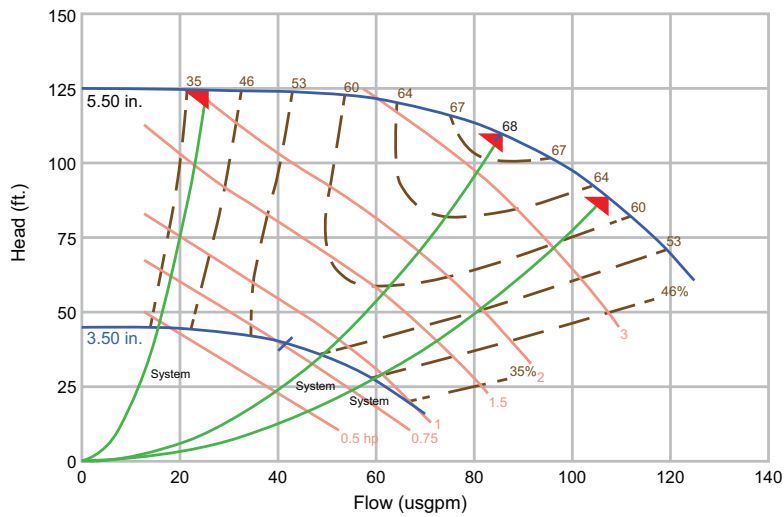
Table 18. Dimensions and weights

Labels	Value
Length	13 ft. 4.5-in.
Width	4 ft. 9.75-in.
Height	7 ft. 11.5-in.
Shipping Weight (lbs)	5,000
Operating Weight (lbs)	5,200
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 4 ft. 3-in.
Fork Pocket Center to Center Distance	4 ft. 2-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

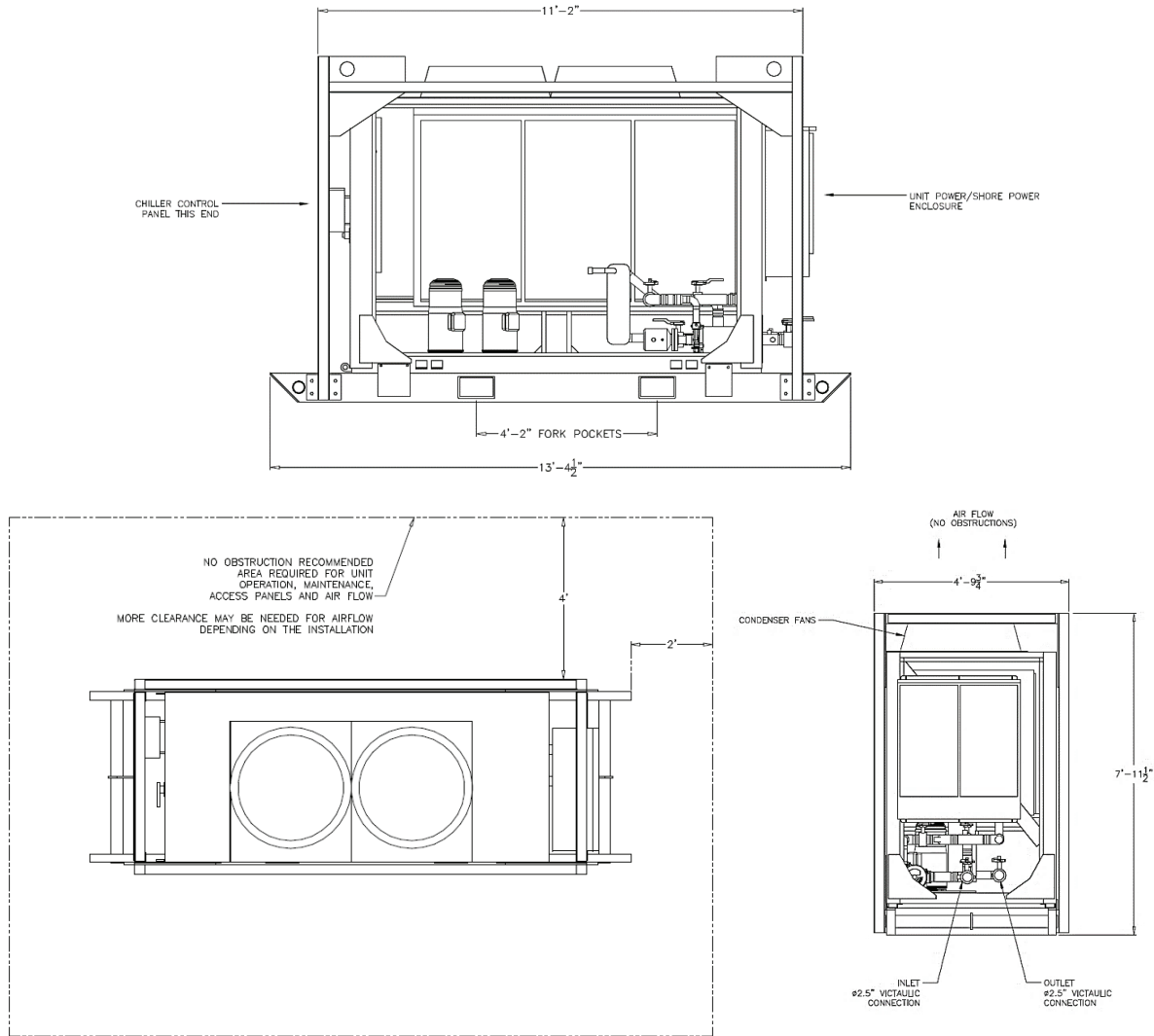
Figure 12. CSCA0025F2 pump curve





25 to 120 Ton CGAM

Figure 13. Unit drawings



40 Ton Air-Cooled CGAM

Table 19. General – CSCA0040F0-F2

Labels	Value
Model Number	CGAM040
Nominal Tons	40
Refrigerant	R-410A
Refrigerant Charge ^(a)	32 lbs
Microchannel Refrigerant Charge ^(b)	19 lbs
Water Connection Size	2.5-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.

Table 19. General – CSCA0040F0-F2 (continued)

- (b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.
- (c) For CGAM models with microchannel condenser coils.
- (d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 20. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	95 A
Maximum Overcurrent Protection (MOP)	110 A
Full Load Amps (FLA)	89 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	109 A
Maximum Overcurrent Protection (MOP)	125 A
Full Load Amps (FLA)	103 A

Note: For additional electrical information, contact Trane Rental Services.

- ^(a) Maximum wire size lug(s) can accept - 2/0.
- ^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 21. Pump data

Labels	Value
Horsepower	10 HP
Min Flow	50 gpm @ 137.7 ft.
Max Flow	201.6 gpm @ 104.1 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 22. Cooling capacity (40 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	57.8	54.2	50.3	46.5	42.6
55	0	49.3	46.3	40.0	39.7	36.3
45	0	41.3	38.9	36.2	33.3	30.4
35	10	33.5	31.5	29.4	27.1	24.7
25	25	26.3	24.9	23.2	21.3	—
15	35	20.3	19.2	17.9	—	—
5	40	15.8	14.8	—	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 23. Water flow rates and pressure drops (40 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
46 (min flow)	5.38
50	6.30



25 to 120 Ton CGAM

Table 23. Water flow rates and pressure drops (40 tons) (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
60	8.90
70	12.00
80	15.40
90	19.40
100	23.70
110	28.50
120	33.70
130	39.30
136 (max flow)	42.90

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0040F0

Table 24. Dimensions and weights

Labels	Value
Length	12 ft. 5-in.
Width	8 ft. 1-in.
Height	8 ft. 6-in.
Shipping Weight (lbs)	7,600
Operating Weight (lbs)	7,800
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 4.125-in.
Fork Pocket Center to Center Distance	3 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 14. CSCA0040F0 pump curve

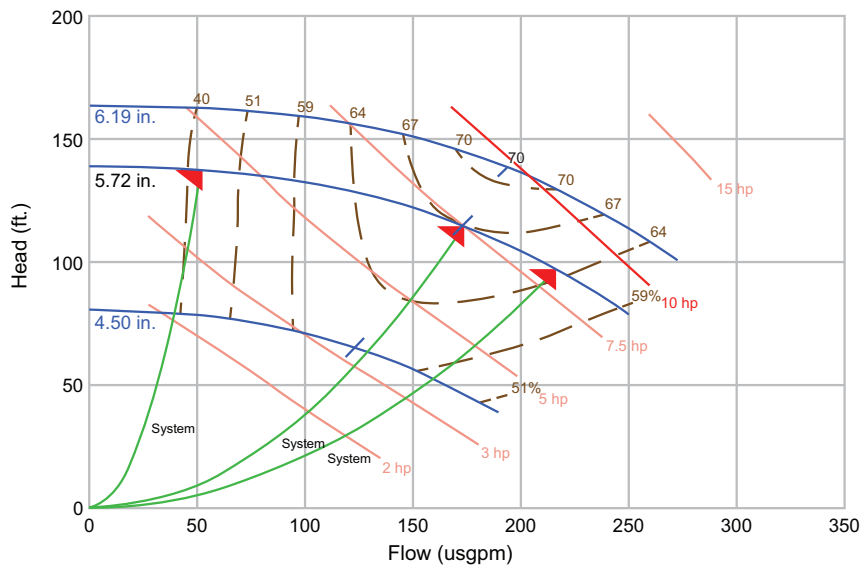
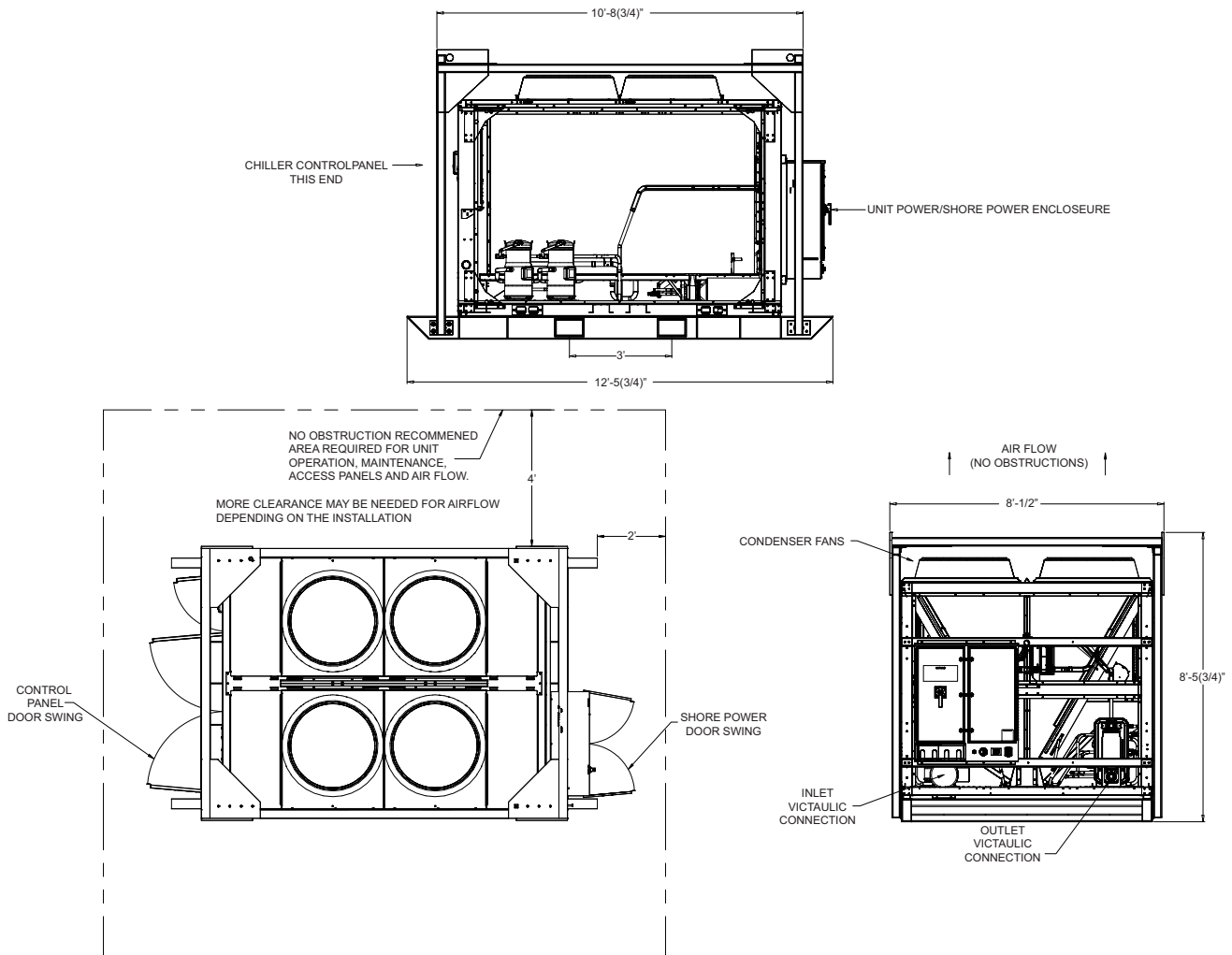


Figure 15. Unit drawings



CSCA0040F2

Table 25. Dimensions and weights

Labels	Value
Length	13 ft. 4.5-in.
Width	8 ft.
Height	7 ft. 11.5-in.
Shipping Weight (lbs)	7,000
Operating Weight (lbs)	7,200
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 5-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.



25 to 120 Ton CGAM

Figure 16. CSCA0040F2 pump curve

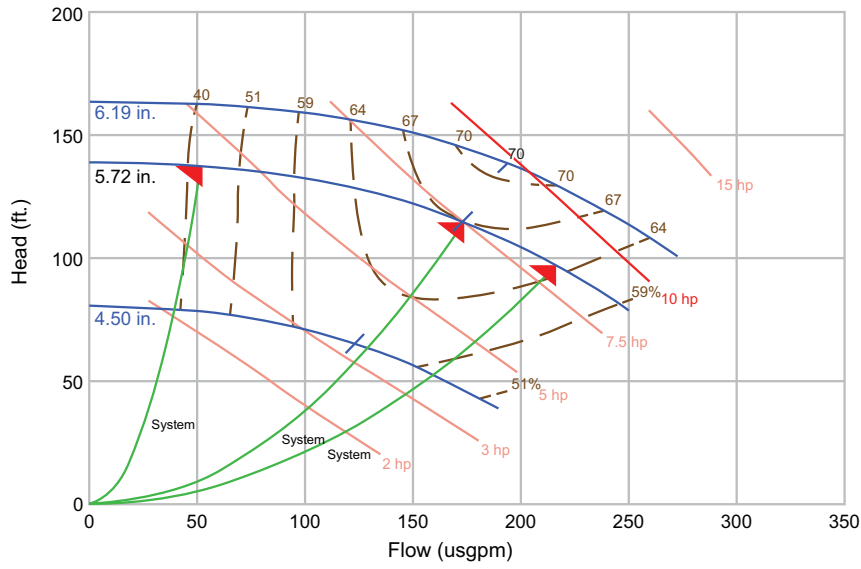
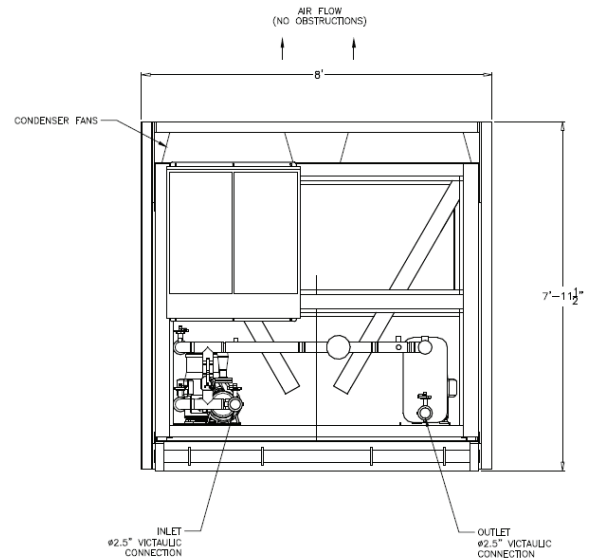
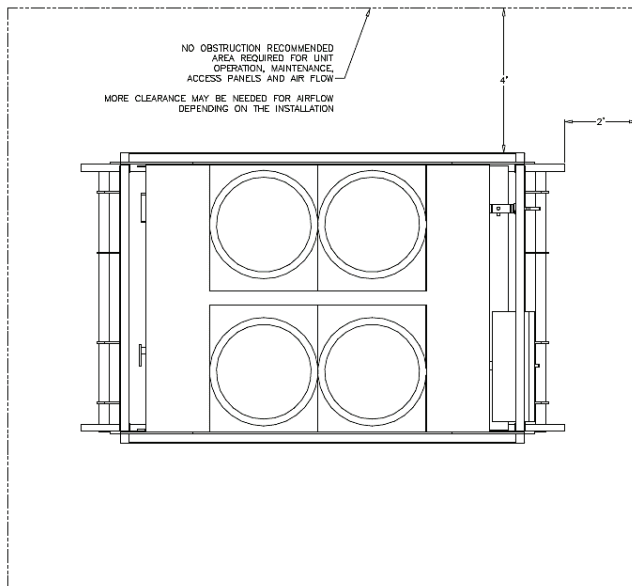
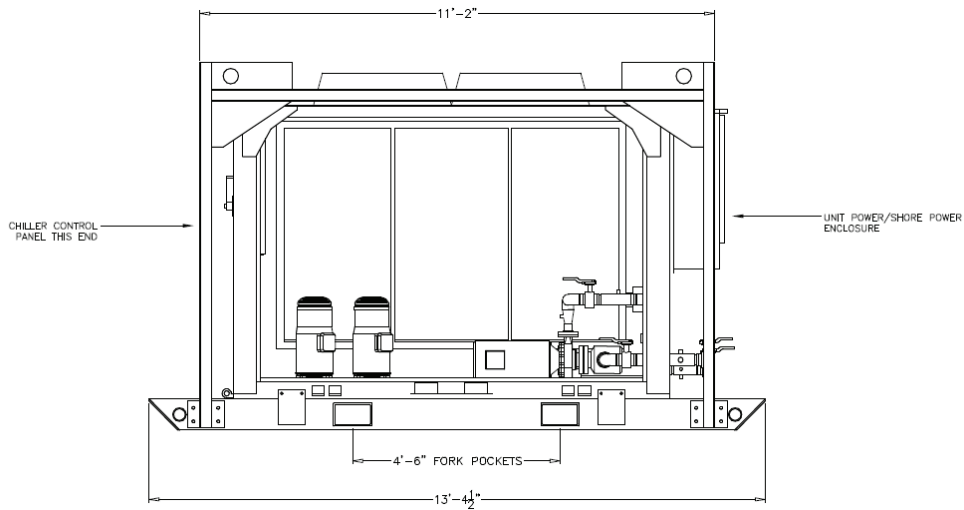


Figure 17. Unit drawings


60 Ton Air-Cooled CGAM

Table 26. General – CSCA0060F0-F3

Labels	Value
Model Number	CGAM060
Nominal Tons	60
Refrigerant	R-410A
Refrigerant Charge ^(a)	44 lbs
Microchannel Refrigerant Charge ^(b)	28 lbs
Water Connection Size	4-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F



25 to 120 Ton CGAM

Table 26. General – CSCA0060F0-F3 (continued)

Labels	Value
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

- (a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.
 (b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.
 (c) For CGAM models with microchannel condenser coils.
 (d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 27. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	130 A
Maximum Overcurrent Protection (MOP)	150 A
Full Load Amps (FLA)	124 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	144 A
Maximum Overcurrent Protection (MOP)	150A or 175A ^(c)
Full Load Amps (FLA)	136 A

Note: For additional electrical information, contact Trane Rental Services.

- (a) Maximum wire size lug(s) can accept - 350 MCM.
 (b) Depending on chiller MCA and wire used, multiple wires per phase may be required.
 (c) Units CSCA0060F0BK-F3EC have a max overcurrent protection of 150 amps when utilizing integral pump; units CSCA0060F3ED-F3FA have a maximum over current protection of 175 amps when utilizing the integral pump.

Table 28. Pump data

Labels	Value
Horsepower	10 HP
Min Flow	50 gpm @ 137.7 ft.
Max Flow	201.6 gpm @ 104.1 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 29. Cooling capacity (60 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	85.1	79.8	74.2	68.3	—
55	0	73.3	68.8	64.0	59.0	54.0
45	0	62.2	58.4	54.3	50.0	45.7
35	15	51.3	48.3	44.9	41.4	37.7
25	25	41.6	39.2	36.5	33.6	30.6
15	35	32.9	31.0	28.8	26.5	—

Table 29. Cooling capacity (60 tons) (continued)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
5	45	25.7	24.2	22.5	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 30. Water flow rates and pressure drops (60 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
68 (min flow)	4.57
85	6.99
100	9.51
115	12.40
130	15.60
145	19.20
160	23.20
175	27.50
190	32.20
201 (max flow)	35.90

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0060F0

Table 31. Dimensions and weights

Labels	Value
Length	15 ft. 6-in.
Width	8 ft. 1-in.
Height	8 ft. 6-in.
Shipping Weight (lbs)	9,000
Operating Weight (lbs)	9,200
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 4.125-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 18. CSA0060F0 pump curve

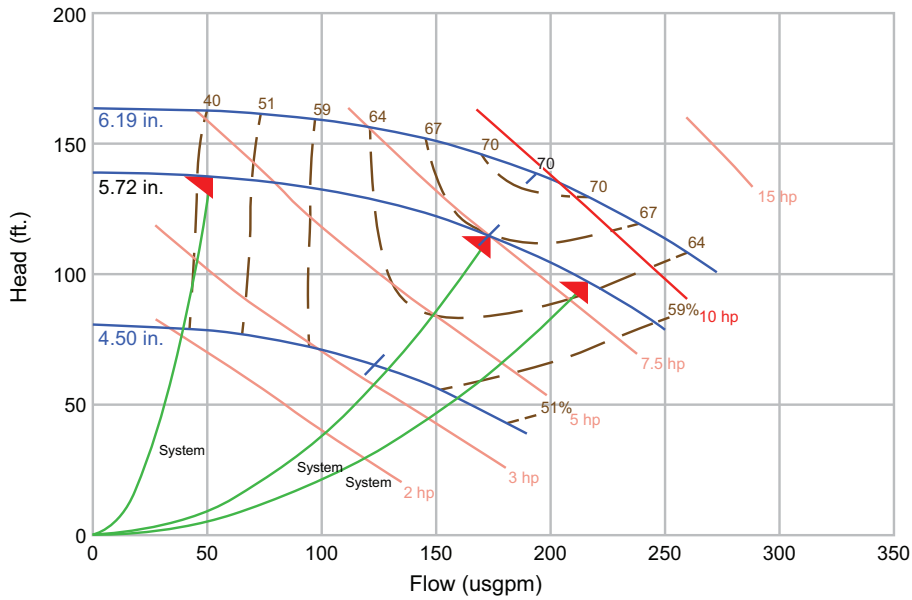
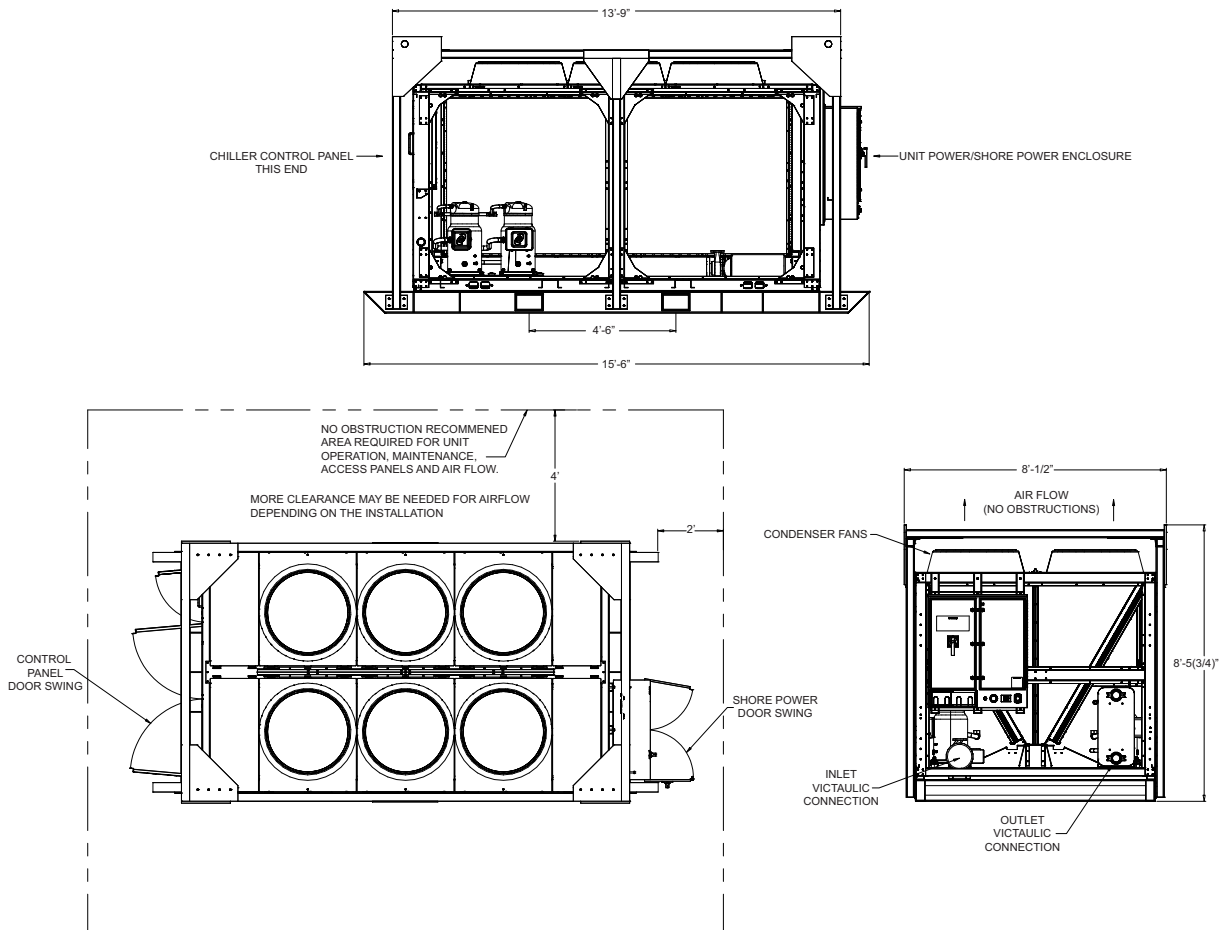


Figure 19. Unit drawings



CSCA0060F2

Table 32. Dimensions and weights

Labels	Value
Length	16 ft. 4.5-in.
Width	8 ft.
Height	7 ft. 11.5-in.
Shipping Weight (lbs)	8,500
Operating Weight (lbs)	8,700
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 5-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 20. CSCA0060F2 pump curve

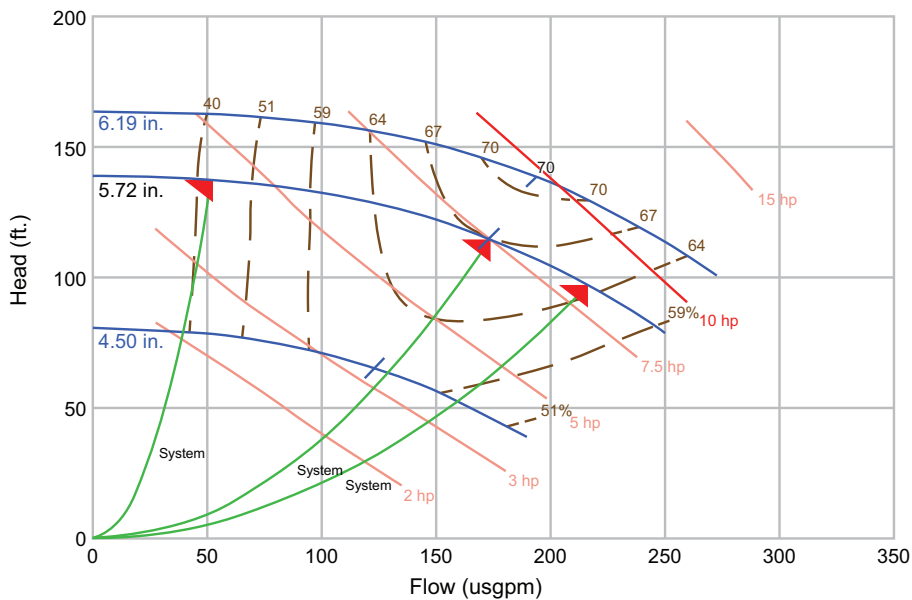
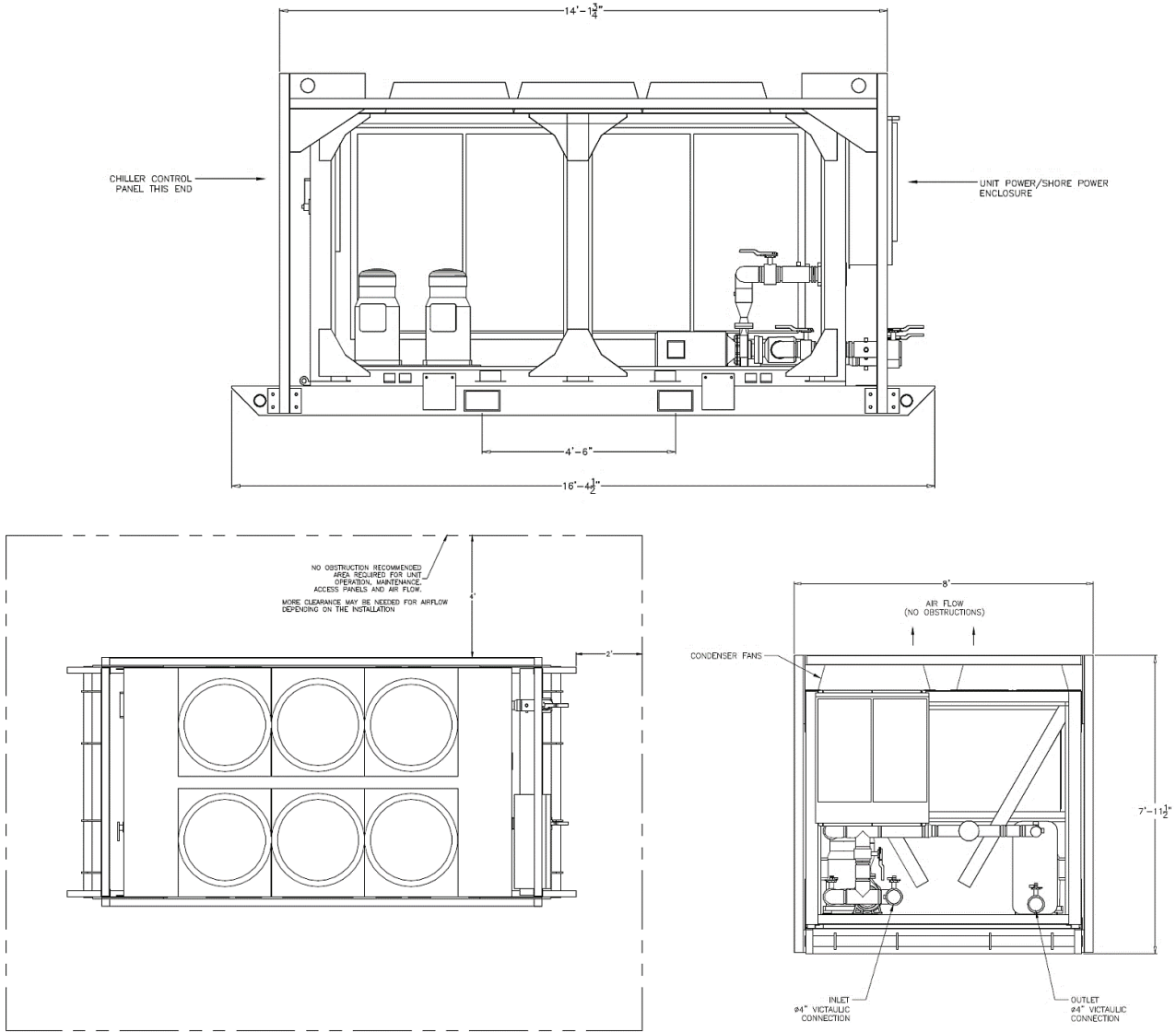


Figure 21. Unit drawings



CSCA0060F3

Table 33. Dimensions and weights

Labels	Value
Length	16 ft. 4.5-in.
Width	7 ft. 4.5-in.
Height	7 ft. 11-in.
Shipping Weight (lbs)	7,900
Operating Weight (lbs)	8,100
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 5-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 22. **CSCA0060F3 pump curve**

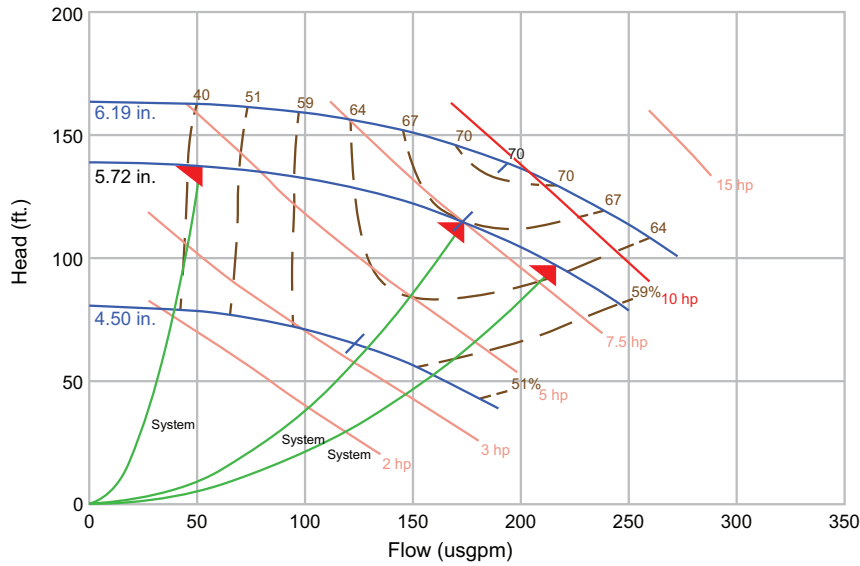
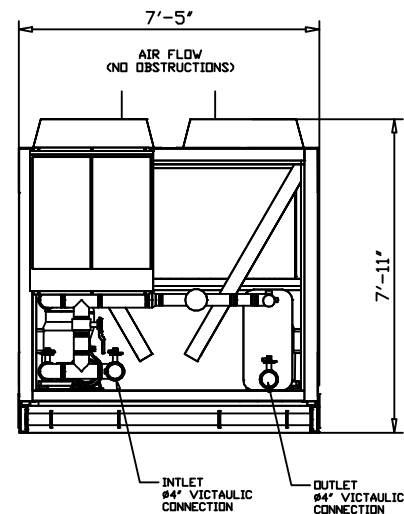
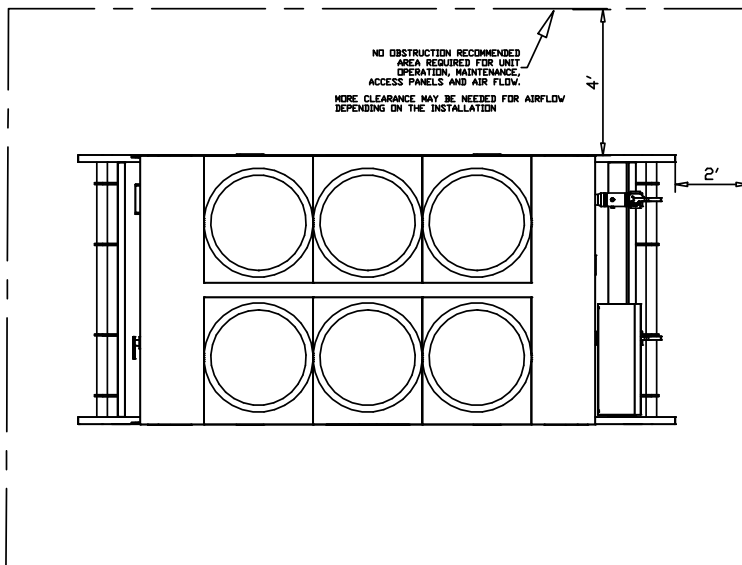
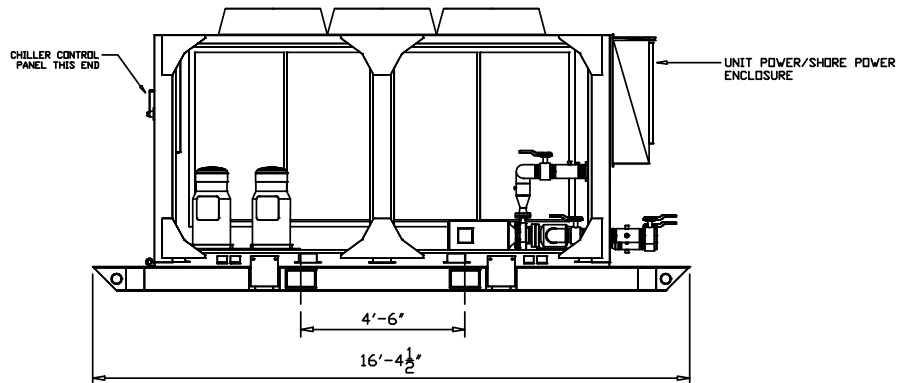


Figure 23. **Unit drawings**





25 to 120 Ton CGAM

80 Ton Air-Cooled CGAM

Table 34. General – CSCA0080F1-F2

Labels	Value
Model Number	CGAM080
Nominal Tons	80
Refrigerant	R-410A
Refrigerant Charge ^(a)	74 lbs
Microchannel Refrigerant Charge ^(b)	45 lbs
Water Connection Size	4-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

- (a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.
 (b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.
 (c) For CGAM models with microchannel condenser coils.
 (d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 35. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	162 A
Maximum Overcurrent Protection (MOP)	175 A
Full Load Amps (FLA)	152 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	189 A
Maximum Overcurrent Protection (MOP)	200 A
Full Load Amps (FLA)	179 A

Note: For additional electrical information, contact Trane Rental Services.

- (a) Maximum wire size lug(s) can accept - 350 MCM.
 (b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 36. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	91 gpm @ 162.9 ft.
Max Flow	376 gpm @ 124.5 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 37. Cooling capacity (80 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	115.6	108.1	100.3	92.5	—
55	0	99.9	93.5	86.7	79.9	73.1
45	0	84.8	79.5	73.8	67.9	62.0
35	15	70.0	65.7	61.0	56.1	51.2
25	25	56.6	53.2	49.5	45.5	—
15	35	44.6	41.9	39.0	—	—
5	45	34.7	32.5	—	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 38. Water flow rates and pressure drops (80 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
92 (min flow)	4.26
110	5.96
130	8.19
150	10.70
170	13.60
190	16.80
210	20.30
230	24.20
250	28.40
275 (max flow)	34.10

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0080F1

Table 39. Dimensions and weights

Labels	Value
Length	15 ft. 1-in.
Width	8 ft. 1-in.
Height	8 ft. 6-in.
Shipping Weight (lbs)	10,100
Operating Weight (lbs)	10,300
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 4.75-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 24. CSCA0080F1 pump curve

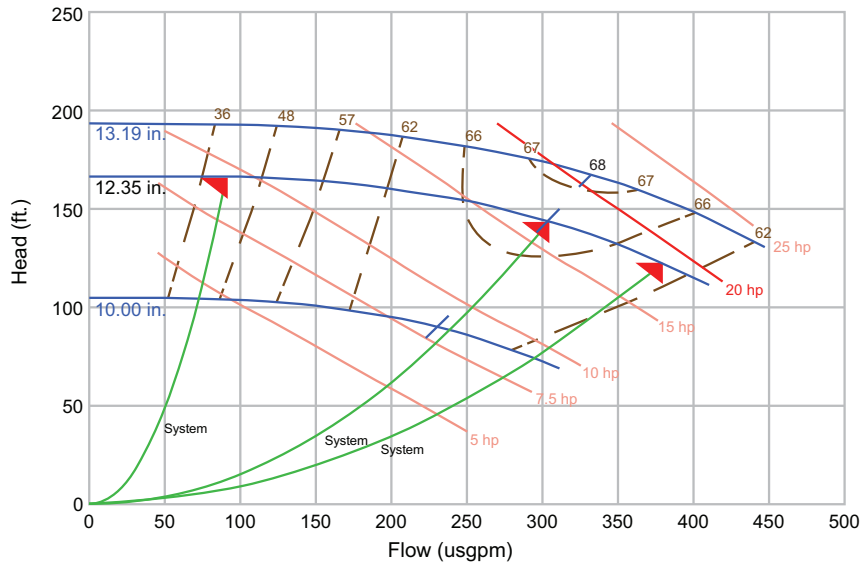
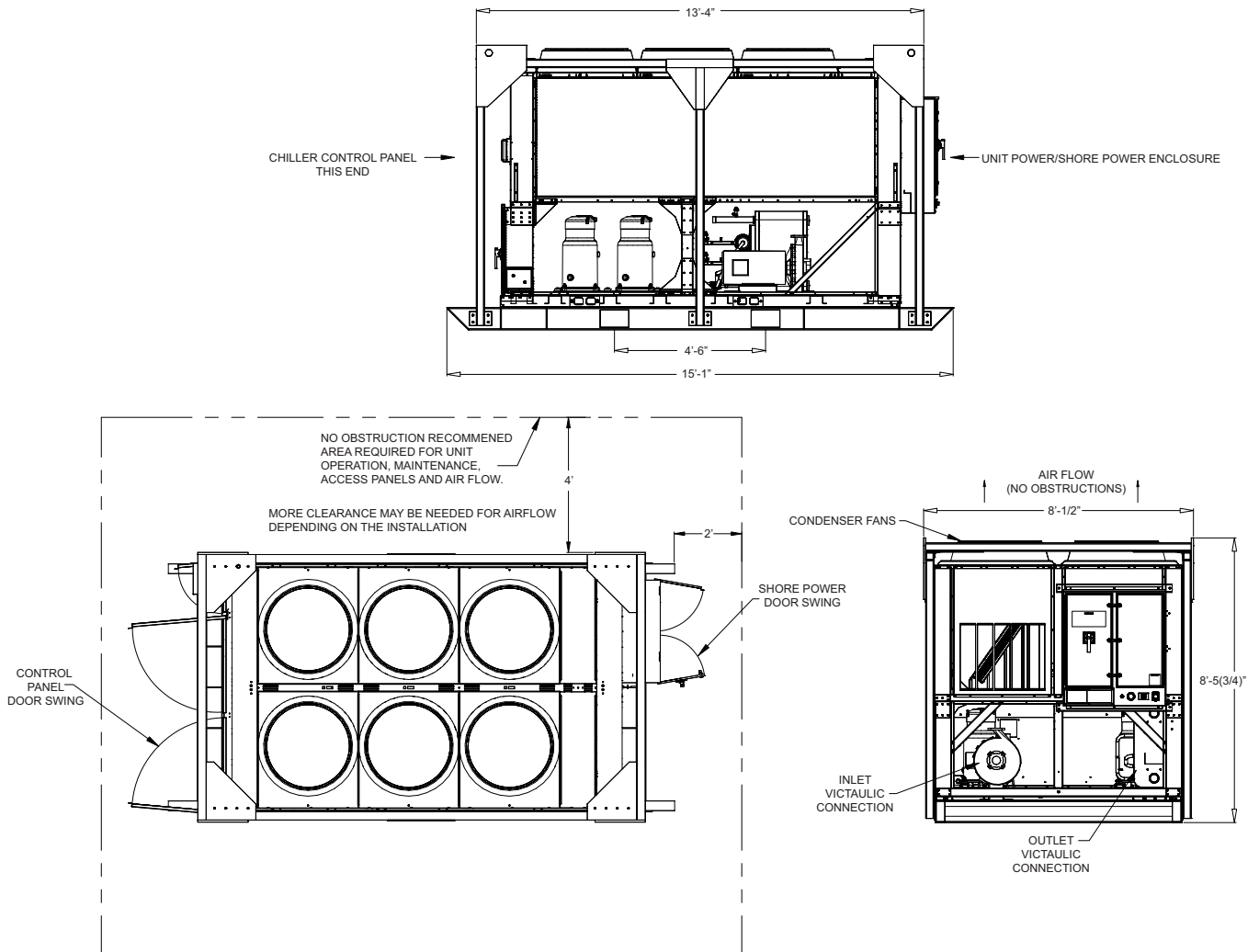


Figure 25. Unit drawings



CSCA0080F2

Table 40. Dimensions and weights

Labels	Value
Length	15 ft. 7.5-in.
Width	8 ft. 0.5-in.
Height	8 ft. 6-in.
Shipping Weight (lbs)	9,800
Operating Weight (lbs)	10,000
Fork Pocket Dimensions	9.25-in. x 5.25-in. x 7 ft. 5-in.
Fork Pocket Center to Center Distance	4 ft. 6-in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 26. CSCA0080F2 pump curve

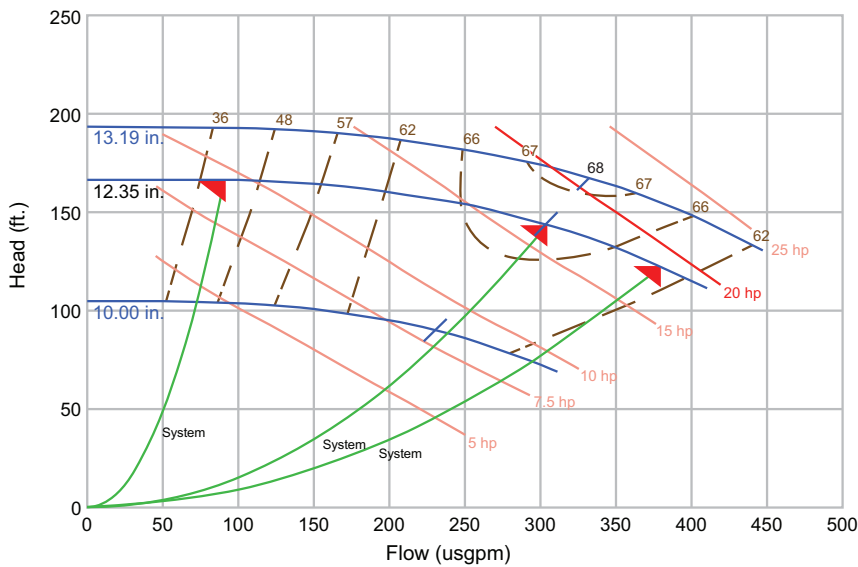
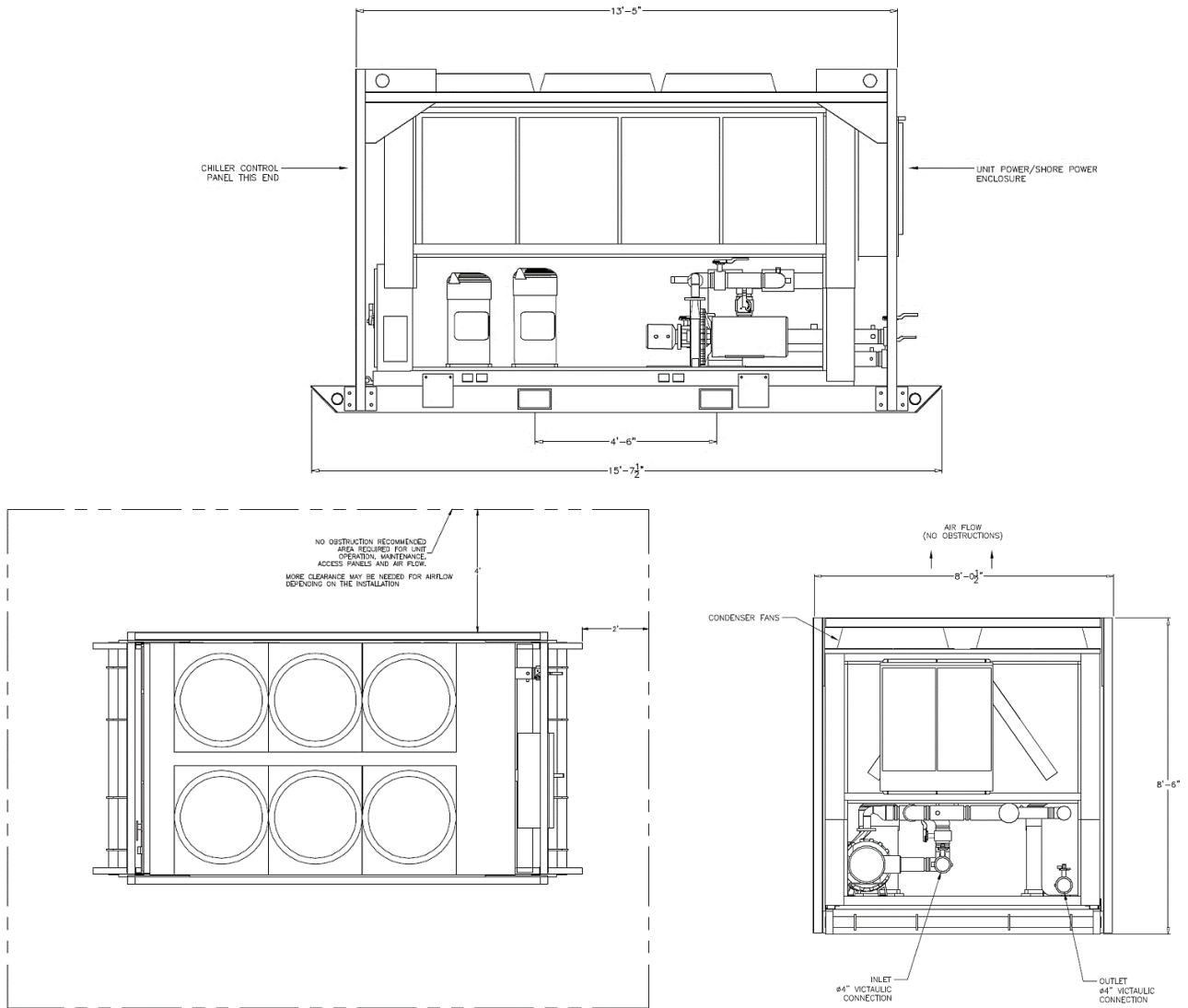


Figure 27. Unit drawings



CSCA0080F4

Table 41. General – CSCA0080F4 CGAM

Labels	Value
Model Number	CGAM080
Nominal Tons	80
Refrigerant	R-454B
Refrigerant Charge ^(a)	67/67 lbs
Water Connection Size	4 in. grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b)(c)}	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 42. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA at 460Vac Symmetrical Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	163 A
Maximum Overcurrent Protection (MOP)	200A
Full Load Amps (FLA)	157.9 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	190 A
Maximum Overcurrent Protection (MOP)	225 A
Full Load Amps (FLA)	181.9

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 43. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	88 gpm @ 148 ft. H ₂ O
Max Flow	412 gpm @ 114 ft.H ₂ O

Table 44. Cooling capacity (80 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	134.5	127.5	120.3	112.9
55	0	114.4	108.6	102.6	96.3
45	0	96.3	91.5	86.5	81.3
35	10	79.6	75.7	71.5	67.1
25	25	64.5	61.3	57.9	54.4
15	35	51.6	50.0	46.2	43.2
5	40	40.9	38.7	36.3	33.7
0	45	36.2	34.2	31.9	29.4

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 45. Water flow rates and pressure drops (80 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
94 (min flow)	3.85
110	5.19
130	7.13
150	9.35
170	11.9
190	14.7
210	17.7



25 to 120 Ton CGAM

Table 45. Water flow rates and pressure drops (80 tons) (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
230	21.1
250	24.7
275 (max flow)	29.6

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 46. Dimensions and weights

Labels	Value
Length	15 ft. 7.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	9,800
Operating Weight (lbs)	10,000
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 47. Installation and operating clearances

Labels	Value
Front	24-in.
Back	24-in.
Slides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Figure 28. CSCA0080F4 - single speed pump curve

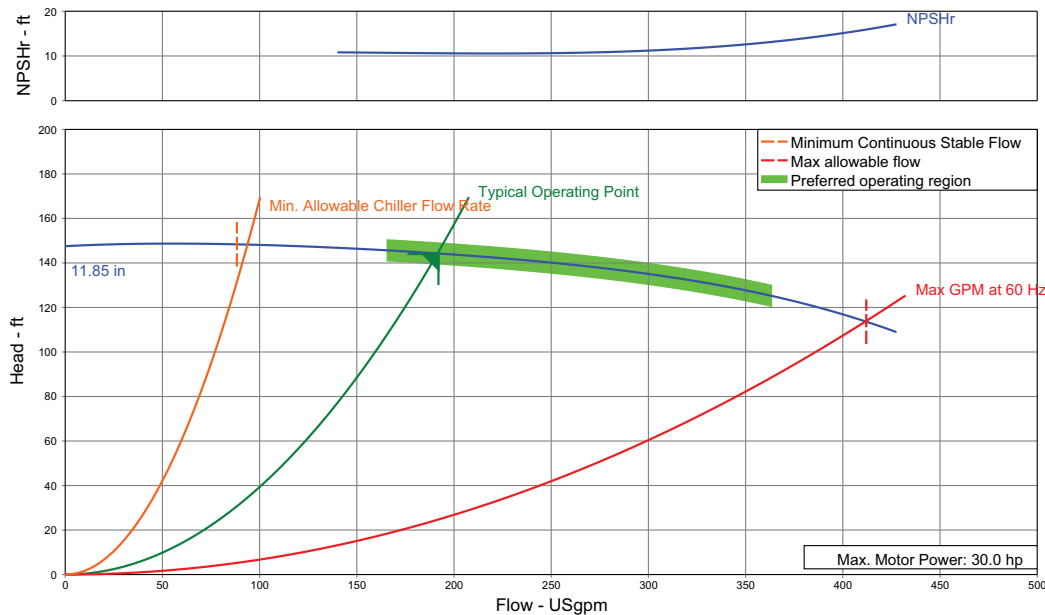
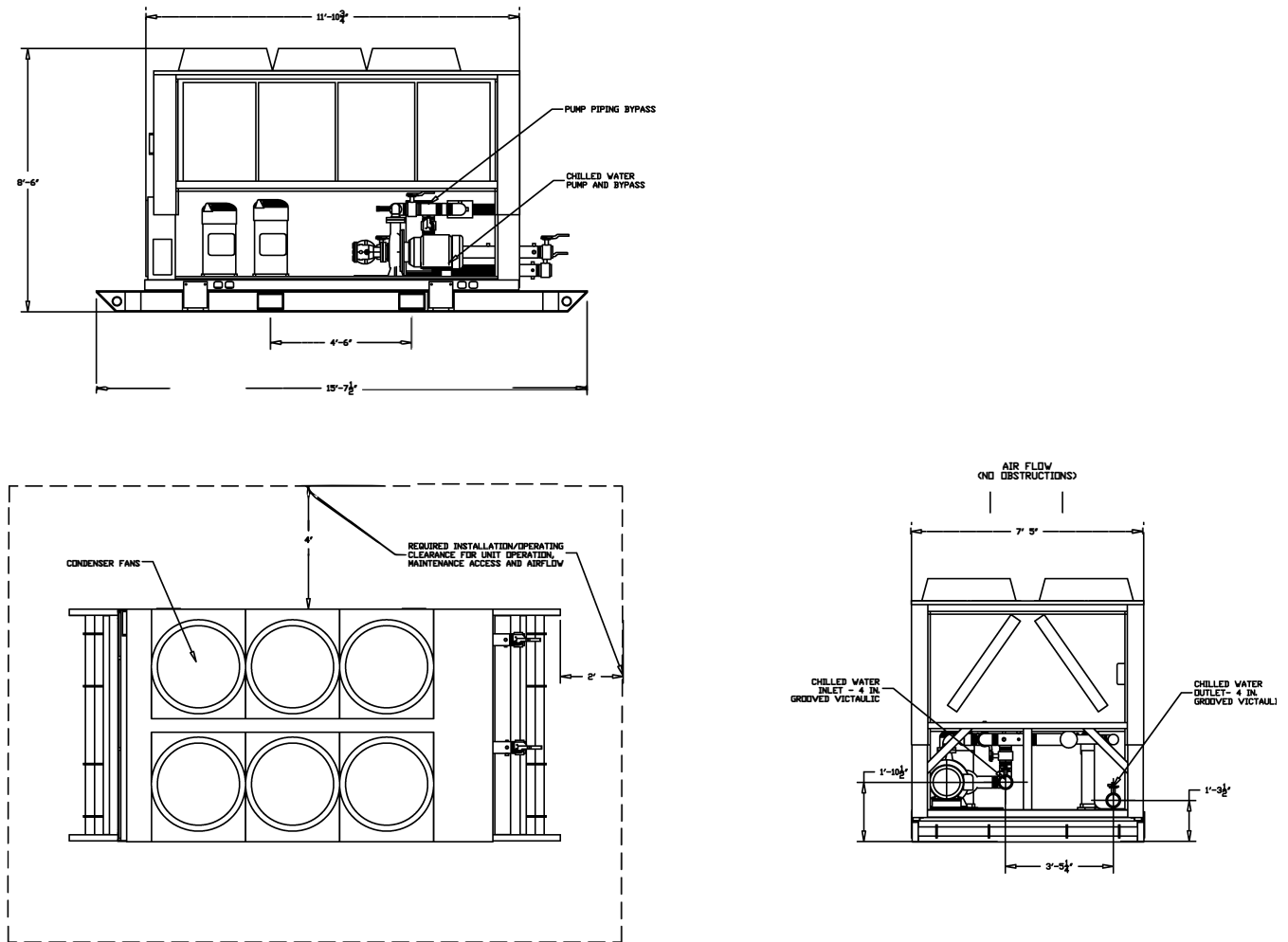


Figure 29. Unit drawings



100 Ton Air-Cooled CGAM

Table 48. General – CSCA0100F1-F3

Labels	Value
Model Number	CGAM100
Nominal Tons	100
Refrigerant	R-410A
Refrigerant Charge ^(a)	90 lbs
Microchannel Refrigerant Charge ^(b)	49 lbs
Water Connection Size	4-in. Victaluc
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.



25 to 120 Ton CGAM

Table 48. General – CSCA0100F1-F3 (continued)

- (b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.
- (c) For CGAM models with microchannel condenser coils.
- (d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 49. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) (b)	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	206 A
Maximum Overcurrent Protection (MOP)	225 A
Full Load Amps (FLA)	194 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	233 A
Maximum Overcurrent Protection (MOP)	250 A
Full Load Amps (FLA)	221 A

Note: For additional electrical information, contact Trane Rental Services.

- (a) Maximum wire size lug(s) can accept - 350 MCM.
- (b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 50. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	91 gpm @ 162.9 ft.
Max Flow	376 gpm @ 124.5 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 51. Cooling capacity (100 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	146.7	137.0	127.0	117.0	—
55	0	126.7	118.4	109.7	100.9	92.1
45	0	107.5	100.6	93.2	85.6	78.0
35	10	88.9	83.3	77.3	70.9	64.5
25	25	71.6	67.2	62.4	57.2	—
15	35	56.3	52.8	49.0	—	—
5	45	43.6	40.9	—	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 52. Water flow rates and pressure drops (100 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
116 (min flow)	4.20
146	6.51
176	9.30
206	12.60
236	16.30
266	20.60
296	25.30
326	30.50
346 (max flow)	34.30

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

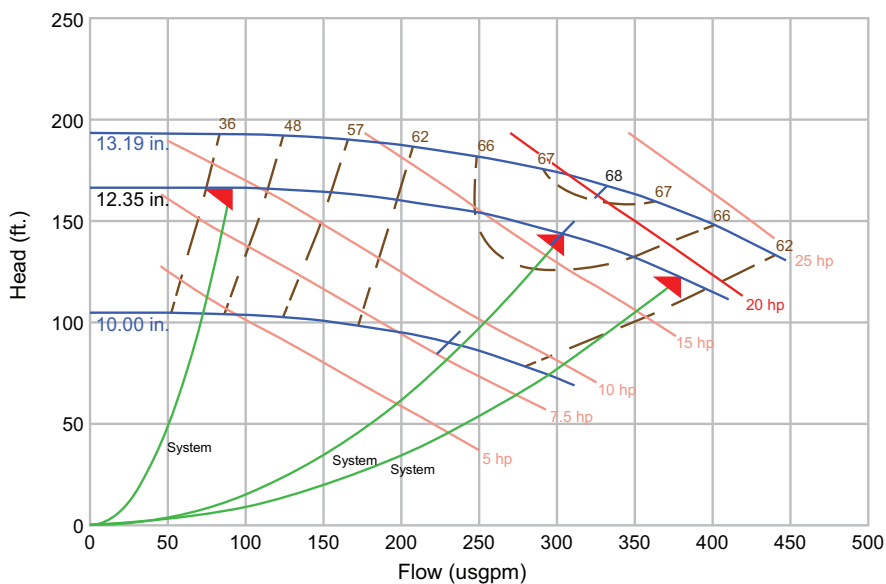
CSCA0100F1

Table 53. Dimensions and weights

Labels	Value
Length	17 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	11,200
Operating Weight (lbs)	11,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

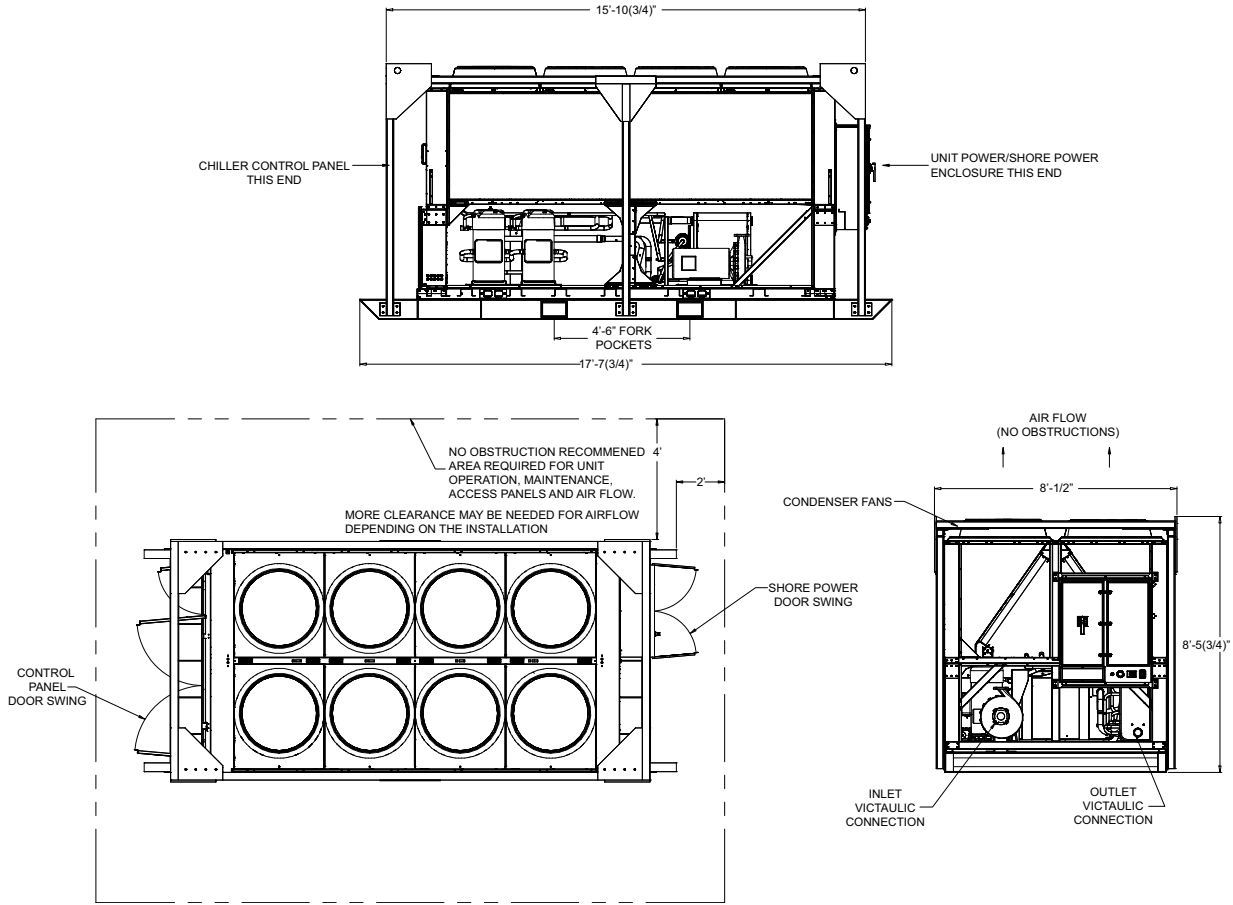
1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 30. CSCA0100F1 pump curve




25 to 120 Ton CGAM

Figure 31. Unit drawings



CSCA0100F2

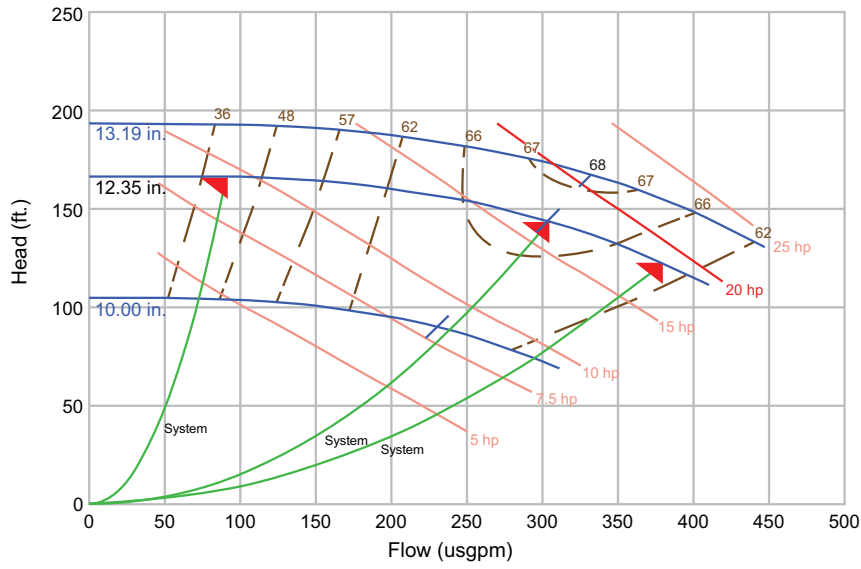
Table 54. Dimensions and weights

Labels	Value
Length	17 ft. 5.5 in.
Width	8 ft. 0.5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	12,500
Operating Weight (lbs)	12,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

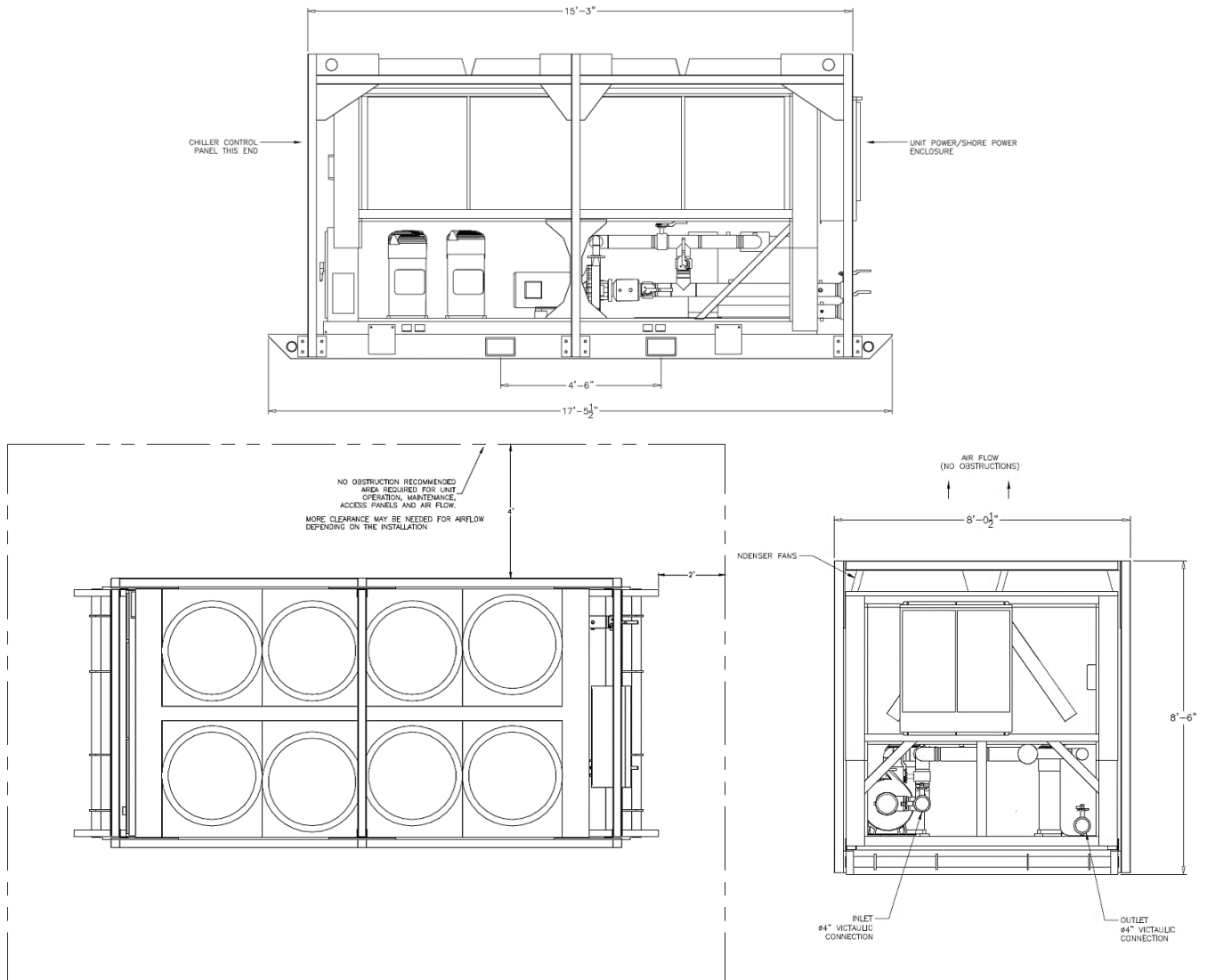
Figure 32. CSPA0100F2 pump curve





25 to 120 Ton CGAM

Figure 33. Unit drawings



CSCA0100F3

Table 55. Dimensions and weights

Labels	Value
Length	17 ft. 5.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,000
Operating Weight (lbs)	10,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 34. CSPA0100F3 pump curve

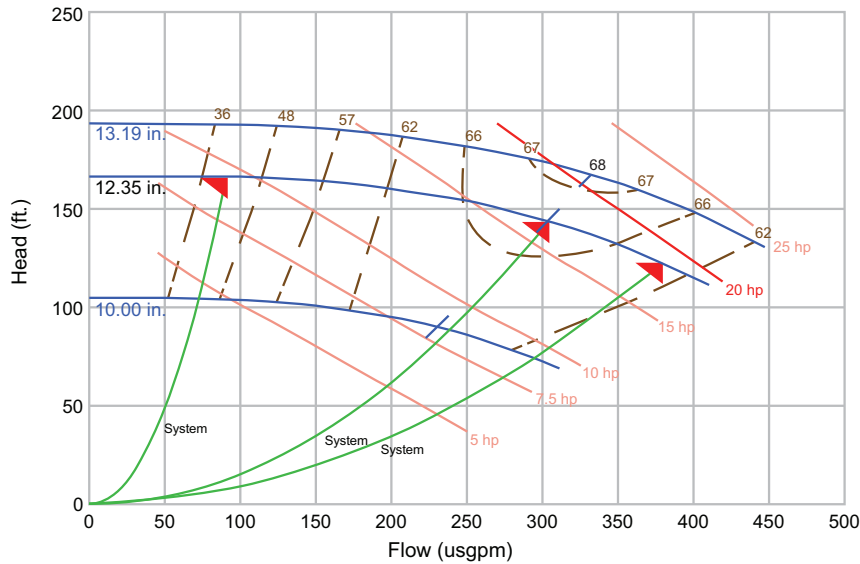
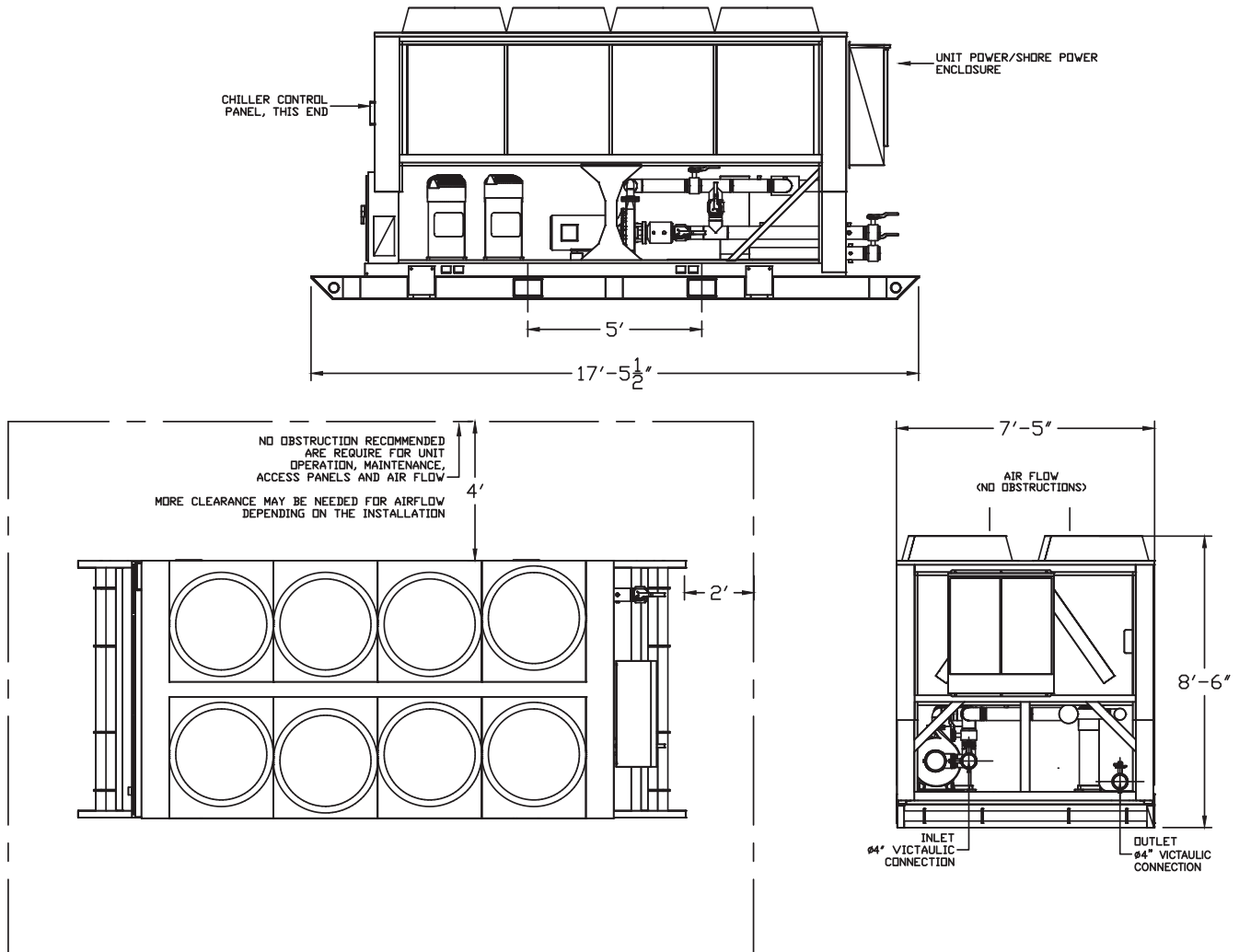


Figure 35. Unit drawings





25 to 120 Ton CGAM

120 Ton Air-Cooled CGAM

Table 56. General – CSCA0120F1-F3

Labels	Value
Model Number	CGAM120
Nominal Tons	120
Refrigerant	R-410A
Refrigerant Charge ^(a)	86 lbs
Microchannel Refrigerant Charge ^(b)	50 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions ^(c)	-20°F to 125°F
Chilled Water Setpoint Limits ^(d)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) The listed refrigerant charge is per refrigeration circuit for all round tube and plate fin condenser coils.

^(b) The listed refrigerant charge is per refrigeration circuit for all extreme low ambient microchannel condenser coils.

^(c) For CGAM models with microchannel condenser coils.

^(d) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 57. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	244 A
Maximum Overcurrent Protection (MOP)	250 A
Full Load Amps (FLA)	230 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	271 A
Maximum Overcurrent Protection (MOP)	300 A
Full Load Amps (FLA)	257 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Maximum wire size lug(s) can accept - 350 MCM.

^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 58. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	91 gpm @ 162.9 ft.
Max Flow	376 gpm @ 124.5 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 59. Cooling capacity (120 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
65	0	169.7	158.1	146.3	134.6	—
55	0	147.5	137.5	127.1	116.7	—
45	0	126.1	117.6	108.7	99.6	90.5
35	10	104.6	97.7	90.4	82.7	75.1
25	25	85.1	79.6	73.7	67.4	—
15	35	67.3	63.0	58.3	—	—
5	45	52.4	49.1	—	—	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Table 60. Water flow rates and pressure drops (120 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
136 (min flow)	5.03
170	7.72
205	11.10
240	15.00
275	19.50
310	24.60
345	30.30
380	36.60
407 (max flow)	41.90

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0120F1

Table 61. Dimensions and weights

Labels	Value
Length	17 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	11,200
Operating Weight (lbs)	11,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 36. CSCA0120F1 pump curve

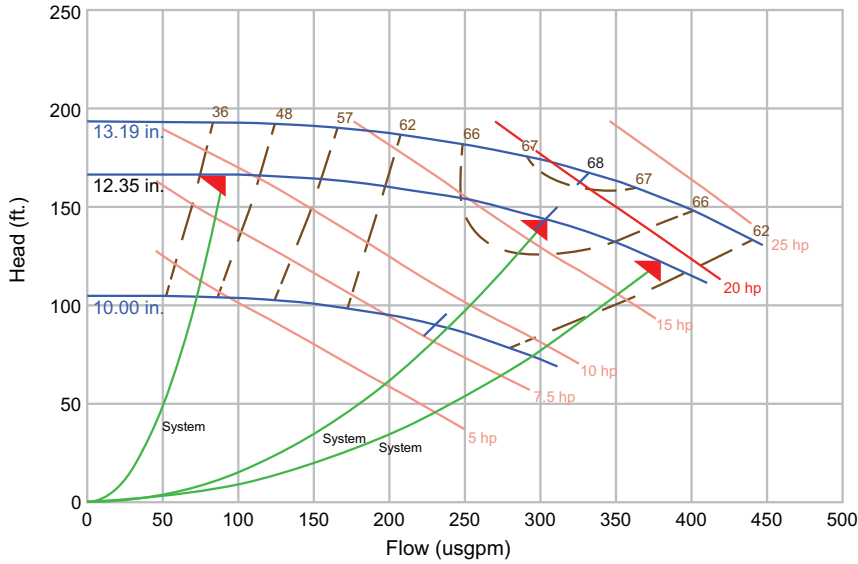
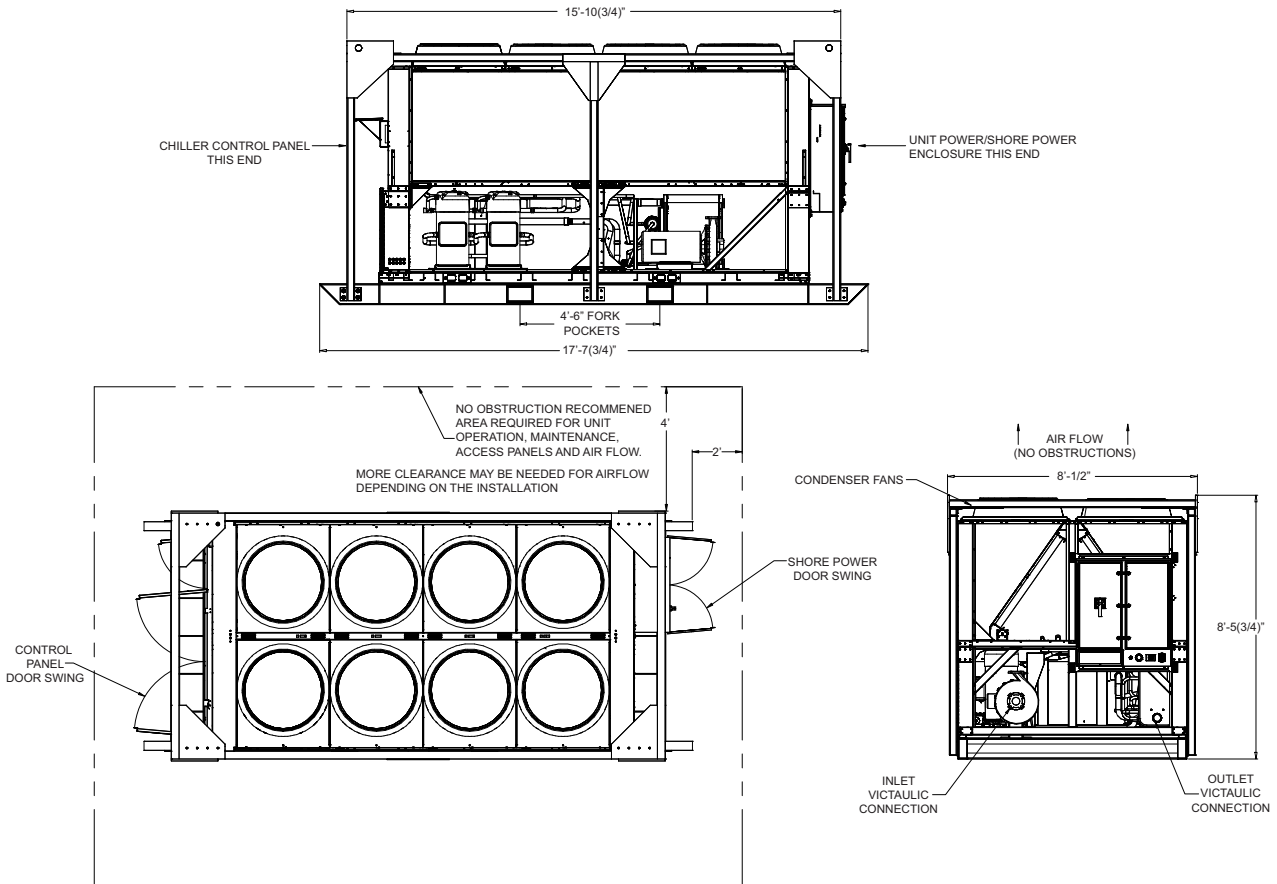


Figure 37. Unit drawings



CSCA0120F2

Table 62. Dimensions and weights

Labels	Value
Length	17 ft. 5.5 in.
Width	8 ft. 0.5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	13,000
Operating Weight (lbs)	13,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 38. CSCA0120F2 pump curve

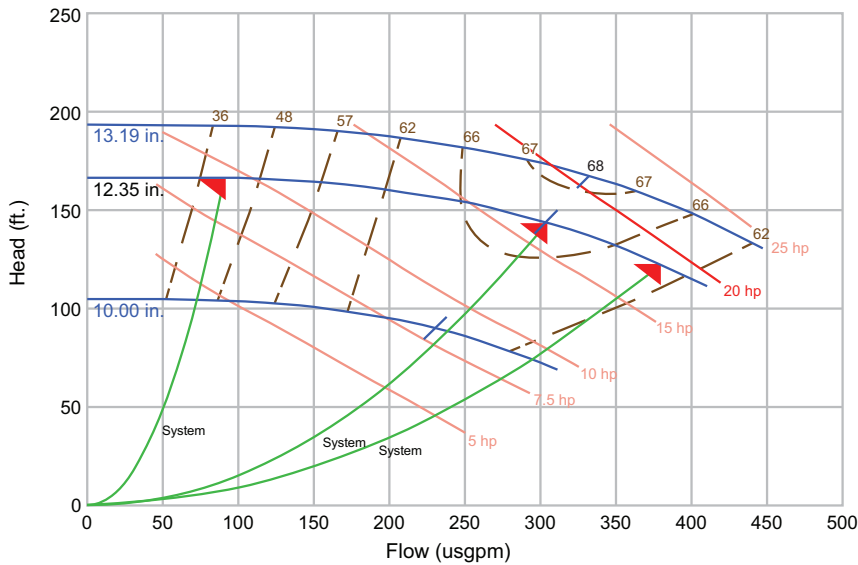
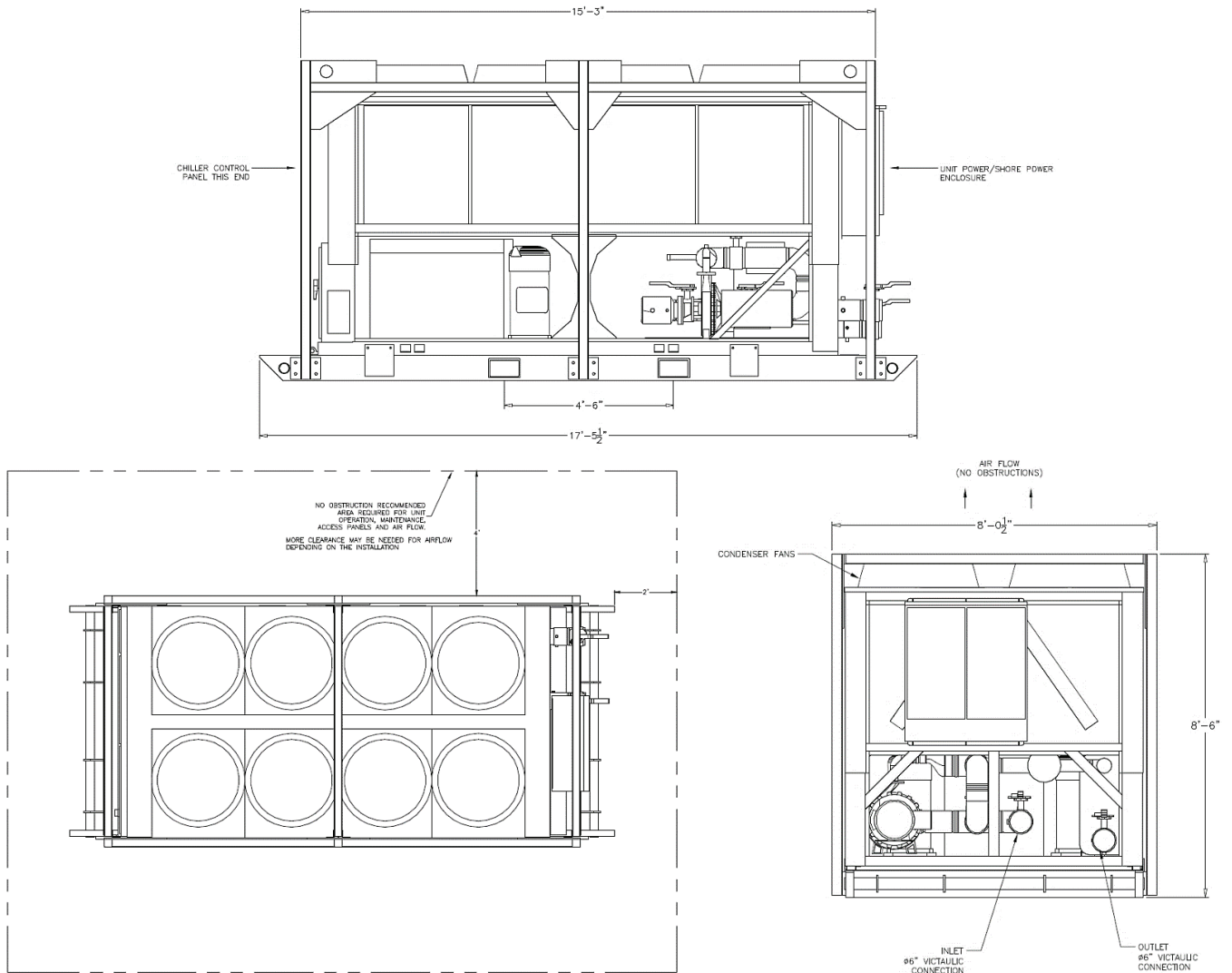


Figure 39. Unit drawings



CSCA0120F3

Table 63. Dimensions and weights

Labels	Value
Length	17 ft. 5.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,500
Operating Weight (lbs)	10,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 40. CSCA0120F3 pump curve

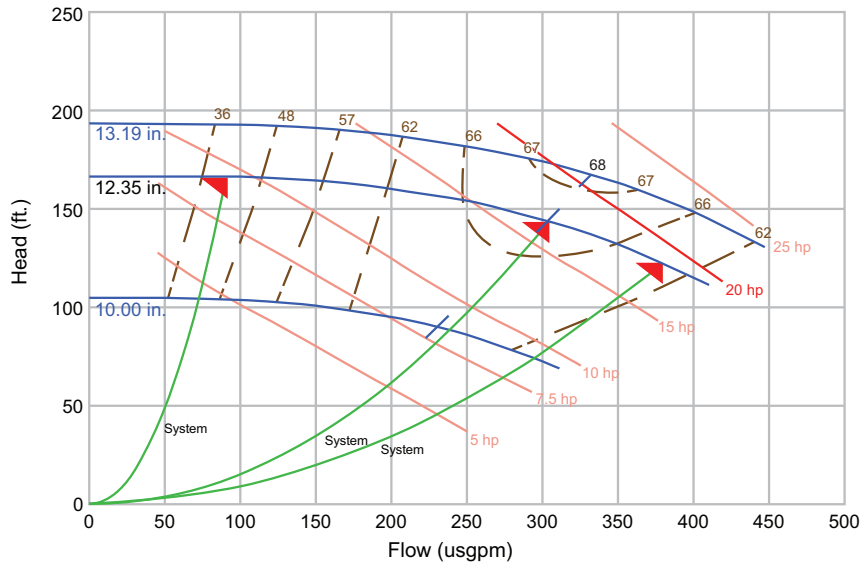
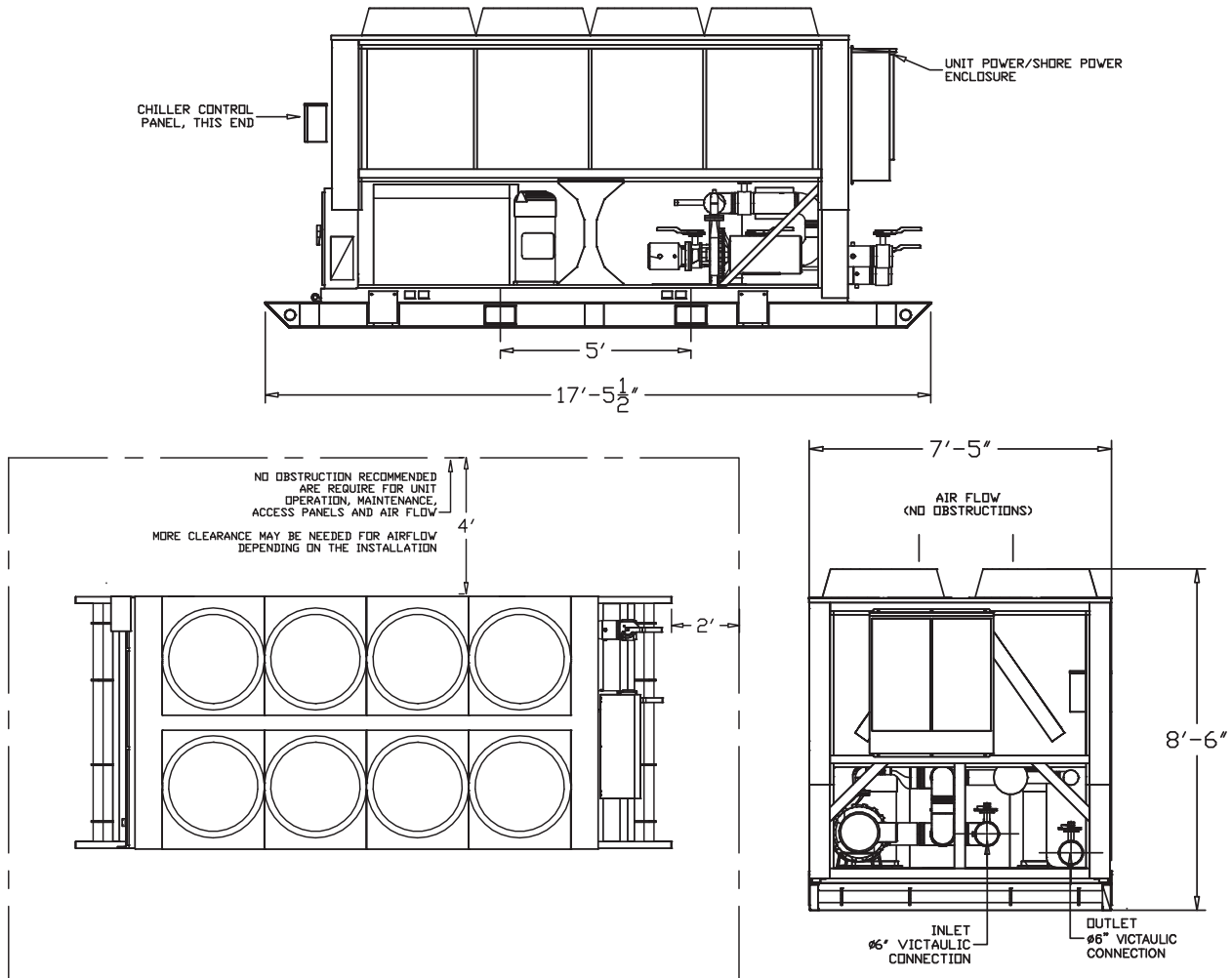


Figure 41. Unit drawings





25 to 120 Ton CGAM

CSCA0120F4

Table 64. General – CSCA0120F4 CGAM

Labels	Value
Model Number	CGAM120
Nominal Tons	120
Refrigerant	R-454B
Refrigerant Charge ^(a)	77/77 lbs.
Water Connection Size	6-in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 65. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA at 460Vac Symmetrical Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	244 A
Maximum Overcurrent Protection (MOP)	300 A
Full Load Amps (FLA)	234.9 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	271 A
Maximum Overcurrent Protection (MOP)	300 A
Full Load Amps (FLA)	258.9

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 66. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	88 gpm @ 148 ft. H ₂ O
Max Flow	412 gpm @ 114 ft.H ₂ O

Table 67. Water flow rates and pressure drops (120 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
136 (min flow)	5.0
170	7.7
205	11.1
240	15.0
275	19.5
310	24.6

Table 67. Water flow rates and pressure drops (120 tons) (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
345	30.3
380	36.6
407 (max flow)	41.9

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 68. Dimensions and weights

Labels	Value
Length	17 ft. 5.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,500
Operating Weight (lbs)	10,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	5 ft. 0 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 69. Installation and operating clearances

Labels	Value
Front	24-in.
Back	24-in.
Slides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 70. Cooling capacity (120 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	189.7	179.8	169.3	158.9
55	0	161.0	152.9	144.4	135.5
45	0	135.3	128.6	121.6	114.2
35	15	111.7	106.3	100.6	94.4
25	30	90.8	86.5	81.8	76.7
15	35	73.4	69.8	65.9	61.6
5	45	58.2	55.2	51.8	49.3
0	45	51.6	48.8	45.6	—

Note: Actual tons of refrigeration in table above are based on chiller models with round tube and plate fin condenser coils.

Figure 42. CSCA0120F4 - single speed pump curve

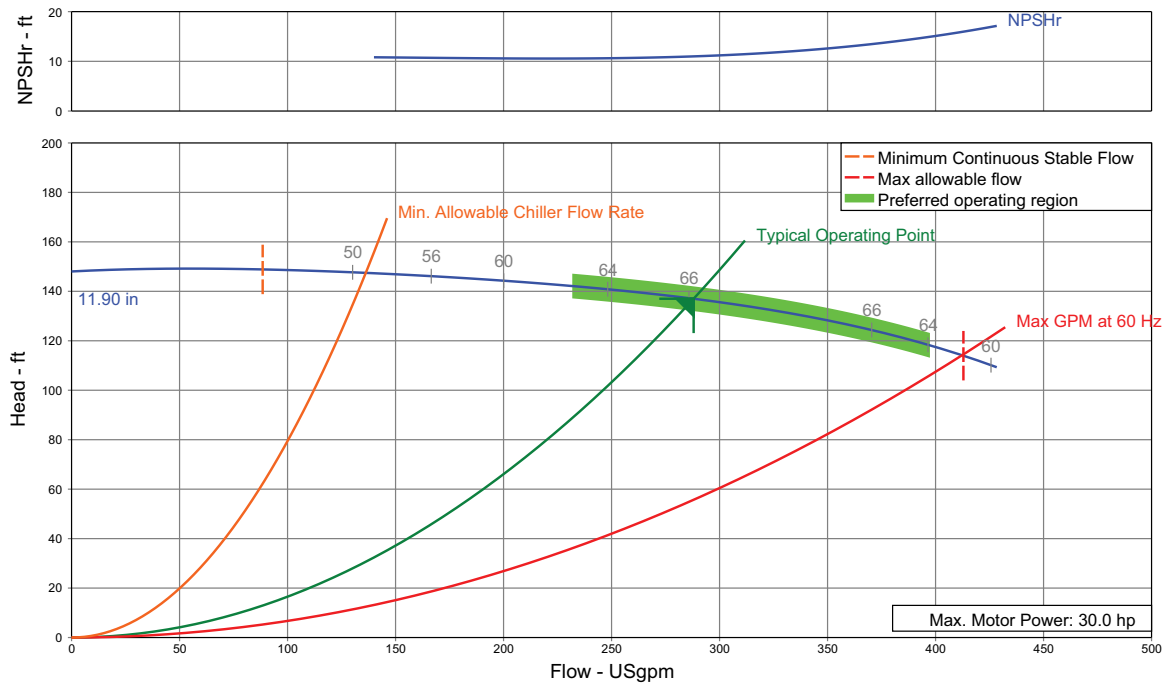
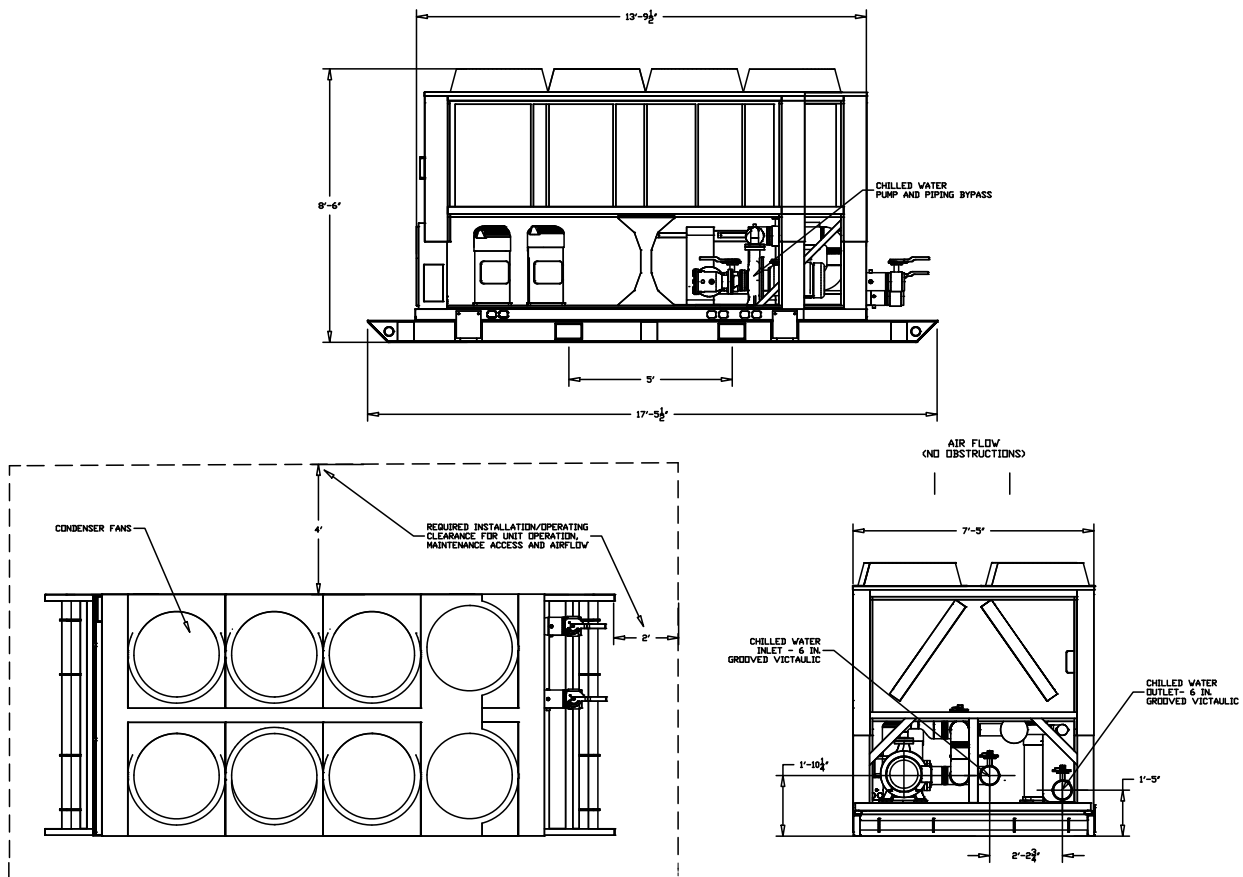


Figure 43. Unit drawings





200 Ton ACSA

RSCA0200F0

Table 71. General – RSCA0200F0

Labels	Value
Model Number	ACSA200
Nominal Tons	200
Refrigerant	R-410A
Refrigerant Charge ^(a)	96/96 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	-20°F to 130°F
Chilled Water Setpoint Limits ^{(b) (c)}	0°F to 68°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 72. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	5000 A
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	438 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	428 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	493 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	476 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 73. Pump data

Labels	Value
Horsepower	40 HP
Min Flow	181 gpm @ 190 ft.
Max Flow	848 gpm @ 119 ft.



200 Ton ACSA

Table 74. Cooling capacity (200 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	306.9	289.4	271.6	254.0
55	0	266.1	251.1	235.9	220.6
45	0	227.8	215.4	202.6	189.5
35	12	191.0	180.9	170.3	159.4
25	25	157.8	149.6	140.9	131.9
15	34	128.5	121.9	114.8	107.4
5	40	103.3	97.9	92.2	86.1
0	42	92.3	87.3	82.1	76.6

Table 75. Water flow rates and pressure drops (200 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
240 (min flow)	5.23
250	5.63
300	7.86
350	10.40
400	13.30
450	16.50
500	20.00
550	23.90
600	28.10
650	32.50
700	37.30
720 (max flow)	39.30

Table 76. Dimensions and weights

Labels	Value
Length	23 ft. 5.5 in.
Width	8 ft. 5 in.
Height	8 ft. 5 in.
Shipping Weight (lbs)	15,020
Operating Weight (lbs)	15,520
Fork Pocket Dimensions	9.5 in. x 4.5 in. x 7 ft. 4 in.
Fork Pocket Center to Center Distance	3 ft. 11 in.

Note: Lifting device: forklift or crane

Table 77. Installation and operating clearances

Labels	Value
Front	40-in.
Back	40-in.
Slides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

RSCA0200F1

Table 78. General – RSCA0200F1 ACSA

Labels	Value
Model Number	ACSA200
Nominal Tons	200
Refrigerant	R-454B
Refrigerant Charge ^(a)	63/63 lbs.
Water Connection Size	6-in. Grooved Victaulic
Ambient Operating Conditions	-20°F to 130°F
Chilled Water Setpoint Limits ^{(b) (c)}	0°F to 68°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 79. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA at 460VAC Symmetrical Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	436 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	415 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	491.3 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	463 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 80. Pump data

Labels	Value
Horsepower	40 HP
Min Flow	181 gpm @ 190 ft.
Max Flow	848 gpm @ 119 ft.

Table 81. Water flow rates and pressure drops (200 tons)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
240 (min flow)	—
250	7.96
300	11.1
350	14.8
400	18.9
450	23.5



200 Ton ACSA

Table 81. Water flow rates and pressure drops (200 tons) (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
500	28.5
550	34.0
600	39.9
650	46.3
700	53.2
720 (max flow)	56.1

Table 82. Dimensions and weights

Labels	Value
Length	23 ft. 5.5 in.
Width	8 ft. 5 in.
Height	8 ft. 5 in.
Shipping Weight (lbs)	15,020
Operating Weight (lbs)	15,520
Fork Pocket Dimensions	9.5 in. x 4.5 in. x 7 ft. 4 in.
Fork Pocket Center to Center Distance	3 ft. 11 in.

Notes:

1. Lifting device: forklift or crane
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 83. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in.
Slides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 84. Cooling capacity (200 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	251.8	240.8	229.4	217.6
55	0	222.3	212.3	202.1	191.7
45	0	193.1	184.3	175.3	166.2
35	15	161.9	154.5	147.0	139.4
25	30	131.6	125.7	119.7	113.6
15	35	106.6	92.3	101.9	97.1
5	45	81.2	73.9	77.6	84.9
0	45	66.5	69.7	72.9	76.3

Figure 44. RSCA0200(F0 and F1) style ACSA chillers - single speed pump curve

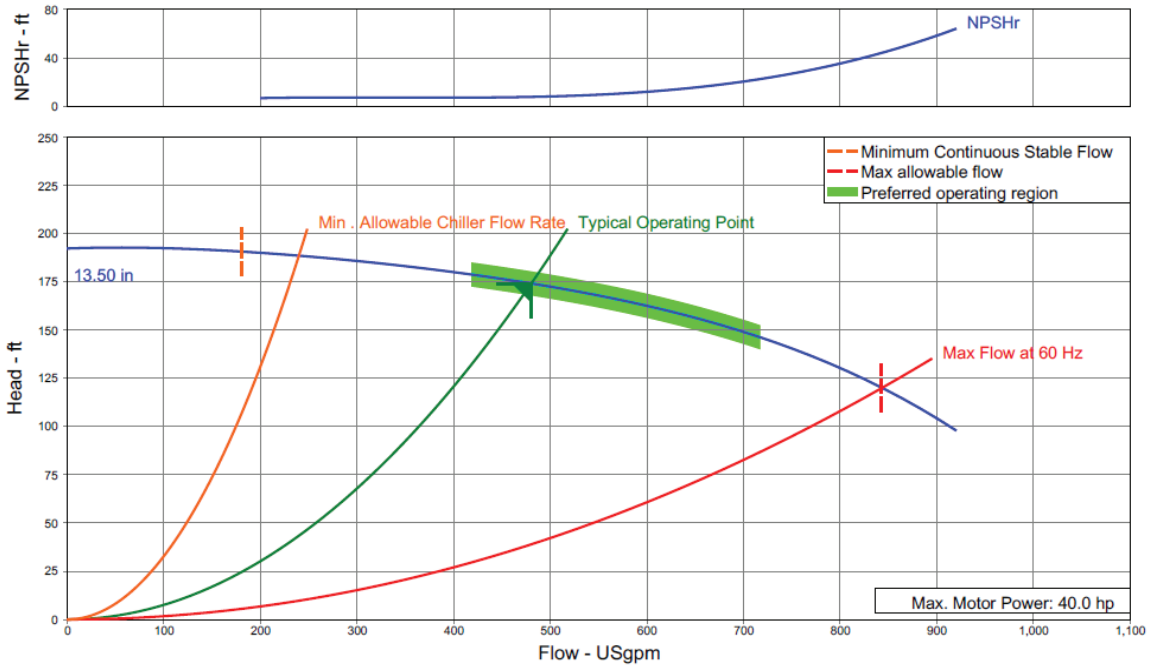
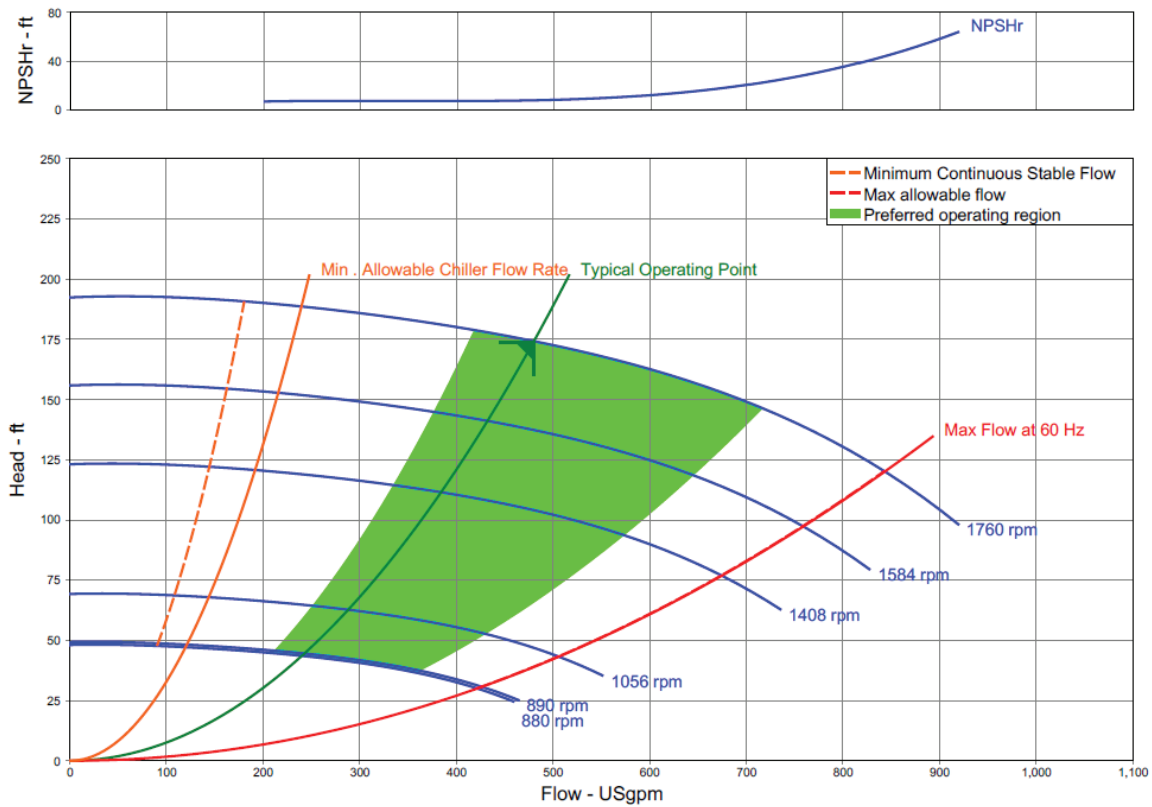


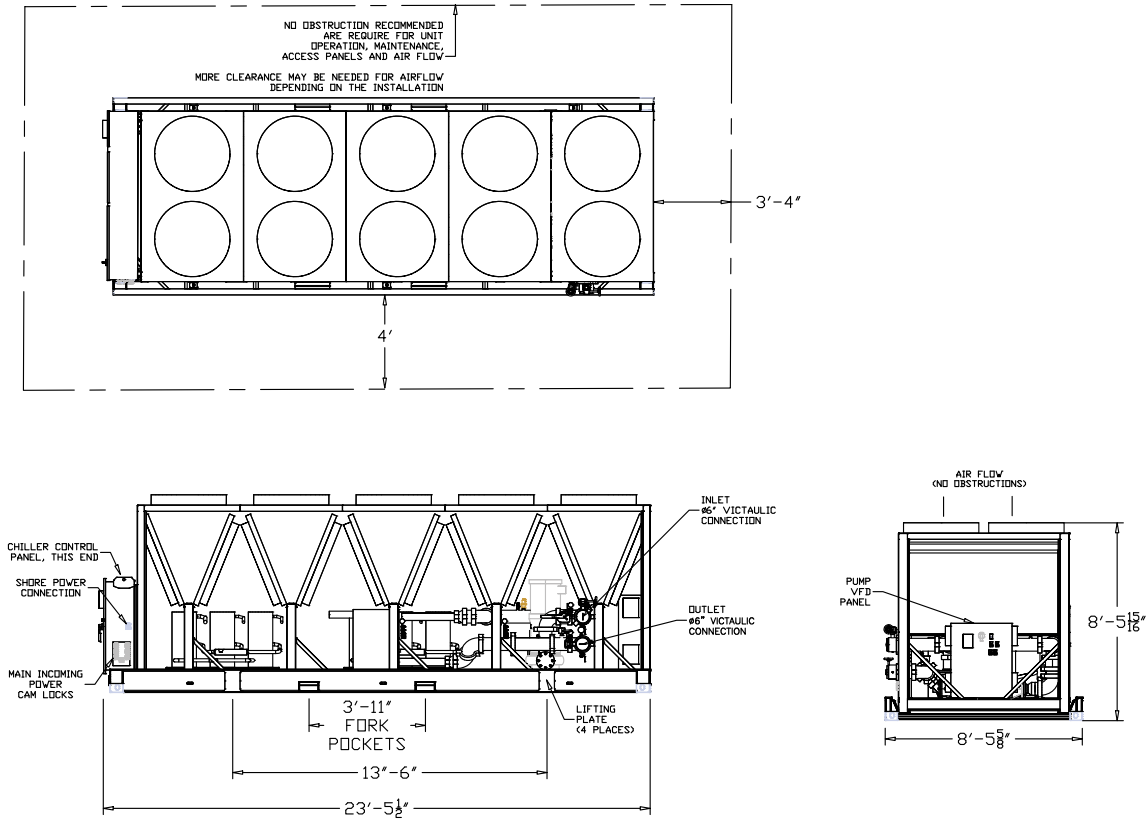
Figure 45. RSCA0200(F0 and F1) style ACSA chillers - multi speed pump curve





200 Ton ACSA

Figure 46. Unit drawings





200 Ton Air-Cooled ACXA

RSCX0200F1 ACXA

Table 85. General – RSCX0200F1

Labels	Value
Model Number	ACXA200
Nominal Tons	200
Refrigerant	R-454B
Refrigerant Charge ^(a)	163/163 lbs
Water Connection Size	6-in. Victaulic
Cooling Mode Ambient Operating Conditions	-4°F to 125°F
Cooling Mode Setpoint Limits ^{(b) (c)}	40°F to 68°F
Heating Mode Ambient Operating Conditions	0°F to 95°F
Heating Mode Setpoint Limits ^{(b) (d)}	68°F to 140°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

- (a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.
- (b) Setpoints only to be used as a guide, selection is required for actual chiller performance.
- (c) When leaving solution is below 42°F, a glycol solution is required.
- (d) When leaving solution is below 80°F at full load, at least 25% glycol solution is required.

Table 86. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35,000 A
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	401 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	379 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	462 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	427 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 87. Pump data

Labels	Value
Horsepower	40 HP
Min Flow	181 gpm @ 190 ft.
Max Flow	848 gpm @ 119 ft.



200 Ton Air-Cooled ACXA

Table 88. Cooling capacity (200 tons)

Leaving Water Temp (°F)	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
68	0	288.6	273.7	258.2	242.3
65	0	276.6	262.2	247.4	232.2
60	0	256.9	243.5	229.8	215.8
55	0	237.8	225.4	212.8	200.0
50	0	219.5	208.1	196.5	184.6
45	0	202.1	191.5	180.9	170.0
40	8	184.8	175.2	165.5	155.7

To have a selection performed to verify performance in a specific application, provide the following information in the format below.

Table 89. Heating capacity (200 tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (MBh) at 2.4 GPM / Nominal Cooling Ton			
		Ambient Air Wet Bulb/Dry Bulb			
		-1°F/0°F ^(a)	20°F/25°F ^(a)	40°F/50°F	60°F/75°F
70	25 ^(b)	854.4	1,434	2,212	2,972
80	0	852.8	1,419	2,189	2,934
90	0	860.8	1,409	2,164	2,853
100	0	—	1402.2	2,141	2,820
110	0	—	958.5	1,486	1,983
120	0	—	1409.4	2,107	2,756
130	0	—	—	2,096	2,725
140	0	—	—	2,087	2,690

^(a) Low-ambient defrost cycle de-rating factors applied as follows:

- 1°F WB / 0°F DB selections de-rated to 80% of effective capacity,
- 20°F WB / 25°F DB selections de-rated to 90% of effective capacity

^(b) When operating in heating mode at leaving fluid temperatures below 76°F, a minimum 25% glycol concentration is required.

Table 90. Cooling mode water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
240 (min flow)	5.23
250	5.60
300	7.81
350	10.40
400	13.20
450	16.40
500	19.90
550	23.80
600	27.90
650	32.40
700	37.10
720 (max flow)	39.10

Table 91. Heating mode water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
240 (min flow)	3.31
250	3.57
300	4.98
350	6.60
400	8.44
450	10.50
500	12.80
550	15.30
600	17.90
650	20.90
700	23.98
720 (max flow)	25.30

Table 92. Dimensions and weights

Labels	Value
Length	23 ft. 6 in.
Width	8 ft. 5.625 in.
Height	8 ft. 5.9375 in.
Shipping Weight (lbs)	18,769
Operating Weight (lbs)	19,328
Fork Pocket Dimensions	9.5 in. x 4.5 in.
Fork Pocket Center to Center Distance	3 ft. 11 in.

Note: Lifting device: forklift or crane

Table 93. Installation and operating clearances

Labels	Value
Front	40-in.
Back	40-in.
Slides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Figure 47. RSCX0200F1 - single speed pump curve

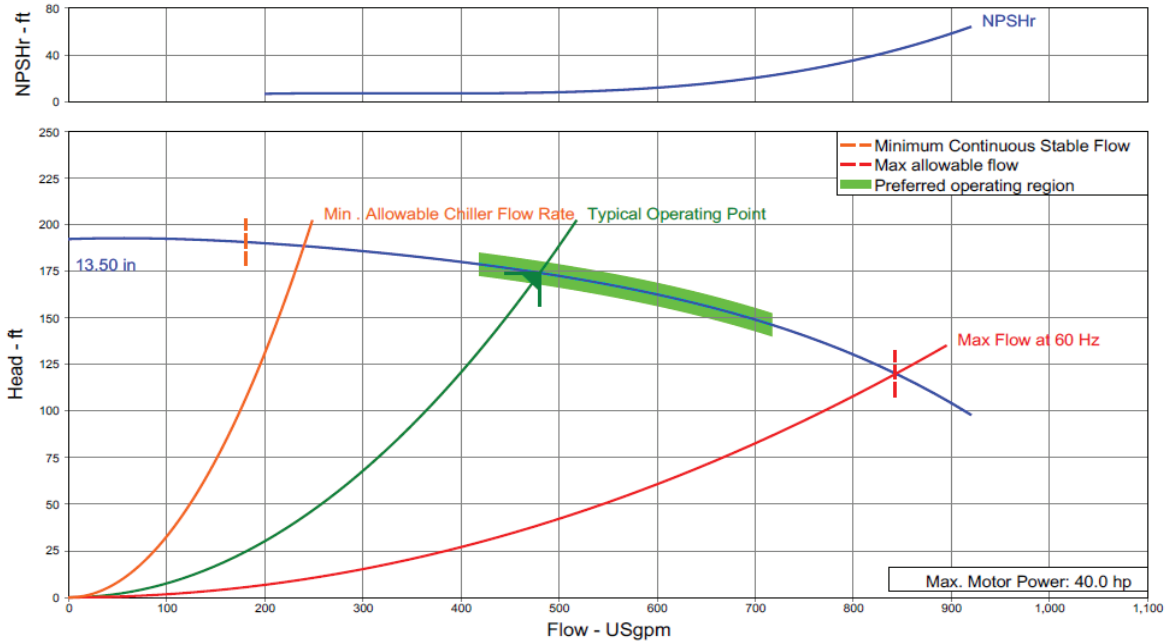


Figure 48. RSCX0200F1 - multi-speed pump curve

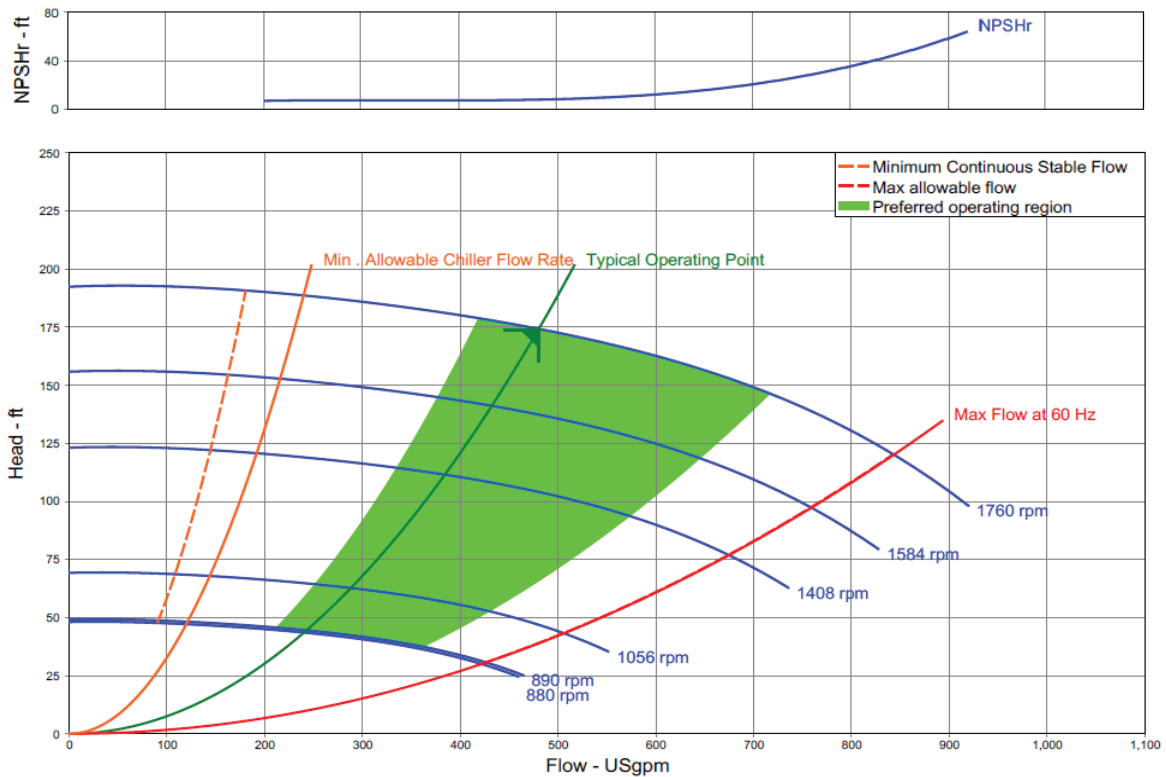
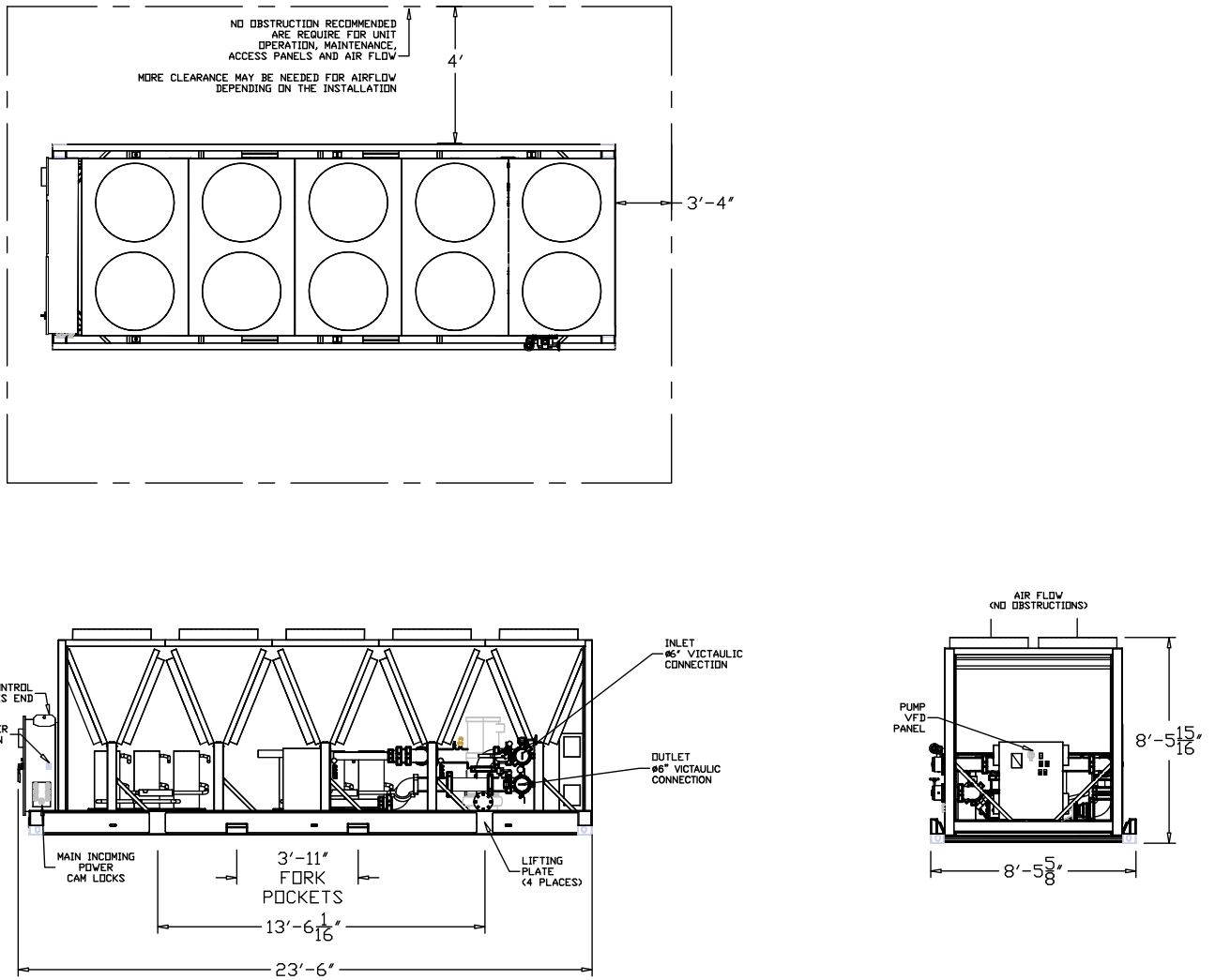


Figure 49. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

80 Ton Air-Cooled RTAA

Table 94. General – CSCA0080F0 and CSCA0080F1

Labels	Value
Model Number	RTAA80
Nominal Tons	80
Refrigerant	R-22
Refrigerant Charge	122 lbs
Water Connection Size	4-in.
Ambient Operating Conditions	0°F to 115°F
Chilled Water Setpoint Limits ^(a)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.

Table 95. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	250 MCM
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	160 A
Maximum Overcurrent Protection (MOP)	200 A
Full Load Amps (FLA)	144 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	185 A
Maximum Overcurrent Protection (MOP)	255 A
Full Load Amps (FLA)	169 A

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 96. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	406 gpm @ 109.5 ft.
Max Flow	90 gpm @ 166.7 ft.

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. Pump is mounted within the frame of chiller.

Table 97. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	84.5	79.8	74.9

Note: Contact Trane Rental Services for low temperature applications.

Table 98. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	96 gpm	190.9 gpm	288 gpm
Pressure Drop	3.5 ft.	12.3 ft.	27.9 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0080F0 and CSCA0080F1

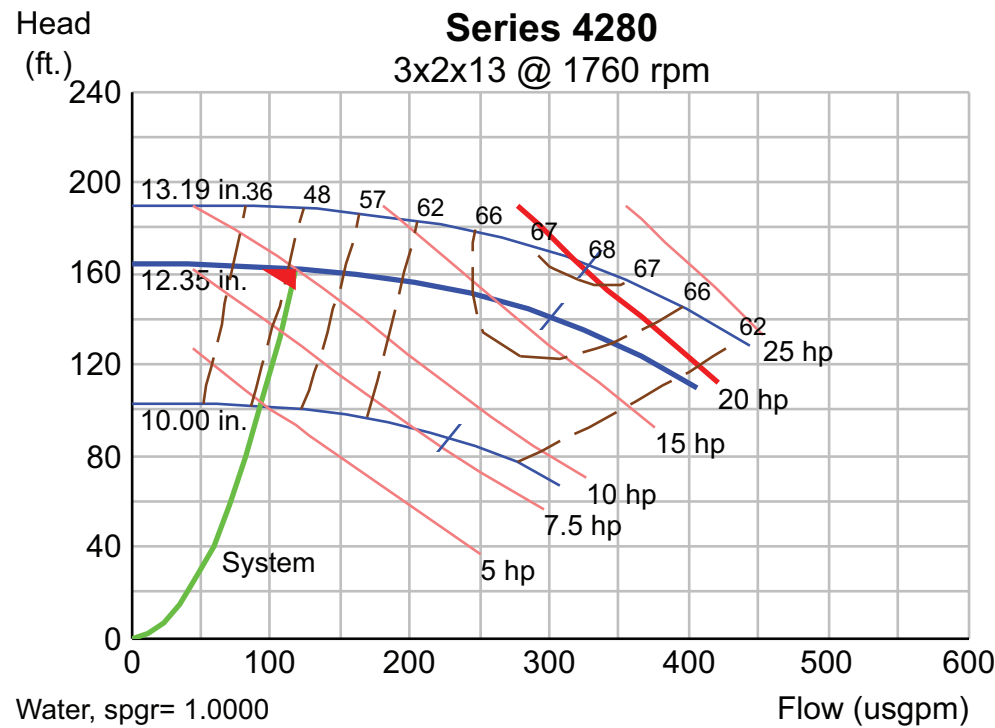
Table 99. Dimensions and weights

Labels	Value
Length	20 ft.
Width	8 ft. 3 in.
Height	8 ft. 5 in.
Shipping Weight (lbs) ^(a)	11,250
Operating Weight (lbs)	11,570

Note: Lifting device: forklift or crane

^(a) For units with integral pump add 1,000 lb to unit weight.

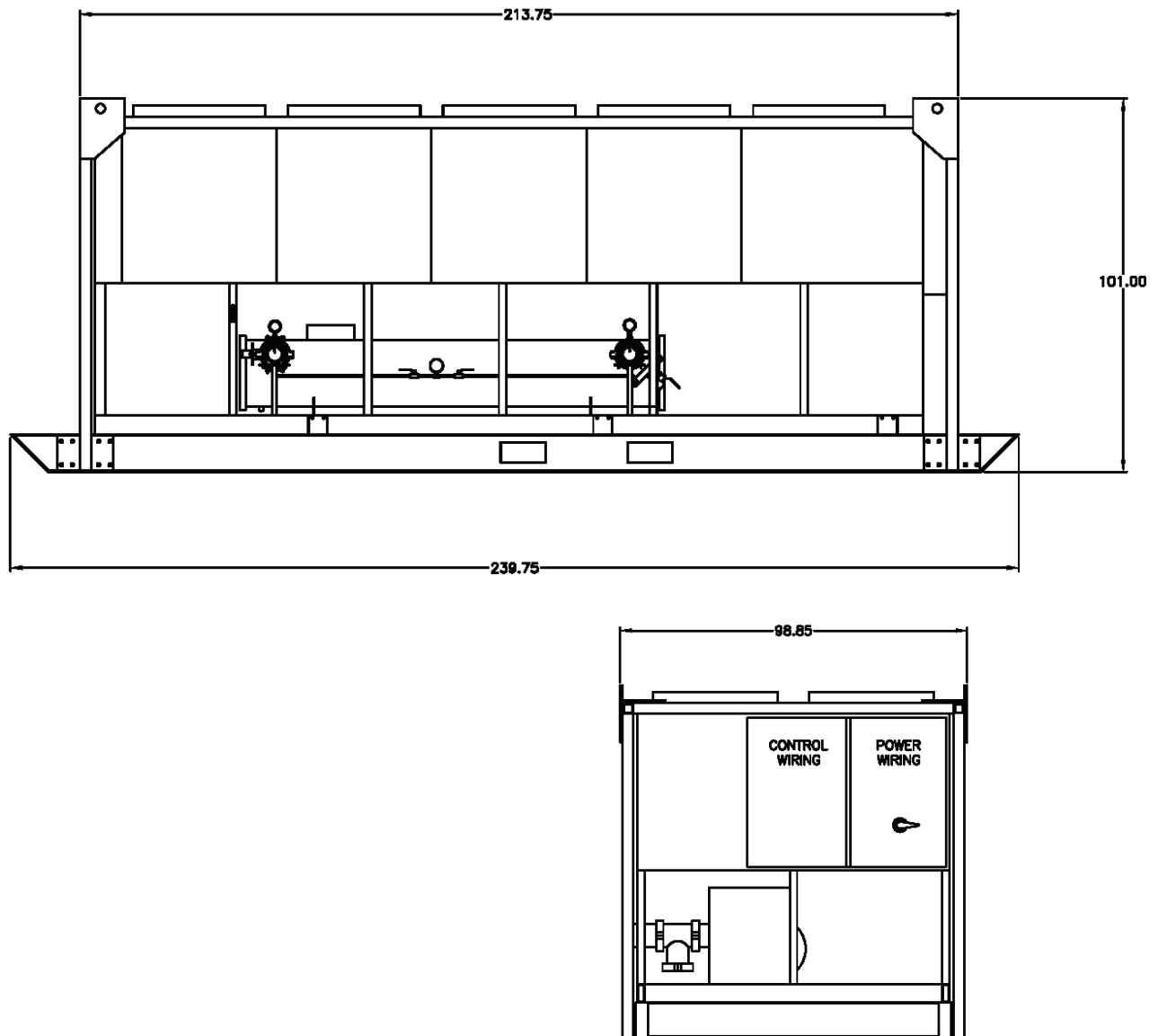
Figure 50. CSCA0080F0 and CSCA0080F1 pump curve





80 to 550 Ton Air Cooled Screw Chillers

Figure 51. Unit drawings



100 Ton Air-Cooled RTAA

Table 100. General – CSCA0100F0 and CSCA0100F1

Labels	Value
Model Number	RTAA100
Nominal Tons	100
Refrigerant	R-22
Refrigerant Charge	146 lbs
Water Connection Size	4-in.
Ambient Operating Conditions	0°F to 115°F
Chilled Water Setpoint Limits ^(a)	0°F to 65°F
Number of Electrical Circuits	1

Table 100. General – CSCA0100F0 and CSCA0100F1 (continued)

Labels	Value
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.

Table 101. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	250 MCM
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	214 A
Maximum Overcurrent Protection (MOP)	250 A
Full Load Amps (FLA)	193 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	239 A
Maximum Overcurrent Protection (MOP)	300 A
Full Load Amps (FLA)	218 A

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 102. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	406 gpm @ 109.5 ft.
Max Flow	90 gpm @ 166.7 ft.

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. Pump is mounted within the frame of chiller.

Table 103. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	106.6	100.6	94.3

Note: Contact Trane Rental Services for low temperature applications.

Table 104. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	120 gpm	240.8 gpm	360 gpm
Pressure Drop	3.9 ft.	14.4 ft.	33 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).



80 to 550 Ton Air Cooled Screw Chillers

CSCA0100F0 and CSCA0100F1

Table 105. Dimensions and weights

Labels	Value
Length	20 ft.
Width	8 ft. 3 in.
Height	8 ft. 5 in.
Shipping Weight (lbs) ^(a)	11,700
Operating Weight (lbs)	11,960

Note: Lifting device: forklift or crane

^(a) For units with integral pump add 1,000 lb to unit weight.

Figure 52. CSCA0100F0 and CSCA0100F1 pump curve

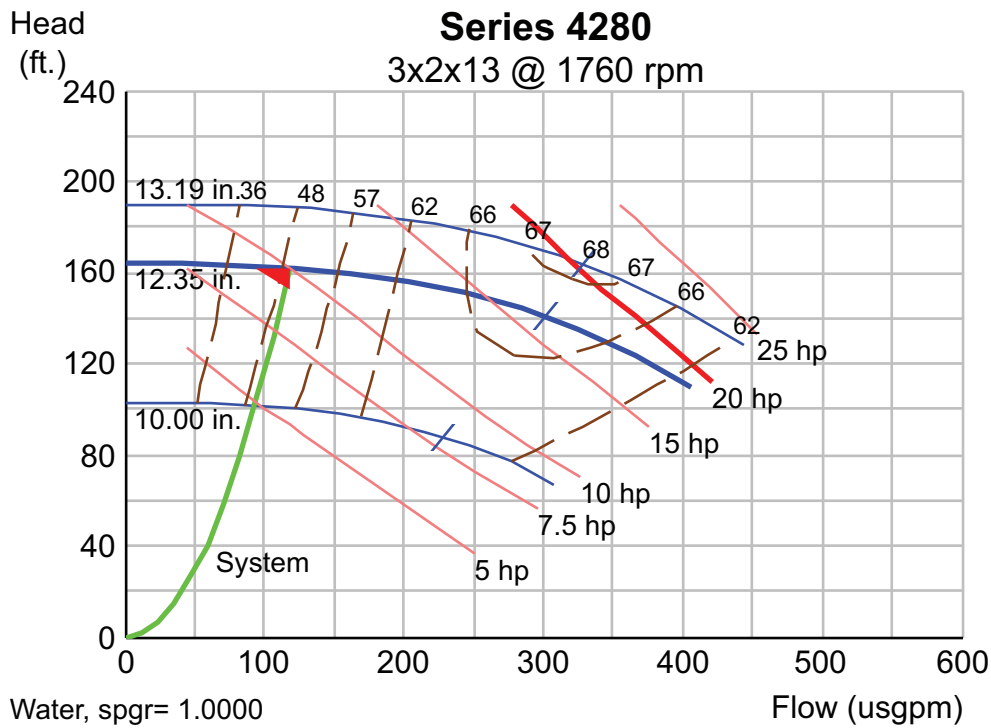
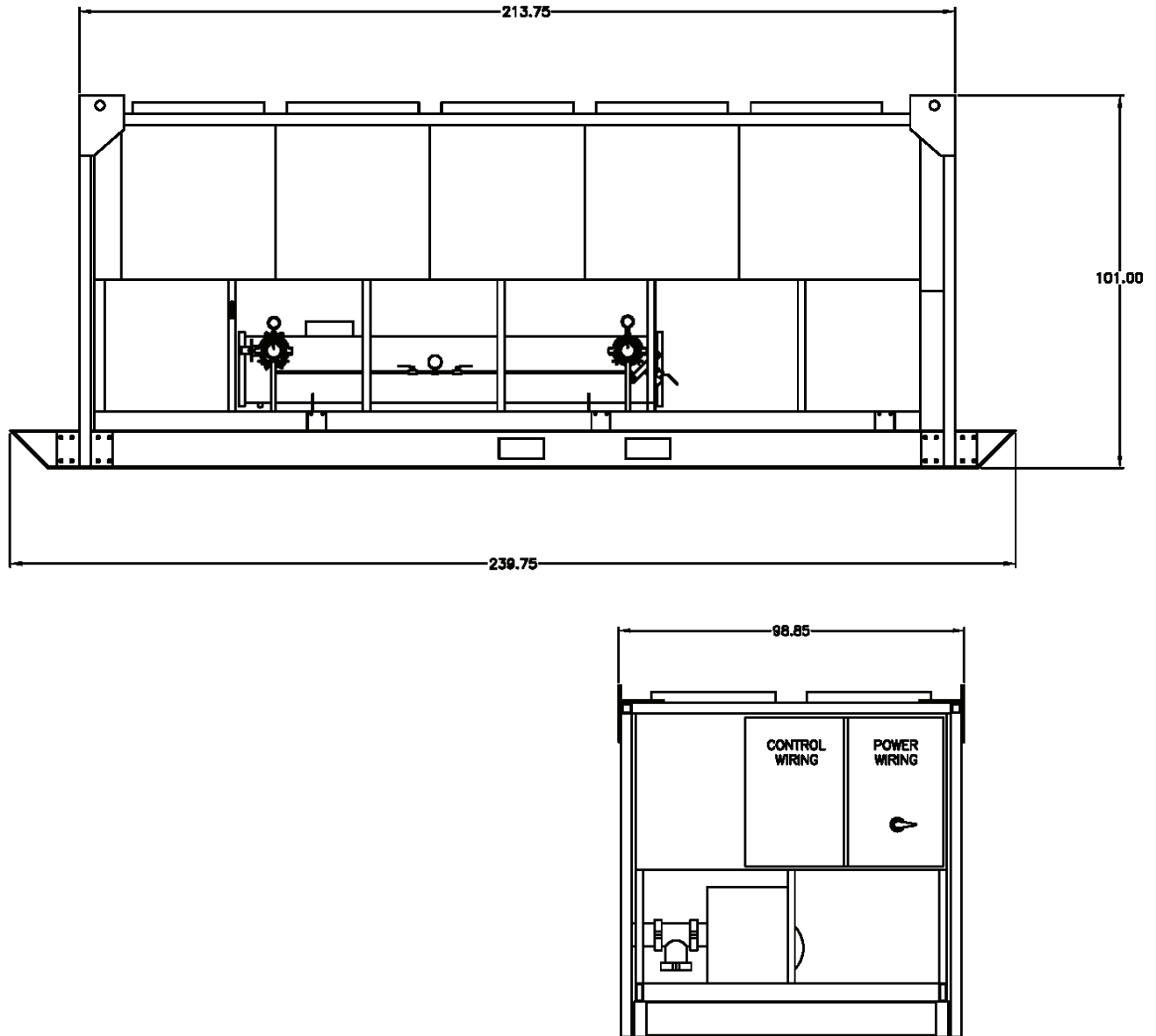


Figure 53. Unit drawings



125 Ton Air-Cooled RTAA

Table 106. General – CSCA0125F0 and CSCA0125F1

Labels	Value
Model Number	RTAA125
Nominal Tons	125
Refrigerant	R-22
Refrigerant Charge	196 lbs
Water Connection Size	6-in.
Ambient Operating Conditions	0°F to 115°F
Chilled Water Setpoint Limits ^(a)	0°F to 65°F



80 to 550 Ton Air Cooled Screw Chillers

Table 106. General – CSCA0125F0 and CSCA0125F1 (continued)

Labels	Value
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.

Table 107. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	250 MCM
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	253 A
Maximum Overcurrent Protection (MOP)	350 A
Full Load Amps (FLA)	227 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	278 A
Maximum Overcurrent Protection (MOP)	350 A
Full Load Amps (FLA)	252 A

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 108. Pump data

Labels	Value
Horsepower	20 HP
Min Flow	406 gpm @ 109.5 ft.
Max Flow	90 gpm @ 166.7 ft.

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. Pump is mounted within the frame of chiller.

Table 109. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	127.3	120.0	112.4

Note: Contact Trane Rental Services for low temperature applications.

Table 110. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	150 gpm	287.2 gpm	450 gpm
Pressure Drop	5.5 ft.	21.3 ft.	47.1 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0125F0 and CSCA0125F1

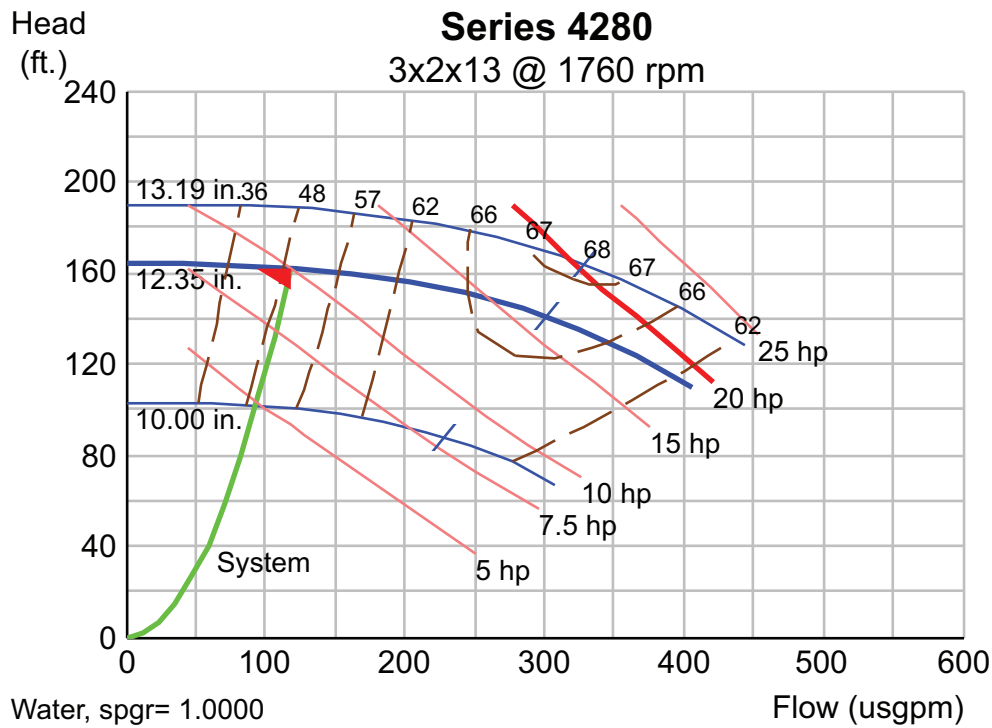
Table 111. Dimensions and weights

Labels	Value
Length	22 ft.
Width	8 ft. 3 in.
Height	8 ft. 5 in.
Shipping Weight (lbs) ^(a)	12,800
Operating Weight (lbs)	13,170

Note: Lifting device: forklift or crane

^(a) For units with integral pump add 1,000 lb to unit weight.

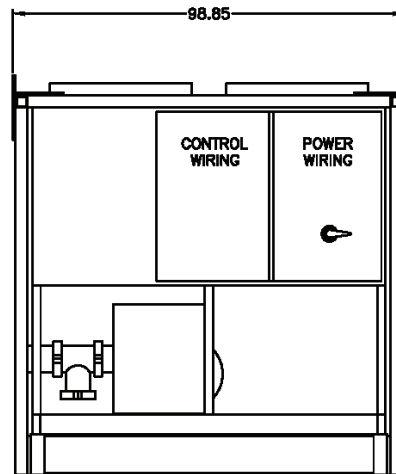
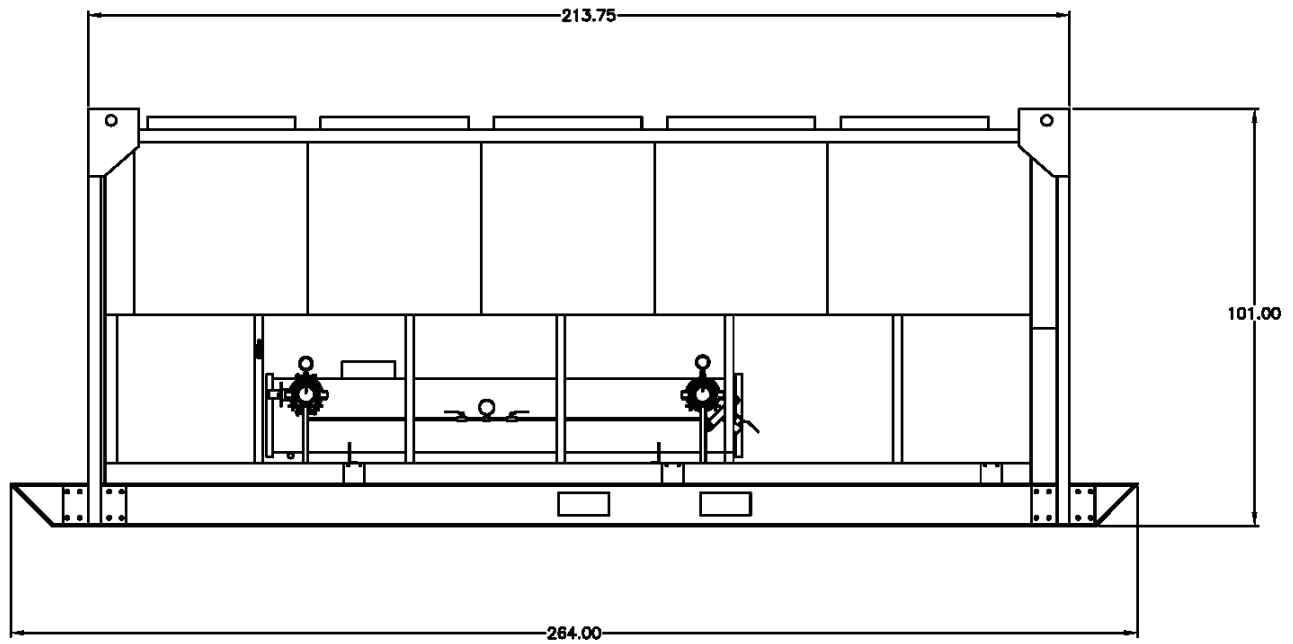
Figure 54. CSCA0125F0 and CSCA0125F1 pump curve





80 to 550 Ton Air Cooled Screw Chillers

Figure 55. Unit drawings



155 Ton Air-Cooled RTAC

Table 112. General – CSCA0155F0-F3

Labels	Value
Model Number	RTAC155
Nominal Tons	155
Refrigerant	R-134a
Refrigerant Charge	175/165 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F

Table 112. General – CSCA0155F0-F3 (continued)

Labels	Value
Chilled Water Setpoint Limits ^(a)	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.

Table 113. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	322 A
Maximum Overcurrent Protection (MOP)	450 A
Full Load Amps (FLA)	289 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	360 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	326 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Maximum wire size lug(s) can accept - 2/0.

^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 114. Pump data – CSCA0155F0

Labels	Value
Horsepower	25 HP
Min Flow	199 gpm @ 129.7 ft.
Max Flow	800 gpm @ 93.1 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 115. Pump data – CSCA0155F2-F3

Labels	Value
Horsepower	25 HP
Min Flow	146 gpm @ 143 ft.
Max Flow	606 gpm @ 99 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.



80 to 550 Ton Air Cooled Screw Chillers

Table 116. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	215.2	200.5	181.1	156.4	117.4
55	0	198.9	185.3	169.7	147.8	115.0
50	0	183.0	170.4	156.3	139.5	112.8
45	0	167.7	156.0	143.1	128.9	108.8
40	0	153.0	142.2	130.4	117.0	101.7
35	10 ^(a)	138.2	128.3	117.6	105.1	91.9
30	20 ^(a)	121.9	113.2	103.6	92.2	80.1
25	25 ^(a)	105.1	97.6	89.2	79.0	68.2
20	30 ^(b)	97.2	90.0	81.7	71.8	61.3

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 117. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
193 (min flow)	3.91
250	6.48
300	9.15
350	12.20
400	15.60
450	19.40
500	23.50
550	28.00
600	32.90
650	38.20
709 (max flow)	44.90

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0155F0

Table 118. Dimensions and weights

Labels	Value
Length	21 ft. 3 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs) ^(a)	16,900
Operating Weight (lbs)	17,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 6.5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only
2. All weights and dimensions listed above are subject to change without notice or liability.

^(a) For units with integral pump add 1,000 lb to unit weight.

Figure 56. CSCA0155F0 pump curve

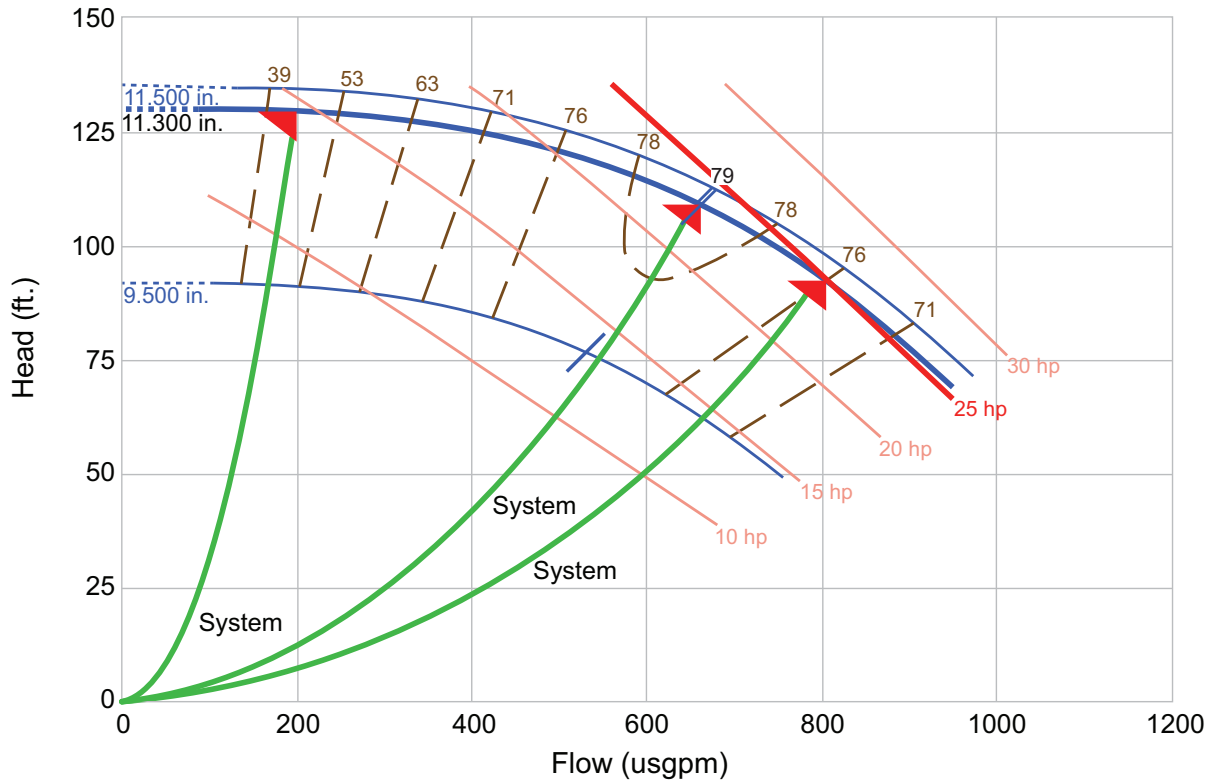
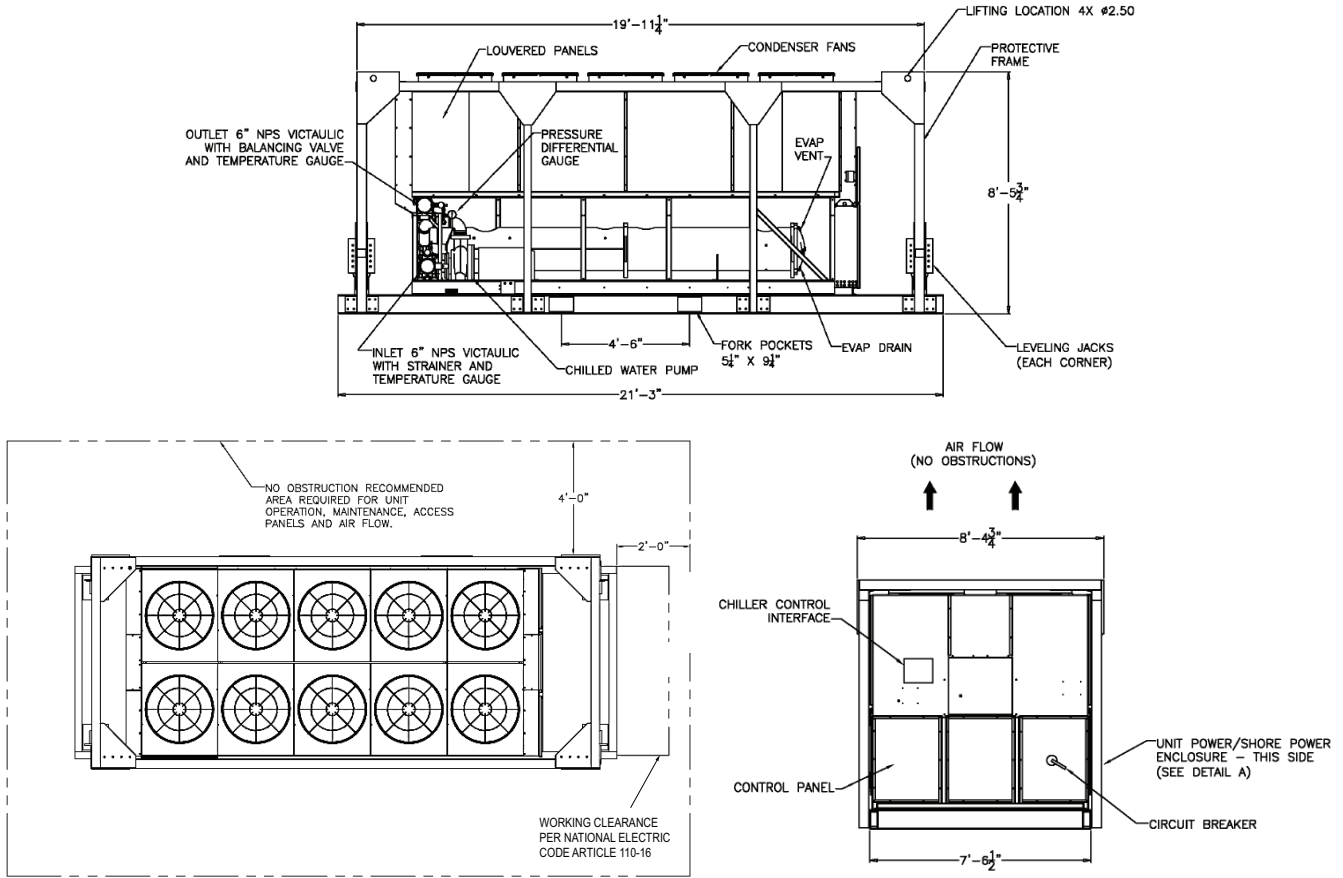


Figure 57. Unit drawings



CSCA0155F2

Table 119. Dimensions and weights

Labels	Value
Length	21 ft. 2 in.
Shipping Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	14,600
Operating Weight (lbs)	14,900
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 58. CSCA0155F2 pump curve

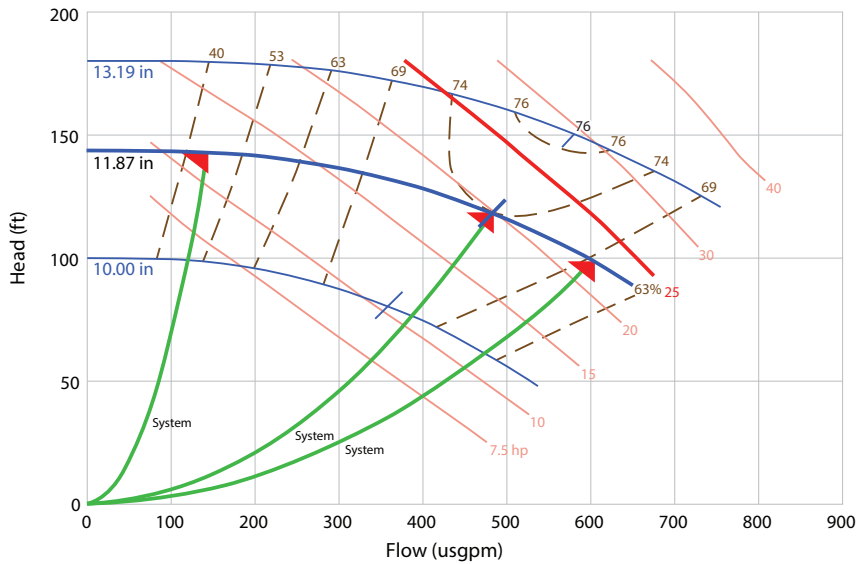
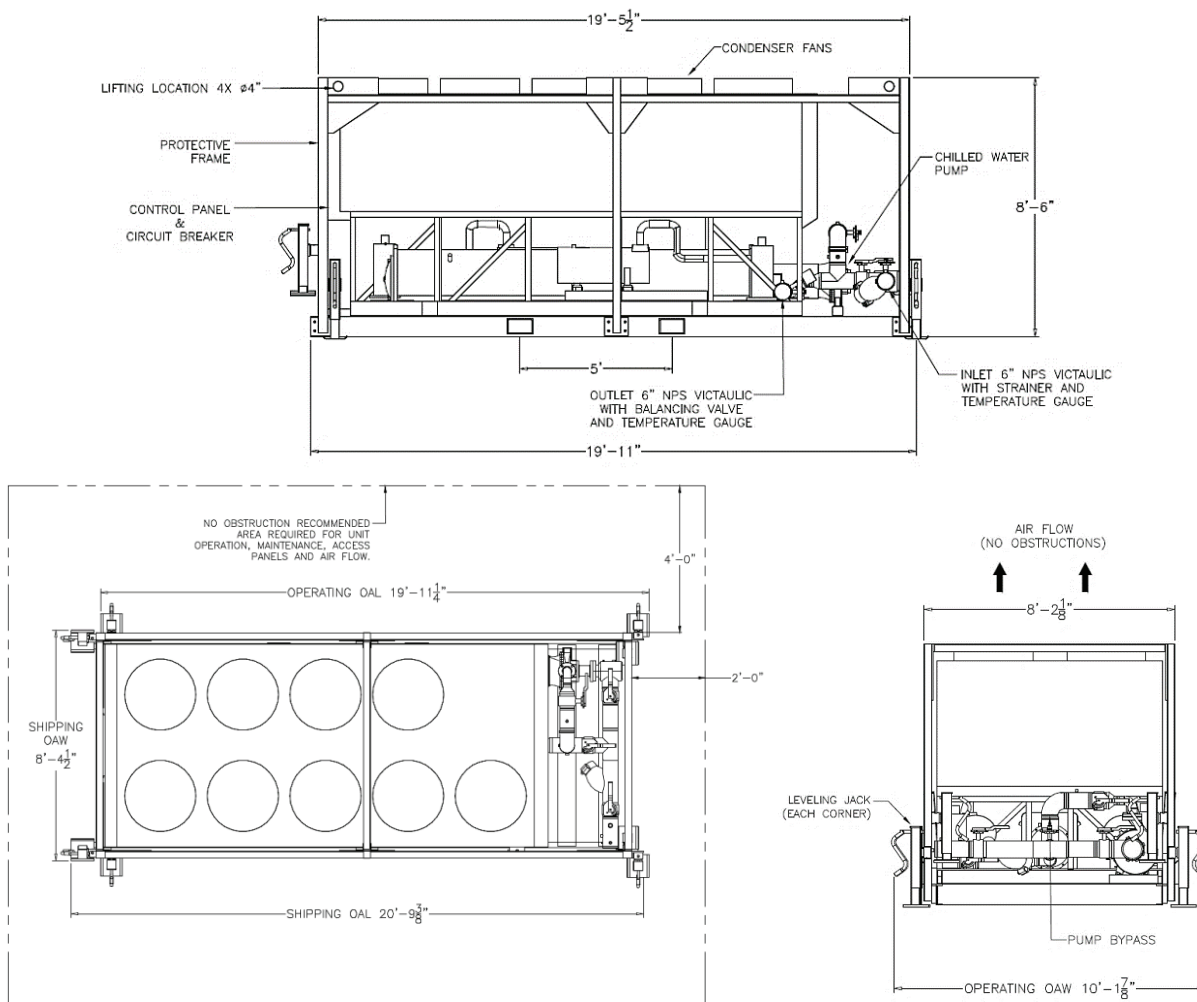


Figure 59. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

CSCA0155F3

Table 120. Dimensions and weights

Labels	Value
Length	21 ft. 2 in.
Shipping Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,000
Operating Weight (lbs)	18,300
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 60. CSCA0155F3 pump curve

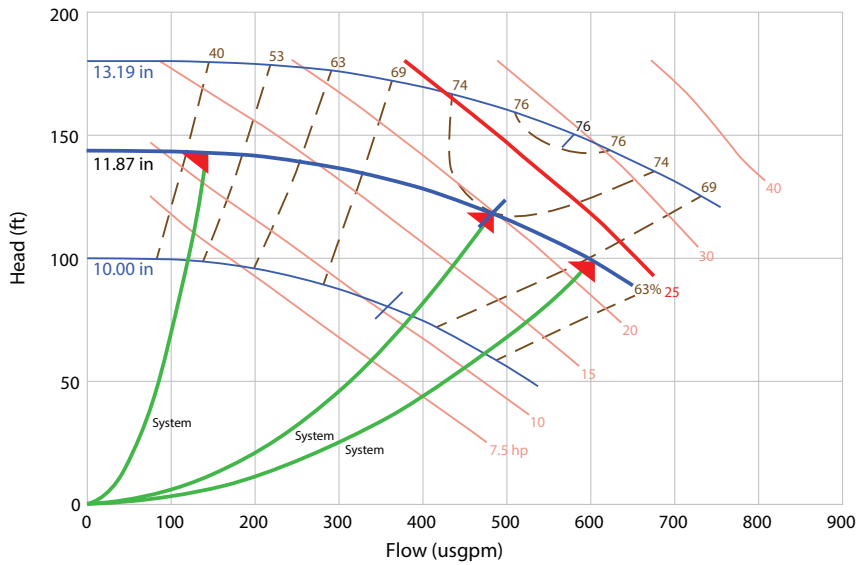
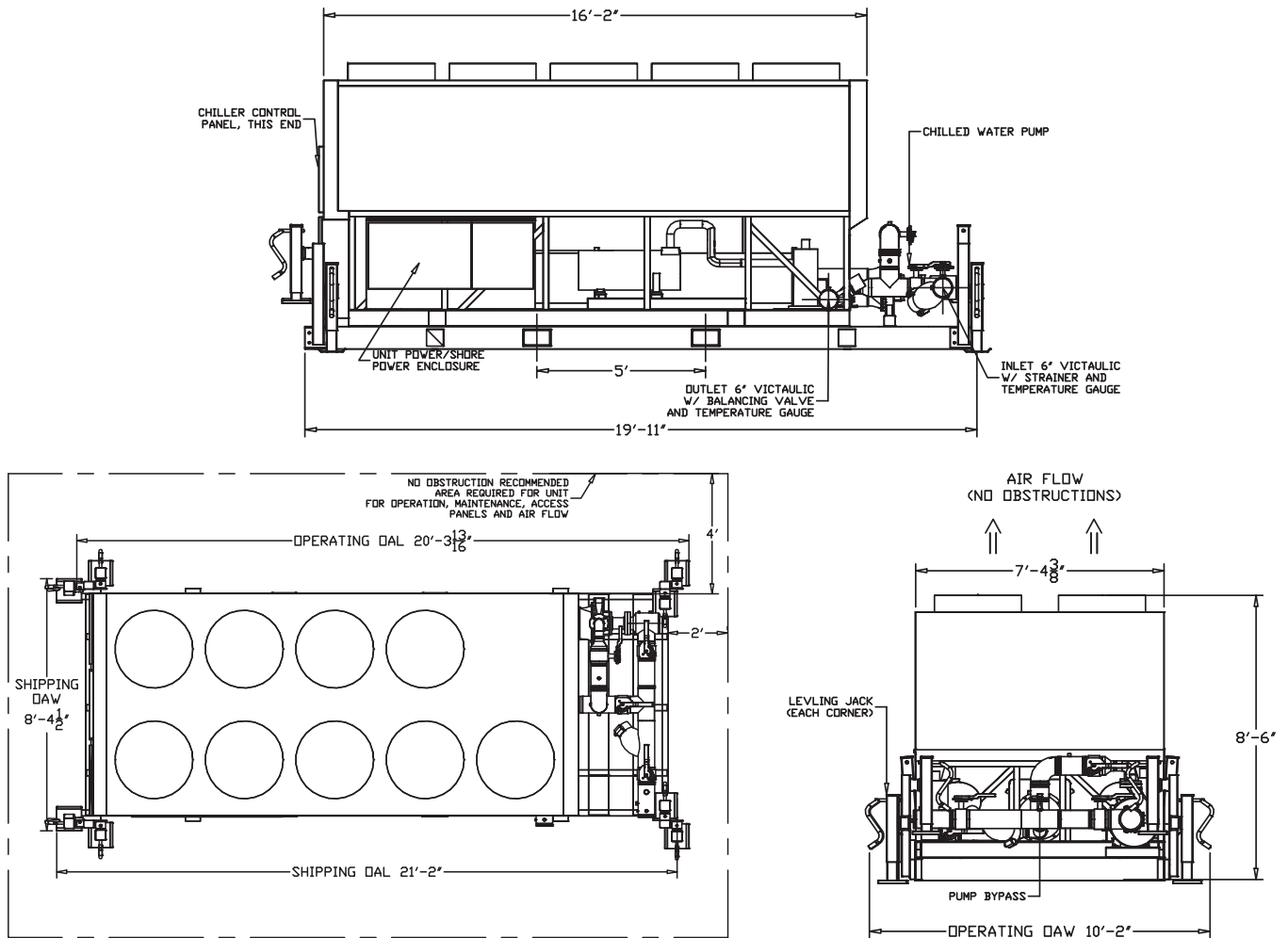


Figure 61. Unit drawings



170 Ton Air-Cooled RTAA

Table 121. General – CSCA0170F0

Labels	Value
Model Number	RTAA170
Nominal Tons	170
Refrigerant	R-22
Refrigerant Charge	300 lbs
Water Connection Size	6-in.
Ambient Operating Conditions	0°F to 115°F
Chilled Water Setpoint Limits ^(a)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.



80 to 550 Ton Air Cooled Screw Chillers

Table 122. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	350 MCM
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	369 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	327 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 123. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	173.8	164.5	154.9

Note: Contact Trane Rental Services for low temperature applications.

Table 124. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	186 gpm	393.5 gpm	612 gpm
Pressure Drop	4.1 ft.	16.0 ft.	38.8 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0170F0

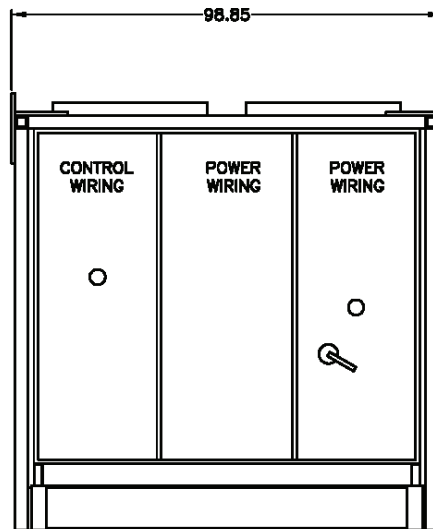
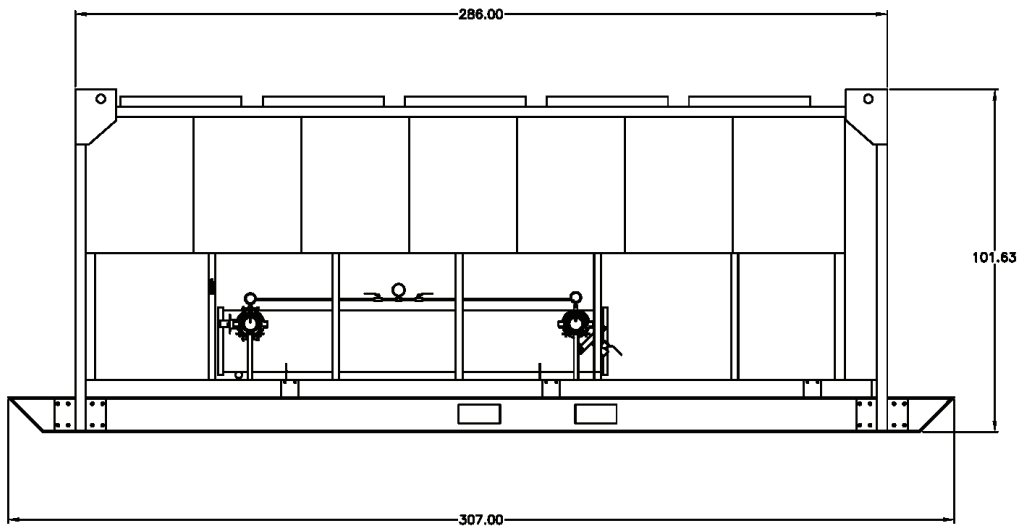
Table 125. Dimensions and weights

Labels	Value
Length	25 ft. 7-in.
Width	8 ft. 3-in.
Height	8 ft. 7-in.
Shipping Weight (lbs) ^(a)	16,555
Operating Weight (lbs)	17,130

Note: Lifting device: Crane only.

^(a) For units with integral pump add 1,000 lb to unit weight.

Figure 62. Unit drawings



170 Ton Air-Cooled RTAC

Table 126. General – CSCA0170F0 and CSCA0170F2

Labels	Value
Model Number	RTAC170
Nominal Tons	170
Refrigerant	R-134a
Refrigerant Charge ^(a)	175/175 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass



80 to 550 Ton Air Cooled Screw Chillers

Table 126. General – CSCA0170F0 and CSCA0170F2 (continued)

Labels	Value
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 127. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) (b)	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	346 A
Maximum Overcurrent Protection (MOP)	450 A
Full Load Amps (FLA)	311 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	385 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	350 A

Note: For additional electrical information, contact Trane Rental Services.

(a) Maximum wire size lug(s) can accept - 600 MCM.

(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 128. Pump data – CSCA0170F0

Labels	Value
Horsepower	25 HP
Min Flow	199 gpm @ 129.7 ft.
Max Flow	800 gpm @ 93.1 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 129. Pump data – CSCA0170F2

Labels	Value
Horsepower	25 HP
Min Flow	146 gpm @ 143 ft.
Max Flow	606 gpm @ 99 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 130. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	235.3	219.6	199.5	173.0	129.2
55	0	217.5	203.0	186.8	163.9	126.3
50	0	200.3	186.8	171.9	155.1	123.5

Table 130. Cooling capacity (tons) (continued)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
45	0	183.6	171.1	157.5	142.4	120.7
40	0	167.7	156.1	143.6	129.4	114.2
35	10 ^(a)	151.8	141.1	129.7	116.4	102.4
30	20 ^(a)	134.5	125.0	114.8	102.6	89.7
25	25 ^(a)	116.6	108.5	99.4	88.5	76.8
20	30 ^(b)	107.7	99.9	91.1	80.4	69.1

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 131. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
202 (min flow)	3.34
250	5.05
300	7.12
350	9.46
400	12.10
450	14.90
500	18.10
550	21.40
600	25.10
650	29.10
700	33.30
741 (max flow)	37.10

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0170F0

Table 132. Dimensions and weights

Labels	Value
Length	21 ft. 3 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,350
Operating Weight (lbs)	18,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.



80 to 550 Ton Air Cooled Screw Chillers

Figure 63. CSCA0170F0 pump curve

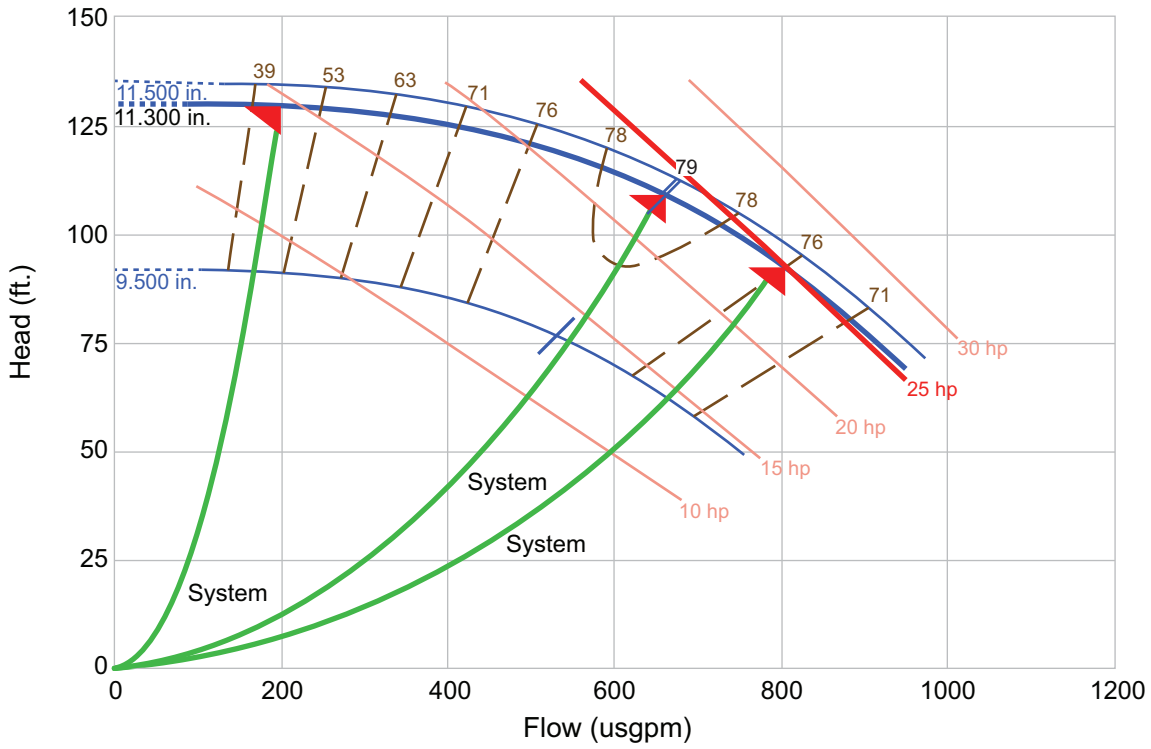
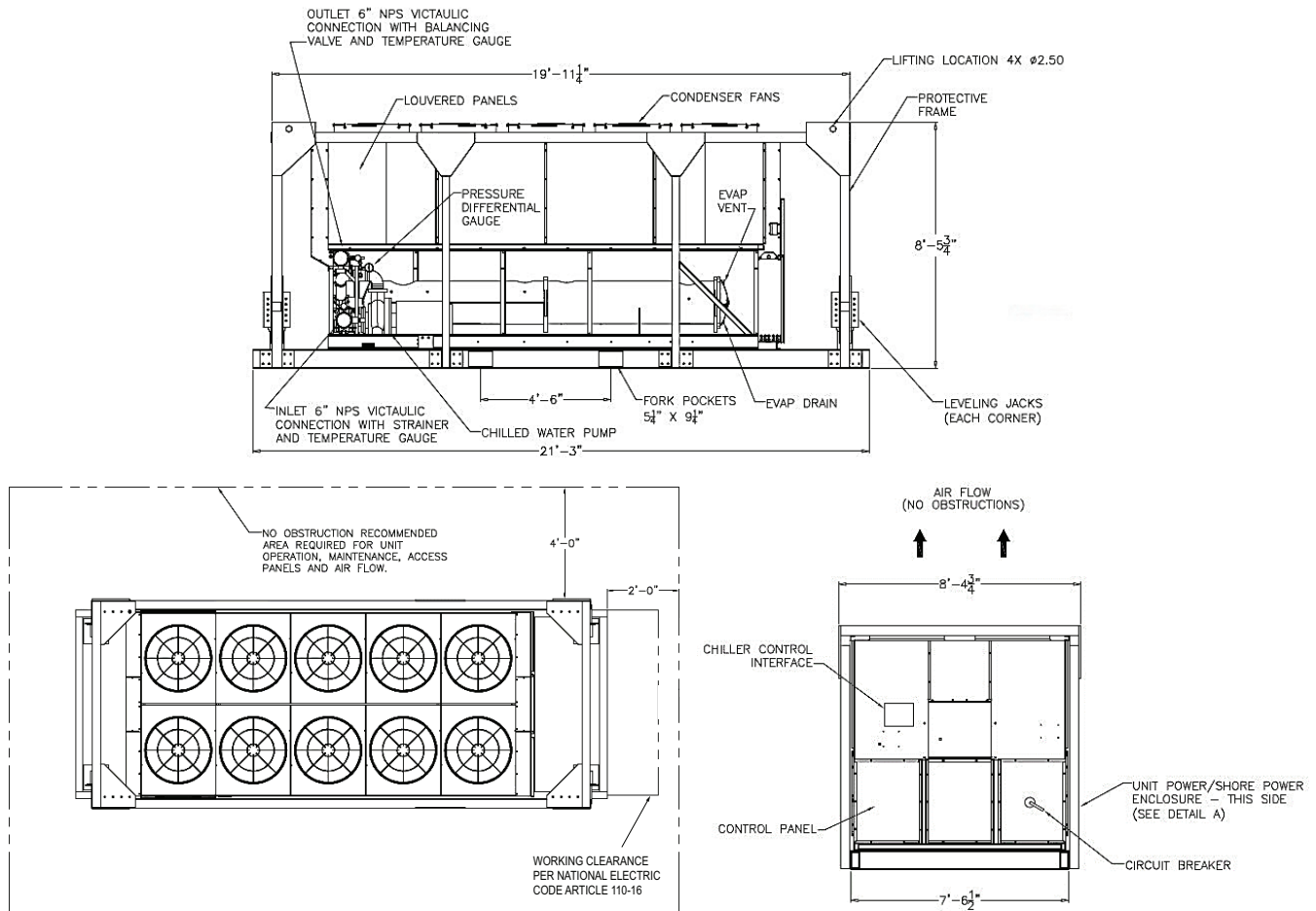


Figure 64. Unit drawings



CSCA0170F2

Table 133. Dimensions and weights

Labels	Value
Length	21 ft. 2 in.
Shipping Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,300
Operating Weight (lbs)	16,650
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

80 to 550 Ton Air Cooled Screw Chillers

Figure 65. CSCA0170F2 pump curve

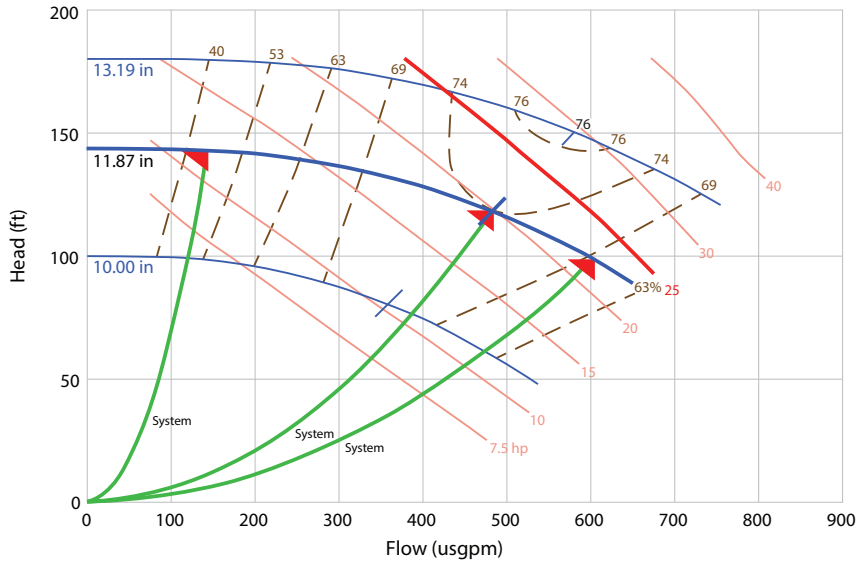
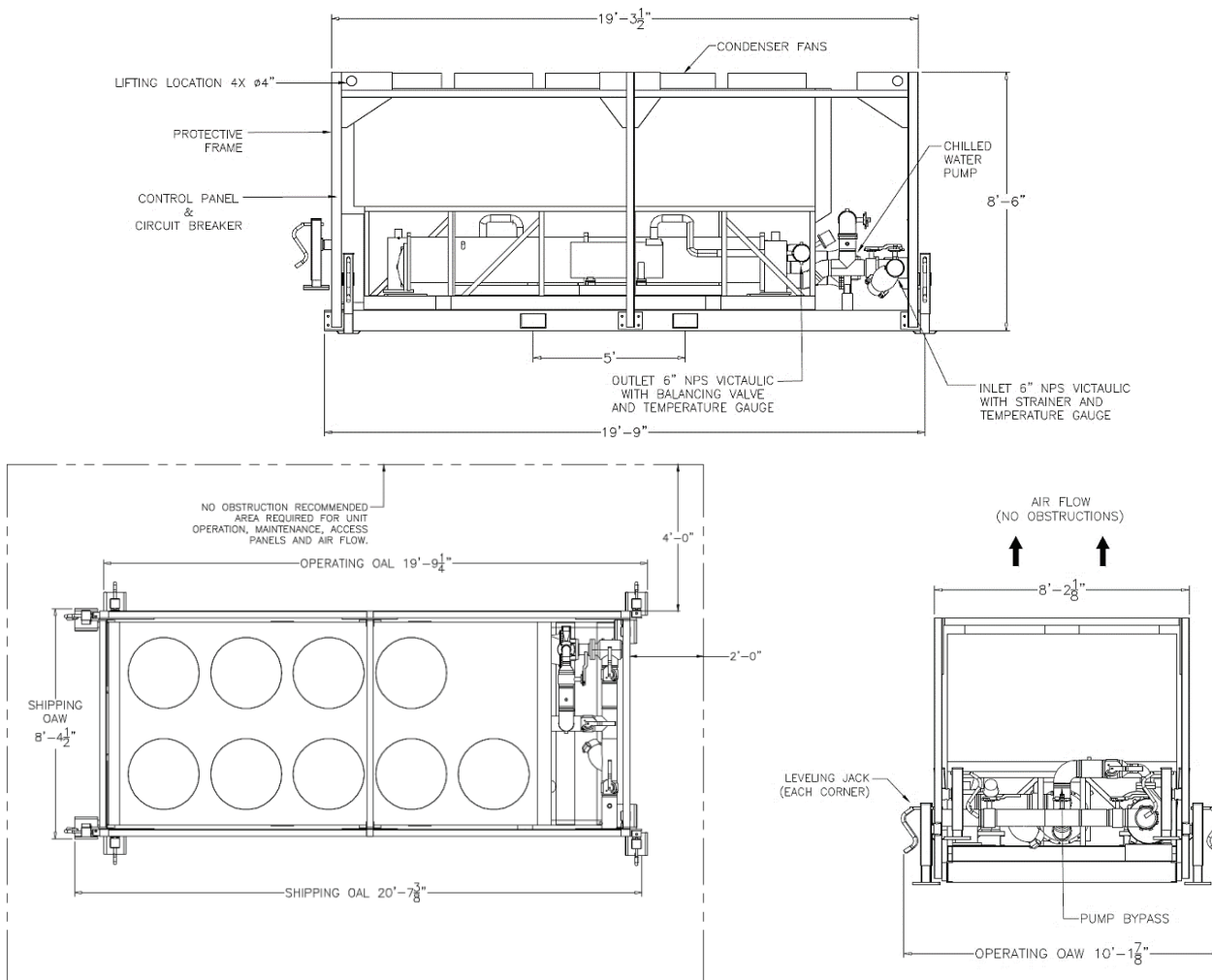


Figure 66. Unit drawings



200 Ton Air-Cooled RTAA

Table 134. General – CSCA0200F0

Labels	Value
Model Number	RTAA200
Nominal Tons	200
Refrigerant	R-22
Refrigerant Charge	340 lbs
Water Connection Size	6-in.
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^(a)	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints are to be used only as a guide.

Table 135. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	350 MCM
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	406 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	365 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 136. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	198.3	188.3	178.2

Note: Contact Trane Rental Services for low temperature applications.

Table 137. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	222 gpm	450.6 gpm	720 gpm
Pressure Drop	4.5 ft.	16.4 ft.	42.0 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0200F0

Table 138. Dimensions and weights

Labels	Value
Length	25 ft. 7 in.
Width	8 ft. 3 in.
Height	8 ft. 6 in.
Shipping Weight (lbs) ^(a)	17,000

80 to 550 Ton Air Cooled Screw Chillers

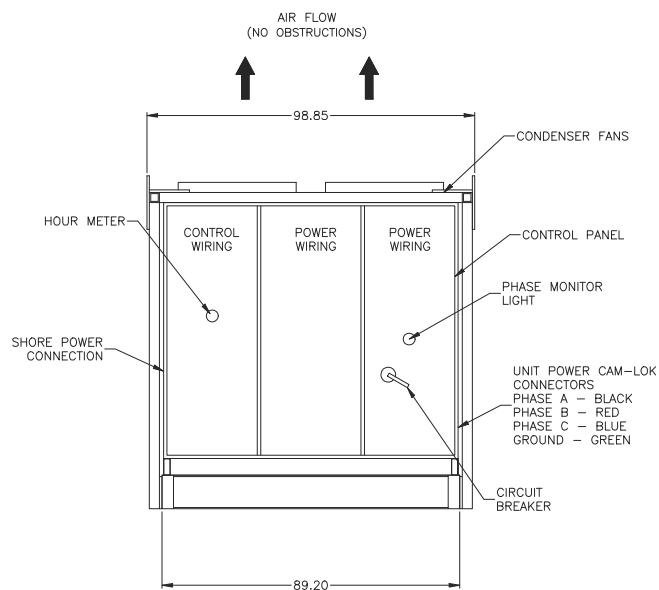
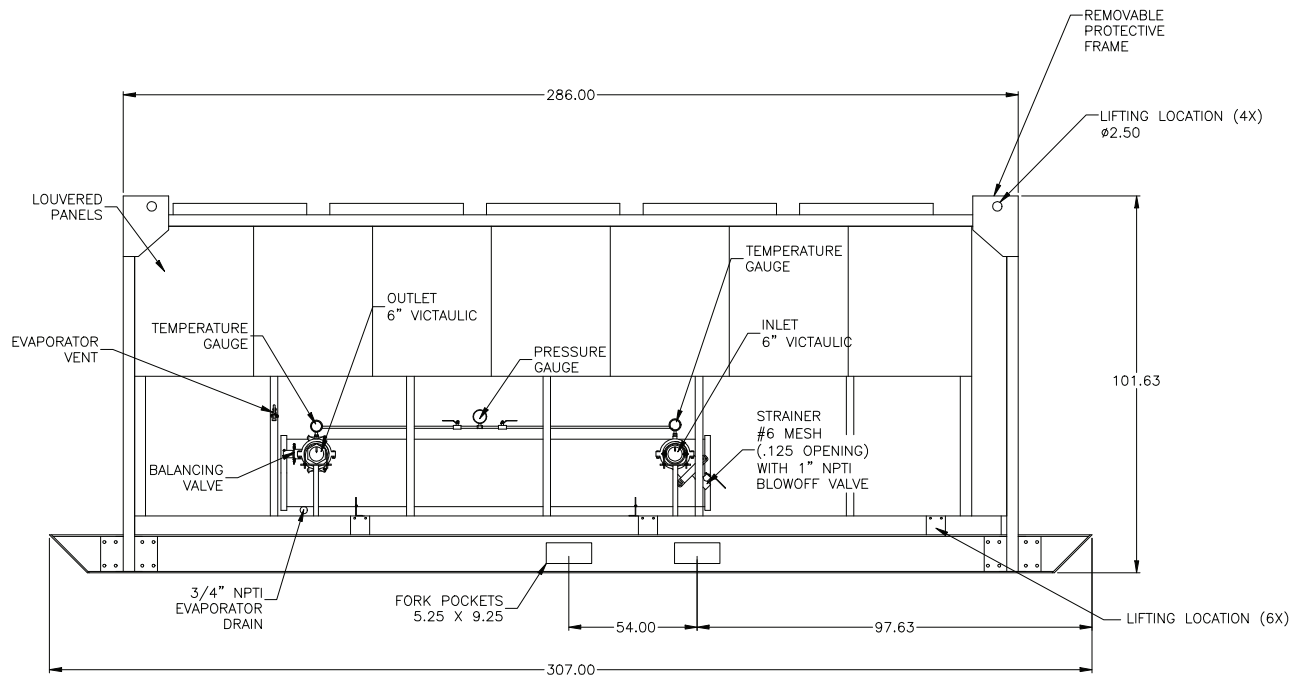
Table 138. Dimensions and weights (continued)

Labels	Value
Operating Weight (lbs)	17,450

Note: Lifting device: forklift or crane

^(a) For units with integral pump add 1,000 lb to unit weight.

Figure 67. Unit drawings



200 Ton Air-Cooled RTAC

Table 139. General – CSCA0200F0-F3

Labels	Value
Model Number	RTAC200
Nominal Tons	200
Refrigerant	R-134a
Refrigerant Charge ^(a)	225/225 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 140. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^{(a) (b)}	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	417 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	375 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	455 A
Maximum Overcurrent Protection (MOP)	600 A
Full Load Amps (FLA)	413 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Maximum wire size lug(s) can accept - 600 MCM.

^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 141. Pump data – CSCA0200F0

Labels	Value
Horsepower	25 HP
Min Flow	199 gpm @ 129.7 ft.
Max Flow	800 gpm @ 93.1 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.



80 to 550 Ton Air Cooled Screw Chillers

Table 142. Pump data – CSCA0200F2-F3

Labels	Value
Horsepower	25 HP
Min Flow	146 gpm @ 143 ft.
Max Flow	606 gpm @ 99 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 143. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	277.9	258.9	236.7	205.8	152.6
55	0	257.5	240.2	220.7	195.3	150.3
50	0	237.7	221.7	203.6	184.5	147.2
45	0	218.4	203.6	187.1	169.1	143.4
40	0	199.8	186.2	171.1	154.3	136.7
35	10 ^(a)	181.2	168.8	155.0	139.4	123.0
30	20 ^(a)	161.5	150.4	138.0	123.8	108.8
25	25 ^(a)	140.9	131.3	120.4	107.8	94.3
20	30 ^(b)	129.7	120.6	110.1	97.9	84.9

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 144. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
217 (min flow)	3.37
300	6.27
350	8.36
400	10.70
450	13.20
500	16.00
550	19.00
600	22.20
650	25.70
700	29.50
750	33.50
796 (max flow)	37.40

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0200F0

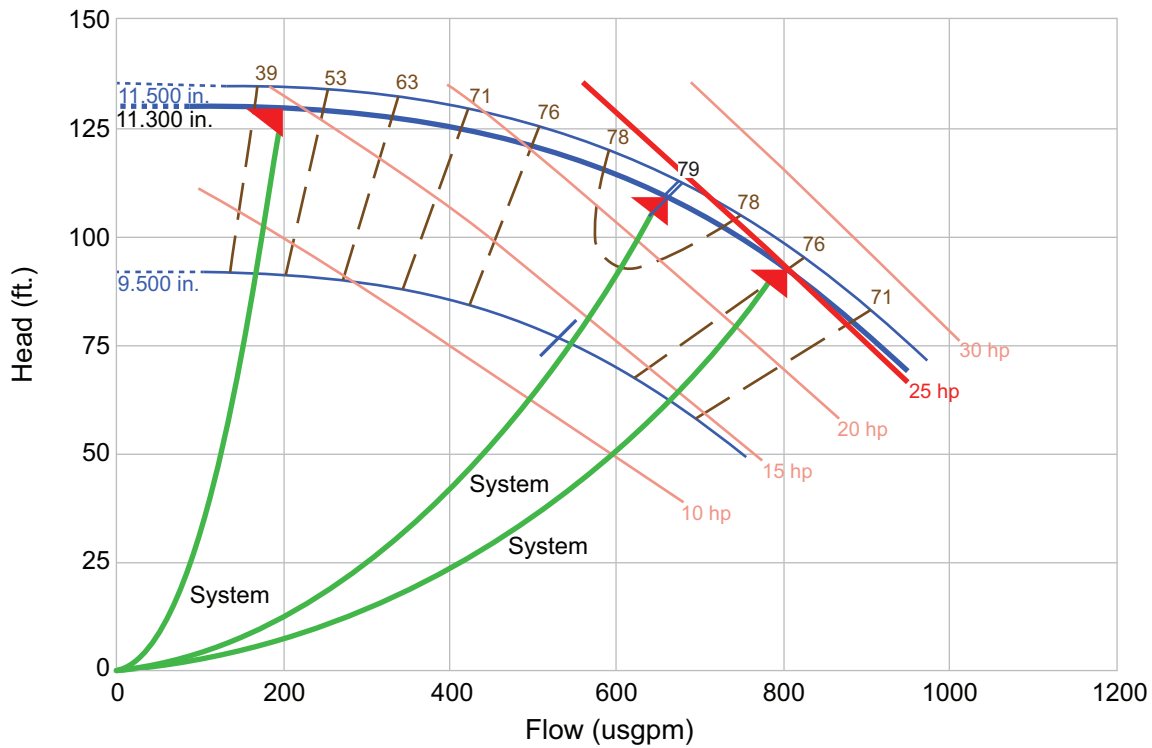
Table 145. Dimensions and weights

Labels	Value
Length	25 ft.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,650
Operating Weight (lbs)	18,333
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

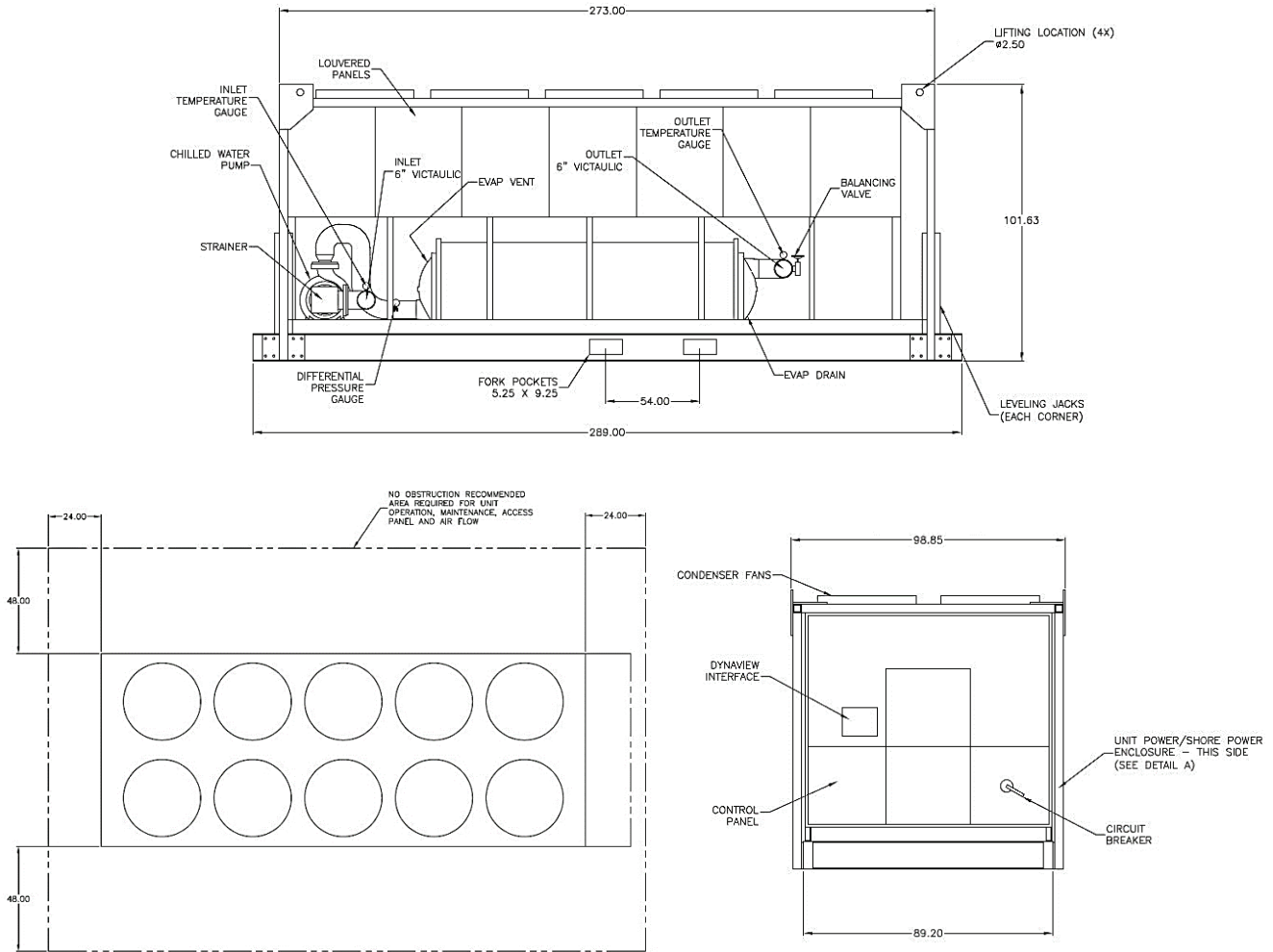
1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 68. CSCA0200F0 pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 69. Unit drawings



CSCA0200F2

Table 146. Dimensions and weights

Labels	Value
Length	22 ft. 6 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,800
Operating Weight (lbs)	17,150
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 70. CSCA0200F2 pump curve

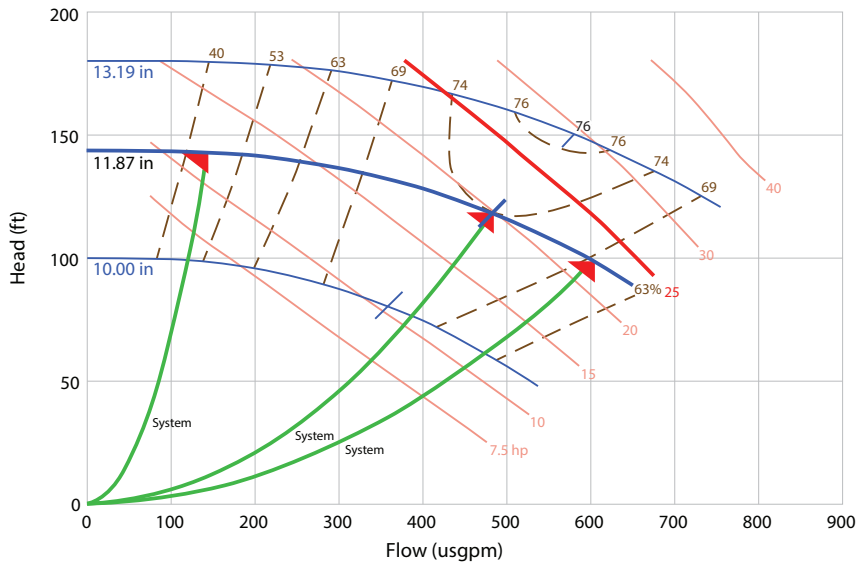
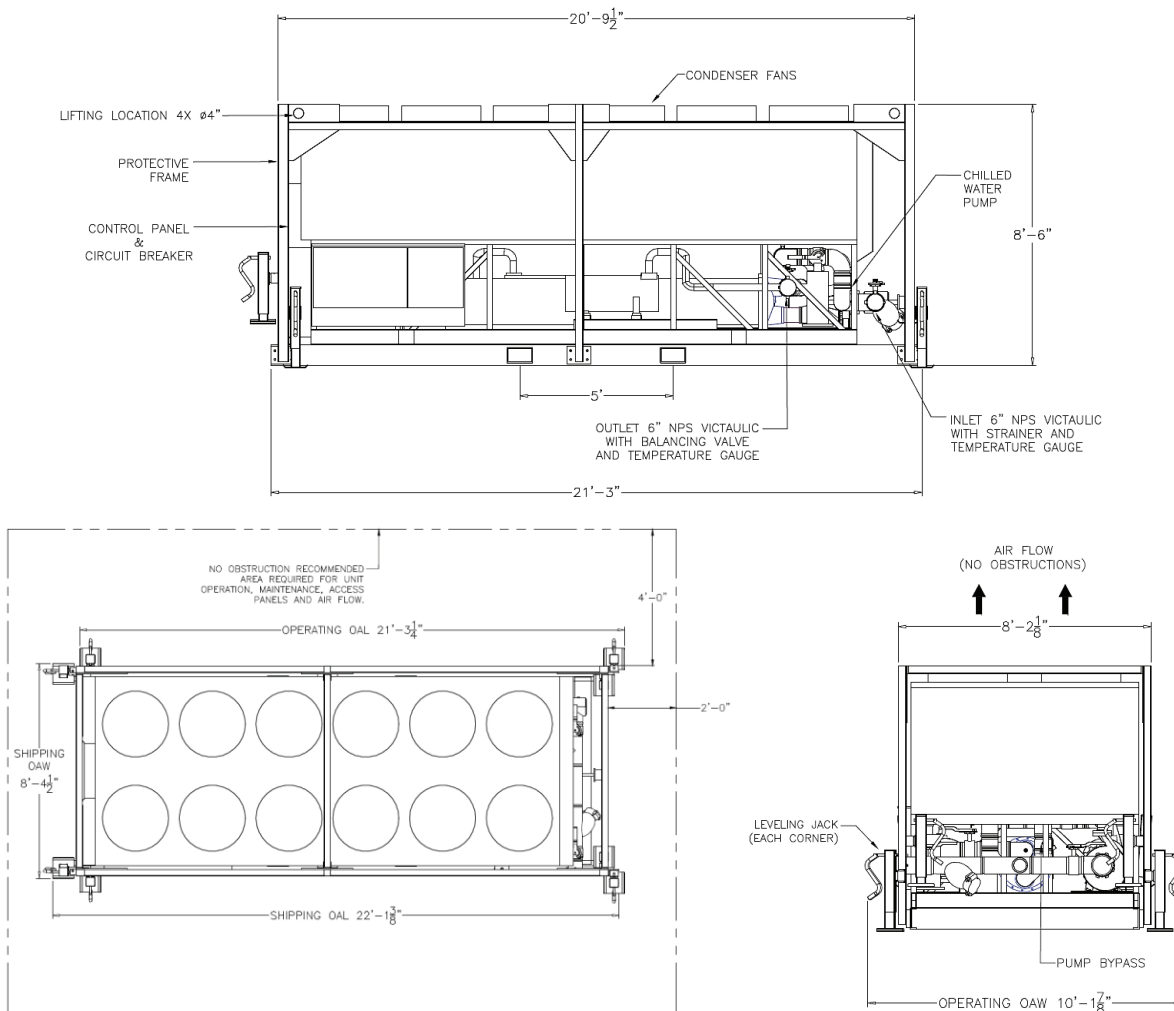


Figure 71. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

CSCA0200F3

Table 147. Dimensions and weights

Labels	Value
Length	22 ft. 6 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	20,750
Operating Weight (lbs)	22,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 72. CSCA0200F3 pump curve

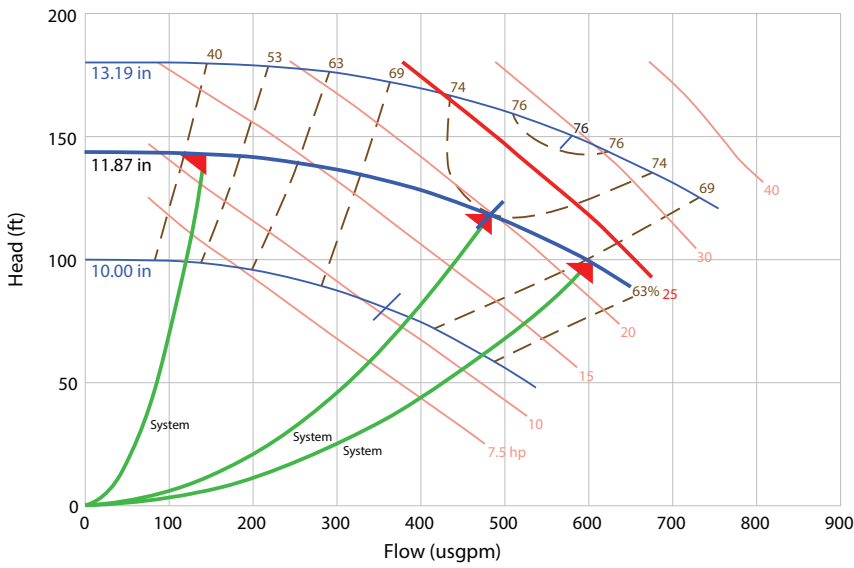
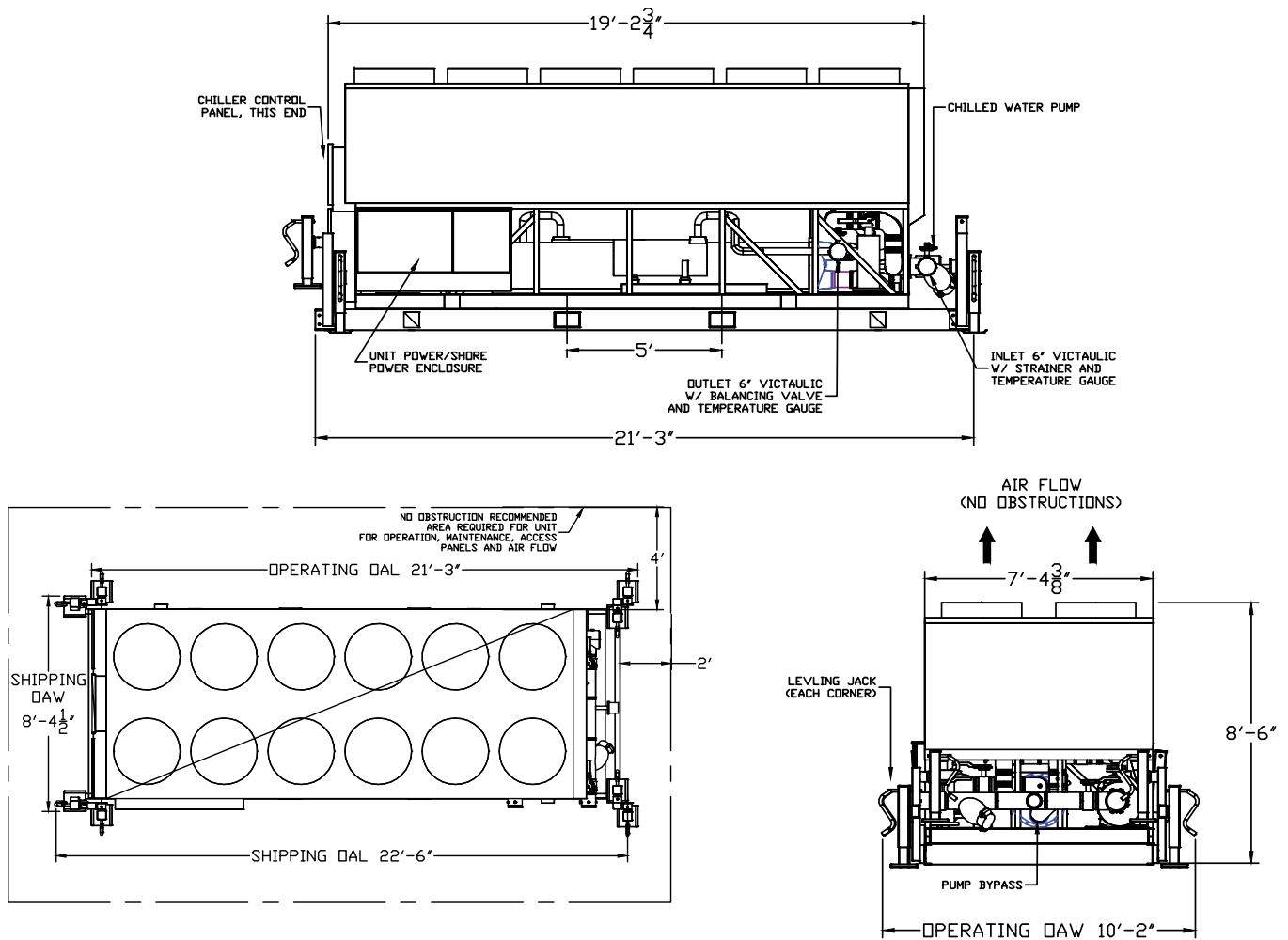


Figure 73. Unit drawings



250 Ton Air-Cooled RTAC

Table 148. General – CSCA0250F0-F3

Labels	Value
Model Number	RTAC250
Nominal Tons	250
Refrigerant	R-134a
Refrigerant Charge ^(a)	235-235 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.



80 to 550 Ton Air Cooled Screw Chillers

Table 149. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections	Series 16 Cam-Type Connections Only
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	495 A
Maximum Overcurrent Protection (MOP)	600 A
Full Load Amps (FLA)	442 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	548 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	495 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Maximum wire size lug(s) can accept - 600 MCM.

^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 150. Pump data – CSCA0250F0

Labels	Value
Horsepower	40 HP
Min Flow	259 gpm @ 116.9 ft.
Max Flow	1253.6 gpm @ 82.7 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 151. Pump data – CSCA0250F2-F3

Labels	Value
Horsepower	30 HP
Min Flow	210 gpm @ 123 ft.
Max Flow	874 gpm @ 84 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 152. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	336.0	312.7	279.0	244.2	180.5
55	0	310.9	289.9	265.8	231.2	175.4
50	0	286.5	267.5	245.8	218.9	172.1
45	0	263.0	245.6	226.0	204.8	168.4
40	0	240.5	224.5	206.7	187.1	164.3

Table 152. Cooling capacity (tons) (continued)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
35	10 ^(a)	218.3	203.7	187.6	169.5	150.5
30	20 ^(a)	196.4	183.2	168.6	152.1	134.6
25	25 ^(a)	174.1	162.4	149.4	134.4	118.5
20	30 ^(b)	158.9	148.0	135.7	121.5	106.5

Note: Contact Trane Rental Services for low temperature applications.

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 153. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
217 (min flow)	3.65
300	6.78
350	9.02
400	11.50
450	14.30
500	17.30
550	20.50
600	24.00
650	27.80
700	31.80
750	36.10
796 (max flow)	40.40

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0250F0

Table 154. Dimensions and weights

Labels	Value
Length	27 ft. 1 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,700
Operating Weight (lbs)	19,300
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

80 to 550 Ton Air Cooled Screw Chillers

Figure 74. CSA0250F0 pump curve

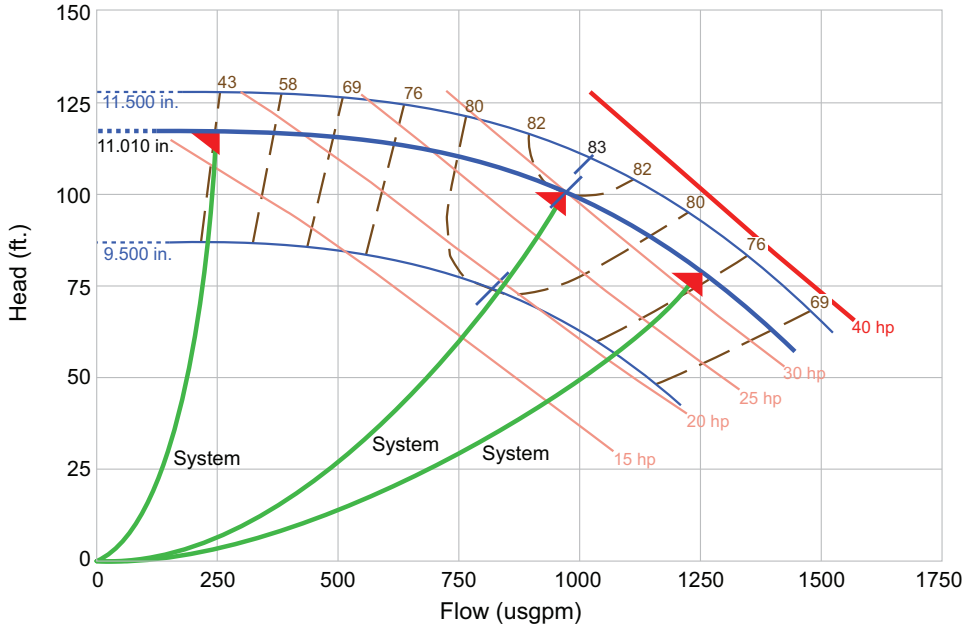
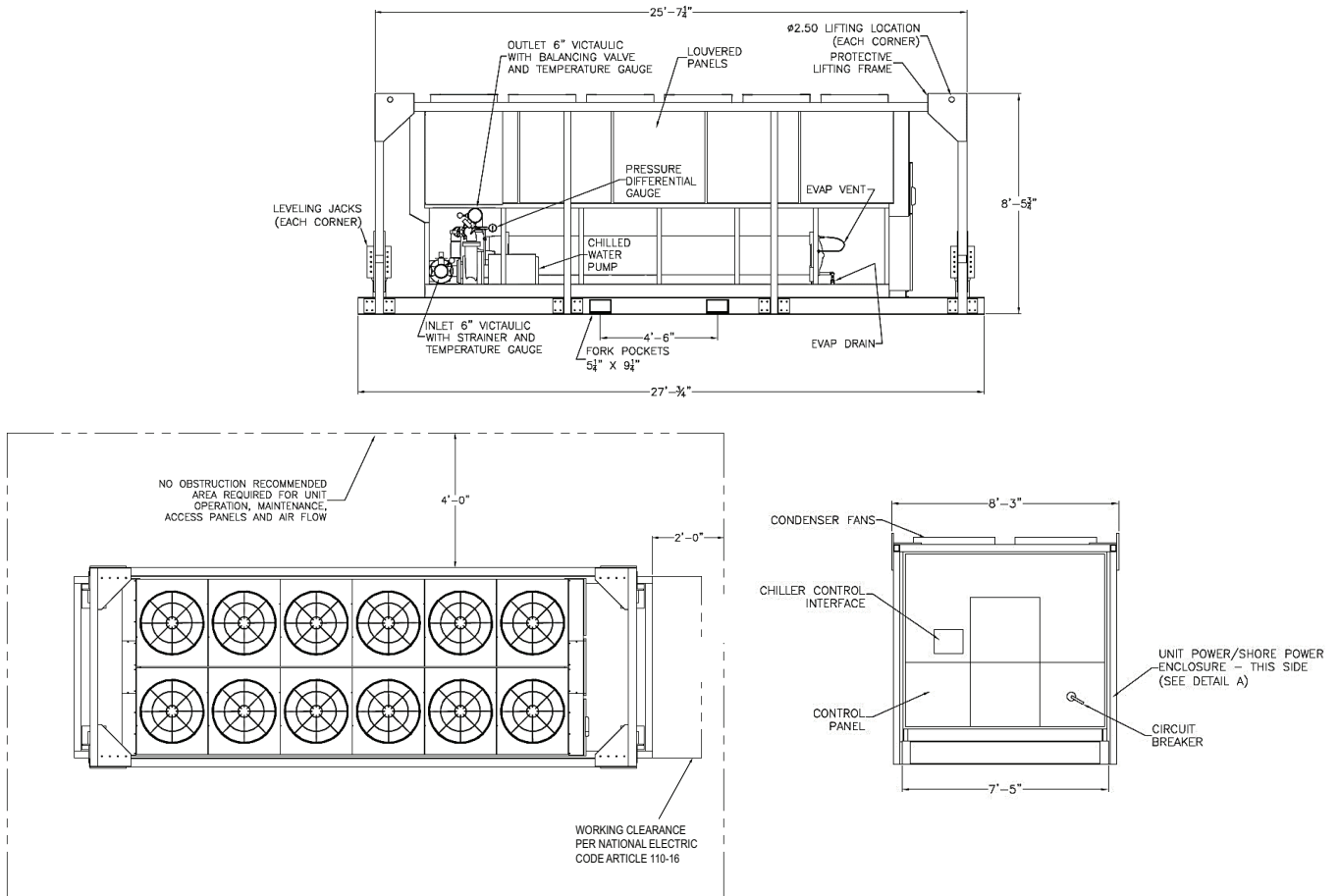


Figure 75. Unit drawings



CSCA0250F2

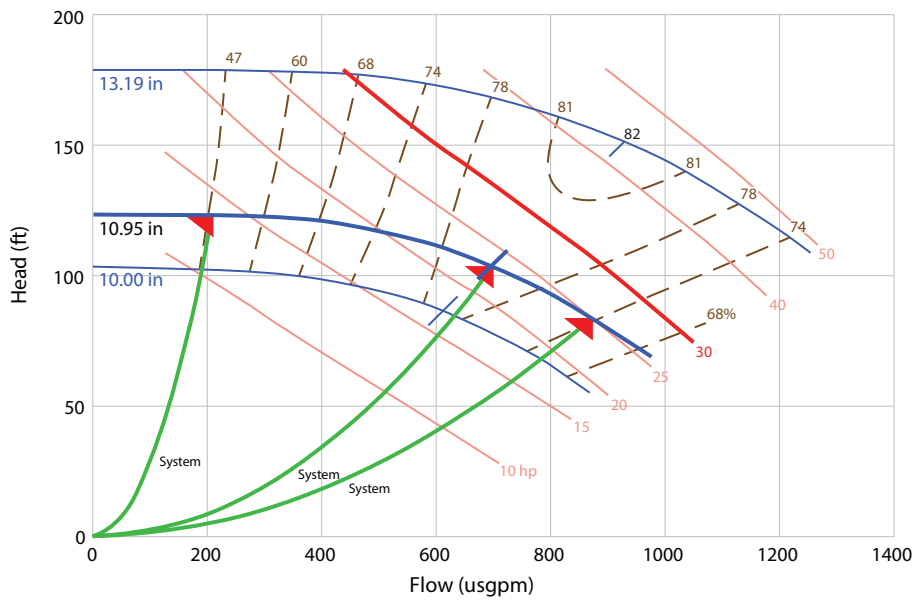
Table 155. Dimensions and weights

Labels	Value
Length	25 ft. 3.25 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	24,000
Operating Weight (lbs)	24,600
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

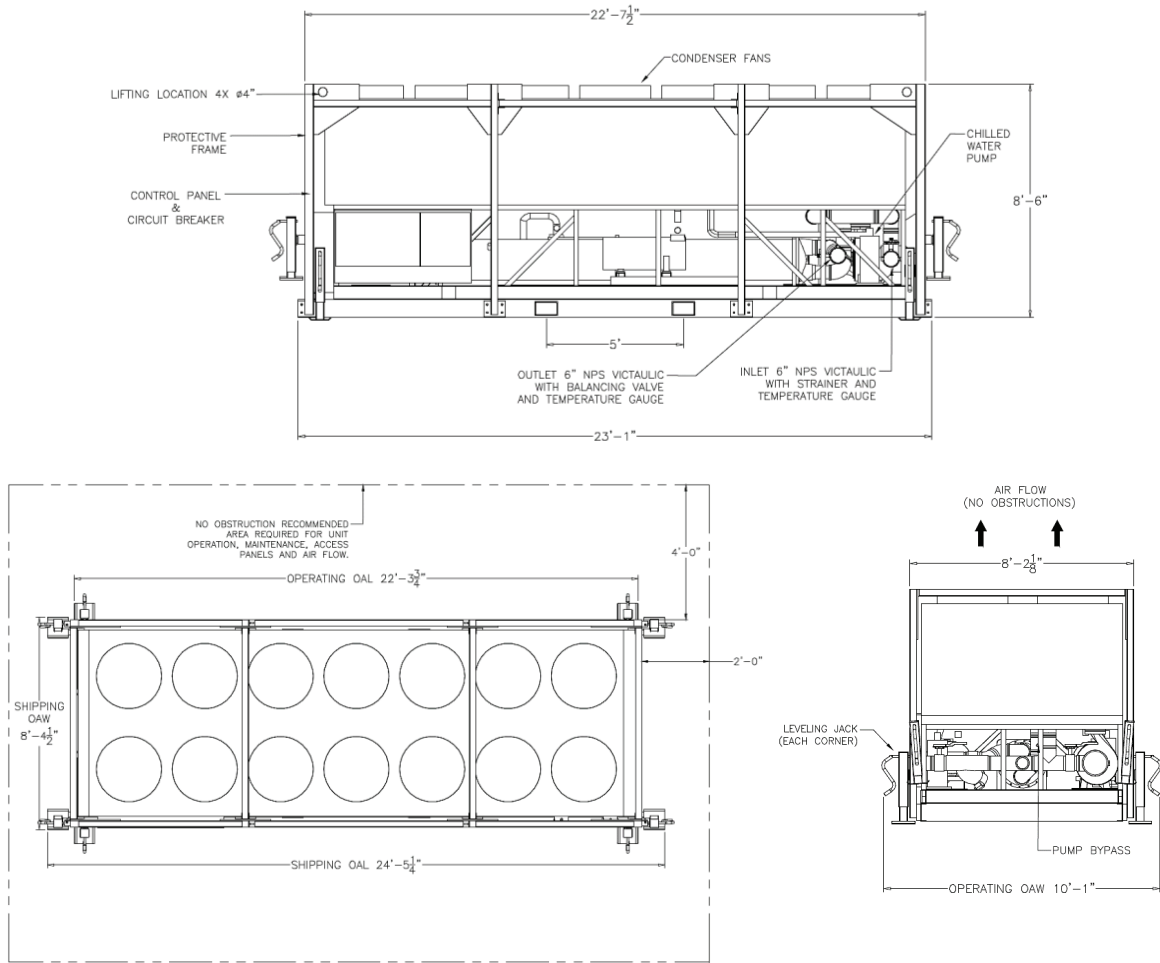
1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 76. CSCA0250F2 pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 77. Unit drawings



CSCA0250F3

Table 156. Dimensions and weights

Labels	Value
Length	25 ft. 3.25 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	23,000
Operating Weight (lbs)	23,600
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 78. CSCA0250F3 pump curve

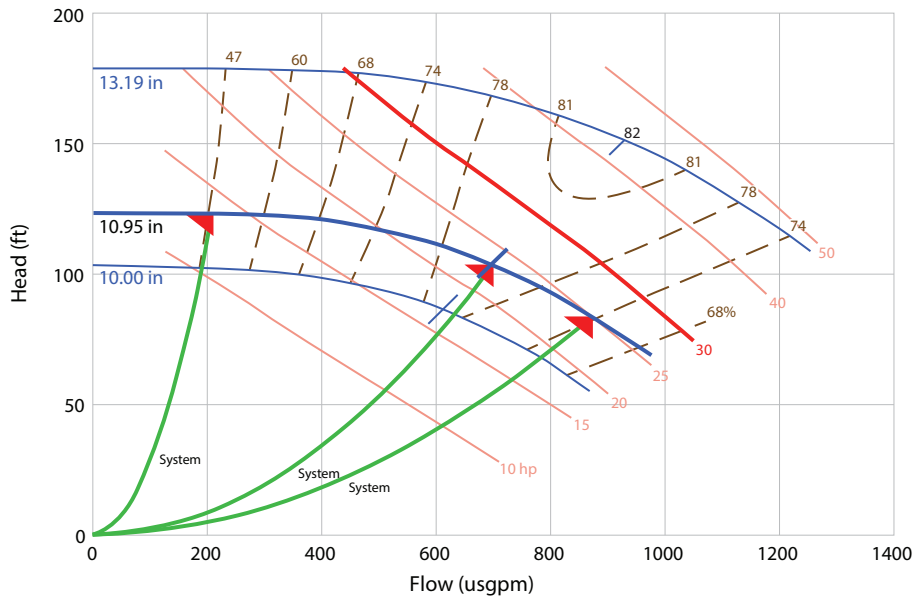
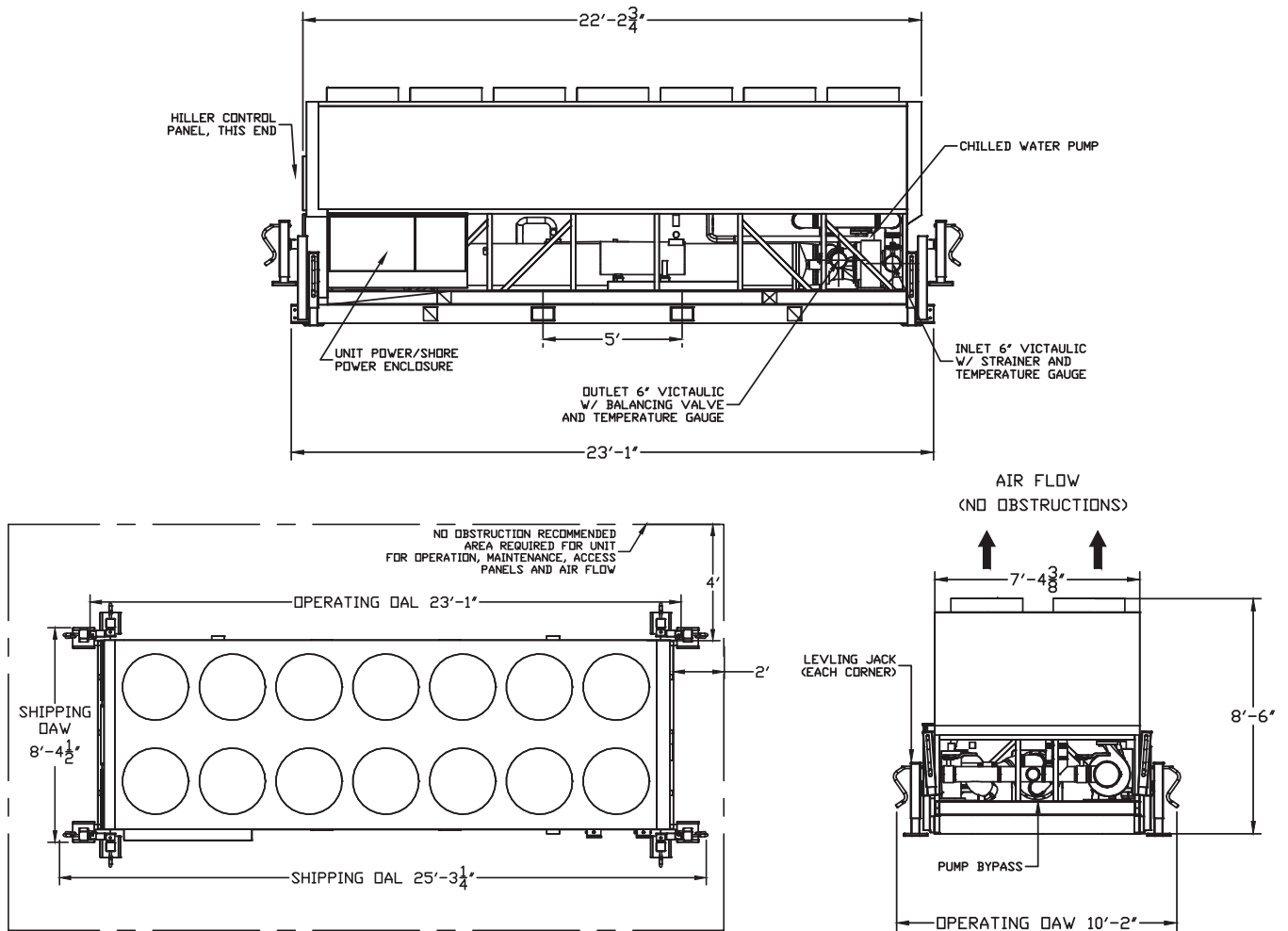


Figure 79. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

300 Ton Air-Cooled RTAA

Table 157. General – CSCA0300F0

Labels	Value
Model Number	RTAA300
Nominal Tons	300
Refrigerant	R-22
Refrigerant Charge ^(a)	540 lbs
Water Connection Size	6-in.
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 158. Electrical data – single point

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	600 MCM
Minimum Circuit Ampacity (MCA)	589 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	548 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 159. Electrical data – dual point

Labels	Value
Minimum Circuit Ampacity (MCA)	406/224 A
Maximum Overcurrent Protection (MOP)	500/350 A
Full Load Amps (FLA)	365/183 A

Note: For additional electrical information, contact Trane Rental Services.

Table 160. Cooling capacity (tons)

Leaving Water Temp (°F)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton		
	Ambient Air Temp		
	85°F	95°F	105°F
44	299.8	284.9	269.8

Note: Contact Trane Rental Services for low temperature applications.

Table 161. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	360 gpm	681.7 gpm	1080 gpm
Pressure Drop	6.3 ft.	18.2 ft.	50.1 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

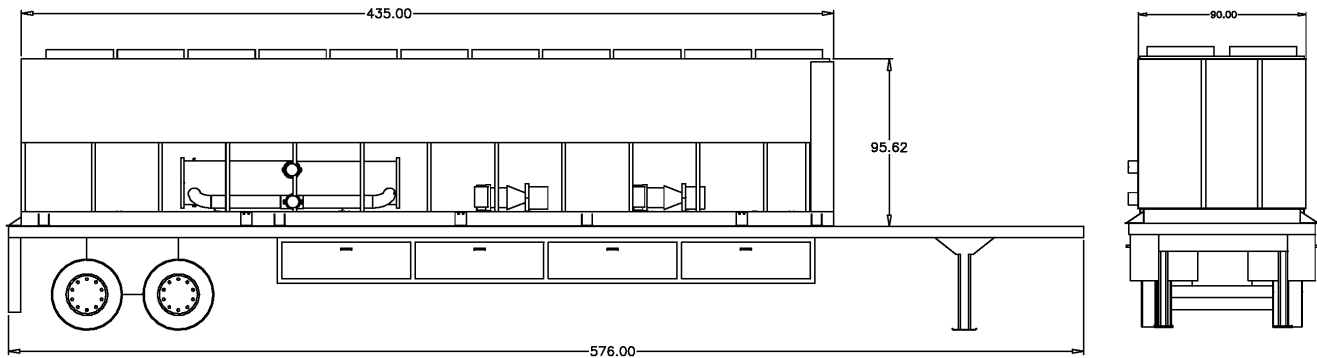
CSCA0300F0

Table 162. Dimensions and weights

	Chiller	Trailer	Overall (Chiller and Trailer)
Length	36 ft. 5 in.	48 ft. 0 in.	48 ft. 0 in.
Width	7 ft. 9 in.	8 ft. 6 in.	8 ft. 6 in.
Height	8 ft. 0 in.	4 ft. 7 in.	12 ft. 7 in.
Shipping Weight (lbs) ^(a)	19,740	14,760	34,500
Operating Weight (lbs)	20,865	—	—

Note: Chiller is permanently mounted to trailer.

^(a) Refer to trailer and overall dimensions.

Figure 80. Unit drawings


300 Ton Air-Cooled RTAC

Table 163. General – CSCA0300F0

Labels	Value
Model Number	RTAC300
Nominal Tons	300
Refrigerant	R-134a
Refrigerant Charge ^(a)	415/200 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^(b) ^(c)	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 164. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz



80 to 550 Ton Air Cooled Screw Chillers

Table 164. Electrical data (continued)

Labels	Value
Maximum Wire Size Lug(s) Can Accept ^(a)	600 MCM
Single Point - With Integral Pump	
Minimum Circuit Ampacity (MCA)	678 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	635 A
Single Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA)	606 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	563 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	423/288 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/450 A
Full Load Amps (FLA) (circuit 1/circuit 2)	377/246 A
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	423/228 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/350 A
Full Load Amps (FLA) (circuit 1/circuit 2)	377/186 A

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 165. Pump data – CSCA0300F0

Labels	Value
Horsepower	50 HP
Min Flow	280 gpm @ 161 ft.
Max Flow	1167.5 gpm @ 117 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 166. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	419.0	389.9	353.7	308.4	225.4
55	0	388.3	361.7	332.2	292.0	221.9
50	0	358.4	334.0	306.5	277.0	217.4
45	0	329.3	307.0	281.5	254.4	212.2
40	0	301.3	280.7	257.3	232.0	205.4
35	10 ^(a)	273.3	254.5	233.2	209.6	184.9
30	20 ^(a)	244.2	227.3	208.1	186.6	163.8
25	25 ^(a)	214.0	199.3	182.3	162.9	142.3
20	30 ^(b)	196.1	182.3	165.9	147.4	127.7

Table 166. Cooling capacity (tons) (continued)

- (a) Performance based on using propylene glycol solution for antifreeze protection.
 (b) Performance based on using ethylene glycol for antifreeze protection.

Table 167. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
400	5.83
500	8.84
600	12.30
700	16.30
800	20.70
900	25.60
1000	31.00
1100	37.00
1134 (max flow)	39.20

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0300F0

Table 168. Dimensions and weights

Chiller Only	
Labels	Value
Length	36 ft.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	23,400
Operating Weight (lbs)	25,400
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: forklift or crane.
2. All weights and dimensions listed above are subject to change without notice or liability.



80 to 550 Ton Air Cooled Screw Chillers

Figure 81. CSCA0300F0 pump curve

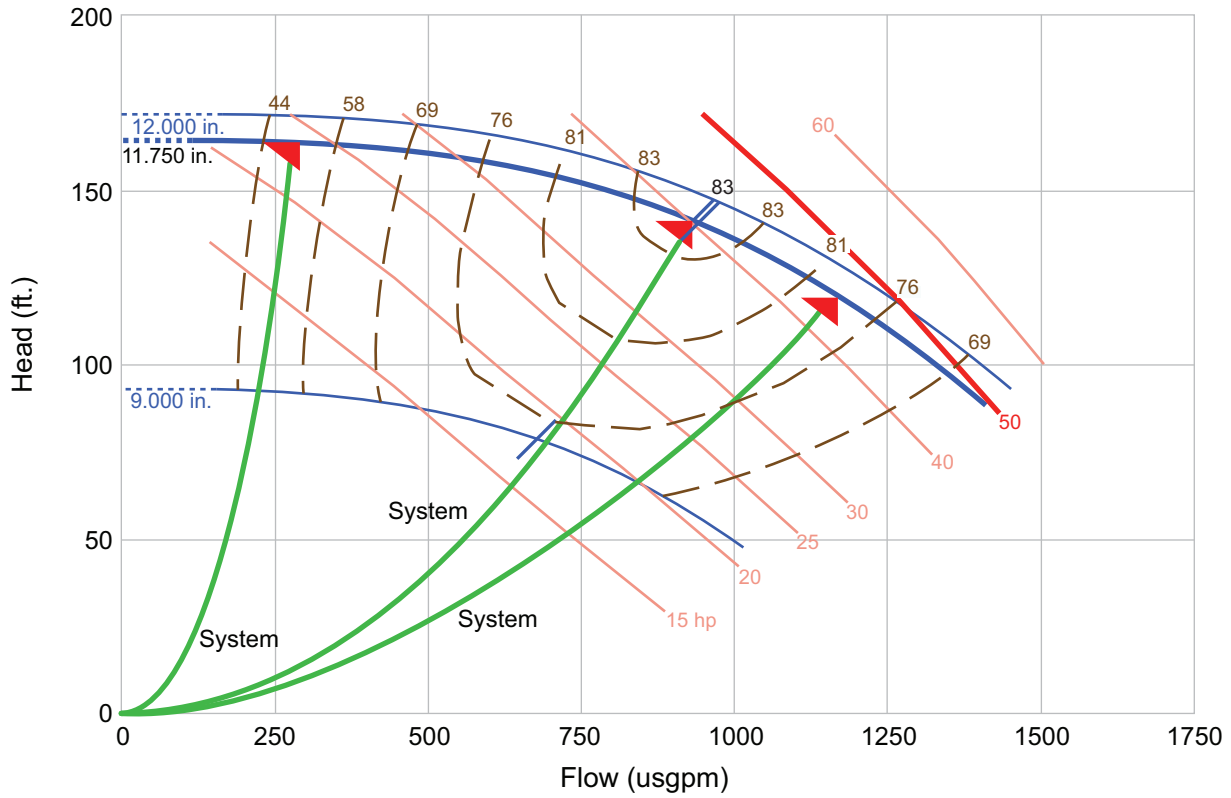


Figure 82. Unit drawings

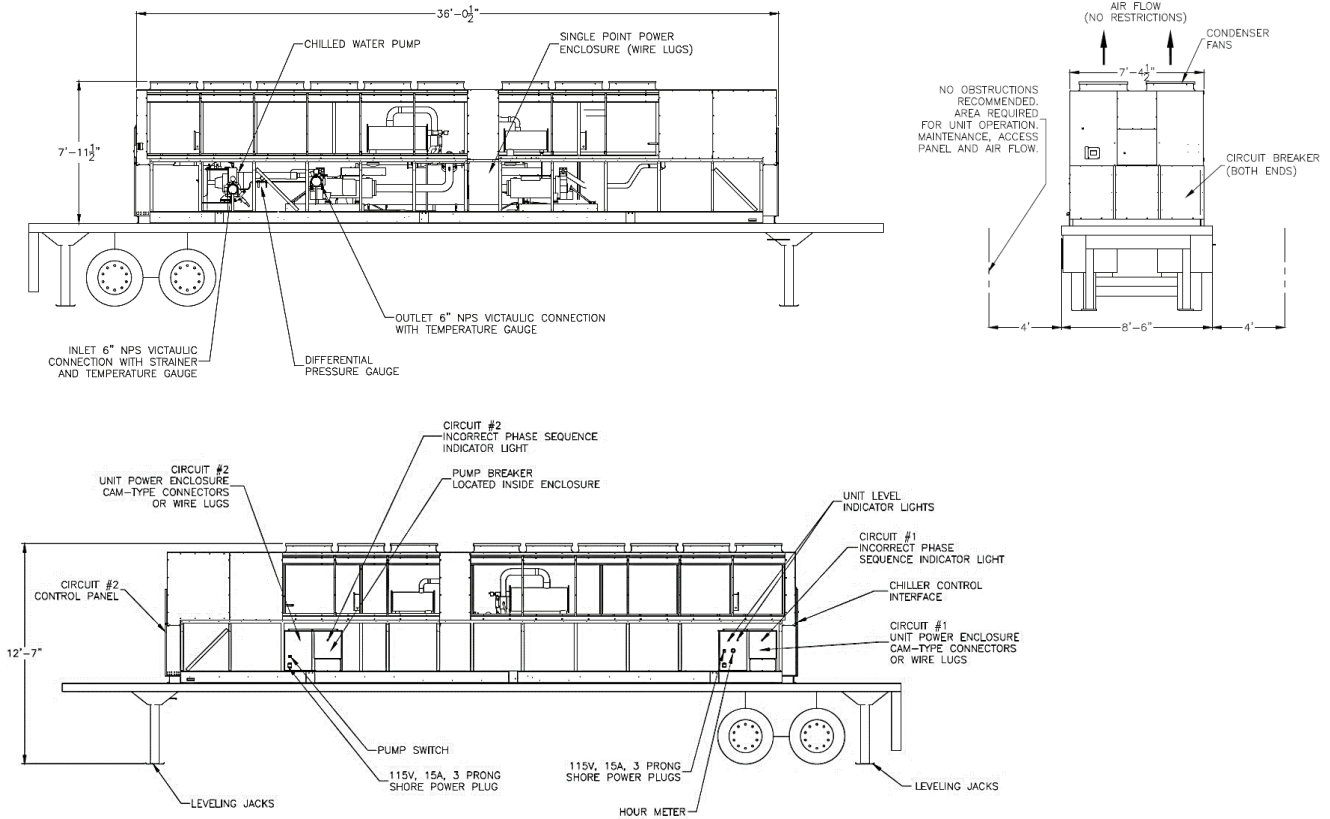


Table 169. General – CSCA0300F2-F3

Labels	Value
Model Number	RTAC300
Nominal Tons	300
Refrigerant	R-134a
Refrigerant Charge ^(a)	415/200 lbs
Water Connection Size	6-in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 170. Electrical data - dual point only

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz



80 to 550 Ton Air Cooled Screw Chillers

Table 170. Electrical data - dual point only (continued)

Labels	Value
Power Supply Connections ^(a)	Series 16 Cam-Type Connections Only
With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	482/231 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/350 A
Full Load Amps (FLA) (circuit 1/circuit 2)	434/185 A
Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	417/231 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/350 A
Full Load Amps (FLA) (circuit 1/circuit 2)	369/185 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 171. Pump data – CSCA0300F2-F3

Labels	Value
Horsepower	50 HP
Min Flow	357 gpm @ 142 ft.
Max Flow	1488 gpm @ 84 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 172. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	419.0	389.9	353.7	308.4	225.4
55	0	388.3	361.7	332.2	292.0	221.9
50	0	358.4	334.0	306.5	277.0	217.4
45	0	329.3	307.0	281.5	254.4	212.2
40	0	301.3	280.7	257.3	232.0	205.4
35	10 ^(a)	273.3	254.5	233.2	209.6	184.9
30	20 ^(a)	244.2	227.3	208.1	186.6	163.8
25	25 ^(a)	214.0	199.3	182.3	162.9	142.3
20	30 ^(b)	196.1	182.3	165.9	147.4	127.7

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 173. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
309 (min flow)	3.55
400	5.83
500	8.84

Table 173. Water flow rates and pressure drops (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
600	12.30
700	16.30
800	20.70
900	25.60
1000	31.00
1100	37.00
1134 (max flow)	39.20

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0300F2-F3

Table 174. Dimensions and weights

Chiller Only	
Labels	Value
Length	36 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	28,000
Operating Weight (lbs)	30,049
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: forklift or crane.
2. All weights and dimensions listed above are subject to change without notice or liability.

80 to 550 Ton Air Cooled Screw Chillers

Figure 83. CSA0300F2-F3 pump curve

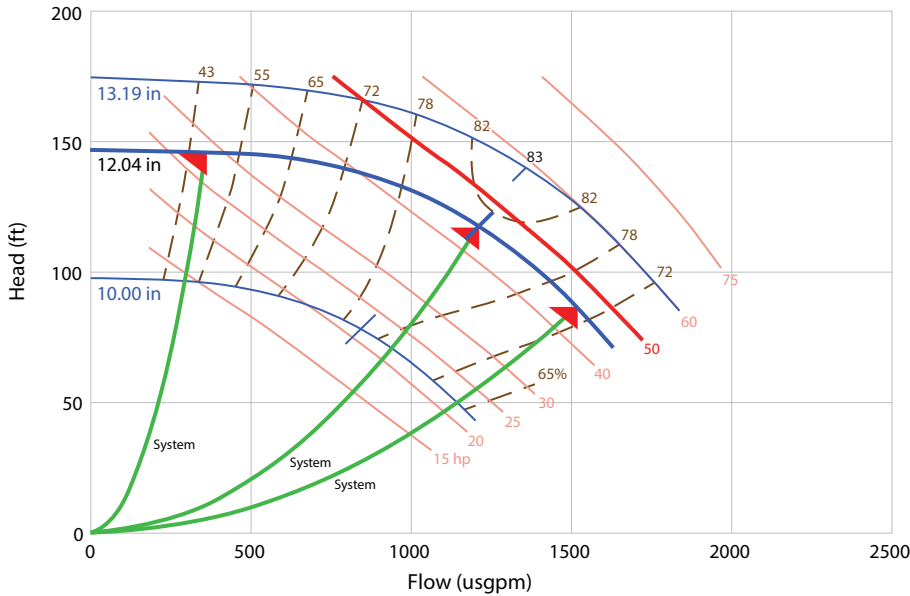
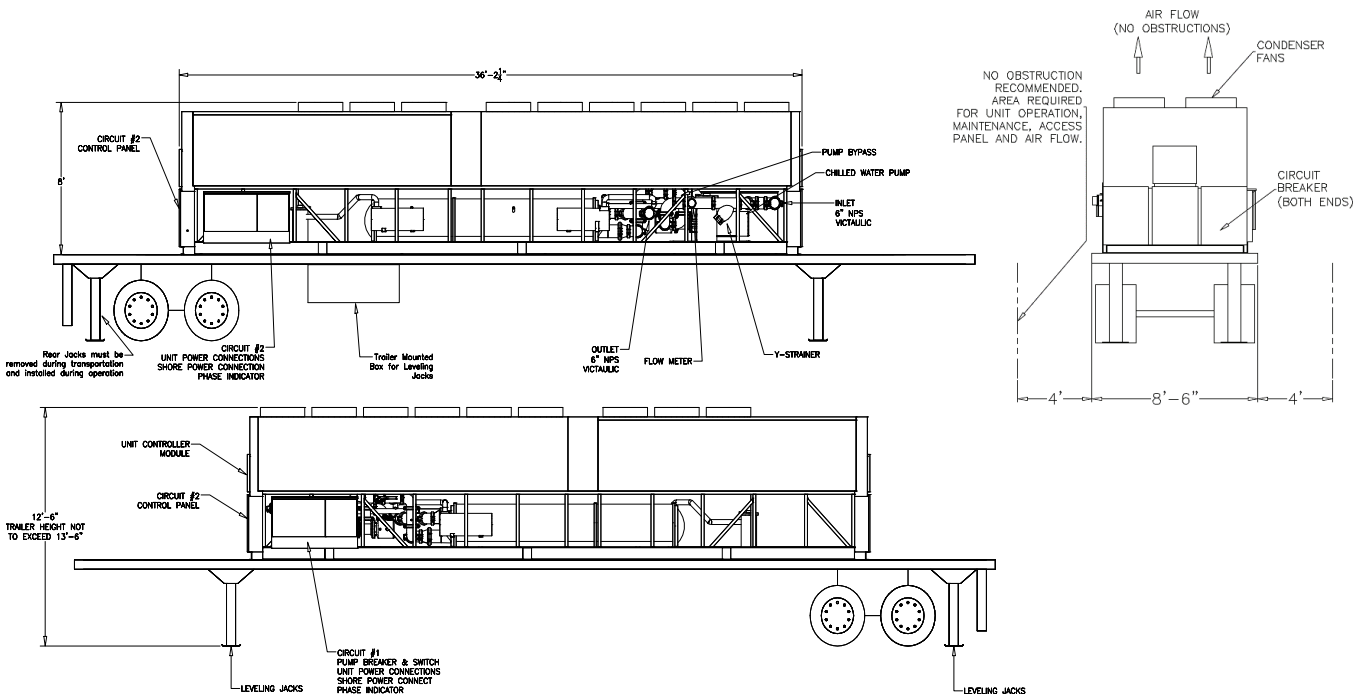


Figure 84. Unit drawings



300 Ton Air-Cooled ACRC

Table 175. General – RSCA0300F0

Labels	Value
Model Number	ACRC300
Nominal Tons	300
Refrigerant	R-513A

Table 175. General – RSCA0300F0 (continued)

Labels	Value
Refrigerant Charge ^(a)	263/263 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all temperature and ice-making applications.

Table 176. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA Symmetrical at 460V Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	543.6 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	489.8 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	609 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	547.8 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 177. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	275 gpm @ 178 ft.H ₂ O
Max Flow	1,276 gpm @ 113 ft.H ₂ O

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 178. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
354 (min flow)	3.04
450	5.06
550	7.6
650	10.6



80 to 550 Ton Air Cooled Screw Chillers

Table 178. Water flow rates and pressure drops (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
700	12.2
750	14.0
800	15.9
850	17.9
950	22.2
1050	27.0
1150	32.2
1299 (max flow)	40.8

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 179. Dimensions and weights

Chiller Only	
Labels	Value
Length	37 ft. 1 in.
Width	7 ft. 4 in.
Height	8 ft. 2.5 in.
Shipping Weight (lbs)	26,500
Operating Weight (lbs)	28,168
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: forklift or crane.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 180. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 181. Cooling capacity (tons)

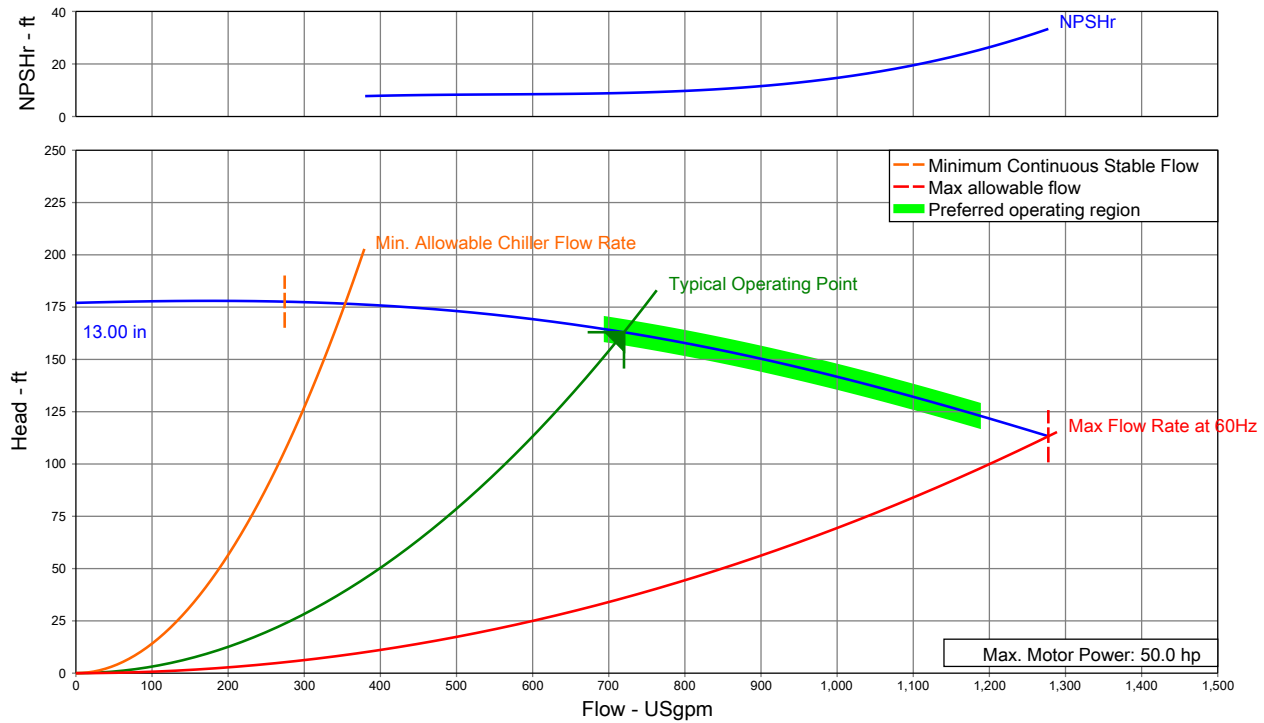
Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton ^(a)			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	422.3	424.4	422.8	424.2
55	0	391.9	395.2	390	360.1

Table 181. Cooling capacity (tons) (continued)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton ^(a)			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
45	0	340.9	343.6	318.8	294.3
35	10	293.1 ^(a)	273.9 ^(a)	254.6 ^(a)	235 ^(a)
25	25	211.1 ^(a)	198.1 ^(a)	184.4 ^(a)	171.8 ^(a)

^(a) Low temperature selections shown at elevated flow rate of 2.7 GPM/Nominal Ton.

Figure 85. RSCA0300F0 - single speed pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 86. RSCA0300F0 - multi-speed pump curve

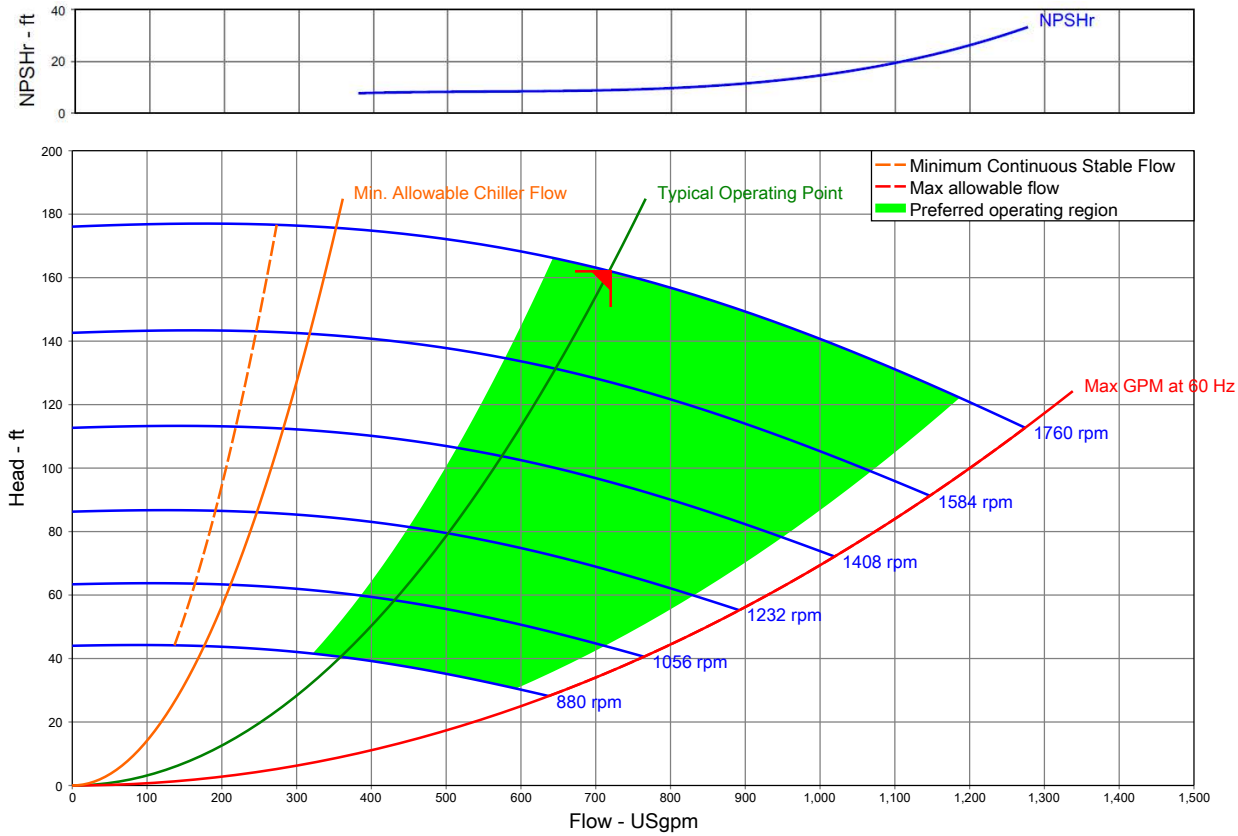
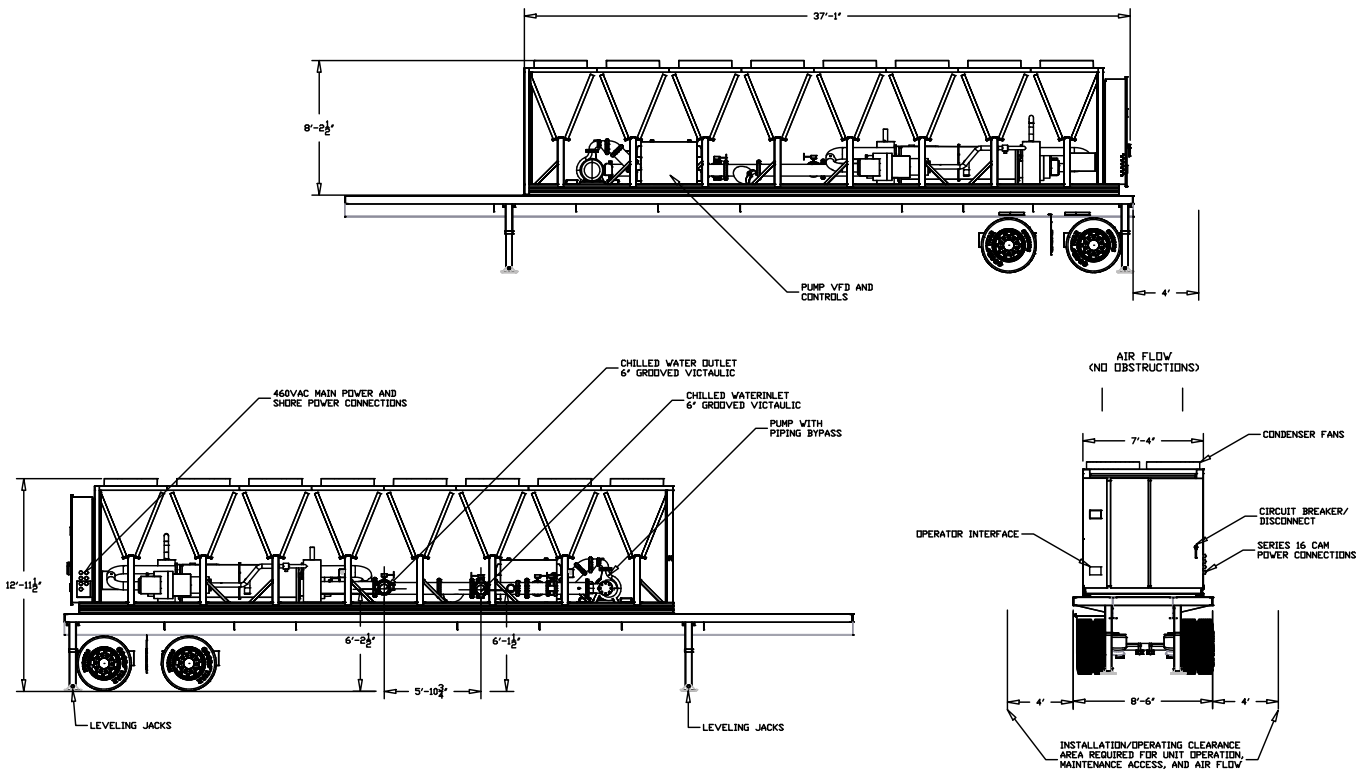


Figure 87. Unit drawings



300 Ton Air-Cooled RTAG

Table 182. General – RSCA0300F0

Labels	Value
Model Number	RTAG 300
Nominal Tons	300
Refrigerant	R-513A
Refrigerant Charge ^(a)	335/159 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 71°F
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all temperature and ice-making applications.

Table 183. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA at 460Vac Symmetrical Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	421/230 A
Maximum Overcurrent Protection (MOP)	500/400 A
Full Load Amps (FLA)	379/191 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	472/230 A
Maximum Overcurrent Protection (MOP)	600/400 A
Full Load Amps (FLA)	379.1/191 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 184. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	187 gpm @ 160 ft.H ₂ O
Max Flow	1,742 gpm @ 79 ft.H ₂ O

Table 185. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
495 (min flow)	5.9
600	8.6
650	10.1
700	11.7
750	13.4
800	15.2



80 to 550 Ton Air Cooled Screw Chillers

Table 185. Water flow rates and pressure drops (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
850	17.1
900	19.1
1,000	23.4
1,100	28.2
1,200 (max flow)	33.4

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 186. Dimensions and weights

Chiller Only	
Labels	Value
Length	35 ft. 4 in.
Width	7 ft. 5 in.
Height	8 ft. 2 in.
Shipping Weight (lbs)	23,735
Operating Weight (lbs)	25,035
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: forklift or crane.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 187. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 188. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	514.4	484.9	454.4	422.9
55	0	442.1	416.6	390.4	362.7
45	0	374.1	352.3	329.6	306.0
35	20	303.7	286.1	267.5	248.2
25	25	238.5	224.7	210.1	194.7
20	30	200.3	188.9	176.8	164.1

Figure 88. RSCA0300F0 - single speed pump curve

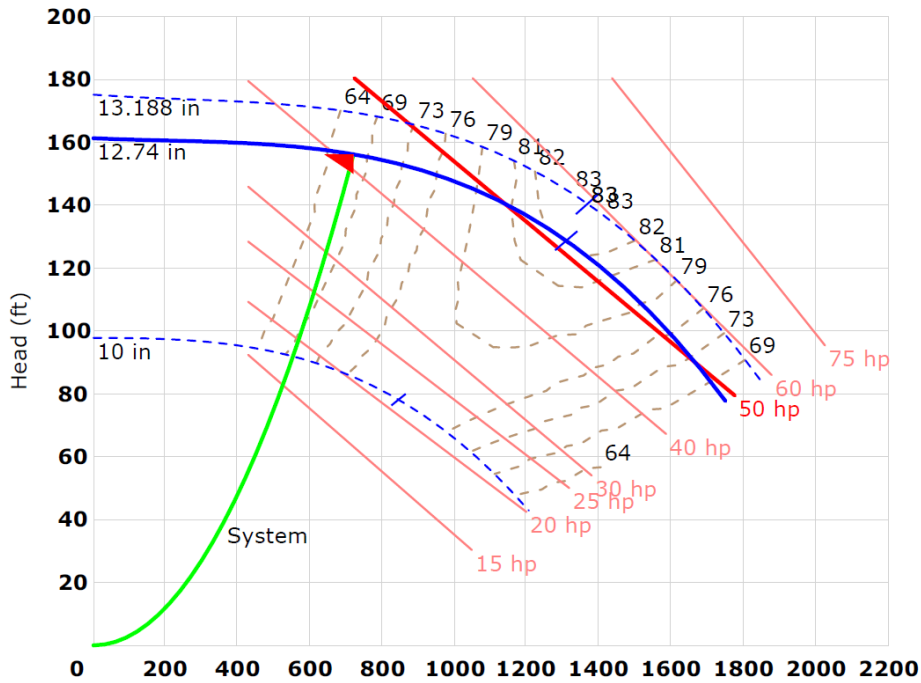
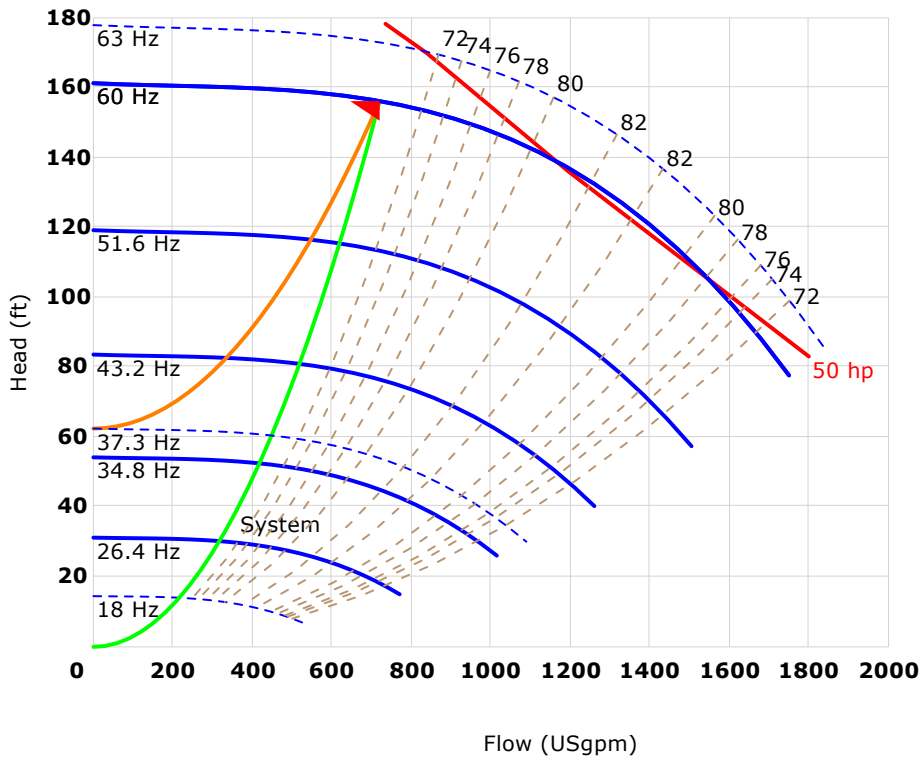


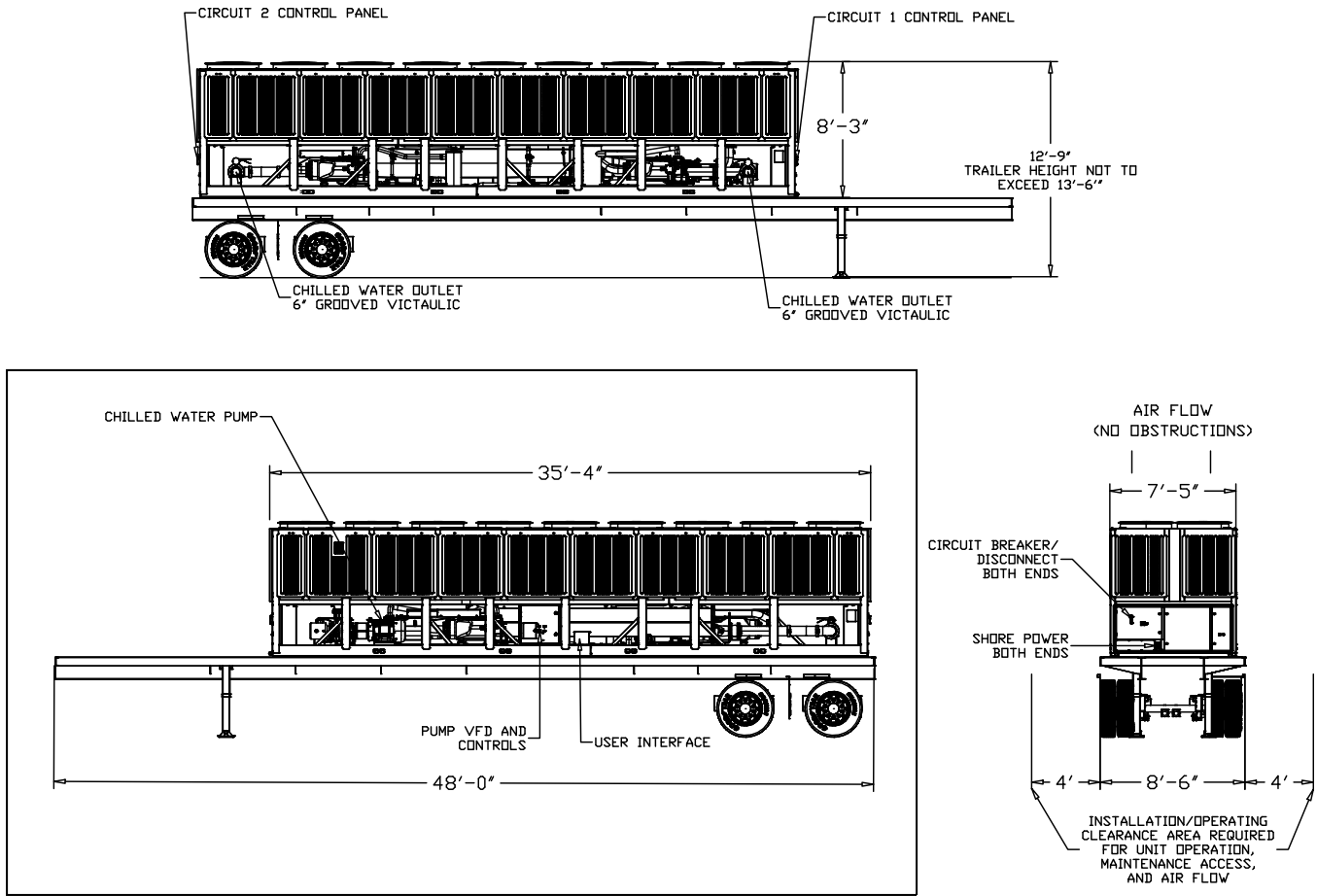
Figure 89. RSCA0300F0 - multi-speed pump curve





80 to 550 Ton Air Cooled Screw Chillers

Figure 90. Unit drawings



400 Ton Air-Cooled RTAA

Table 189. General – CSCA0400F0

Labels	Value
Model Number	RTAA400
Nominal Tons	400
Refrigerant	R-22
Refrigerant Charge	415/415 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^(a)	10°F to 65°F
Number of Electrical Circuits ^(b)	2
Number of Refrigerant Circuits	2

Note: Selection is required for actual chiller performance.

^(a) Setpoints only to be used as a guide.

^(b) Several of the RTAA400s are permanently set-up for single point electrical connections or dual point electrical connections only. Contact Trane Rental Services with any questions regarding chiller to be supplied.

Table 190. Electrical data – Single point

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	350 MCM
Single Point - With Integral Pump	
Minimum Circuit Ampacity (MCA)	830 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	790 A
Single Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA)	774 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	734 A
Dual Point	
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept ^(a)	600 MCM
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	468/406 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	424/366 A
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	406/406 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	366/366 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 191. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	280 gpm @ 161 ft.
Max Flow	1167.5 gpm @ 117 ft.

Note: Pump is mounted within the chiller.

Table 192. Cooling capacity (tons)

Leaving Chilled Water Temperature (°F)	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44	402.2	382.3	362.1

Note: Contact Trane Rental Services for low temperature applications.



80 to 550 Ton Air Cooled Screw Chillers

Table 193. Water flow rates

	Minimum	Standard	Maximum
Evaporator Flow	480 gpm	914.8 gpm	1440 gpm
Pressure Drop	7.4 ft.	21.9 ft.	59.6 ft.

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

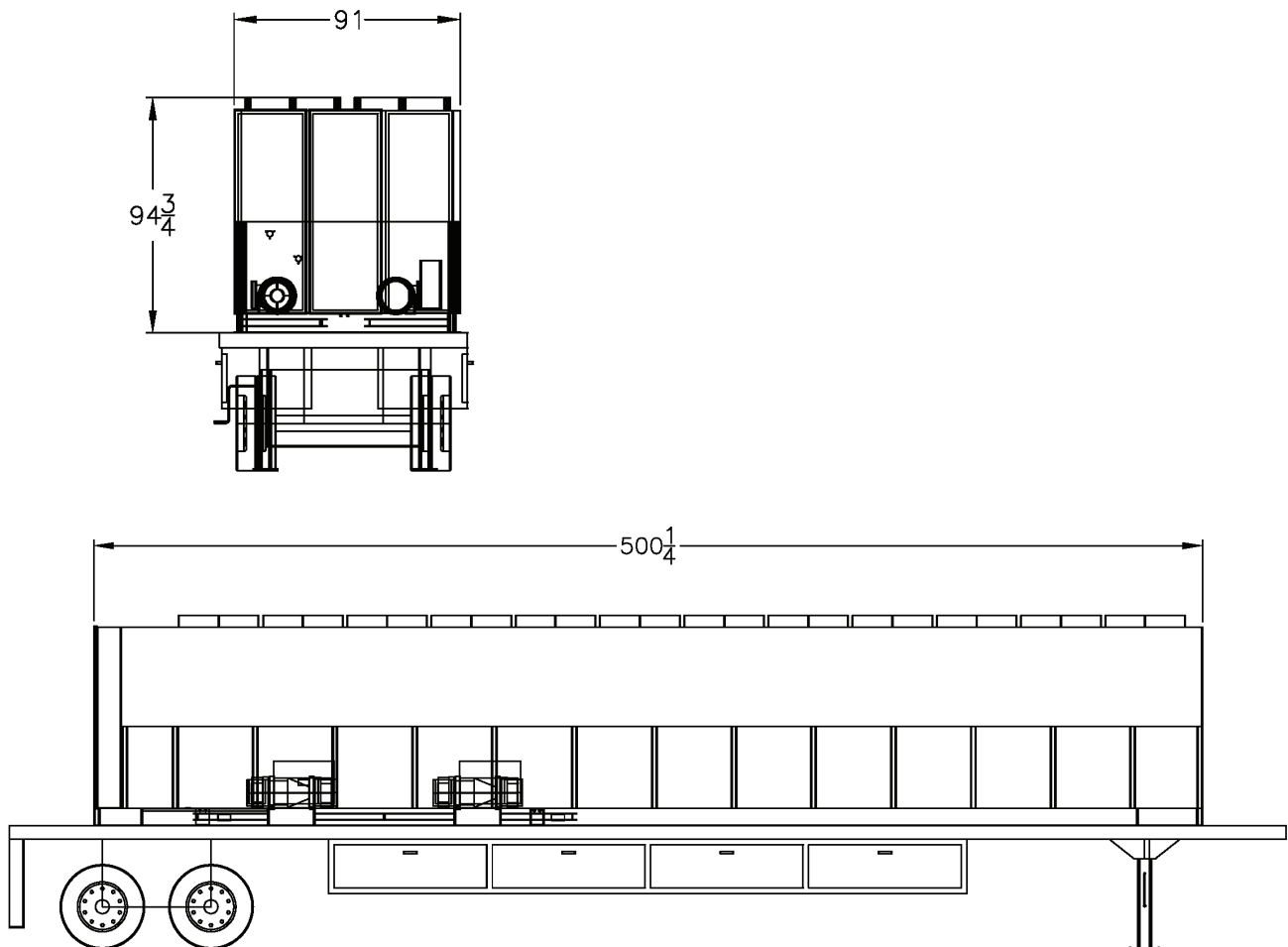
CSCA0400F0

Table 194. Dimensions and weights

	Chiller	Trailer	Overall (Chiller and Trailer)
Length	45 ft. 5 in.	48 ft. 0 in.	48 ft. 0 in.
Width	7 ft. 11 in.	8 ft. 6 in.	8 ft. 6 in.
Height	8 ft. 0 in.	4 ft. 7 in.	12 ft. 7 in.
Shipping Weight (lbs)	25,200	14,760	39,960
Operating Weight (lbs)	26,100	—	—

Note: Chiller is permanently mounted to trailer.

Figure 91. Unit drawings



400 Ton Air-Cooled RTAC

Table 195. General – CSCA0400F0

Labels	Value
Model Number	RTAC400
Nominal Tons	400
Refrigerant	R-134a
Refrigerant Charge ^(a)	415/415 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^(b) ^(c)	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) When leaving solution is below 40°F a glycol solution is required for all low temperature and ice-making applications.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 196. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) Can Accept ^(a)	600 MCM
Single Point - With Integral Pump	
Minimum Circuit Ampacity (MCA)	855 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	812 A
Single Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA)	792 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	750 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	417/474 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	375/432 A
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	417/417 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	375/375 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.



80 to 550 Ton Air Cooled Screw Chillers

Table 197. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	280 gpm @ 161 ft.
Max Flow	1167.5 gpm @ 117 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 198. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	563.0	523.9	473.0	412.3	299.2
55	0	522.3	486.3	447.0	390.8	294.4
50	0	482.6	449.7	412.8	371.5	288.4
45	0	444.0	414.0	379.6	343.3	281.5
40	0	406.6	379.0	347.4	313.5	275.6
35	10 ^(a)	369.5	344.2	315.4	283.8	250.6
30	20 ^(a)	331.8	309.1	282.9	253.8	223.1
25	25 ^(a)	292.9	272.8	249.4	223.1	195.2
20	30 ^(b)	267.8	249.0	226.7	201.7	175.1

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 199. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
381 (min flow)	3.66
500	6.18
600	8.68
700	11.50
800	14.70
900	18.10
1000	21.90
1100	26.10
1200	30.60
1300	35.40
1396 (max flow)	40.50

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0400F0

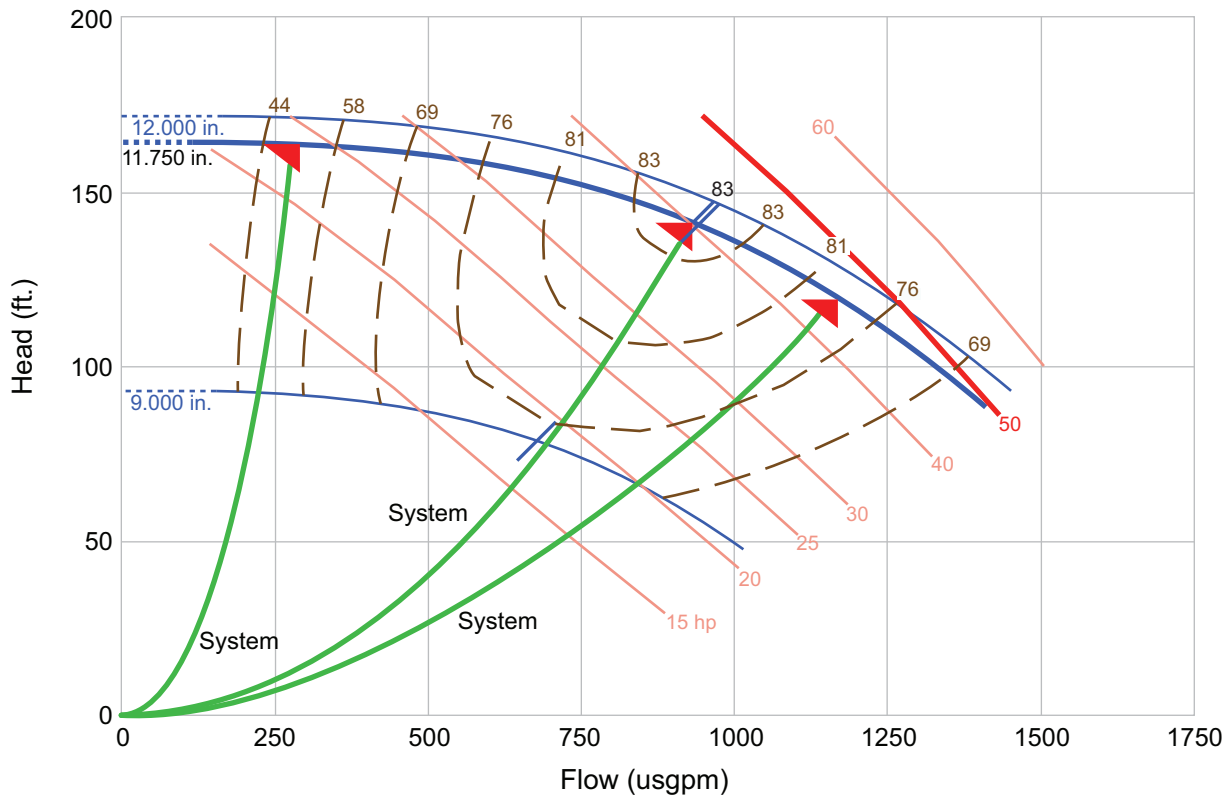
Table 200. Dimensions and weights

Chiller Only	
Labels	Value
Length	39 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	28,700
Operating Weight (lbs)	30,860
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 92. CSCA0400F0 pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 93. Unit drawings

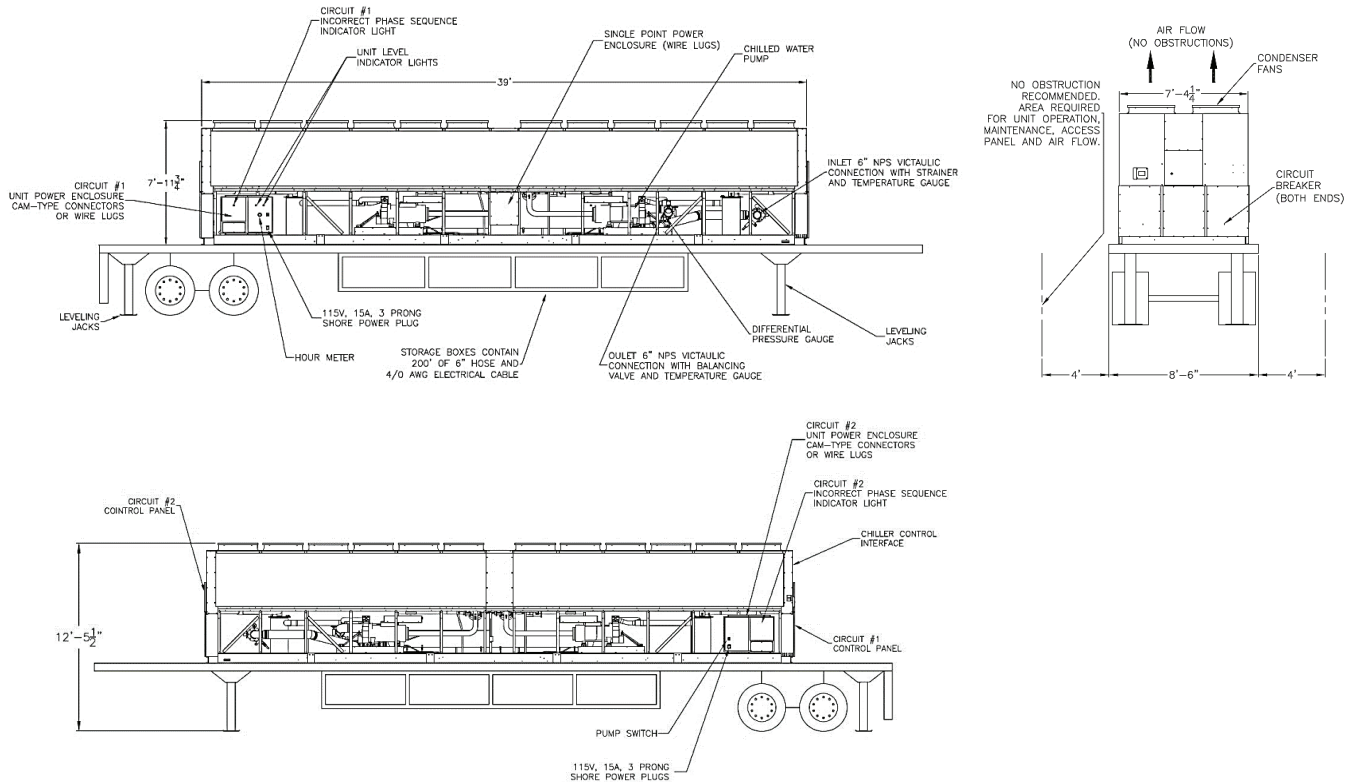


Table 201. General – CSCA0400F2-F3

Labels	Value
Model Number	RTAC400
Nominal Tons	400
Refrigerant	R-134a
Refrigerant Charge ^(a)	415/415 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

(b) When leaving solution is below 42°F a glycol solution is required for all low temperature and ice-making applications.

(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 202. Electrical data – Dual point only

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Power Supply Connections ^(a)	Series 16 Cam-Type Connections Only
With Integral Pump	

Table 202. Electrical data – Dual point only (continued)

Labels	Value
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	482/417 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	434/369 A
Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	417/417 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	369/369 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 203. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	357 gpm @ 142 ft.
Max Flow	1488 gpm @ 84 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 204. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	563.0	523.9	473.0	412.3	299.2
55	0	522.3	486.3	447.0	390.8	294.4
50	0	482.6	449.7	412.8	371.5	288.4
45	0	444.0	414.0	379.6	343.3	281.5
40	0	406.6	379.0	347.4	313.5	275.6
35	10 ^(a)	369.5	344.2	315.4	283.8	250.6
30	20 ^(a)	331.8	309.1	282.9	253.8	223.1
25	25 ^(a)	292.9	272.8	249.4	223.1	195.2
20	30 ^(b)	267.8	249.0	226.7	201.7	175.1

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 205. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
381 (min flow)	3.66
500	6.18
600	8.68
700	11.50
800	14.70



80 to 550 Ton Air Cooled Screw Chillers

Table 205. Water flow rates and pressure drops (continued)

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
900	18.10
1000	21.90
1100	26.10
1200	30.60
1300	35.40
1396 (max flow)	40.50

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0400F2-F3

Table 206. Dimensions and weights

Chiller Only	
Labels	Value
Length	39 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	35,800
Operating Weight (lbs)	37,974
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 94. CSCA0400F2-F3 pump curve

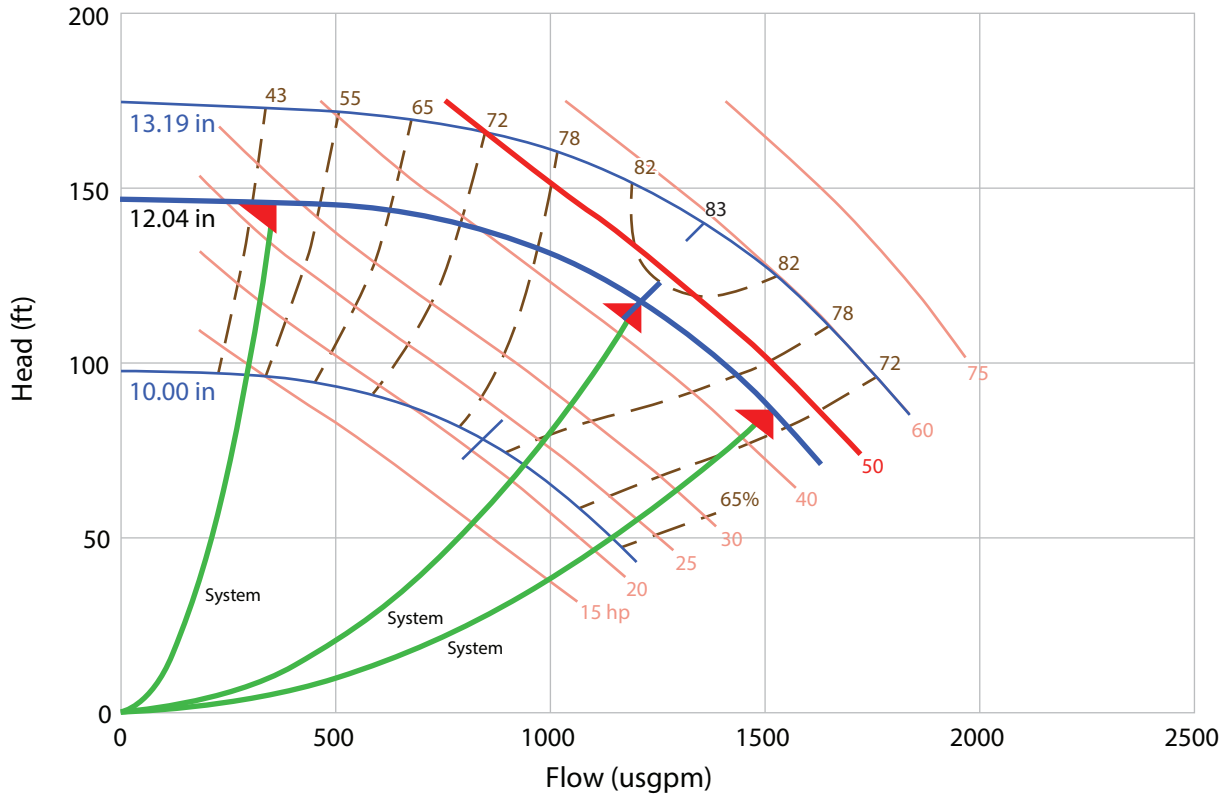
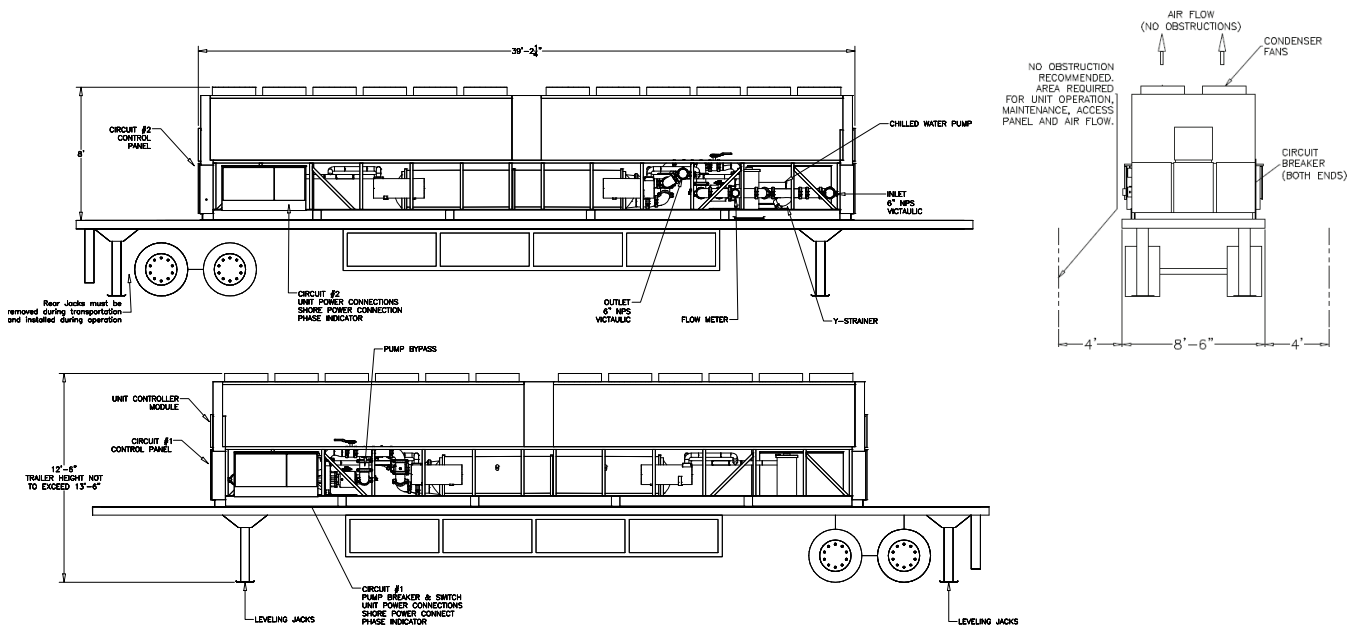


Figure 95. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

440 Ton Air-Cooled RTAG

Table 207. General – RSCA0440F0 RTAG

Labels	Value
Model Number	RTAG 425
Nominal Tons	425
Refrigerant	R-513A
Refrigerant Charge ^(a)	344/333 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 71°F
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all temperature and ice-making applications.

Table 208. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA at 460Vac Symmetrical Max
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	455/453 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	407.1/405 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	509/453 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	700/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	463.4/405 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 209. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	390 gpm @ 175 ft. H ₂ O
Max Flow	1240 gpm @ 103 ft. H ₂ O

Table 210. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
674 (min flow)	4.6
750	5.7
800	6.5
850	7.3
900	8.2
950	9.1
1000	10.1
1050	11.1
1100	12.1
1150	13.2
1200 (max flow)	14.4

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 211. Dimensions and weights

Chiller Only	
Labels	Value
Length	39 ft. 3 in.
Width	7 ft. 5 in.
Height	8 ft. 2.5 in
Shipping Weight (lbs)	28,298 lbs
Operating Weight (lbs)	30,370 lbs
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 212. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.



80 to 550 Ton Air Cooled Screw Chillers

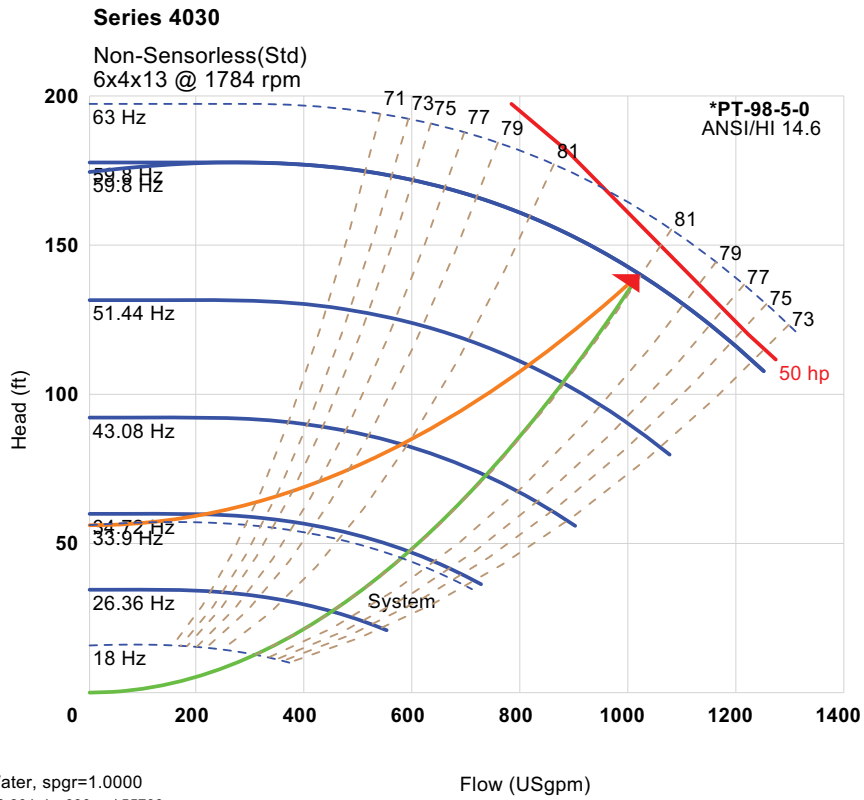
Table 213. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	723.8	678.8	632.6	585.4
55	0	628.1	589.1	548.9	507.6
45	0	536.1	502.7	468.2	432.7
35	10	437.3	410.4	382.4	353.3
25	25	343.5	322.8	300.9	278.1
20	30	286.6	269.9	252.1	233.4

Figure 96. RSCA0440F0 - single speed pump curve

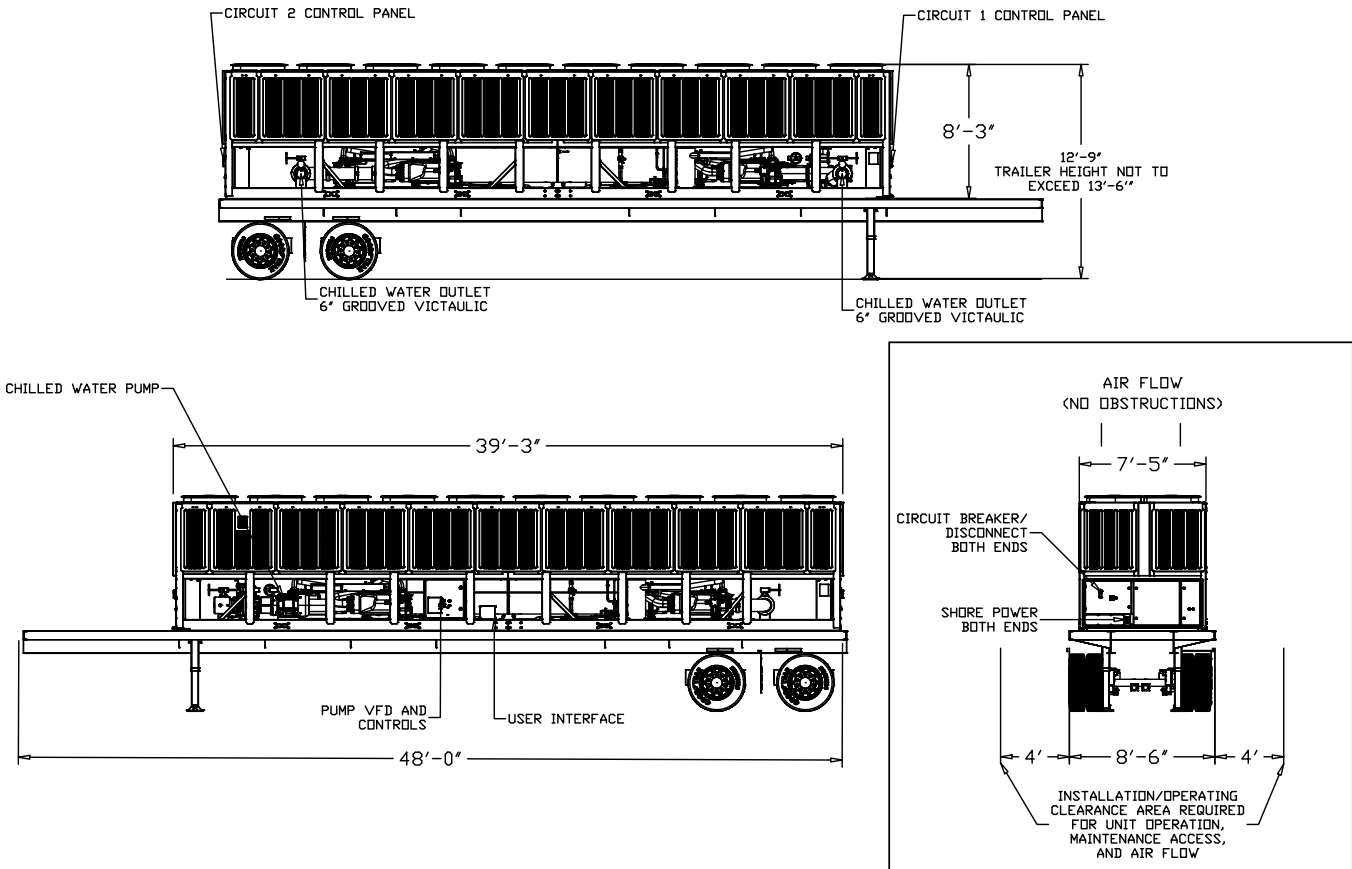


Figure 97. RSCA0440F0 - multi-speed pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 98. Unit drawings



440 Ton Air-Cooled ACRC

Table 214. General – RSCA0440F0 ACRC

Labels	Value
Model Number	ACRC 440
Nominal Tons	440
Refrigerant	R-513A
Refrigerant Charge ^(a)	366/177 lbs
Water Connection Size	6-in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 65°F
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

(c) When leaving solution is below 42°F, a glycol solution is required for all temperature and ice-making applications.

Table 215. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz

Table 215. Electrical data (continued)

Labels	Value
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA Symmetrical at 460Vac Max
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	547.2/323 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	700/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	485.9/262.3 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	612/323 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	800/500 A
Full Load Amps (FLA) (circuit 1/circuit 2)	413.9/262.3 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 216. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	275 gpm @ 178 ft. H ₂ O
Max Flow	1,276 gpm @ 113 ft. H ₂ O

Table 217. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
450 (min flow)	2.48
550	3.7
700	5.93
850	8.62
1000	11.8
1100	14.1
1200	16.6
1300	19.3
1450	23.7
1600	28.6
1750	33.9
1981 (max flow)	42.9

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).



80 to 550 Ton Air Cooled Screw Chillers

Table 218. Dimensions and weights

Chiller Only	
Labels	Value
Length	43 ft. 2 in.
Width	7 ft. 4 in.
Height	8 ft. 2.5 in
Shipping Weight (lbs)	31,600 lbs
Operating Weight (lbs)	32,950 lbs
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 219. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 220. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	597.5	597.5	597.5	589.8
55	0	557.9	546.1	552.4	504.5
45	0	499.1	485.0	456.6	420
35	10	381*	379.2*	359.6*	340.1*
25	25	322.9*	307.6*	285.1*	262*

Note: Low temperature selections shown at elevated flow rate of 2.7 GPM/Nominal Ton.

Figure 99. RSCA0440F0 - single speed pump curve

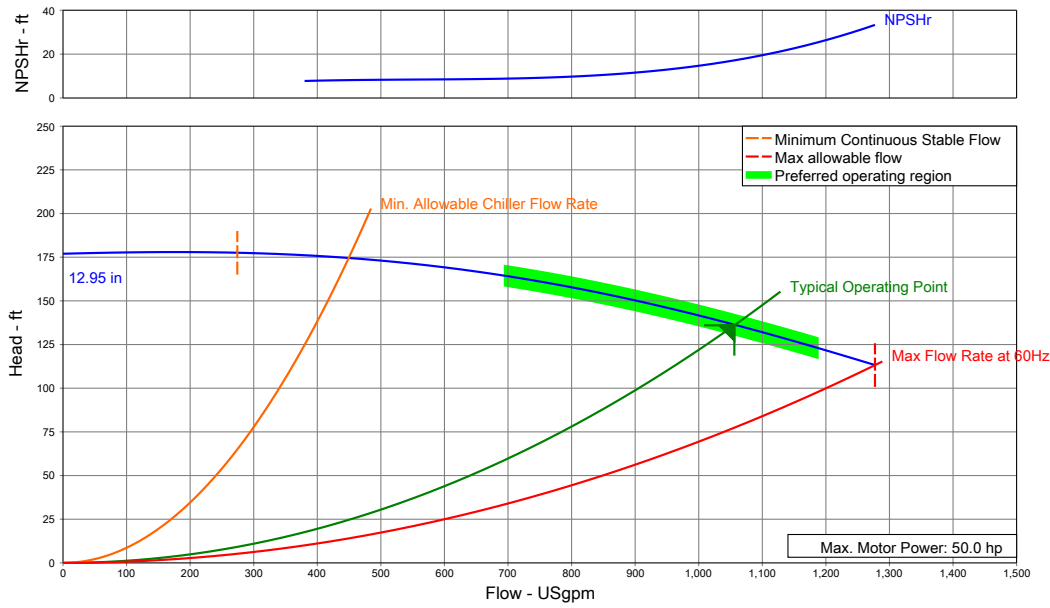
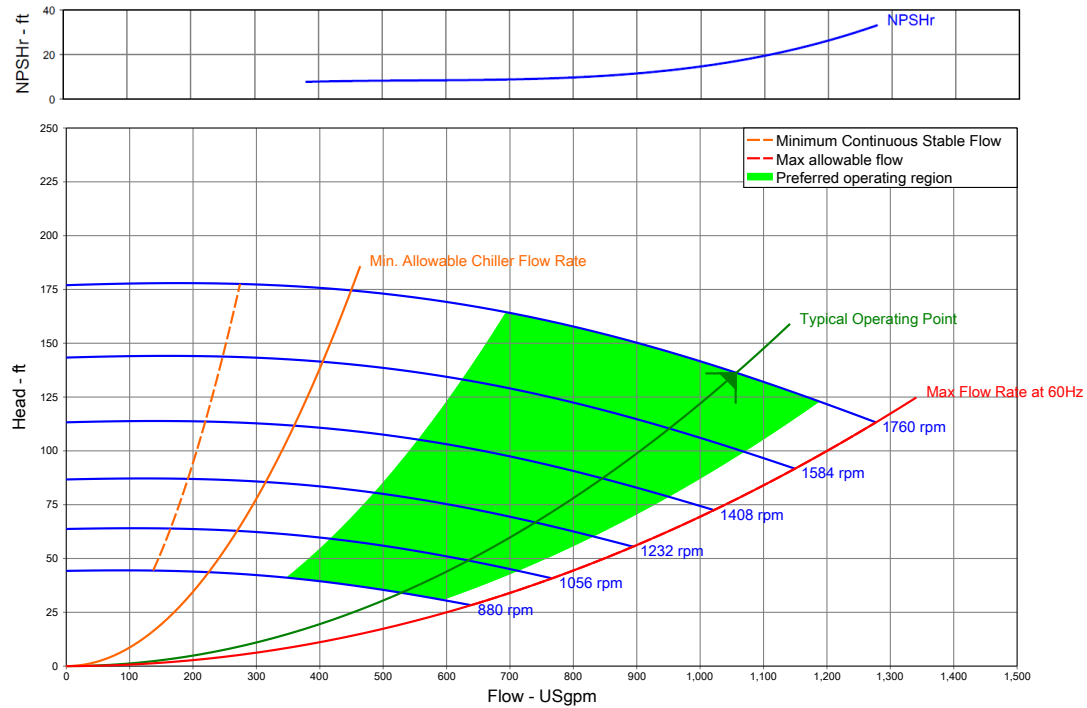
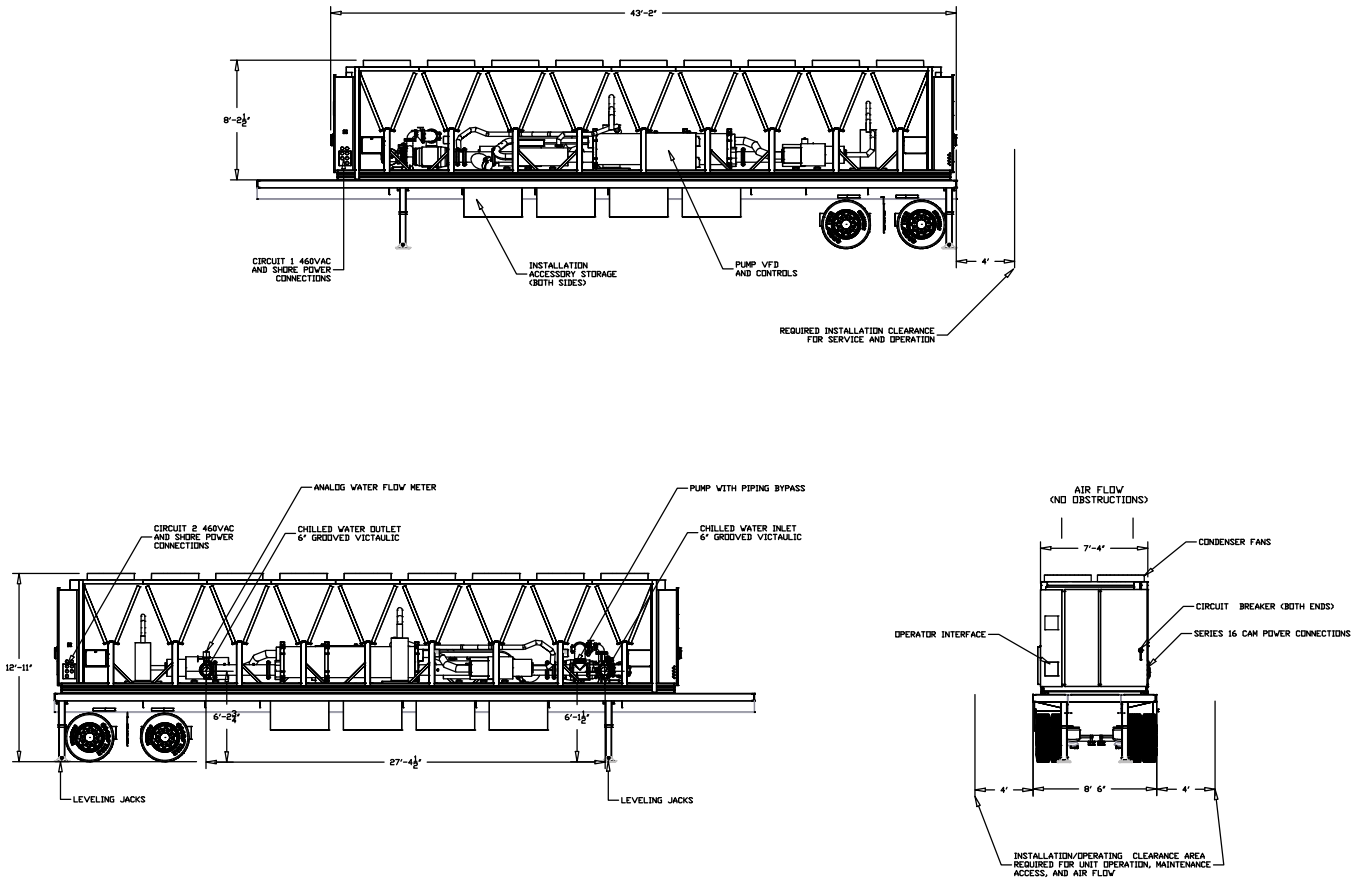


Figure 100. RSCA0440F0 - multi-speed pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 101. Unit drawings



500 Ton Air-Cooled RTAC

Table 221. General – CSCA0500F0-F4

Labels	Value
Model Number	RTAC500
Nominal Tons	500
Refrigerant	R-134a
Refrigerant Charge ^(a)	460/460 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Evaporation Configuration	2 pass
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) Have engineering validate performance for applications that require 60°F and above supply leaving water temperatures.

Table 222. Electrical data – dual point only

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections ^(a) ^(b)	Lugs or Series 16 Cam-Type Connections
F2-F4 Power Supply Connections ^(b)	Series 16 Cam-Type Connections Only
F0 Series Electrical With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	495/561 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/700 A
Full Load Amps (FLA) (circuit 1/circuit 2)	445/511 A
F0 Series Electrical - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	495/495 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	445/445 A
F2-F4 Series Electrical With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	560/495 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	700/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	503/438 A
F2-F4 Series Electrical Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	495/495 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/600 A
Full Load Amps (FLA) (circuit 1/circuit 2)	438/438 A

Note: For additional electrical information, contact Trane Rental Services.

^(a) Maximum wire size lug(s) can accept - 600 MCM.

^(b) Depending on chiller MCA and wire used, multiple wires per phase may be required.

Table 223. Pump data – CSCA0500F0

Labels	Value
Horsepower	50 HP
Min Flow	370 gpm @ 142.5 ft.
Max Flow	1543 gpm @ 93.1 ft.

Note: Pump is mounted within the chiller frame and controlled by the chiller standalone control system if not connected to end user building automation system.

Table 224. Pump data – CSCA0500F2-F4

Labels	Value
Horsepower	50 HP
Min Flow	365 gpm @ 146 ft.
Max Flow	1521 gpm @ 87 ft.

Note: Pump is mounted within the chiller frame with a bypass and controlled by the chiller standalone control system if not connected to end user building automation system.



80 to 550 Ton Air Cooled Screw Chillers

Table 225. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
60	0	679.0	626.3	556.4	483.4	352.8
55	0	629.3	585.5	529.5	462.1	343.4
50	0	580.9	541.3	497.4	437.0	335.2
45	0	534.0	498.3	457.8	414.1	329.1
40	0	488.9	456.5	419.3	379.6	320.4
35	10 ^(a)	444.3	414.8	381.0	344.5	305.9
30	20 ^(a)	400.6	373.8	343.3	309.8	274.3
25	25 ^(a)	356.0	332.2	304.8	274.4	242.2
20	30 ^(b)	325.0	302.8	277.0	248.2	217.7

^(a) Performance based on using propylene glycol solution for antifreeze protection.

^(b) Performance based on using ethylene glycol for antifreeze protection.

Table 226. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
422 (min flow)	3.69
550	6.14
650	8.39
750	10.90
850	13.70
950	16.80
1050	20.10
1150	23.70
1250	27.60
1350	31.80
1450	36.30
1548 (max flow)	41.00

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

CSCA0500F0

Table 227. Dimensions and weights

Chiller Only	
Labels	Value
Length	45 ft. 3 in.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	31,640
Operating Weight (lbs)	32,990

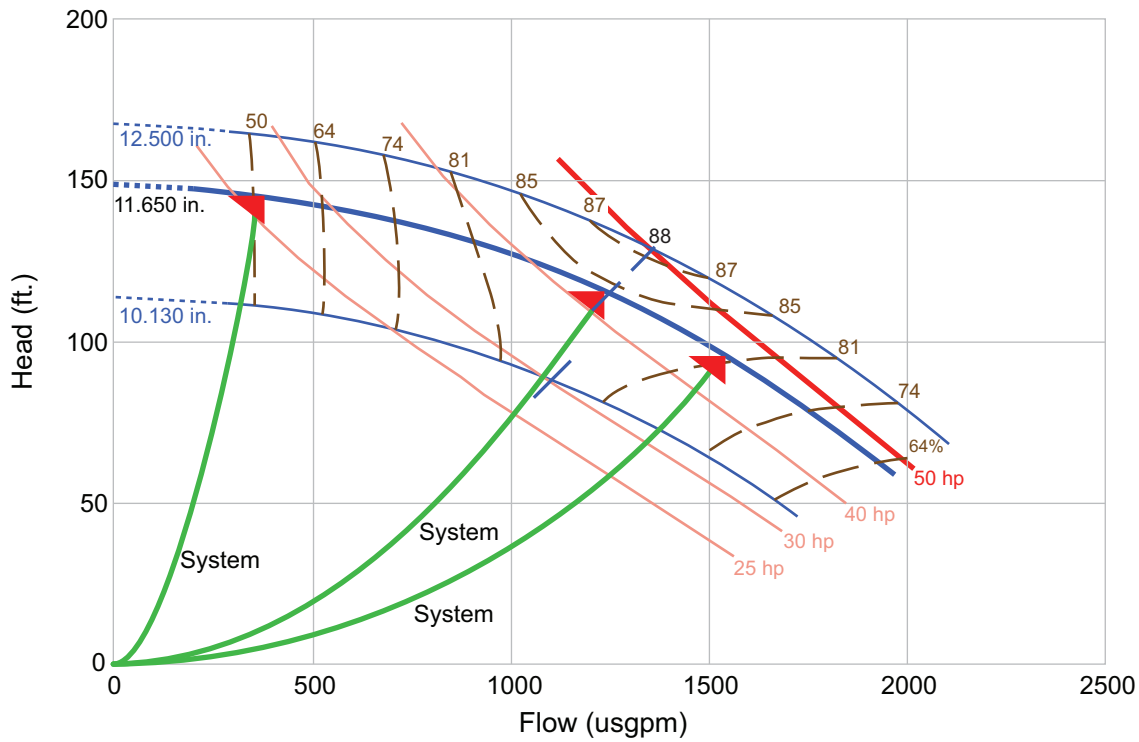
Table 227. Dimensions and weights (continued)

Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

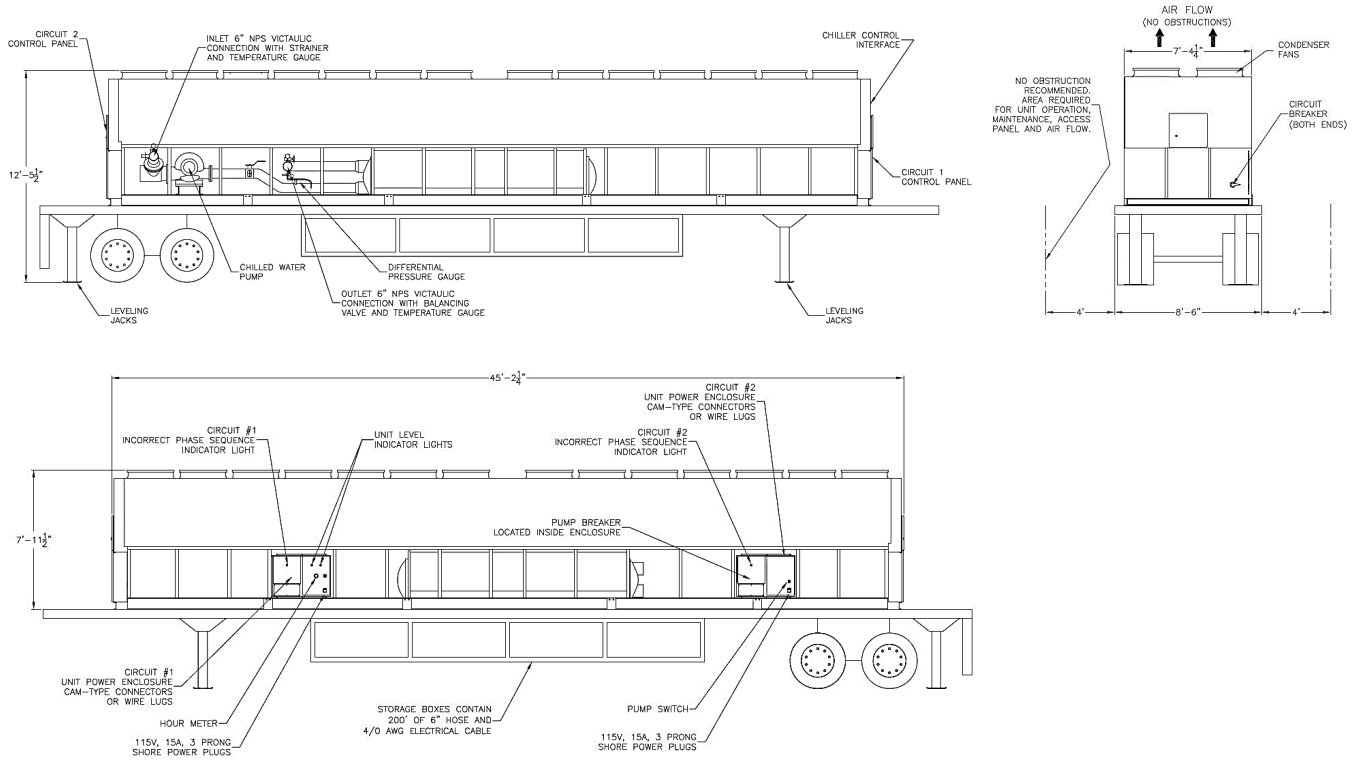
Figure 102. CSCA0500F0 pump curve





80 to 550 Ton Air Cooled Screw Chillers

Figure 103. Unit drawings



CSCA0500F2-F4

Table 228. Dimensions and weights

Chiller Only	
Labels	Value
Length	45 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	36,000
Operating Weight (lbs)	37,350
Trailer	
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Figure 104. CSCA0500F2-F4 pump curve

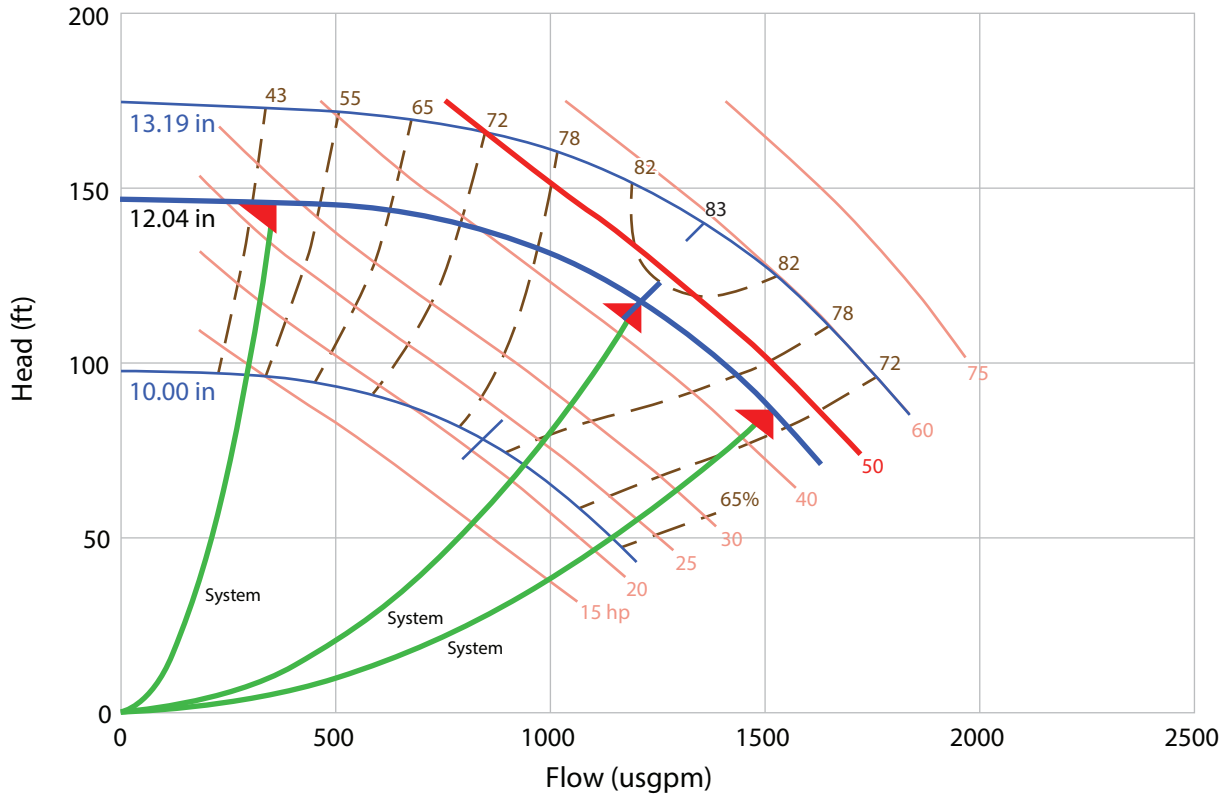
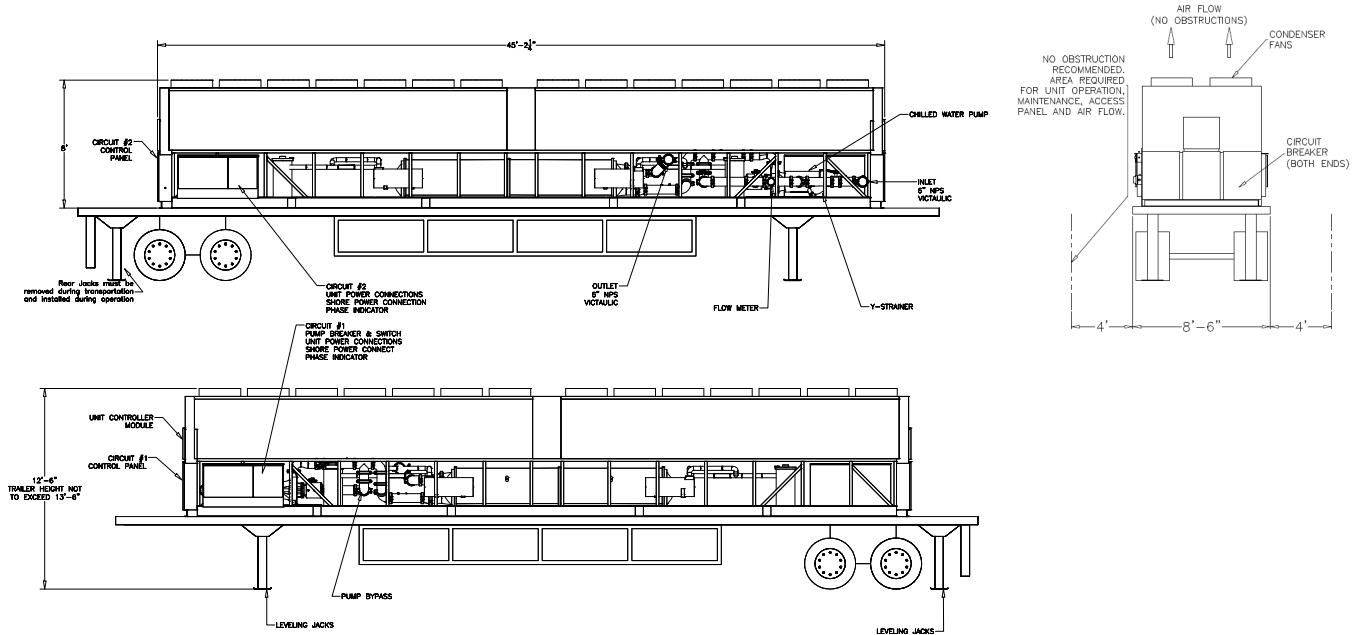


Figure 105. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

500 Ton Air-Cooled RTAF

Table 229. General – RSCA0500F0

Labels	Value
Model Number	RTAF 500
Nominal Tons	500
Refrigerant	R-513A
Refrigerant Charge ^(a)	275.6/288.4 lbs
Water Connection Size	6-in. Grooved Victaulic
Ambient Operating Conditions	-4°F to 130°F
Chilled Water Setpoint Limits ^{(b) (c)}	20°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 230. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connection
SCCR	35kA Symmetrical at 460Vac Max
Without Integral Pump	
Minimum Circuit Ampacity (MCA)	934 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	848.1 A
With Integral Pump	
Minimum Circuit Ampacity (MCA)	998 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	906.1 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability

Table 231. Pump data

Labels	Value
Horsepower	50 HP
Min Flow	506 gpm @ 146 ft. H ₂ O
Max Flow	2,153 gpm @ 88 ft. H ₂ O

Note: Maximum water side pressure is 150 PSIG (2.31 ft. H₂O = 1 PSI).

Table 232. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
506 (min flow)	5.25
600	7.37
750	11.5
900	16.7
1,000	20.7
1,100	25.2
1,200	30.2
1,300	35.8
1,450	45.0
1,600	55.5
1,750	67.4
1855 (max flow)	76.4

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 233. Dimensions and weights

Chiller Only	
Labels	Value
Length	52 ft. 11 in.
Width	7 ft. 3 in.
Height	7 ft. 10 in.
Shipping Weight (lbs)	38,000
Operating Weight (lbs)	30,459
Trailer	
Length	53 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	15,560

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 234. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.



80 to 550 Ton Air Cooled Screw Chillers

Table 235. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	800.2	754.2	707.1	658.2
55	0	686.2	646.4	605.5	563.8
45	0	579.5	545.6	510.9	475.2
35	10	477.1	449.4	420.6	391.0
25	25	375.0	353.8	331.4	308.2
20	30	326.5	308.2	288.9	268.7

Figure 106. RSCA0500F0 - single speed pump curve

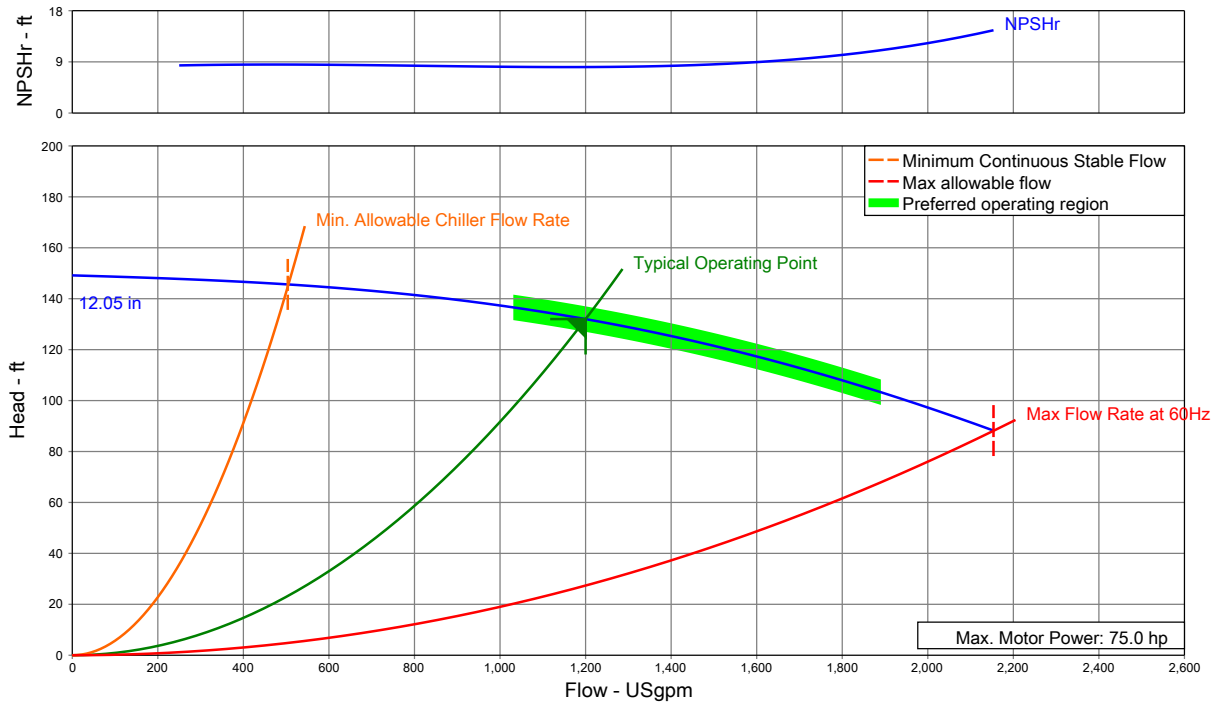


Figure 107. RSCA0500F0 - multi-speed pump curve

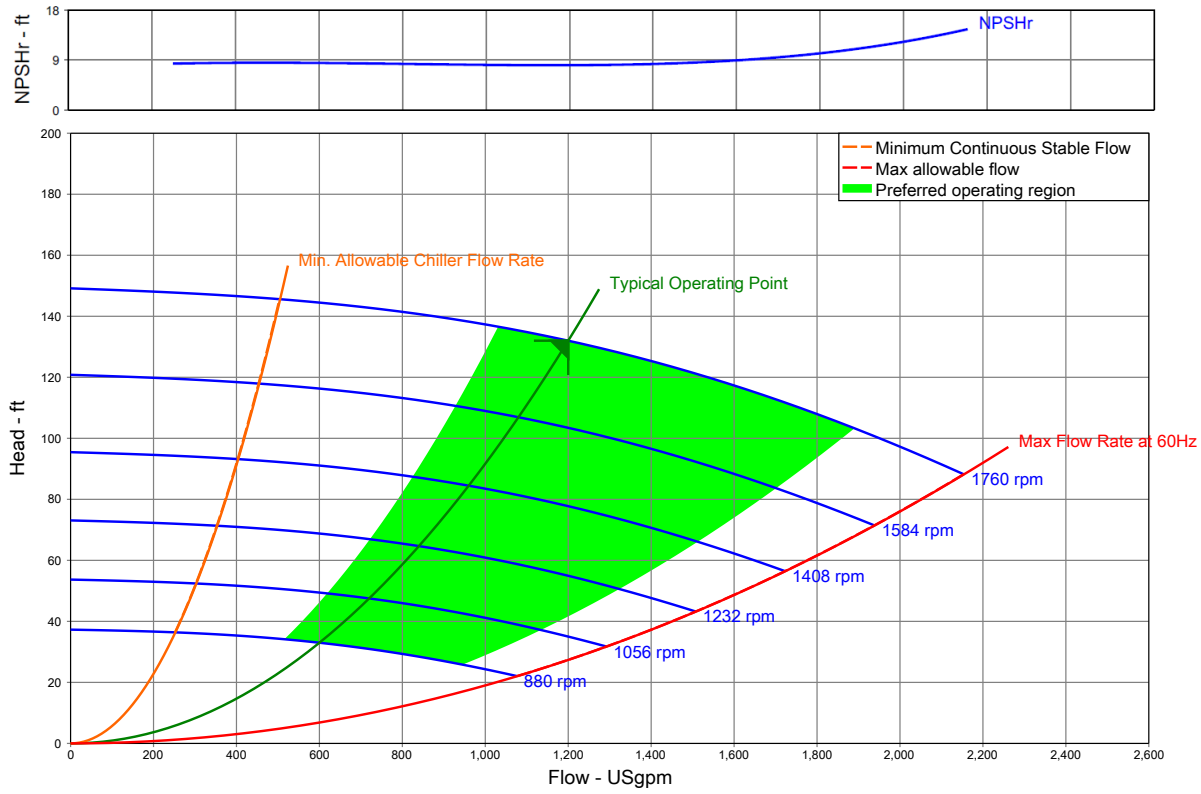
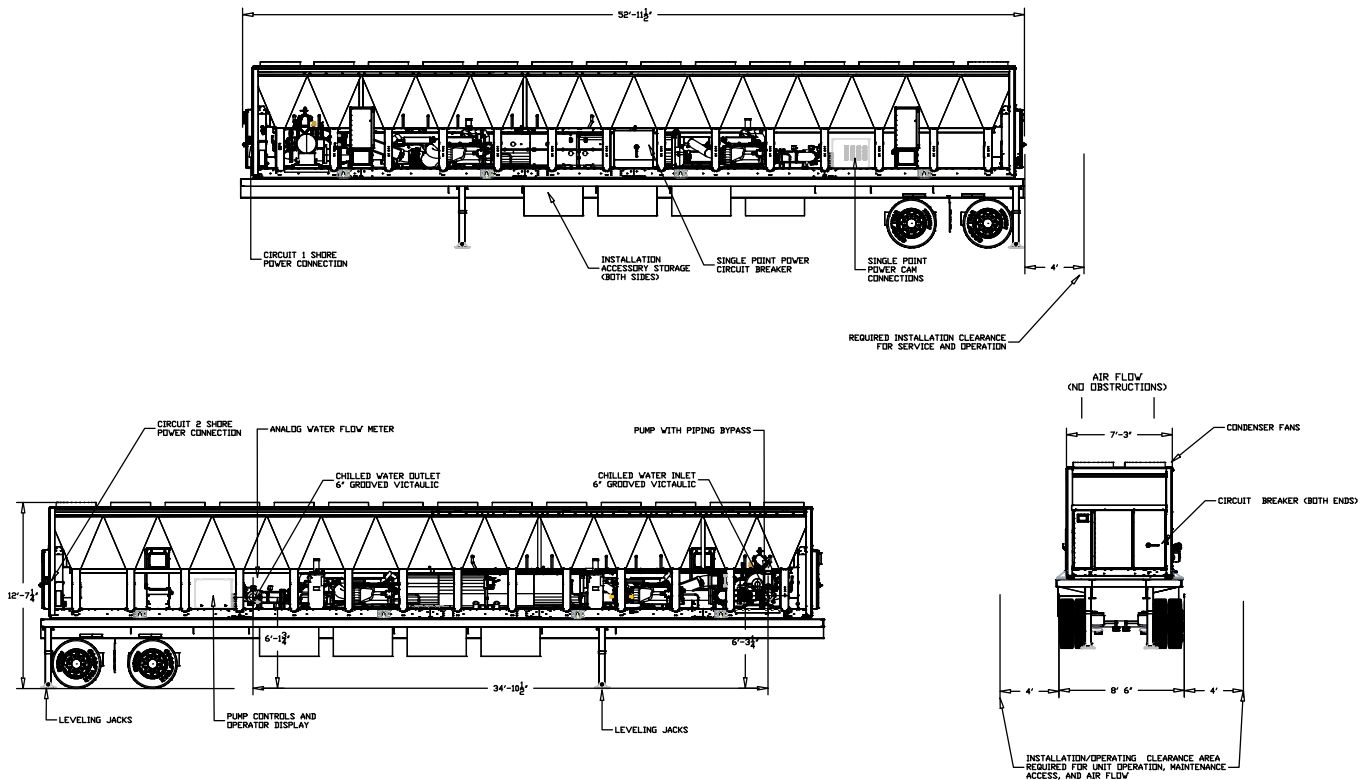


Figure 108. Unit drawings





80 to 550 Ton Air Cooled Screw Chillers

550 Ton Air-Cooled ACRC

RSCA0550F0

Table 236. General - RSCA0550F0

Labels	Value
Model Number	ACRC 550
Nominal Tons	550
Refrigerant	R-513A
Refrigerant Charge ^(a)	380/365 lbs
Water Connection Size	6-in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 65°F
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all low temperature and ice-making applications.

Table 237. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connection
SCCR	10 kA Symmetrical at 460V Max
Single Point - Without Integral Pump	
Single Point Power MCA	1077 A
Single Point Power MOP	1200 A
Single Point Power FLA	1011 A
Single Point - With Integral Pump	
Single Point Power MCA	1154.8 A
Single Point Power MOP	1200 A
Single Point Power FLA	1082.8 A
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit1/circuit2)	554.2/564.2 A
Maximum Overcurrent Protection (MOP) (circuit1/circuit2)	800/800 A
Full Load Amps (FLA)(circuit1/circuit2)	507.3/505.5 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit1/circuit2)	649.2/564.2 A
Maximum Overcurrent Protection (MOP) (circuit1/circuit2)	800/800 A
Full Load Amps (FLA) (circuit1/circuit2)	577.3 C/505.5 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 238. Pump data

Labels	Value
Horsepower	60 HP
Min Flow	334 gpm @ 157 ft. H ₂ O
Max Flow	1,560 gpm @ 97 ft.H ₂ O

Table 239. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
591 (min flow)	2.6
800	4.7
1,000	7.2
1,200	10.2
1,300	11.9
1,400	13.7
1,600	17.6
1,800	22.0
2,000	26.8
2,200	32.1
2,400	37.9
2603 (max flow)	44.3

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 240. Dimensions and weights

Chiller Only	
Labels	Value
Length	51 ft. 11.25-in.
Width	7 ft. 4-in.
Height	8 ft. 2.5-in.
Shipping Weight (lbs)	38,000
Operating Weight (lbs)	39,350
Trailer	
Labels	Values
Length	53 ft.
Width	8 ft. 6-in.
Height	5 ft. 0.25-in.
Shipping Weight (lbs)	15,560

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.



80 to 550 Ton Air Cooled Screw Chillers

Table 241. Installation and operating clearances

Labels	Value
Front	48-in.
Back	48-in.
Sides	48-in. ^(a)
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 242. Cooling capacity (tons)

Leaving Water Temp	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM/ Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	733.1	739.6	789.4	741.2
55°F	0	700.7	738.9	694.8	646.8
45°F	0	632.8	593.9	578.8	538.1
35°F	10	530.0	502.4	473.8	435.6
25°F	25	395.8	382.0	354.7	326.3

Figure 109. RSCA0550F0 - single speed pump curve

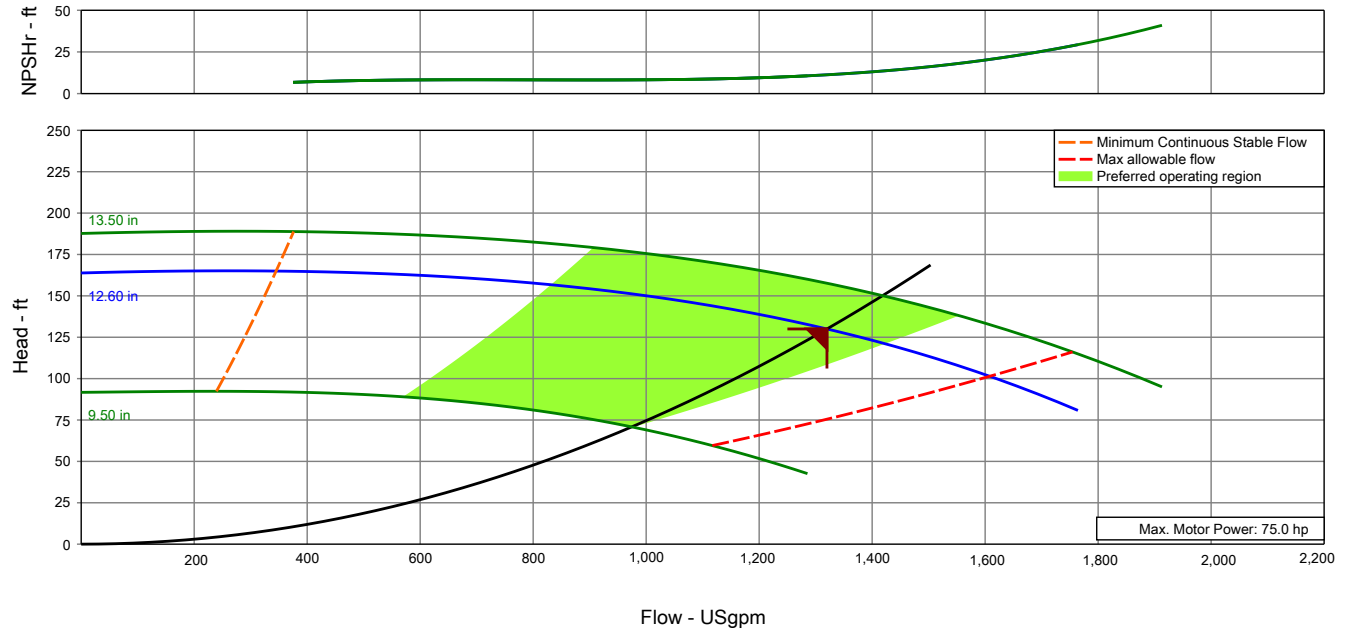
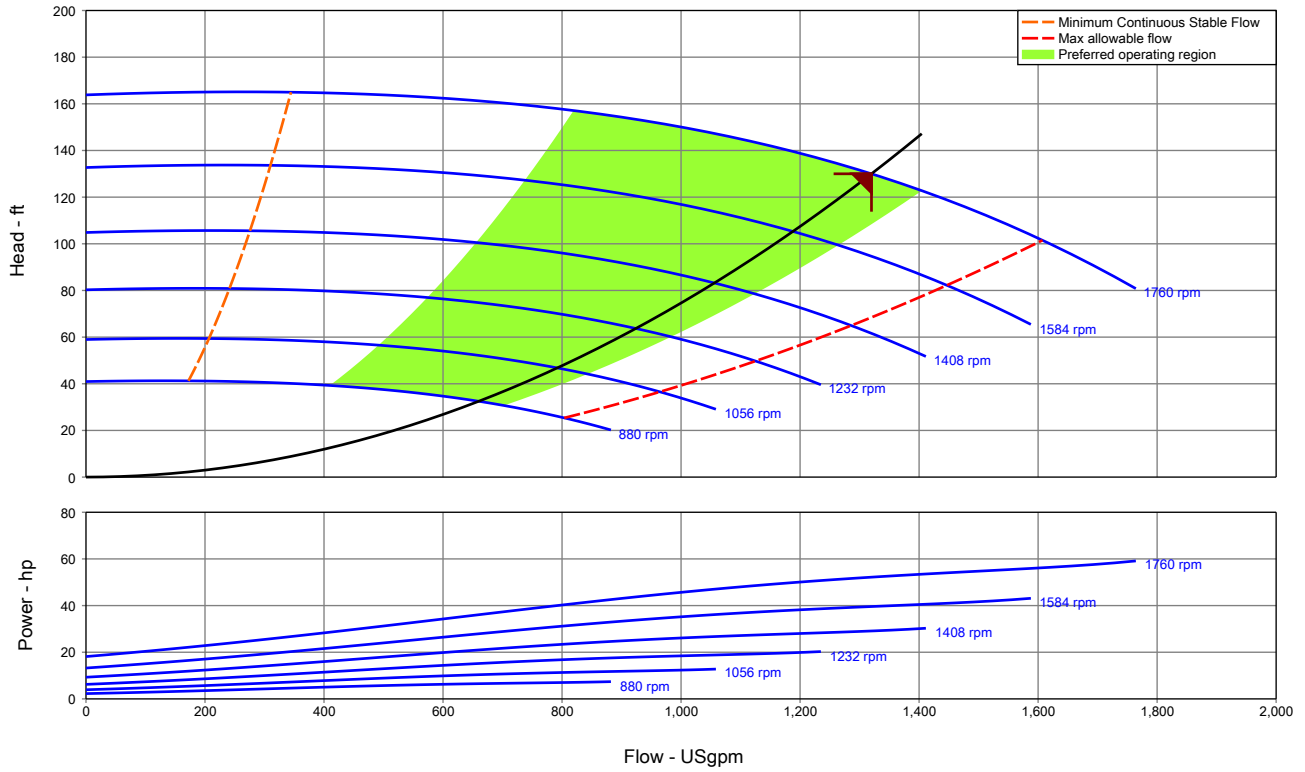
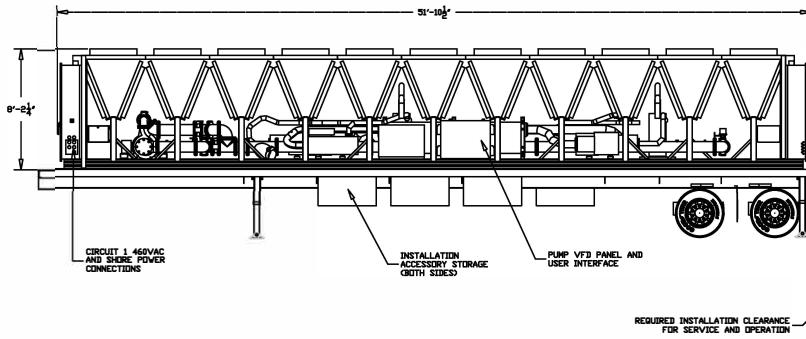


Figure 110. RSCA0550F0 - multi-speed pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 111. Unit drawings



SPECIFICATIONS:

ELECTRICAL

CIRCUIT 1	DUAL POINT
VOLTAGE = 460V, 60Hz, 3PH	
MCA (MIN CIRCUIT AMPACITY)	647 AMPS
MOP (MAX OVERCURRENT PROTECTION)	800 AMPS
CIRCUIT 2	
VOLTAGE = 460V, 60Hz, 3PH	
MCA (MIN CIRCUIT AMPACITY)	571 AMPS
MOP (MAX OVERCURRENT PROTECTION)	800 AMPS

UNIT POWER CONNECTIONS

LEVITON CAM-TYPE MALE RECEPTACLES (16 SERIES)
 (1)2 POWER (L1, L2, L3) AND (2) GROUND (G)
 THESE ACCEPT THE CORRESPONDING CAM-TYPE FEMALE PLUG

SHORE POWER

(2) 115V, 60Hz, 1PH, 15A
 PROVIDES POWER TO CONTROLS, COMPRESSOR HEATERS,
 AND OIL SEPARATOR HEATERS
 (REQUIRES TWO SEPARATE CIRCUITS, 15 AMPS MINIMUM)

EVAPORATOR

WATER STORAGE = 49.3 GALLONS
 MINIMUM FLOW = 591 GPM
 MAXIMUM FLOW = 2,603 GPM
 MAXIMUM WATER PRESSURE = 150 PSI
 MINIMUM WATER PRESSURE DROP = 2.6 FT. OF H₂O
 MAXIMUM WATER PRESSURE DROP = 44.3 FT. OF H₂O

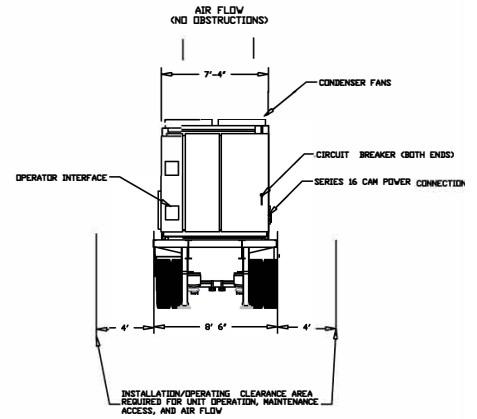
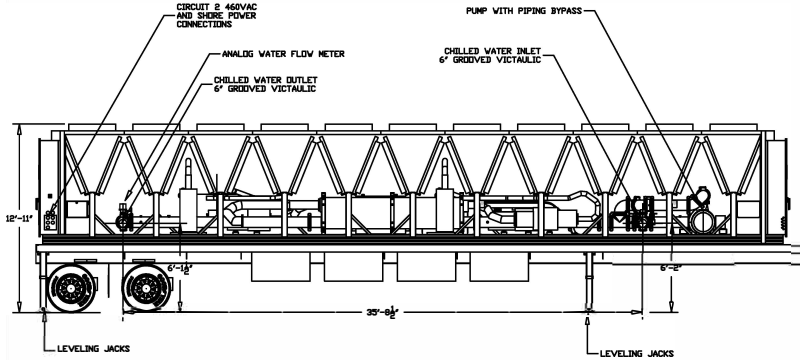
PUMP

460V, 60Hz, 3PH
 60HP, 1800 RPM, FLA = 70 AMPS
 NOMINAL WATER FLOW 1,320 GPM @ 125 FT. OF H₂O

MINIMUM STARTING/OPERATING AMBIENT TEMP = 0°F

CHILLER SHIPPING WEIGHT = 31,400 LBS.

CHILLER OPERATING WEIGHT = 32,750 LBS.



RSCA0550F1
Table 243. General – RSCA0550F1

Labels	Value
Model Number	ACRC 550
Nominal Tons	550
Refrigerant	R-513A
Refrigerant Charge ^(a)	380/365 pounds
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits ^{(b) (c)}	25°F to 65°F
Number of Electrical Circuits	2
Number of Refrigerant Circuits	2

^(a) Data containing information on two circuits is shown as follows: ckt 1/ ckt 2.

^(b) Setpoints only to be used as a guide, selection is required for actual chiller performance.

^(c) When leaving solution is below 42°F, a glycol solution is required for all temperature and ice-making applications.

Table 244. Electrical data

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connections
SCCR	35kA Symmetrical at 460Vac Max
Dual Point - Without Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	569.6/571.2 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	800/800 A
Full Load Amps (FLA) (circuit 1/circuit 2)	507.3/505.5 A
Dual Point - With Integral Pump	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	647/571 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	800/800 A
Full Load Amps (FLA) (circuit 1/circuit 2)	577.3/505.5 A

Notes:

1. For additional electrical information, contact Trane Rental Services.
2. All features and specifications are subject to change without notice or liability.

Table 245. Pump data

Labels	Value
Horsepower	60 HP
Min Flow	334 gpm @ 157 ft. H ₂ O
Max Flow	1,560 gpm @ 97 ft.H ₂ O



80 to 550 Ton Air Cooled Screw Chillers

Table 246. Water flow rates and pressure drops

Flow Rate (GPM)	Pressure Drop (ft. H ₂ O)
591 (min flow)	2.6
800	4.7
1,000	7.2
1,200	10.2
1,300	11.9
1,400	13.7
1,600	17.6
1,800	22.0
2,000	26.8
2,200	32.1
2,400	37.9
2603 (max flow)	44.3

Note: Maximum water side pressure is 150 psi (2.31 ft. H₂O = 1 psi).

Table 247. Dimensions and weights

Chiller Only	
Labels	Value
Length	51 ft. 11.25 in.
Width	7 ft. 4 in.
Height	8 ft. 2.5 in.
Shipping Weight (lbs)	38,000
Operating Weight (lbs)	39,350
Trailer	
Length	53 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	15,560

Notes:

1. Lifting device: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

Table 248. Installation and operating clearances

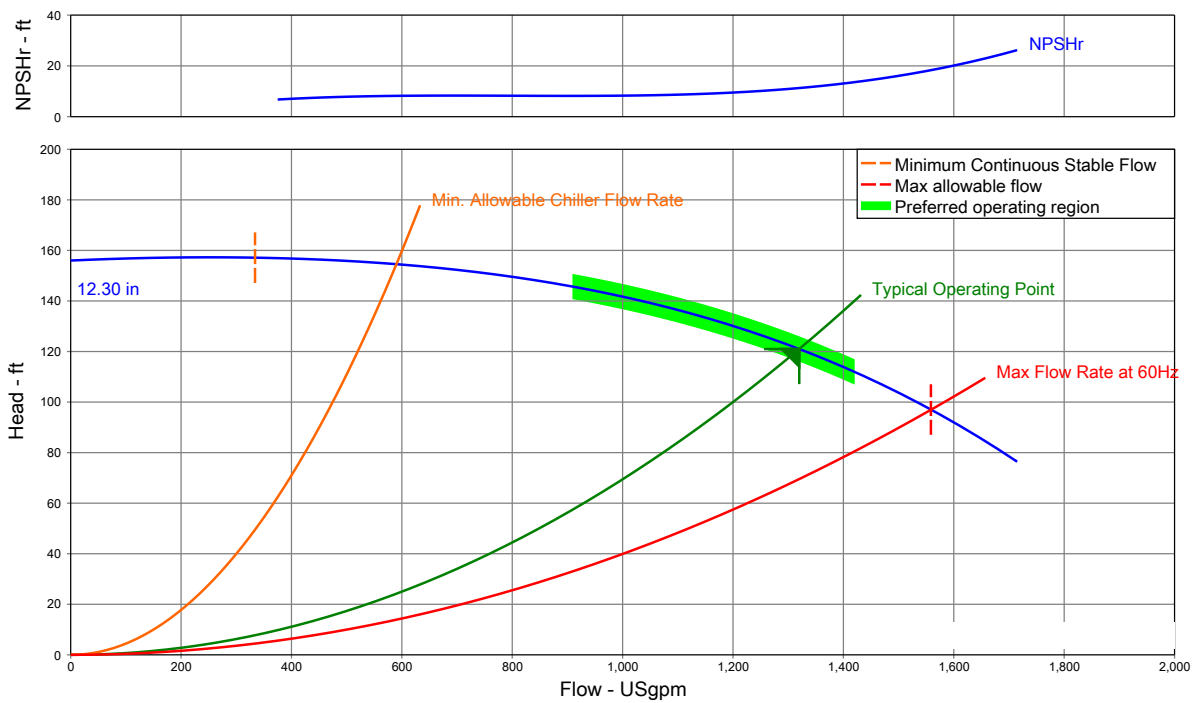
Labels	Value
Front	48-in.
Back	48-in. ^(a)
Sides	48-in.
Top	No obstructions

^(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

Table 249. Cooling capacity (tons)

Leaving Water Temp (°F)	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65	0	733.1	739.6	789.4	741.2
55	0	700.7	738.9	694.8	646.8
45	0	632.8	593.9	578.8	538.1
35	10	530.0	502.4	473.8	435.6
25	25	395.8	382.0	354.7	326.3

Figure 112. RSCA0550F1 - single speed pump curve



80 to 550 Ton Air Cooled Screw Chillers

Figure 113. RSCA0550F1 - multi-speed pump curve

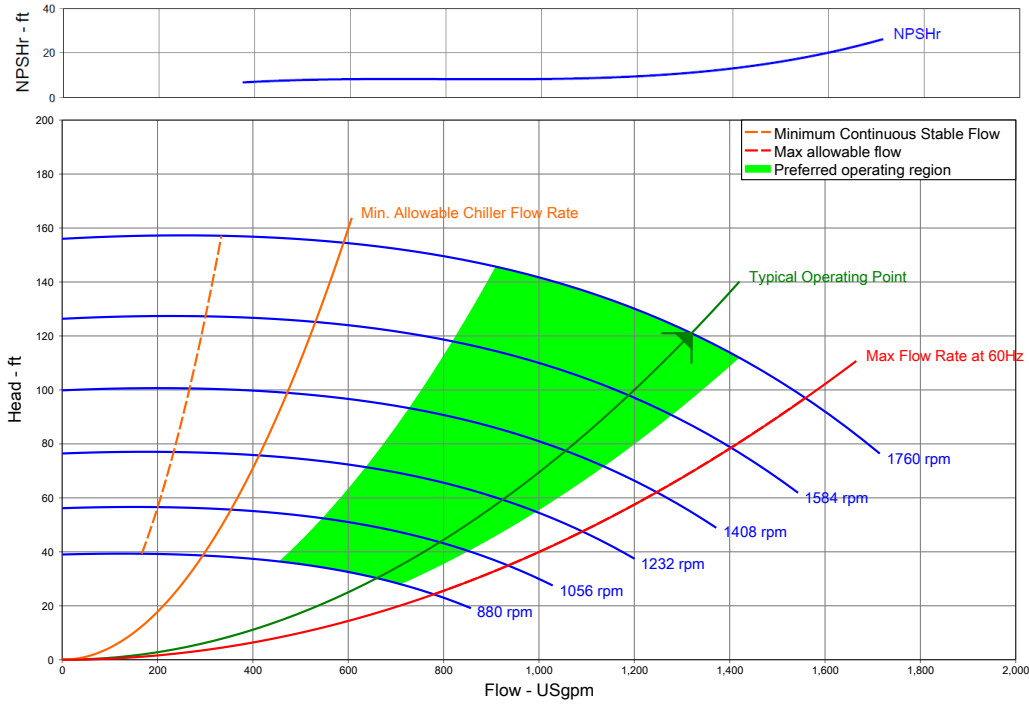
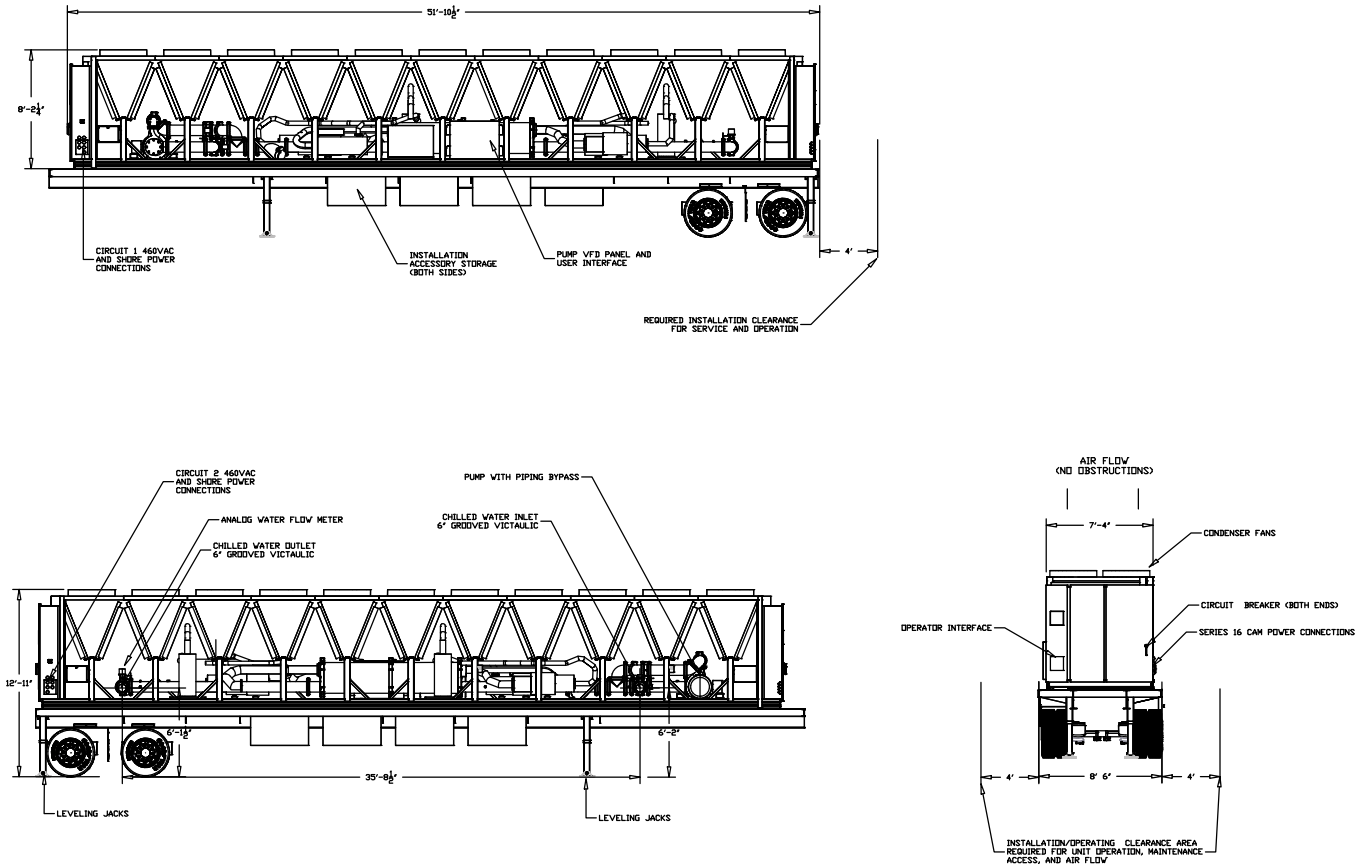


Figure 114. Unit drawings





Notes

Trane - by Trane Technologies (NYSE: TT), a global innovator - creates comfortable, energy efficient indoor environments for commercial and residential applications. For more information, please visit trane.com or tranetechnologies.com.

Trane has a policy of continuous product and product data improvements and reserves the right to change design and specifications without notice. We are committed to using environmentally conscious print practices.

TEMP-PRC007B-EN 24 Apr 2026
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