



Product Catalog

# Trane Rental Services

## 460 Volt Temporary Air-Cooled Chillers





## Introduction

Read this manual thoroughly before operating or servicing this unit.

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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.

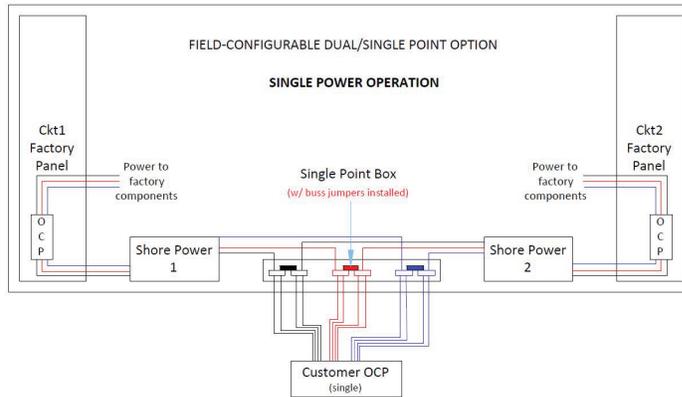
[Table 1, p. 5](#) below outlines the single point or dual point power configurations available in the Trane Rental Air-Cooled chiller fleet. Contact Trane Rental Services Engineering for additional information.

**Table 1. Trane rental air-cooled chiller power configuration**

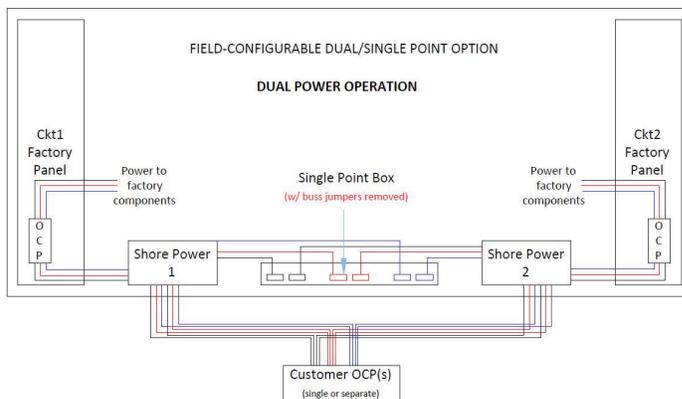
Unit Size (tons)	Trane rental air-cooled chiller model	Power Configuration
10-250	All models	Single point only
300	CSCA0300F0 - RTAA	Unit-specific <sup>(a)</sup>
300	CSCA0300F0 - RTAC	Dual or single point
300	CSCA0300F2-F3 - RTAC	Dual point only
300	RSCA0300F0 - ACRC	Single point only
300	RSCA0300F0 - RTAG	Dual point only
400	CSCA0400F0 - RTAA	Unit-specific <sup>(a)</sup>
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 <sup>(a)</sup>	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 <sup>(b)</sup>	YES	-	-	YES	460V only
RTAC <sup>(b)</sup>	YES	-	YES	-	460V only
RTAF <sup>(b)</sup>	YES	-	-	YES	460V only
RTAG <sup>(b)</sup>	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 plugs, one for each circuit's control panel.

### Water Flow Limits Value

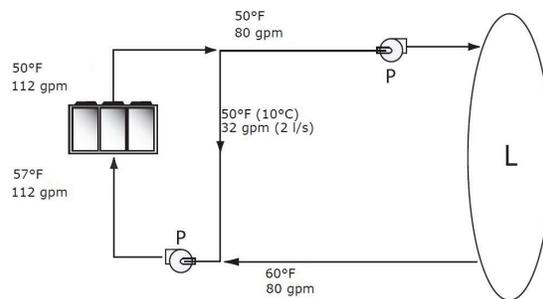
Minimum and maximum flow rates are found under the water flow rates and pressure drops section of the desired chiller listing. Verify flow is within these limits.

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.



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.

### 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.

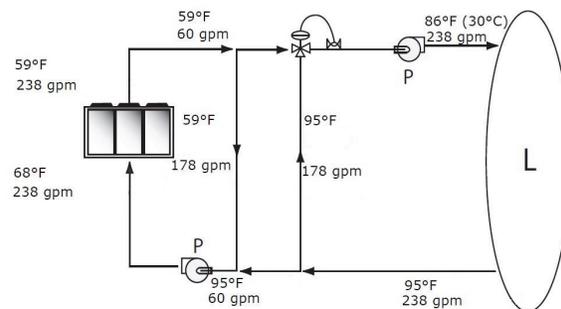
## Leaving Water Temperature Limits

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.



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.

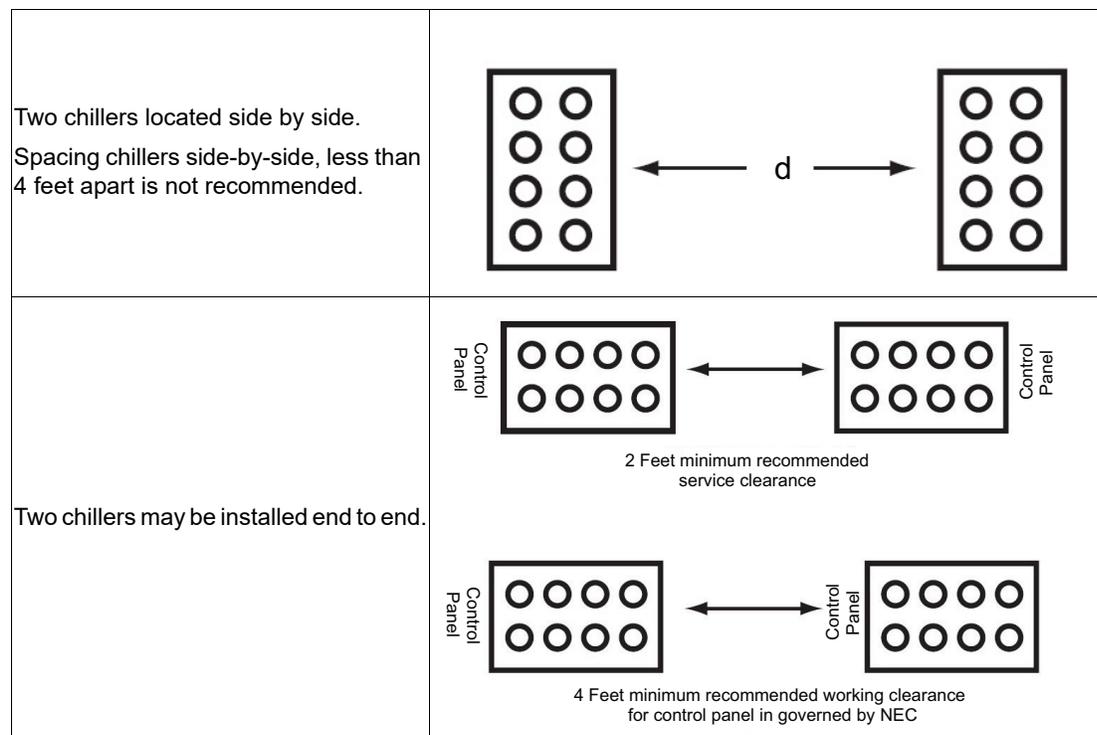
If the installed system volume does not meet the above recommendations, consider the following items to increase the volume of water in the system and reduce the rate of change of the return water temperature.

- 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:



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.



## Application Considerations

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. There must be adequate ventilation to dissipate the rejected heat. The unit must not be placed in non-ventilated 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

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

**Table 5. RTAC sound pressure data**

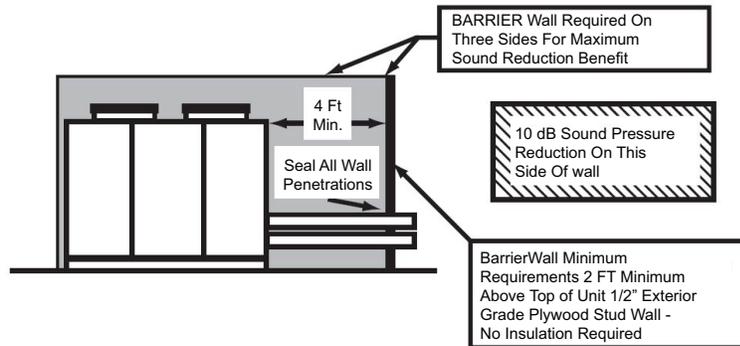
Unit Size (tons)	A-Weighted Sound Pressure Level, dBA, ref 20 micro Pa (60 Hz @ 30 ft.)
155	72.0
170	74.0
200	75.0
250	75.0
300	76.0
400	78.0
500	78.0

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 3, 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 3. Minimum wall requirements**



## Pump Control

All model RSPA, ACSA, ACXA, 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 providing 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:

- a) Adjusting a potentiometer on the pump control panel, or
- b) 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.

The RTAA model rental chillers include chillers without an integral pump installed - contact Trane Rental Services for unit-specific features. 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.



## Application Considerations

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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 recommended guidelines by the heat tracing manufacturer. In low ambient applications, heaters alone will provide protection down to -20°F (-29°C), but will NOT protect the evaporator from freezing as a result of charge migration. For this reason it is required that chiller water pump control be used in conjunction with heaters. When chiller pump control is established and ensured it allows the Trane chiller controller to start the pump and establish flow to prevent evaporator freeze damage. For this option the pump must be controlled by the unit and this function must be validated, including a review of any automated or manual valves in the chilled water loop which may prevent the chiller from establishing flow to prevent catastrophic evaporator damage.

The only failsafe method to prevent evaporator damage in the event of a complete power loss during freezing weather is ensuring that an appropriate freeze inhibiting fluid mixture is present 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% 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 10VDC 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 <sup>(a)</sup>	1.5-inch Dixon
Ambient Operating Conditions	60°F to 95°F
Setpoint Limits <sup>(b)</sup>	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 <sup>(a)</sup>	460V 3-Phase
Frequency	60Hz
Wire Connection Type <sup>(b)</sup>	8/4 Cable Whip
SCCR	5,000 A
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	32 A
Maximum Overcurrent Protection (MOP)	50 A
Full Load Amps (FLA)	26.6 A
<b>With Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	36 A
Maximum Overcurrent Protection (MOP)	50 A
Full Load Amps (FLA)	30.4 A

**Notes:**

- For additional electrical information, contact Trane Rental Services.
- 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.



## 10 Ton Portable Chiller

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

Leaving Water Temp	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton
		Ambient Air Temp
		95°F
60°F	0	10.29
50°F	0	9.80
45°F	30	8.82
40°F	30	7.84
35°F	30	6.86
30°F	30	5.88
25°F	30	4.90
20°F	40	3.92

**Table 10. Dimensions and weights**

Labels	Value
<b>RSPA0010B0AA; RSPA0010F0AB<sup>(a)</sup></b>	
Length	4 ft. 8 in.
Width	2 ft. 10 in.
Height	5 ft.
Shipping Weight (lbs)	1,100
Operating Weight (lbs)	1,309
<b>RSPA0010F0AC - RSPA0010F0**</b>	
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.

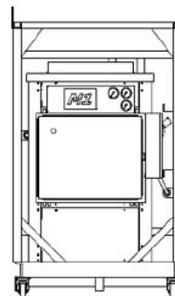
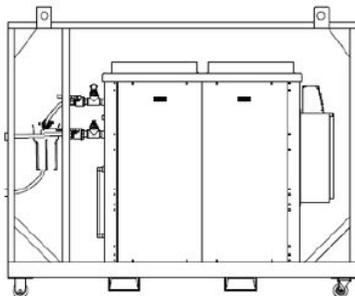
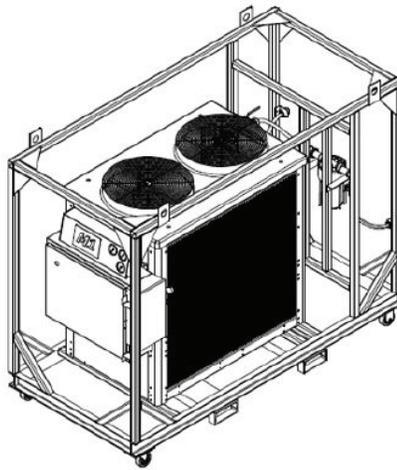
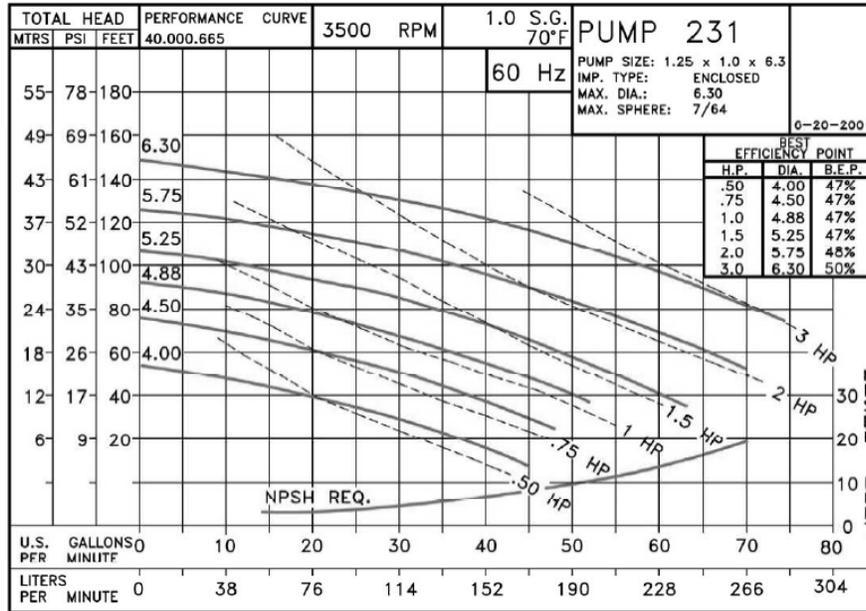
**Table 11. Installed/operating clearances**

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

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

# 10 Ton Portable Chiller

Integral Pump Curve





# 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 <sup>(a)</sup>	34 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	22.5 lbs
Water Connection Size	2.5 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 <sup>(a)</sup> <sup>(b)</sup>	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	56 A
Maximum Overcurrent Protection (MOP)	75 A
Full Load Amps (FLA)	49 A
<b>With Integral Pump</b>	
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	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°F	0	36.6	34.2	31.6	29.1	-
55°F	0	31.9	29.7	27.5	25.2	22.9
45°F	0	27.3	25.5	23.6	21.6	19.6
35°F	10	22.8	21.3	19.7	18.0	16.3
25°F	25	18.6	17.4	16.1	14.7	-
15°F	35	14.8	13.9	12.8	-	-
5°F	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).*



## 25 to 120 Ton CGAM

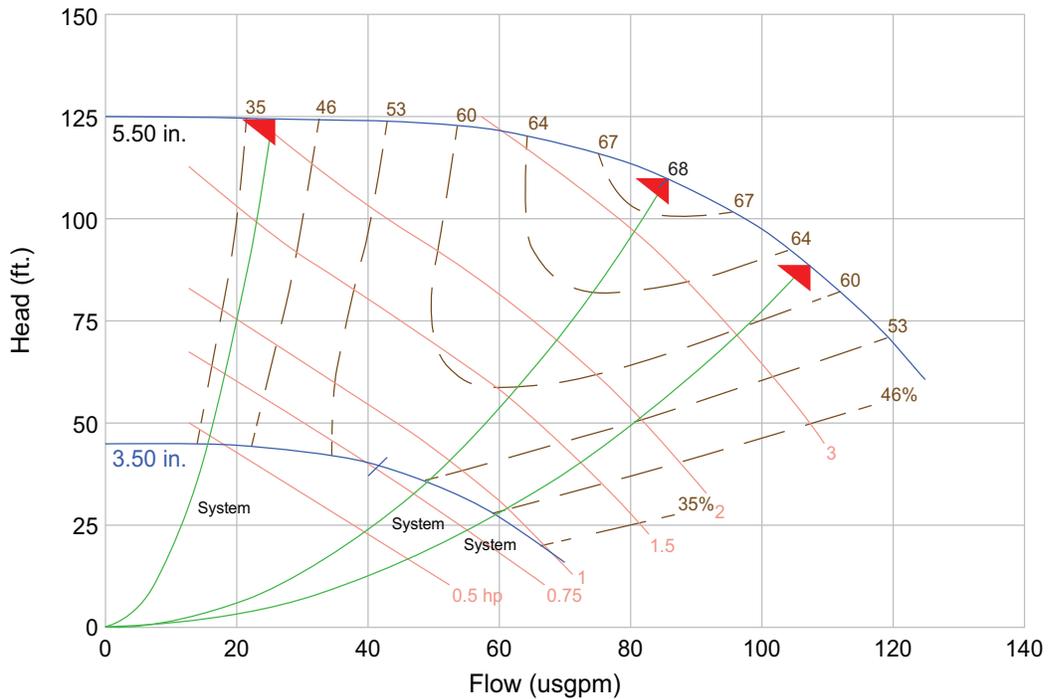
### General – CSCA0025F0

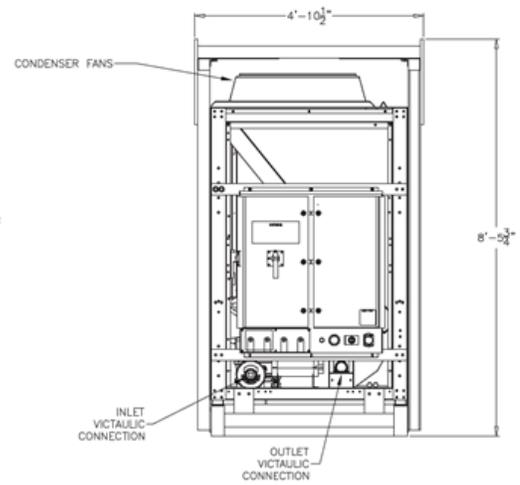
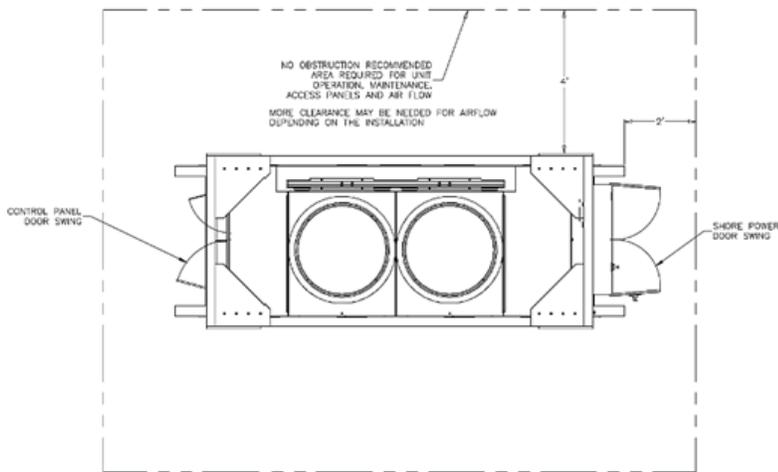
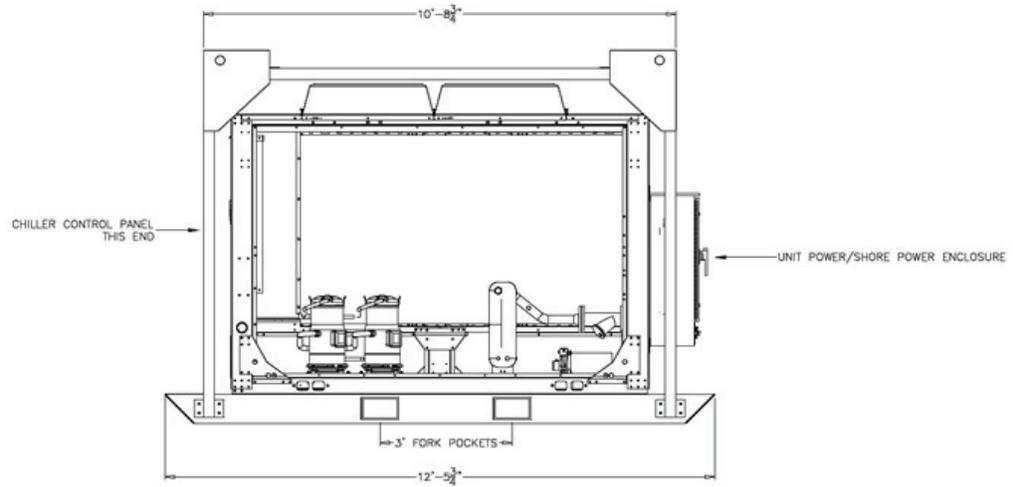
**Table 17. Dimensions and weights**

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.







## 25 to 120 Ton CGAM

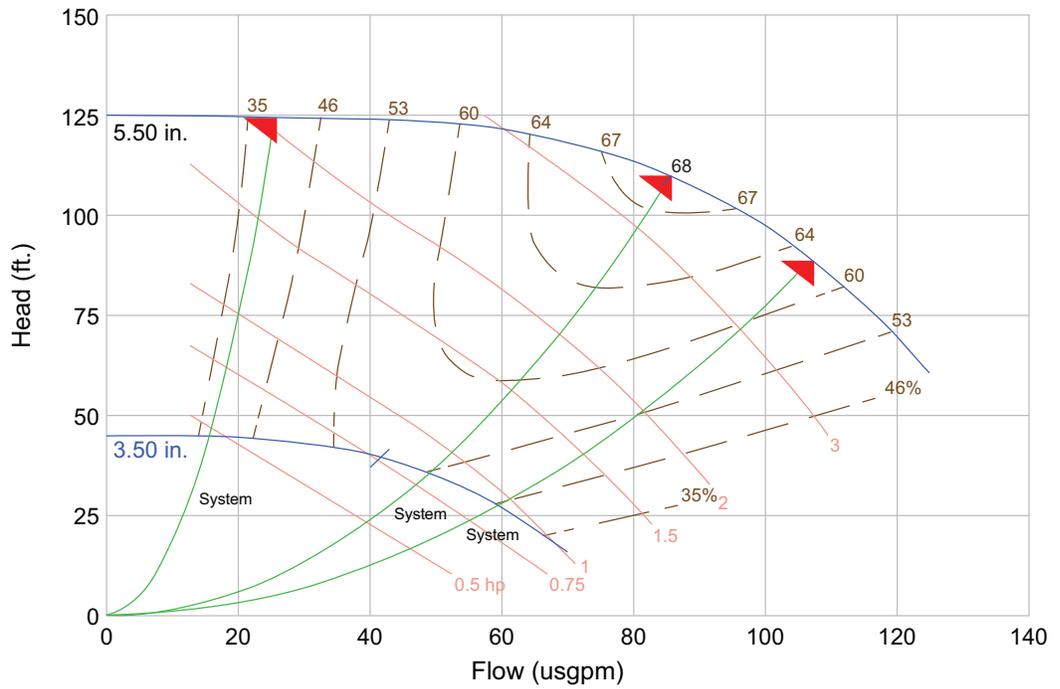
### General – CSCA0025F2

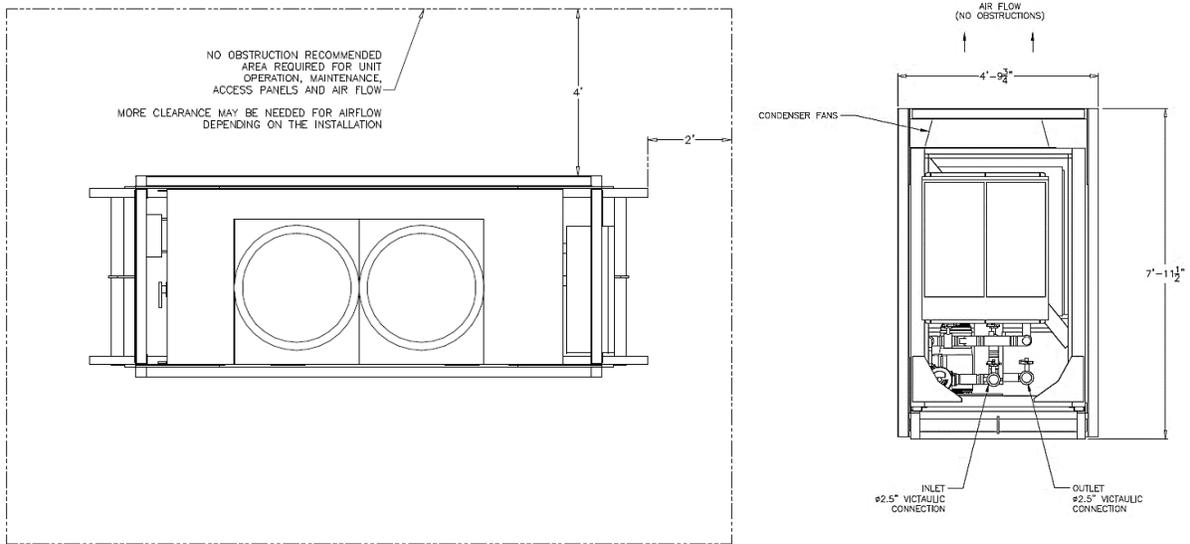
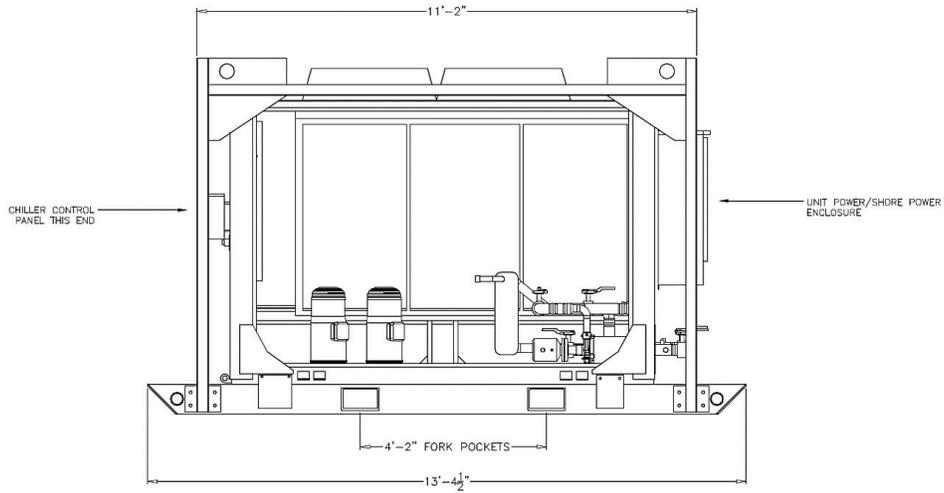
**Table 18. Dimensions and weights**

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.







## 40 Ton Air-Cooled CGAM

**Table 19. General – CSCA0040F0-F2**

Labels	Value
Model Number	CGAM040
Nominal Tons	40
Refrigerant	R-410A
Refrigerant Charge <sup>(a)</sup>	32 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	19 lbs
Water Connection Size	2.5 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 20. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	95 A
Maximum Overcurrent Protection (MOP)	110 A
Full Load Amps (FLA)	89 A
<b>With Integral Pump</b>	
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	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°F	0	57.8	54.2	50.3	46.5	42.6
55°F	0	49.3	46.3	40.0	39.7	36.3
45°F	0	41.3	38.9	36.2	33.3	30.4
35°F	10	33.5	31.5	29.4	27.1	24.7
25°F	25	26.3	24.9	23.2	21.3	-
15°F	35	20.3	19.2	17.9	-	-
5°F	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 <sub>2</sub> O)
46 (min flow)	5.38
50	6.30
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. H<sub>2</sub>O = 1 psi).*



## 25 to 120 Ton CGAM

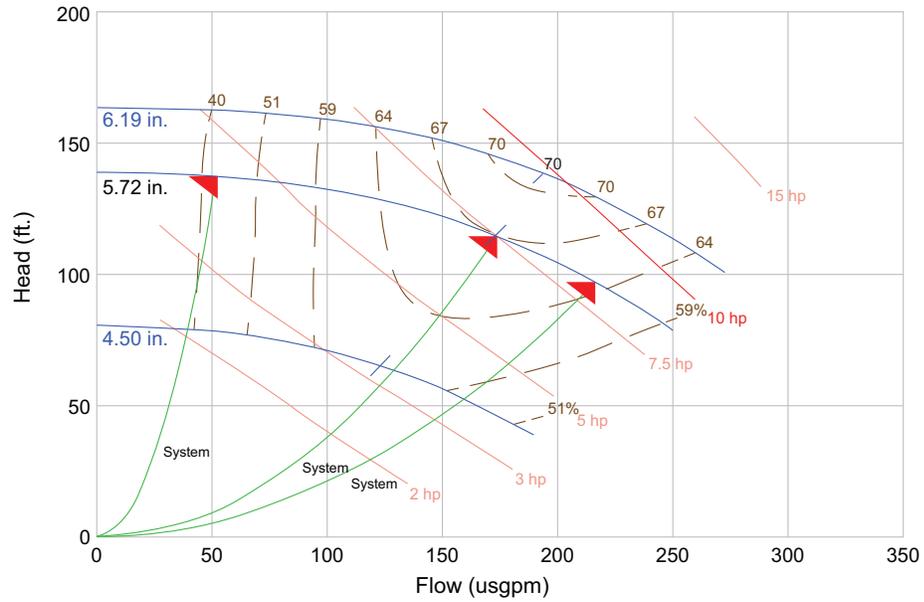
### General – CSCA0040F0

**Table 24. Dimensions and weights**

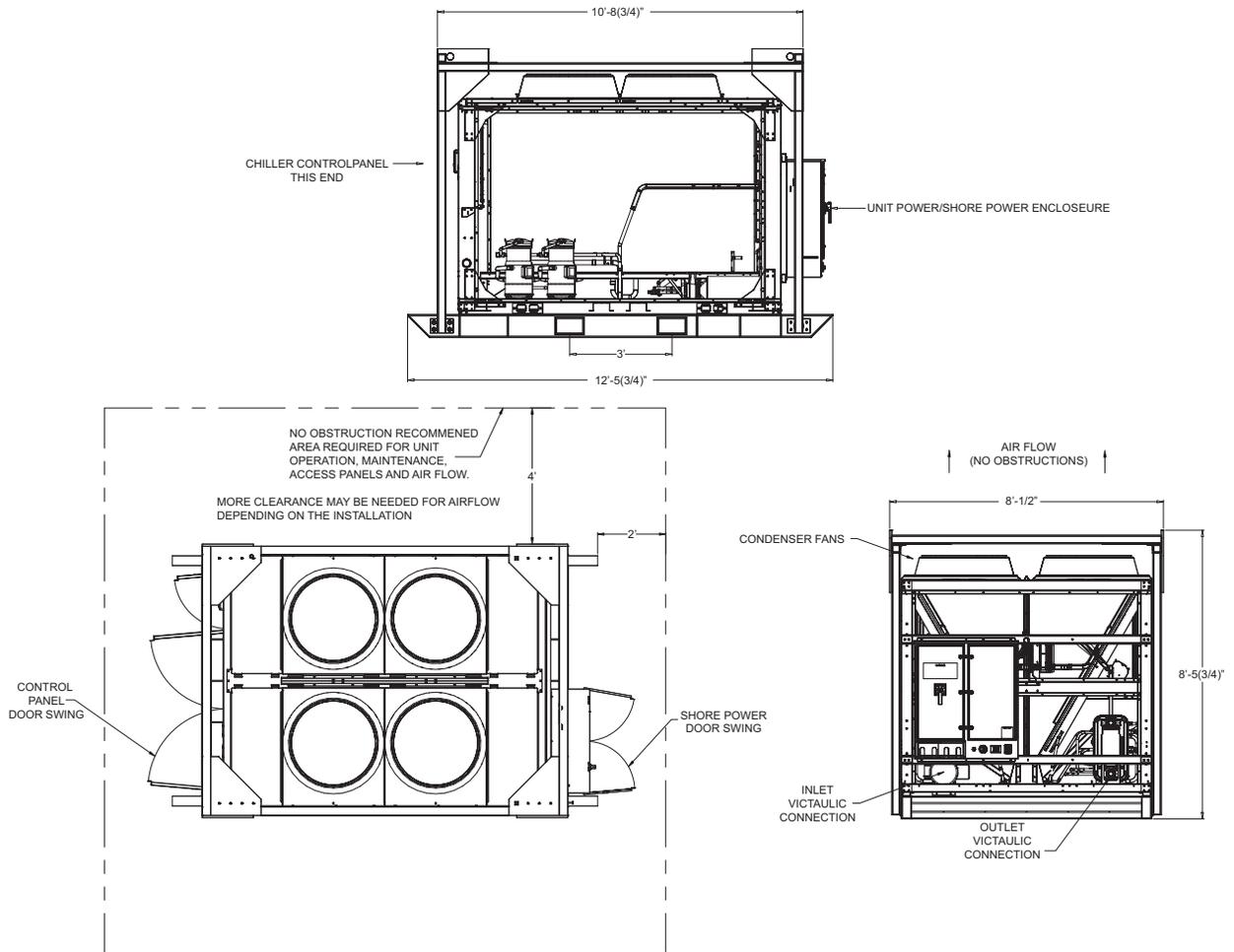
Labels	Value
Length	12 ft. 5 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	7,600
Operating Weight (lbs)	7,800
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.125 in.
Fork Pocket Center to Center Distance	3 ft.

**Notes:**

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



## 25 to 120 Ton CGAM





## 25 to 120 Ton CGAM

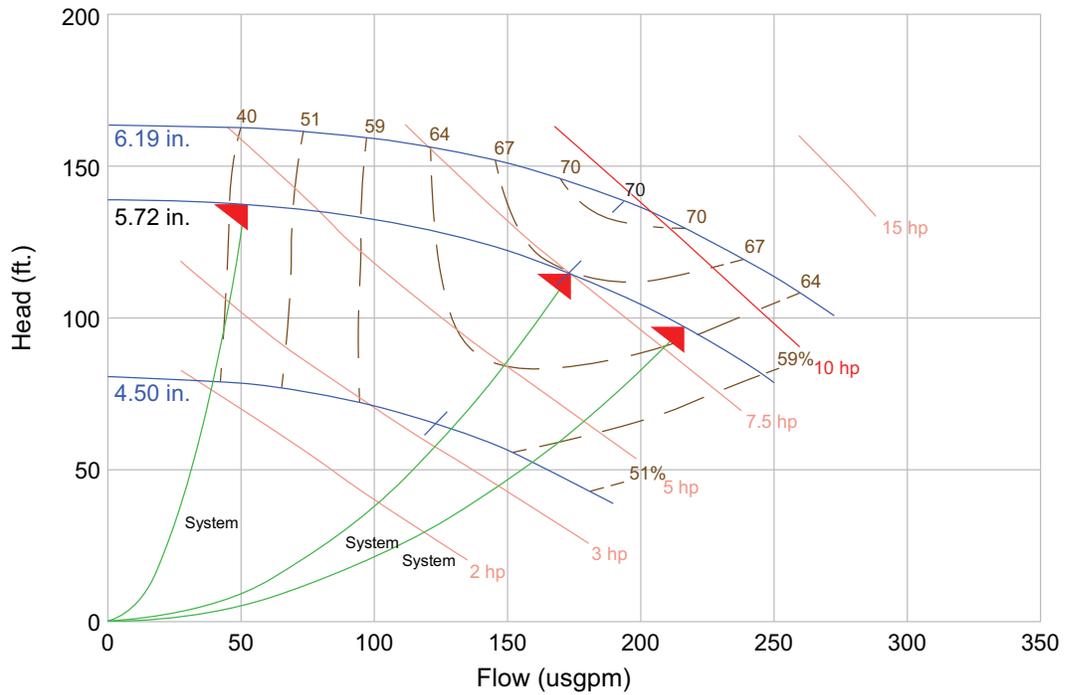
### General – CSCA0040F2

**Table 25. Dimensions and weights**

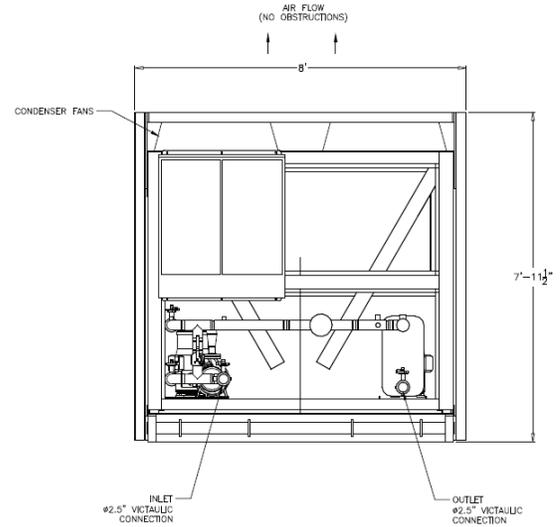
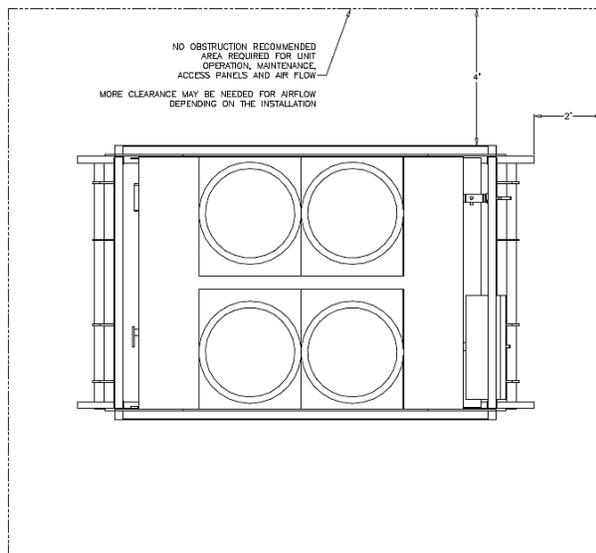
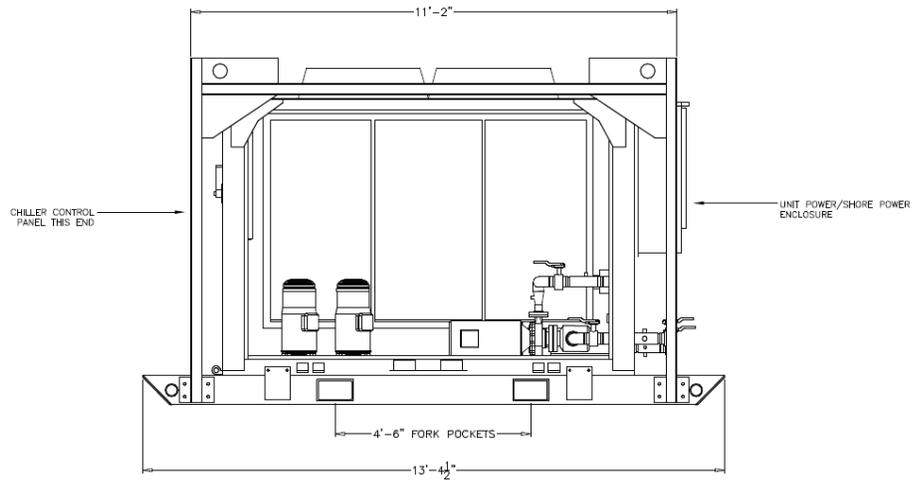
Labels	Value
Length	13 ft. 4.5 in.
Width	8 ft.
Height	7 ft. 11.5 in.
Shipping Weight (lbs)	7,000
Operating Weight (lbs)	7,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**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





## 25 to 120 Ton CGAM

### 60 Ton Air-Cooled CGAM

**Table 26. General – CSCA0060F0-F3**

Labels	Value
Model Number	CGAM060
Nominal Tons	60
Refrigerant	R-410A
Refrigerant Charge <sup>(a)</sup>	44 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	28 lbs
Water Connection Size	4 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 27. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	130 A
Maximum Overcurrent Protection (MOP)	150 A
Full Load Amps (FLA)	124 A
<b>With Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	144 A
Maximum Overcurrent Protection (MOP)	150A or 175A <sup>(c)</sup>
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	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°F	0	85.1	79.8	74.2	68.3	-
55°F	0	73.3	68.8	64.0	59.0	54.0
45°F	0	62.2	58.4	54.3	50.0	45.7
35°F	15	51.3	48.3	44.9	41.4	37.7
25°F	25	41.6	39.2	36.5	33.6	30.6
15°F	35	32.9	31.0	28.8	26.5	-
5°F	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).*



## 25 to 120 Ton CGAM

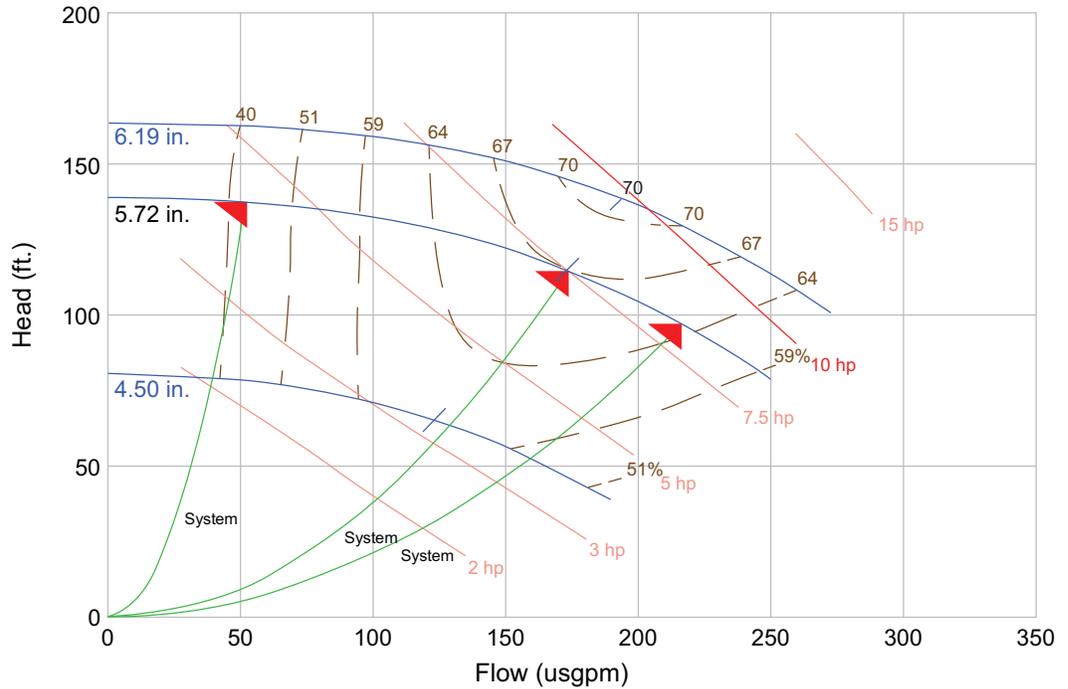
### General – CSCA0060F0

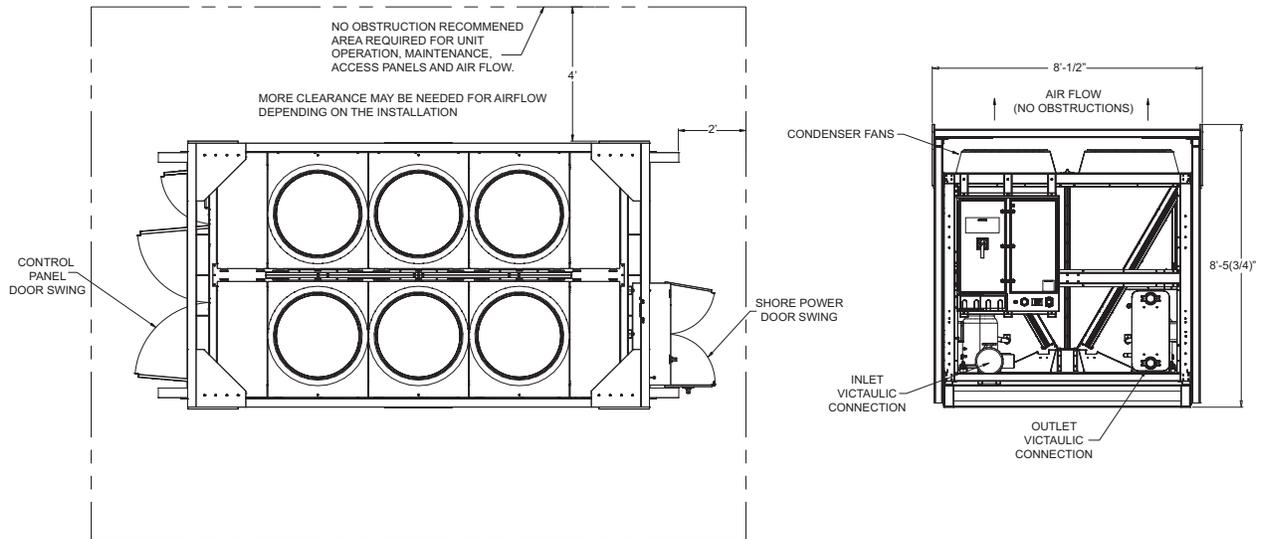
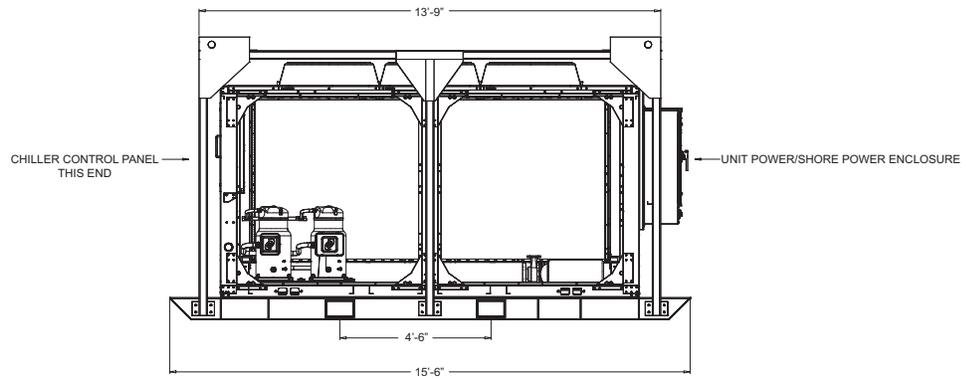
**Table 31. Dimensions and weights**

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.







## 25 to 120 Ton CGAM

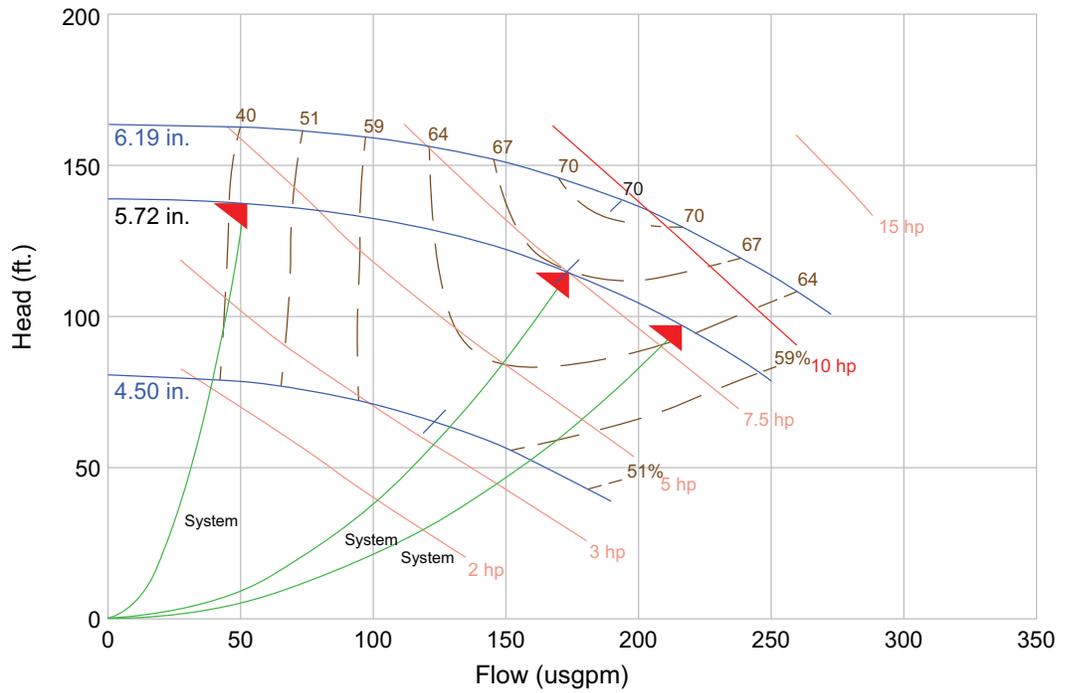
### General – CSCA0060F2

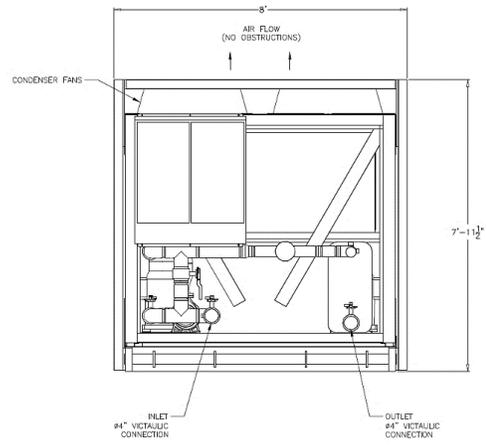
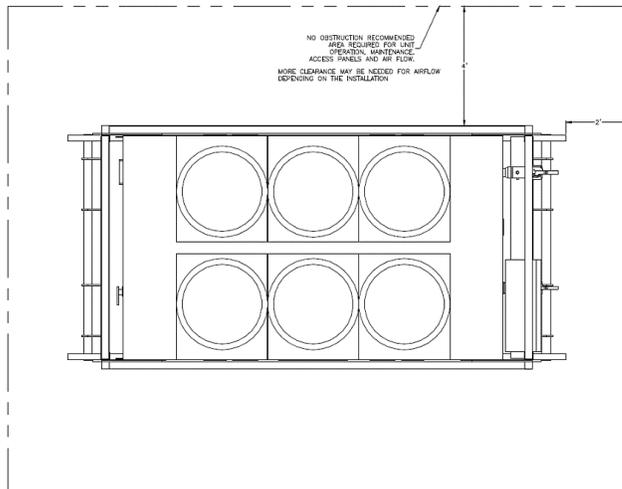
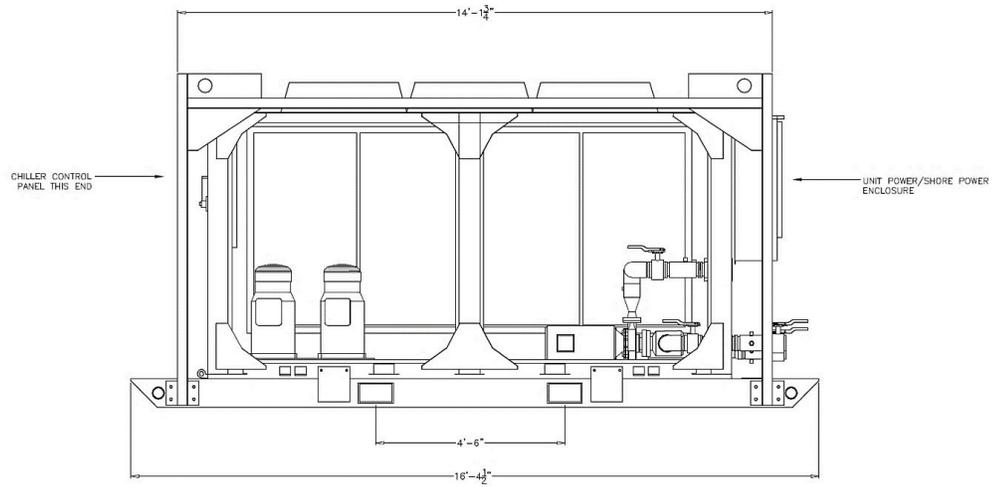
**Table 32. Dimensions and weights**

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.







## 25 to 120 Ton CGAM

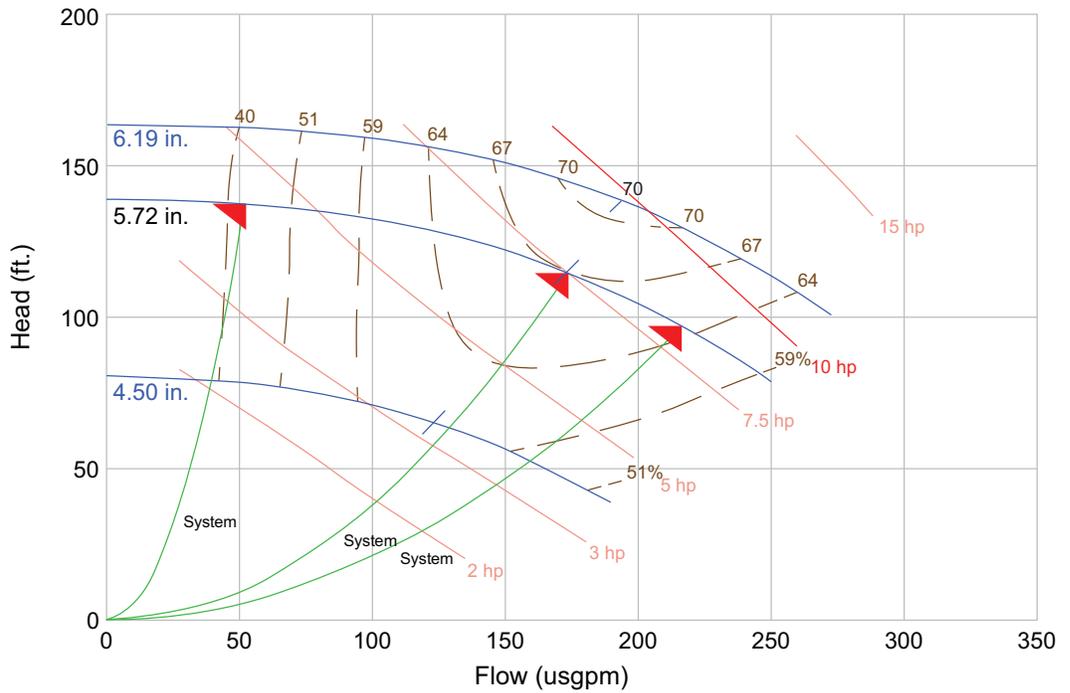
### General – CSCA0060F3

**Table 33. Dimensions and weights**

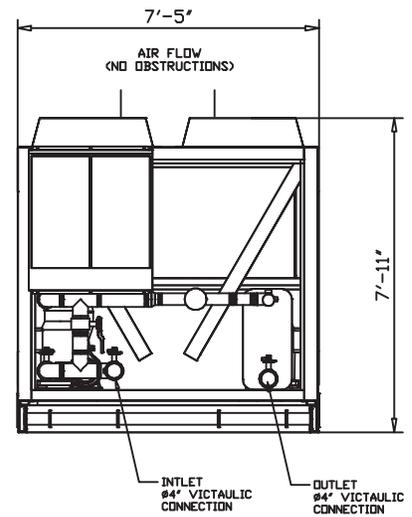
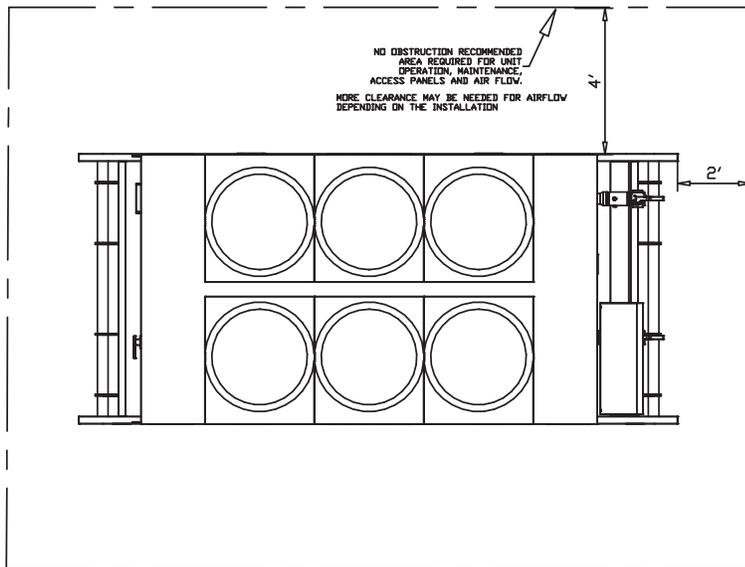
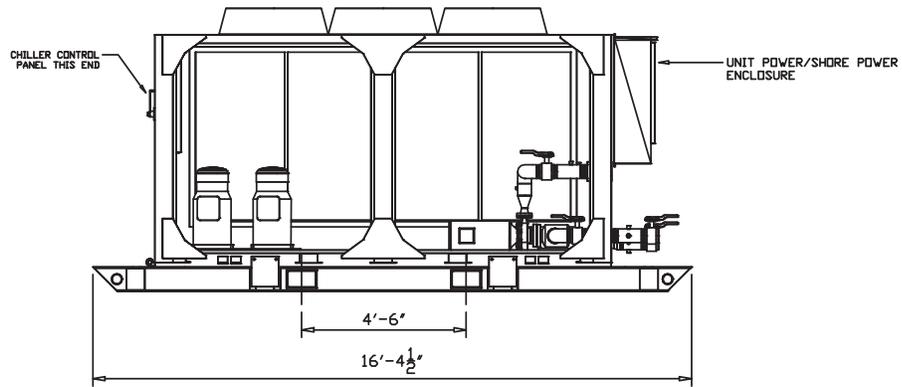
Labels	Value
Length	16 ft. 4.5 in.
Width	7 ft. 4.5 in.
Height	7 ft. 11 in.
Shipping Weight (lbs)	7,900
Operating Weight (lbs)	8,100
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



## 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 <sup>(a)</sup>	74 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	45 lbs
Water Connection Size	4 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	162 A
Maximum Overcurrent Protection (MOP)	175 A
Full Load Amps (FLA)	152 A
<b>With Integral Pump</b>	
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	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°F	0	115.6	108.1	100.3	92.5	-
55°F	0	99.9	93.5	86.7	79.9	73.1
45°F	0	84.8	79.5	73.8	67.9	62.0
35°F	15	70.0	65.7	61.0	56.1	51.2
25°F	25	56.6	53.2	49.5	45.5	-
15°F	35	44.6	41.9	39.0	-	-
5°F	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).*



## 25 to 120 Ton CGAM

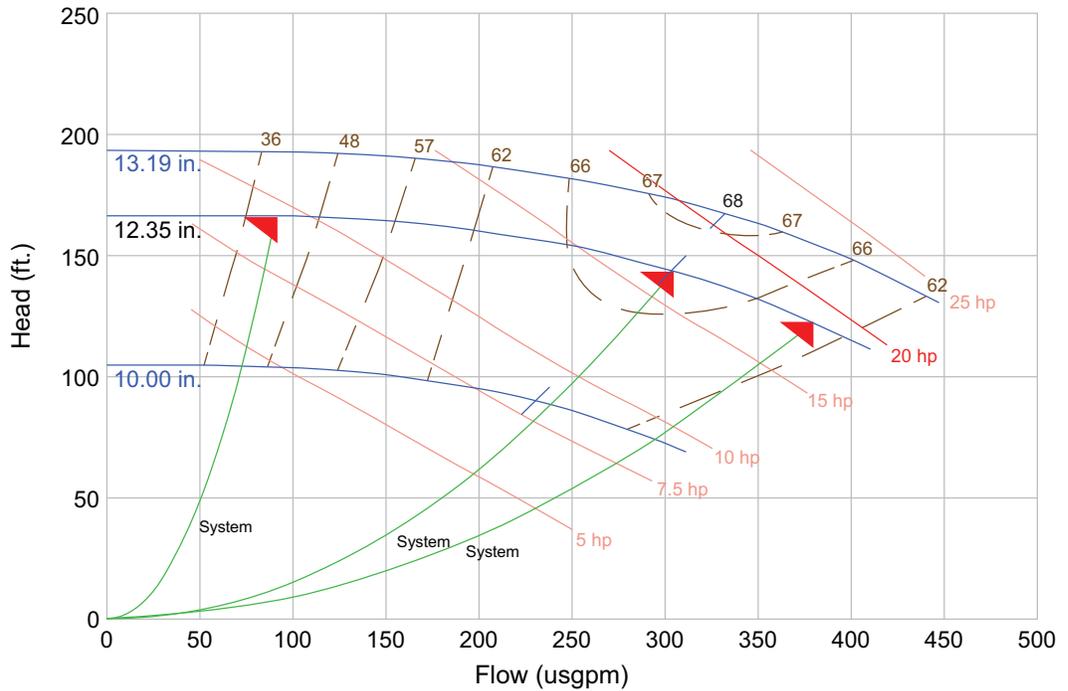
### General – CSCA0080F1

**Table 39. Dimensions and weights**

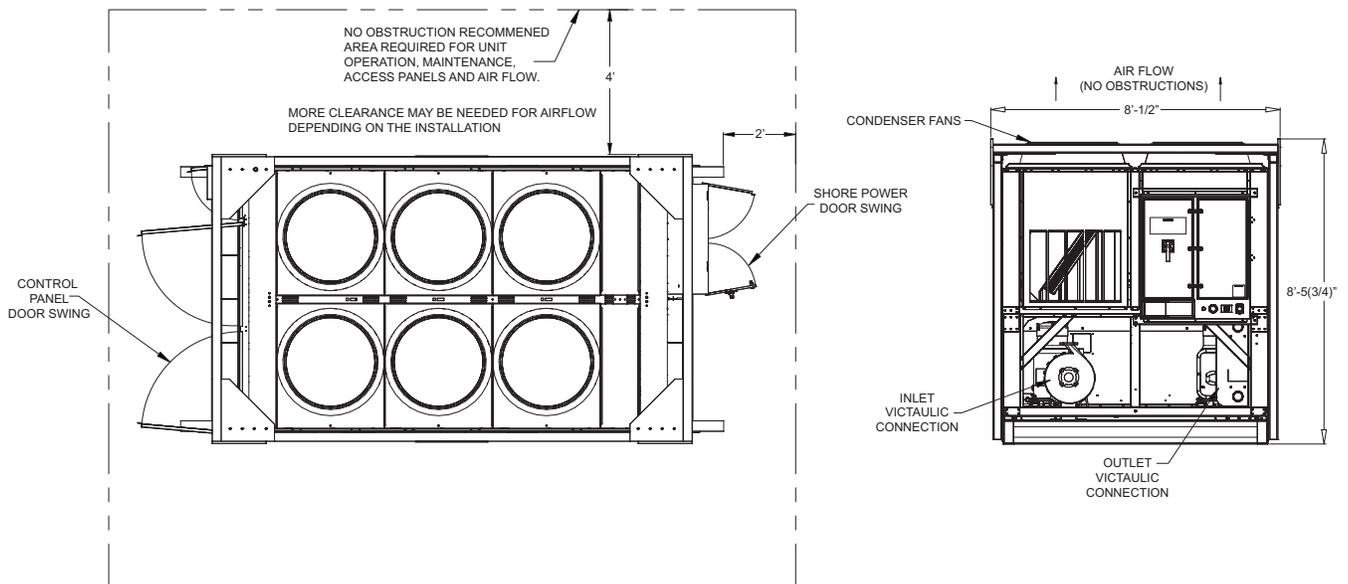
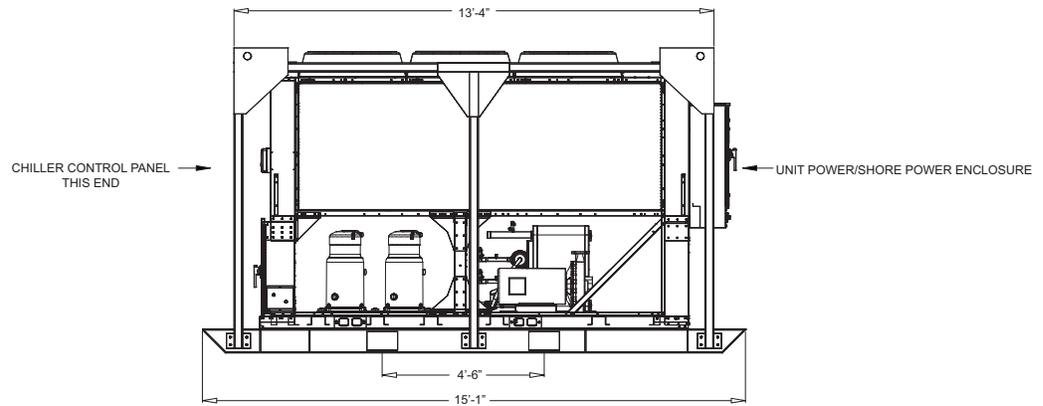
Labels	Value
Length	15 ft. 1 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,100
Operating Weight (lbs)	10,300
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



# 25 to 120 Ton CGAM





## 25 to 120 Ton CGAM

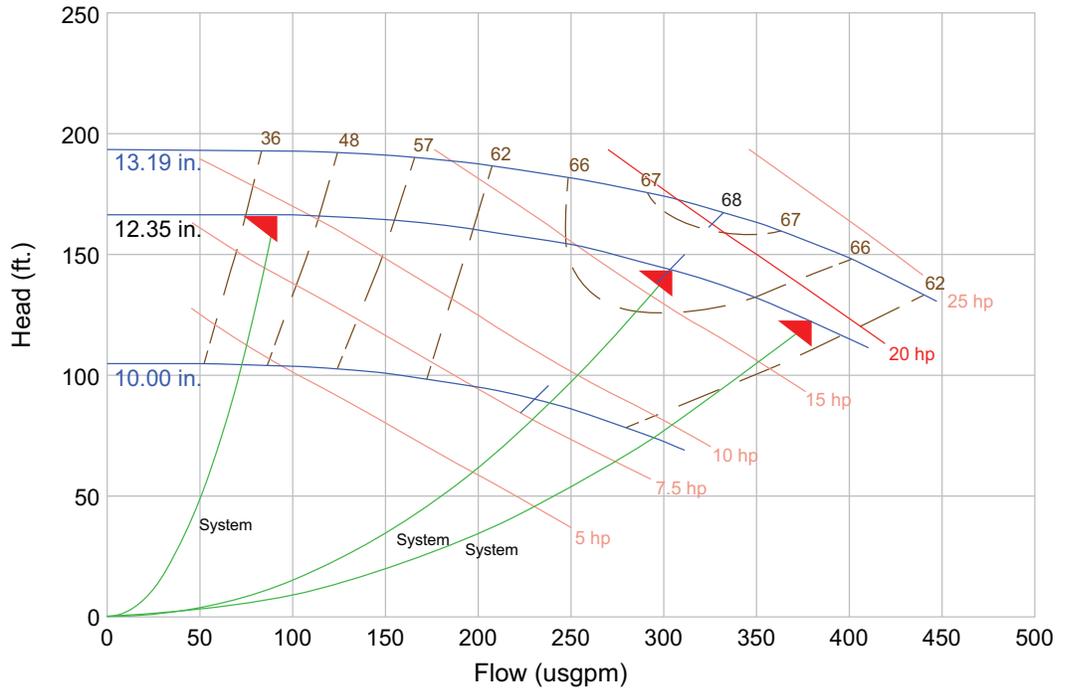
### General – CSCA0080F2

**Table 40. Dimensions and weights**

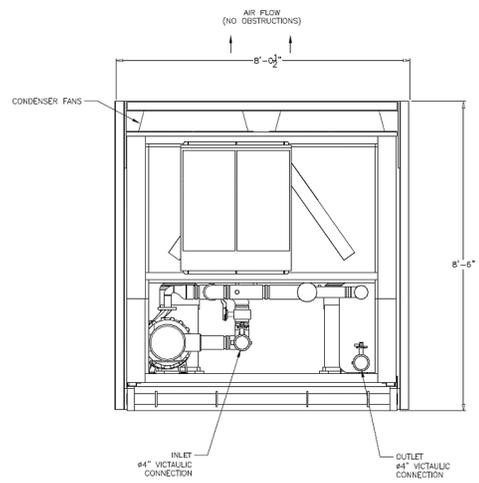
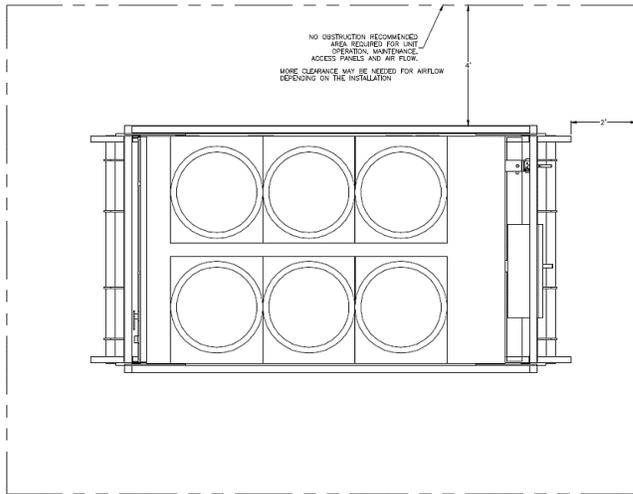
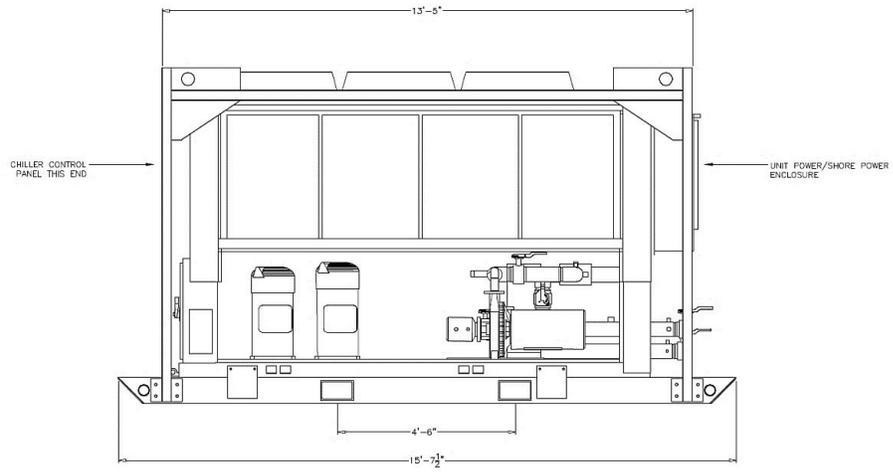
Labels	Value
Length	15 ft. 7.5 in.
Width	8 ft. 0.5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	9,800
Operating Weight (lbs)	10,000
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



# 25 to 120 Ton CGAM





## 25 to 120 Ton CGAM

### General – CSCA0080F4

**Table 41. General – CSCA0080F4 CGAM**

Labels	Value
Model Number	CGAM080
Nominal Tons	80
Refrigerant	R-454B
Refrigerant Charge <sup>(a)</sup>	67/67 lbs
Water Connection Size	4 in. grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b)(c)</sup>	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
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	163 A
Maximum Overcurrent Protection (MOP)	200A
Full Load Amps (FLA)	157.9 A
<b>With Integral Pump</b>	
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 <sub>2</sub> O
Max Flow	412 gpm @ 114 ft.H <sub>2</sub> O

**Table 44. Cooling capacity (80 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	134.5	127.5	120.3	112.9
55°F	0	114.4	108.6	102.6	96.3

**Table 44. Cooling capacity (80 tons) (continued)**

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
45°F	0	96.3	91.5	86.5	81.3
35°F	10	79.6	75.7	71.5	67.1
25°F	25	64.5	61.3	57.9	54.4
15°F	35	51.6	50.0	46.2	43.2
5°F	40	40.9	38.7	36.3	33.7
0°F	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**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
94 (min flow)	3.85
110	5.19
130	7.13
150	9.35
170	11.9
190	14.7
210	17.7
230	21.1
250	24.7
275 (max flow)	29.6

*Note:* Maximum water side pressure is 150 psi (2.31 ft. H<sub>2</sub>O = 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: forklift or crane.
2. All weights and dimensions listed above are subject to change without notice or liability.

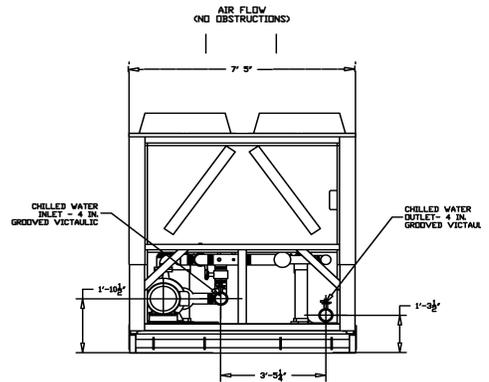
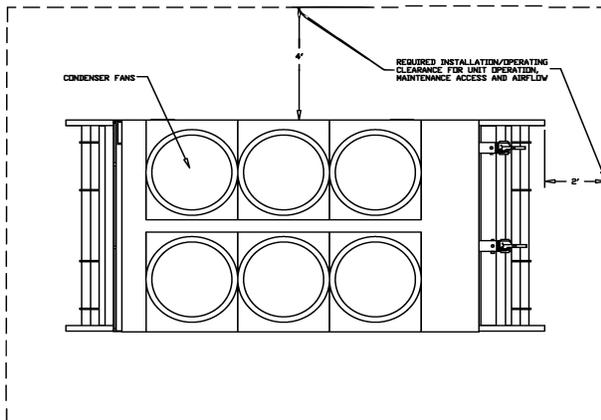
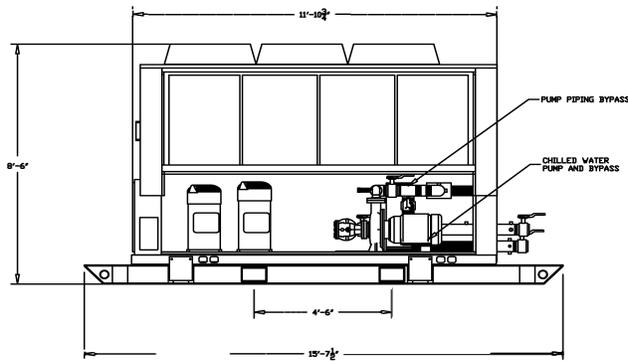
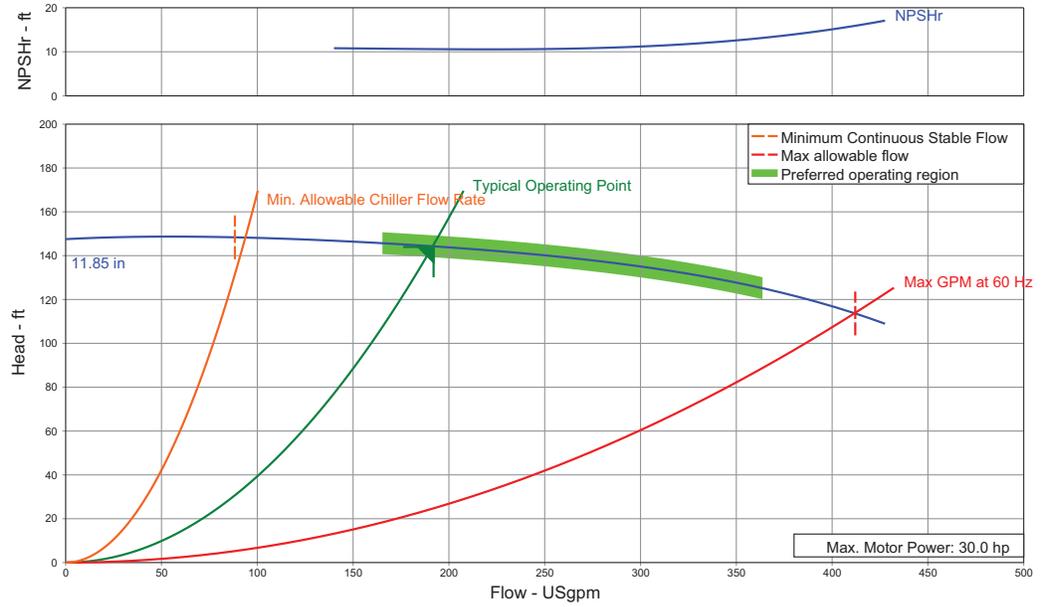
**Table 47. Installed/operating clearances**

Labels	Value
Front	24 in.
Back	24 in.
Slides	48 in. <sup>(a)</sup>
Top	No obstructions

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

# 25 to 120 Ton CGAM

## Single Speed Pump Curve



# 100 Ton Air-Cooled CGAM

**Table 48. General – CSCA00100F1-F3**

Labels	Value
Model Number	CGAM100
Nominal Tons	100
Refrigerant	R-410A
Refrigerant Charge <sup>(a)</sup>	90 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	49 lbs
Water Connection Size	4 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 49. Electrical data**

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



## 25 to 120 Ton CGAM

**Table 51. Cooling capacity (100 tons)**

Leaving Water Temp	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°F	0	146.7	137.0	127.0	117.0	–
55°F	0	126.7	118.4	109.7	100.9	92.1
45°F	0	107.5	100.6	93.2	85.6	78.0
35°F	10	88.9	83.3	77.3	70.9	64.5
25°F	25	71.6	67.2	62.4	57.2	–
15°F	35	56.3	52.8	49.0	–	–
5°F	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).*

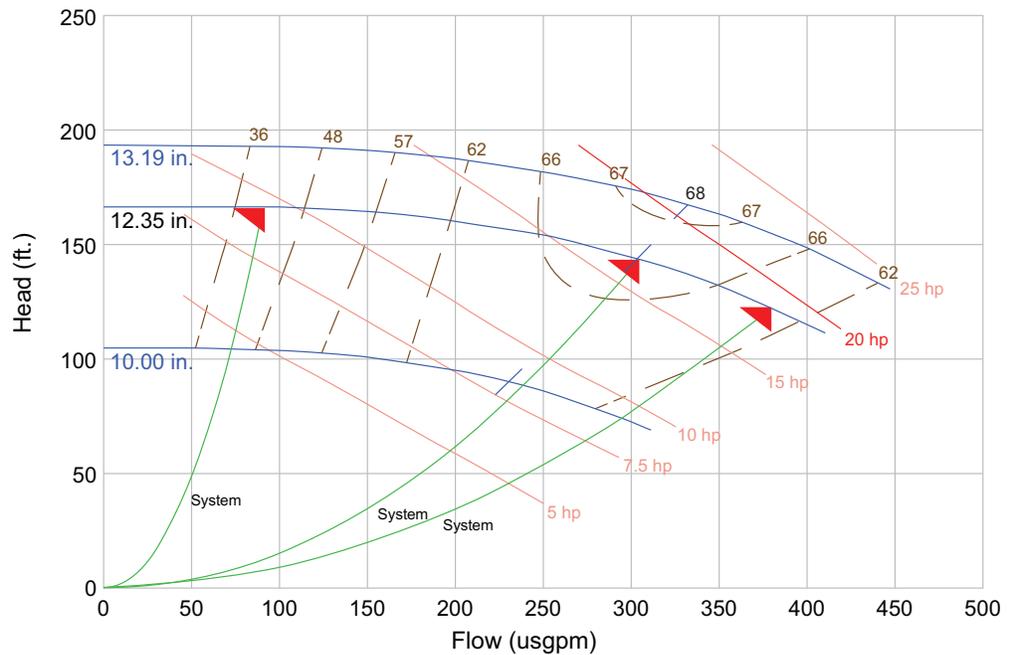
General – CSCA0100F1

Table 53. Dimensions and weights

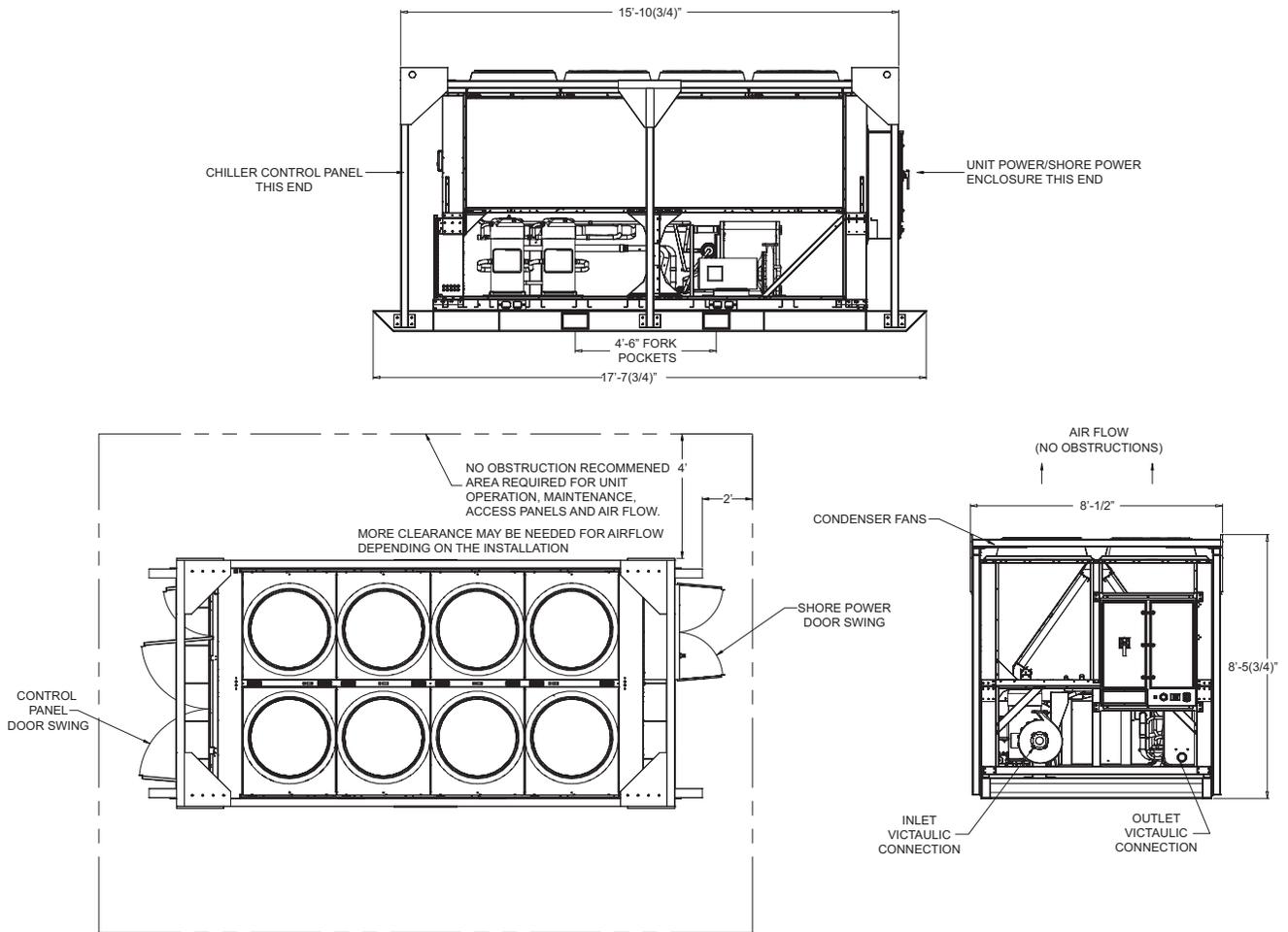
Labels	Value
Length	17 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	11,200
Operating Weight (lbs)	11,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

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



# 25 to 120 Ton CGAM



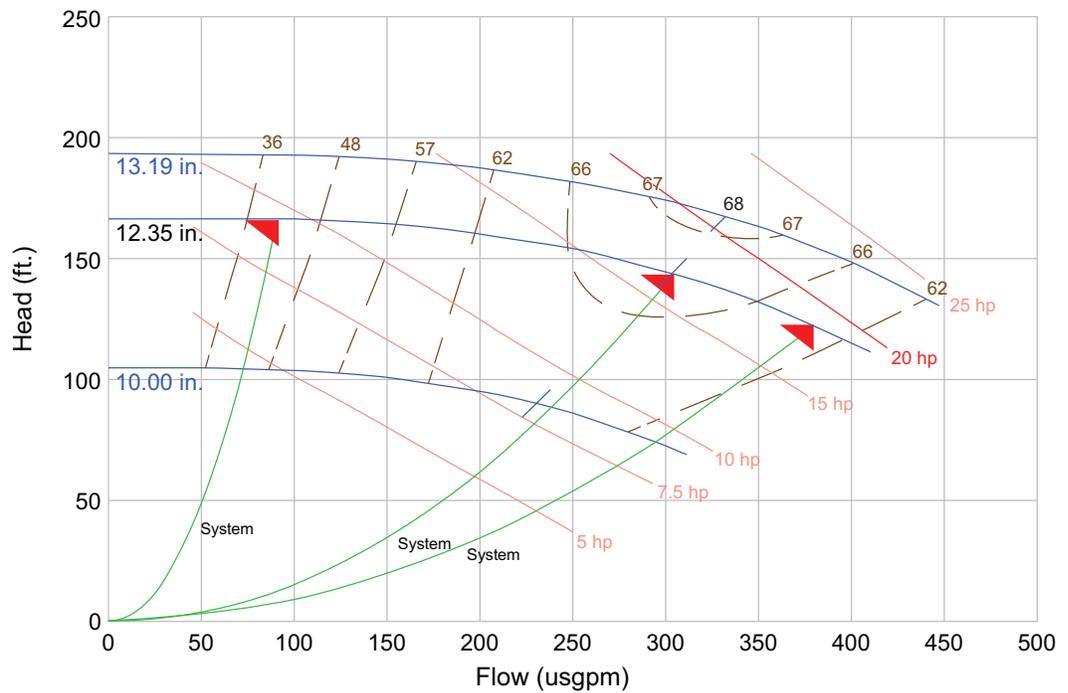
General – CSCA0100F2

Table 54. Dimensions and weights

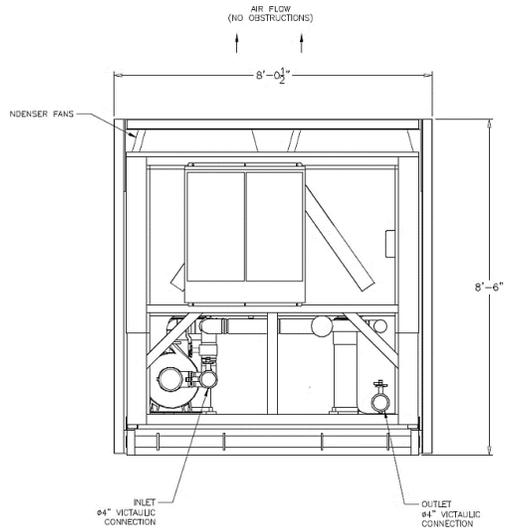
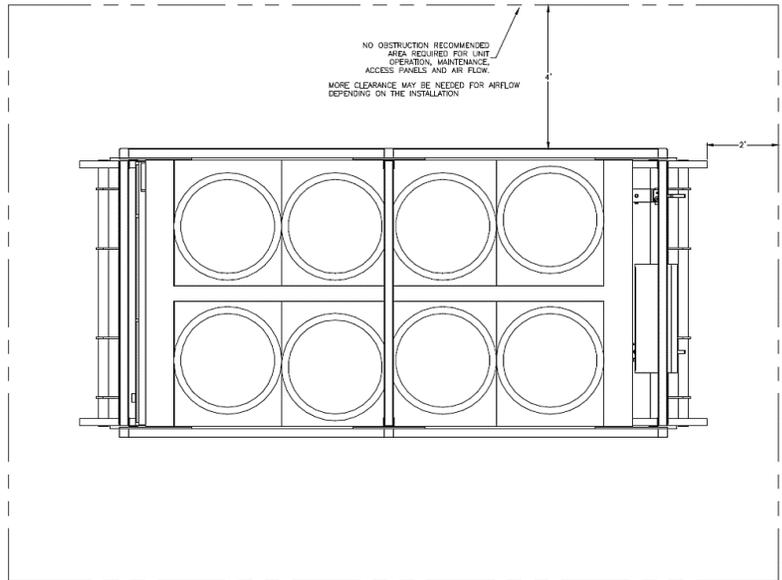
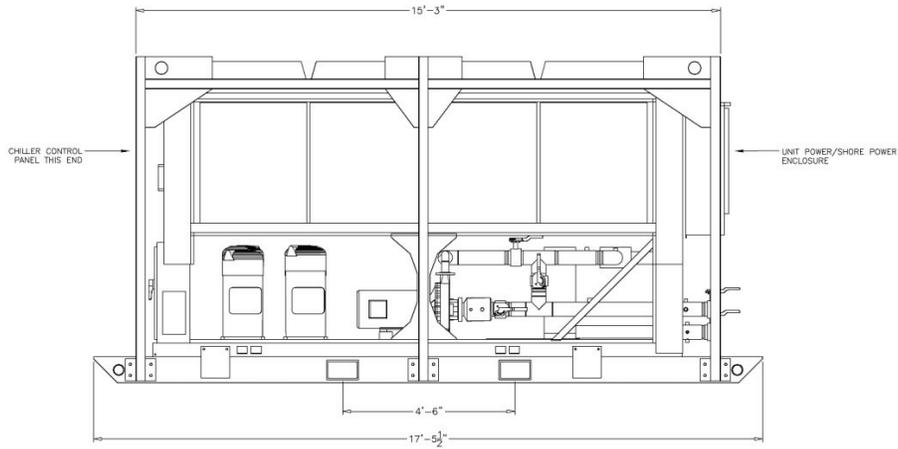
Labels	Value
Length	17 ft. 5.5 in.
Width	8 ft. 0.5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	12,500
Operating Weight (lbs)	12,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

Notes:

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



# 25 to 120 Ton CGAM



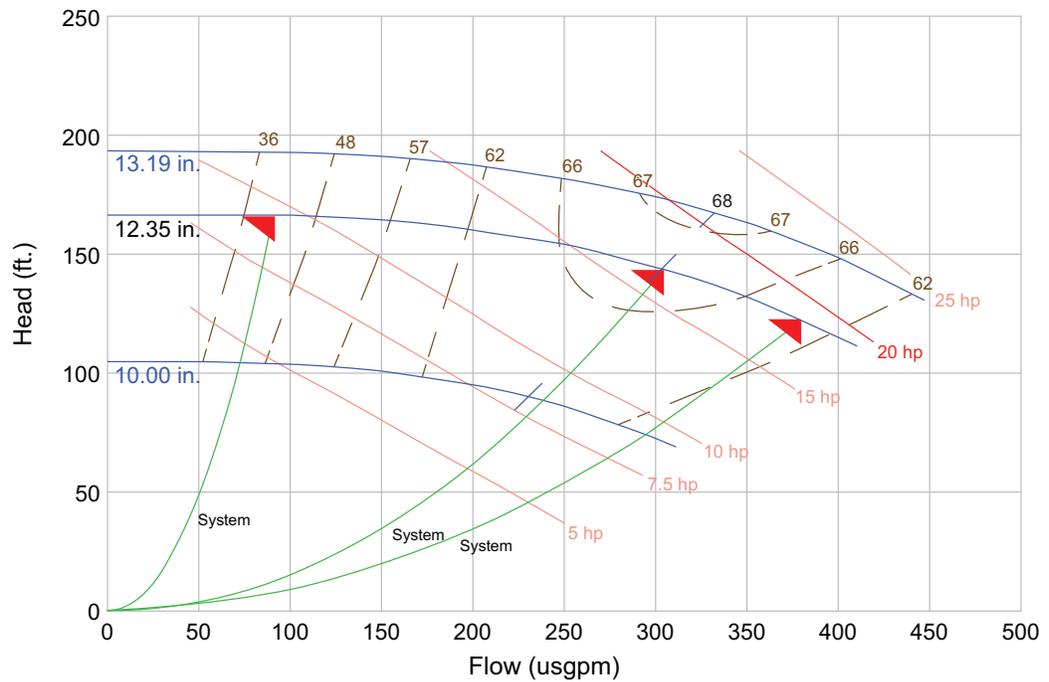
### General – CSCA0100F3

**Table 55. Dimensions and weights**

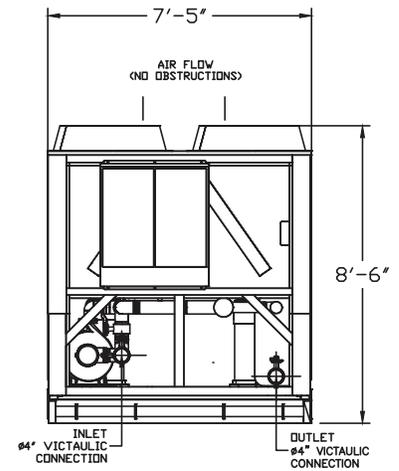
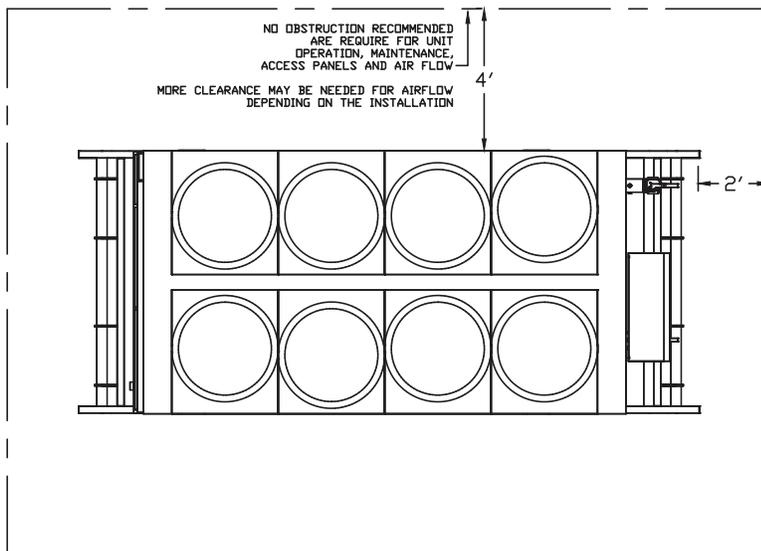
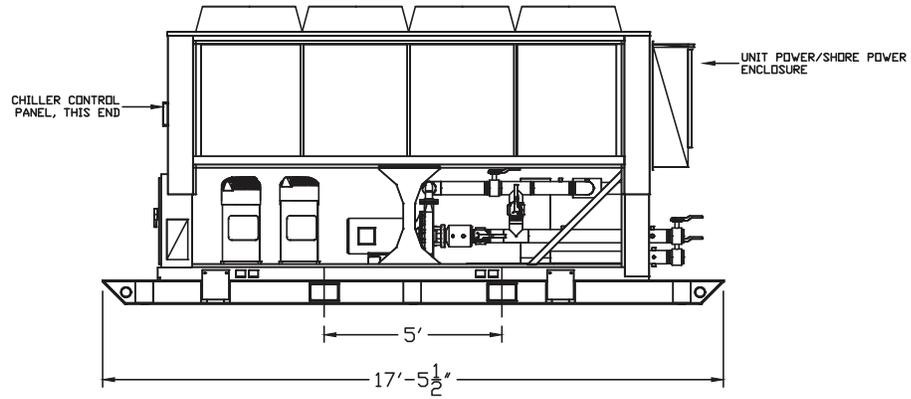
Labels	Value
Length	17 ft. 5.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,000
Operating Weight (lbs)	10,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 25 to 120 Ton CGAM



## 120 Ton Air-Cooled CGAM

**Table 56. General – CSCA00120F1-F3**

Labels	Value
Model Number	CGAM120
Nominal Tons	120
Refrigerant	R-410A
Refrigerant Charge <sup>(a)</sup>	86 lbs
Microchannel Refrigerant Charge <sup>(b)</sup>	50 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Extreme Ambient Operating Conditions <sup>(c)</sup>	-20°F to 125°F
Chilled Water Setpoint Limits <sup>(d)</sup>	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 <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	244 A
Maximum Overcurrent Protection (MOP)	250 A
Full Load Amps (FLA)	230 A
<b>With Integral Pump</b>	
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.



## 25 to 120 Ton CGAM

**Table 59. Cooling capacity (120 tons)**

Leaving Water Temp	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°F	0	169.7	158.1	146.3	134.6	–
55°F	0	147.5	137.5	127.1	116.7	–
45°F	0	126.1	117.6	108.7	99.6	90.5
35°F	10	104.6	97.7	90.4	82.7	75.1
25°F	25	85.1	79.6	73.7	67.4	–
15°F	35	67.3	63.0	58.3	–	–
5°F	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).*

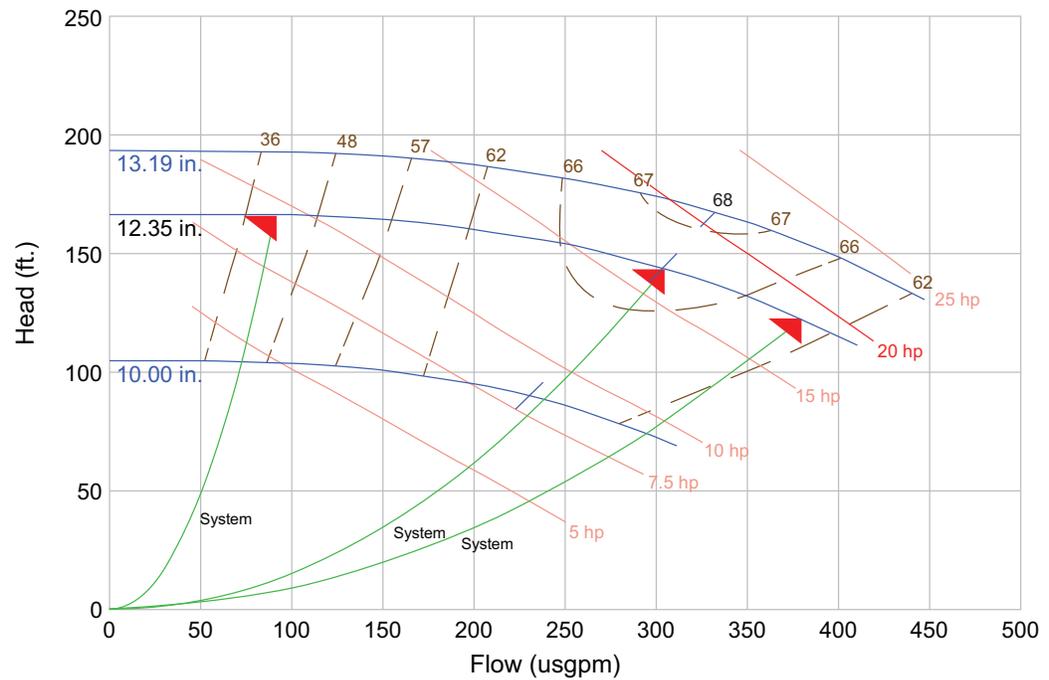
## General – CSCA0120F1

**Table 61. Dimensions and weights**

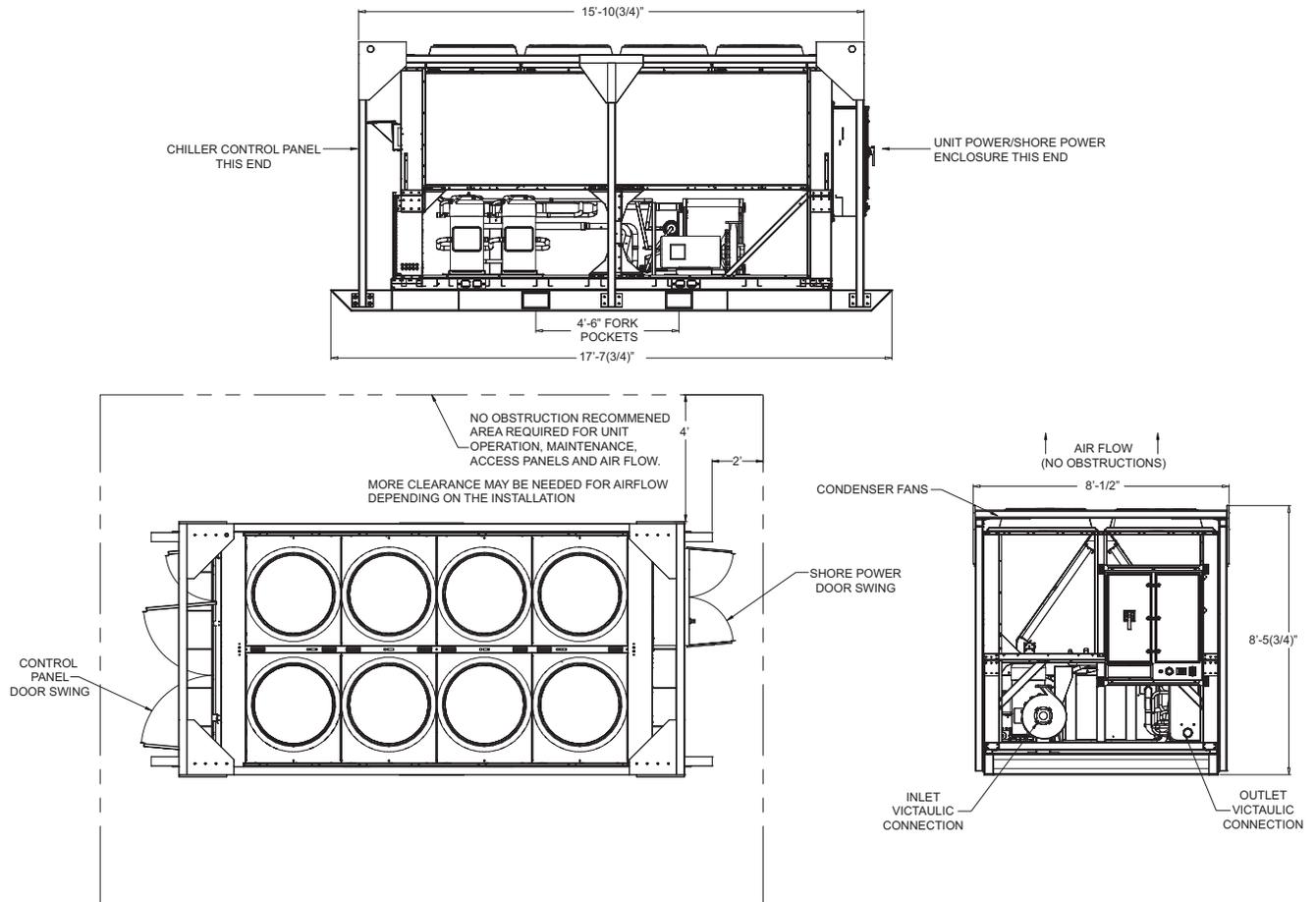
Labels	Value
Length	17 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	11,200
Operating Weight (lbs)	11,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 4.75 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



## 25 to 120 Ton CGAM



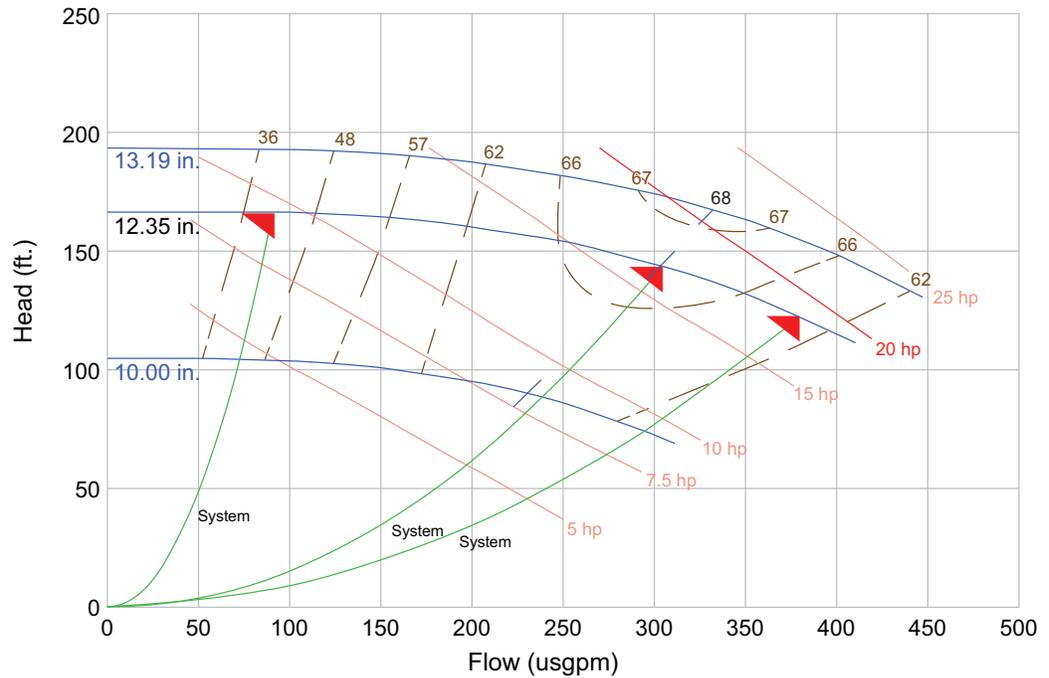
## General – CSCA0120F2

**Table 62. Dimensions and weights**

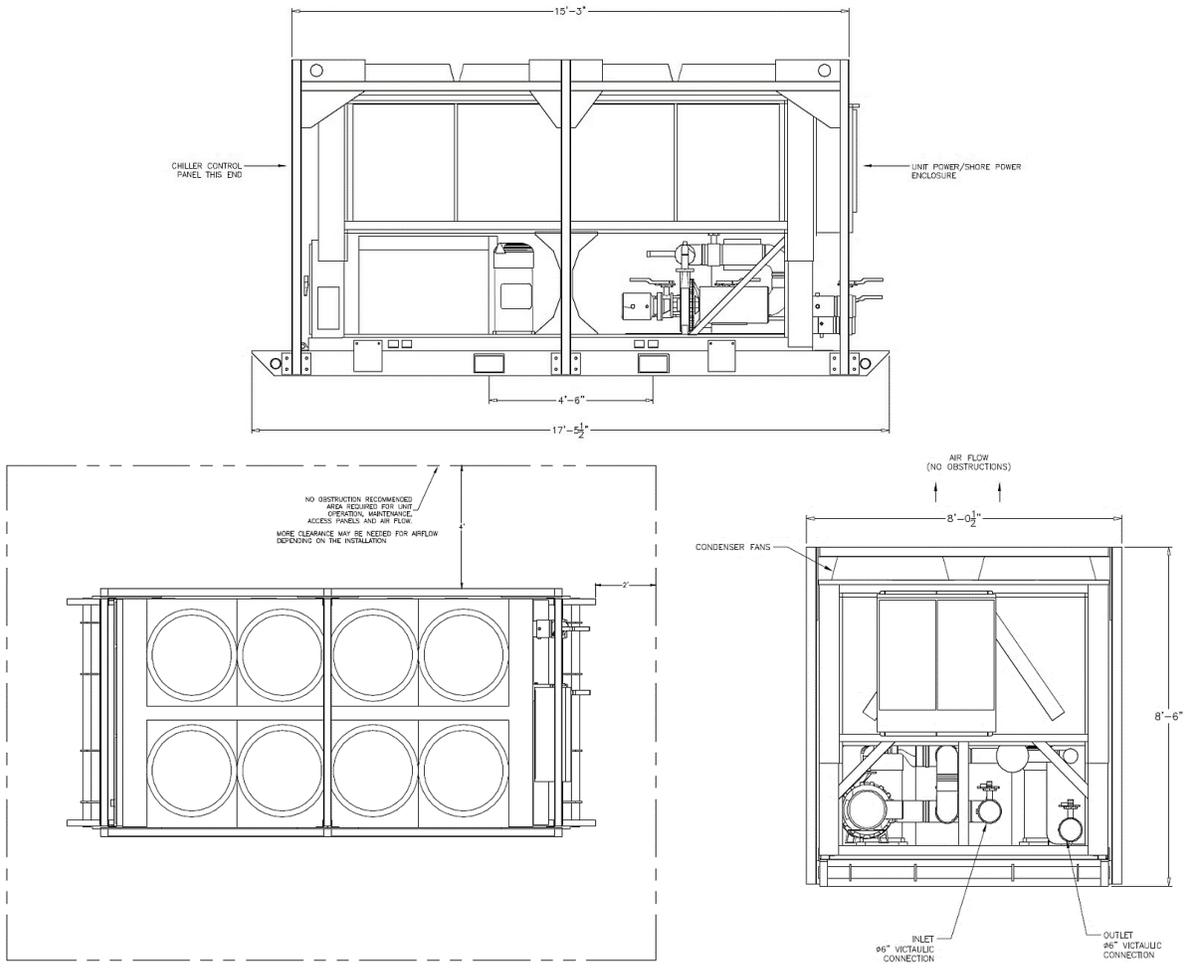
Labels	Value
Length	17 ft. 5.5 in.
Width	8 ft. 0.5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	13,000
Operating Weight (lbs)	13,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**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



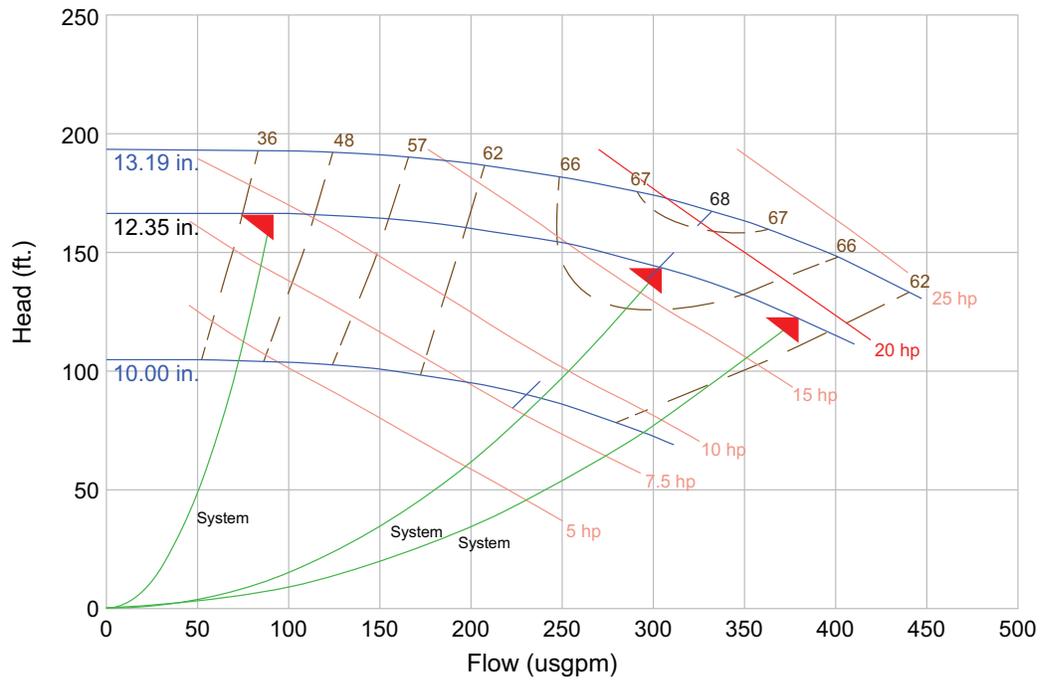
General – CSCA0120F3

Table 63. Dimensions and weights

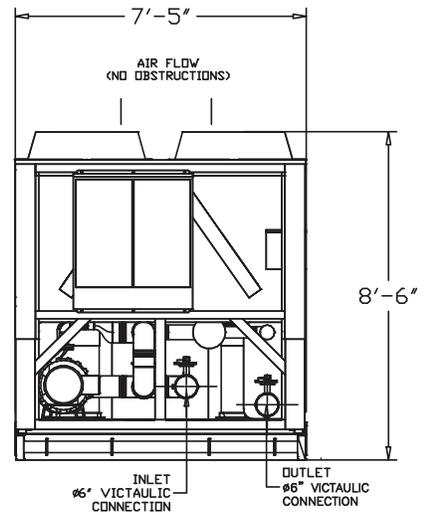
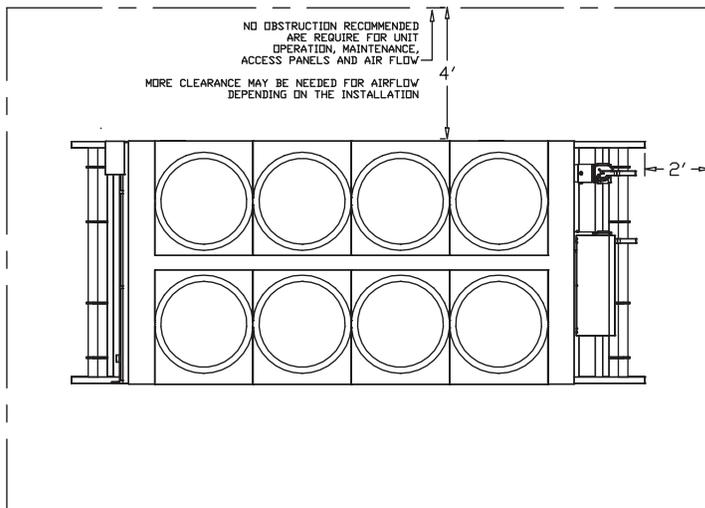
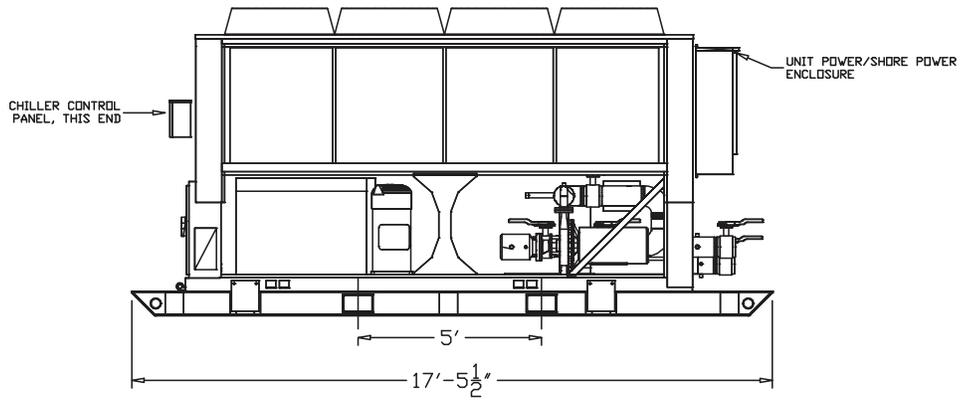
Labels	Value
Length	17 ft. 5.5 in.
Width	7 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	10,500
Operating Weight (lbs)	10,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 5 in.
Fork Pocket Center to Center Distance	5 ft.

Notes:

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



# 25 to 120 Ton CGAM



## General – CSCA0120F4

**Table 64. General – CSCA00120F4 CGAM**

Labels	Value
Model Number	CGAM120
Nominal Tons	120
Refrigerant	R-454B
Refrigerant Charge <sup>(a)</sup>	77/77 lbs.
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b)(c)</sup>	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 Connection
SCCR	35kA at 460Vac Symmetrical Max
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	244 A
Maximum Overcurrent Protection (MOP)	300 A
Full Load Amps (FLA)	234.9 A
<b>With Integral Pump</b>	
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
Min Flow	88 GPM at 148 ft H <sub>2</sub> O
Max Flow	412 GPM at 114 ft H <sub>2</sub> O

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

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
136 (min flow)	5.0
170	7.7
205	11.1
240	15.0



## 25 to 120 Ton CGAM

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

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
275	19.5
310	24.6
345	30.3
380	36.6
407 (max flow)	41.9

*Note:* Maximum water side pressure is 150 psi (2.31 ft. H<sub>2</sub>O = 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:**

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

**Table 69. Installed/operating clearances**

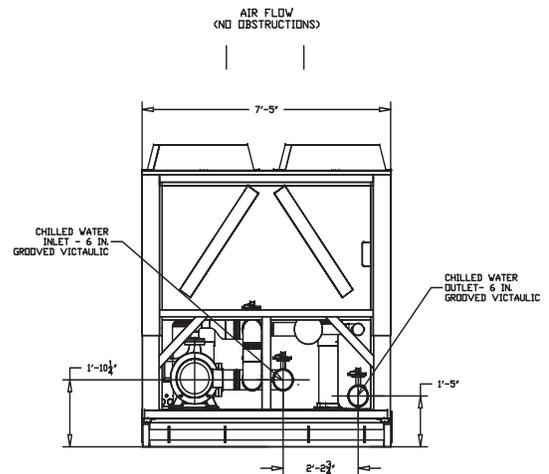
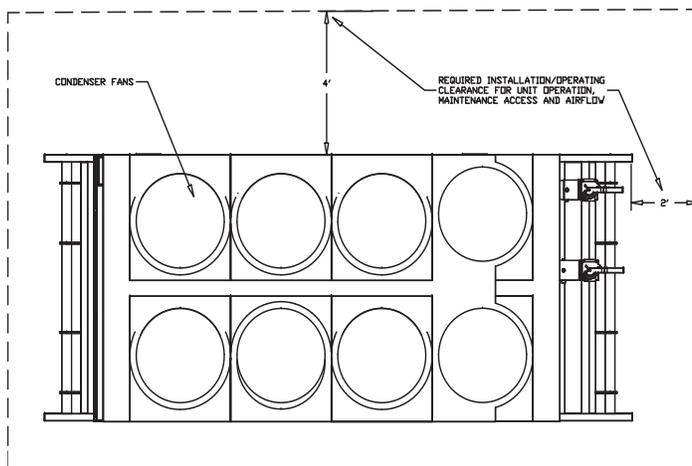
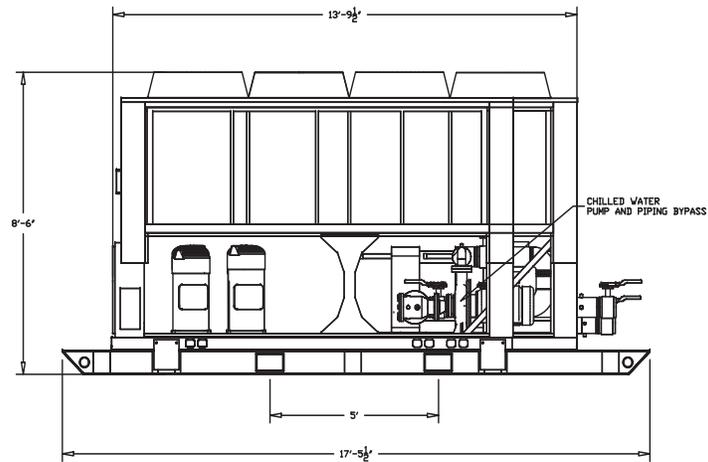
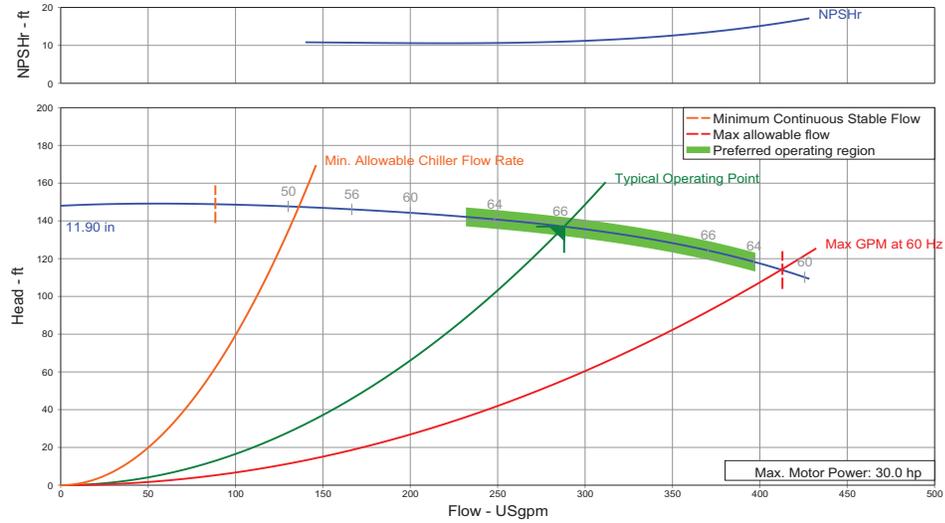
Front	24 in.
Back	24 in.
Sides	48 in. <sup>(a)</sup>
Top	No obstructions

(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	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	189.7	179.8	169.3	158.9
55°F	0	161	152.9	144.4	135.5
45°F	0	135.3	128.6	121.6	114.2
35°F	15	111.7	106.3	100.6	94.4
25°F	30	90.8	86.5	81.8	76.7
15°F	35	73.4	69.8	65.9	61.6
5°F	45	58.2	55.2	51.8	49.3
0°F	45	51.6	48.8	45.6	-

Single Speed Pump Curve





# 200 Ton ACSA

## General – RSCA0200F0

**Table 71. General – RSCA0200F0**

Labels	Value
Model Number	ACSA200
Nominal Tons	200
Refrigerant	R-410A
Refrigerant Charge <sup>(a)</sup>	96/96 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	-20°F to 130°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 Only
SCCR	5000 A
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	438 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	428 A
<b>With Integral Pump</b>	
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.

**Table 74. Cooling capacity (200 tons)**

Leaving Water Temp	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	306.9	289.4	271.6	254.0

**Table 74. Cooling capacity (200 tons) (continued)**

Leaving Water Temp	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
55°F	0	266.1	251.1	235.9	220.6
45°F	0	227.8	215.4	202.6	189.5
35°F	12	191.0	180.9	170.3	159.4
25°F	25	157.8	149.6	140.9	131.9
15°F	34	128.5	121.9	114.8	107.4
5°F	40	103.3	97.9	92.2	86.1
0°F	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 <sub>2</sub> 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. Installed/operating clearances**

Labels	Value
Front	40 in.
Back	40 in.
Sides	48 in. <sup>(a)</sup>
Top	No Obstructions

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



## 200 Ton ACSA

### General – RSCA0200F1

**Table 78. General – RSCA0200F1 ACSA**

Labels	Value
Model Number	ACSA200
Nominal Tons	200
Refrigerant	R-454B
Refrigerant Charge <sup>(a)</sup>	63/63 lbs.
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	-20°F to 130°F
Chilled Water Setpoint Limits <sup>(b)(c)</sup>	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 Connection
SCCR	35kA at 460VAC Symmetrical Max
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	436 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	415 A
<b>With Integral Pump</b>	
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. H <sub>2</sub> O
Max Flow	848 gpm @ 119 ft.H <sub>2</sub> O

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

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
240 (min flow)	-
250	7.96
300	11.1
350	14.8

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

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
400	18.9
450	23.5
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. Installed/operating clearances**

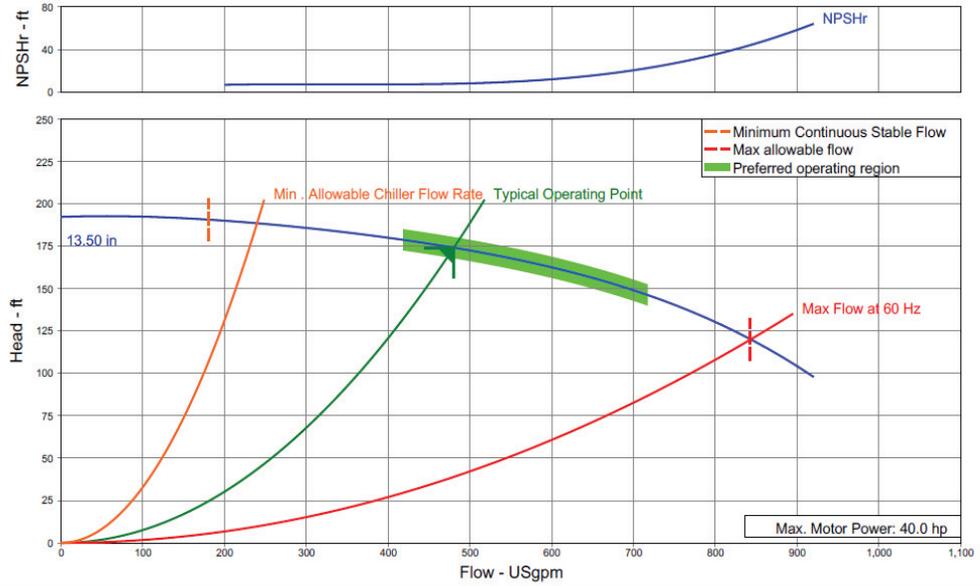
Labels	Value
Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
Top	No Obstructions

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

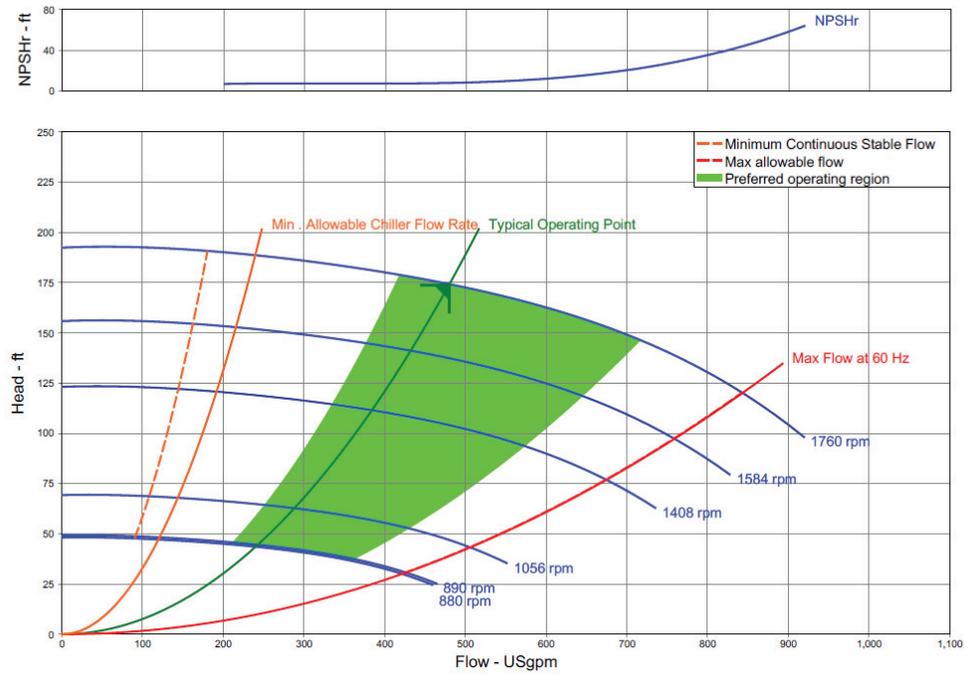
**Table 84. Cooling capacity (200 tons)**

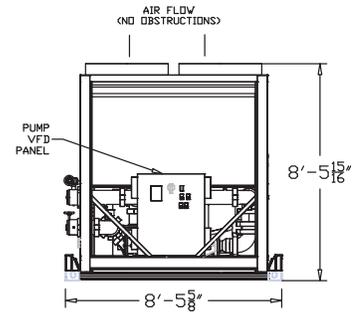
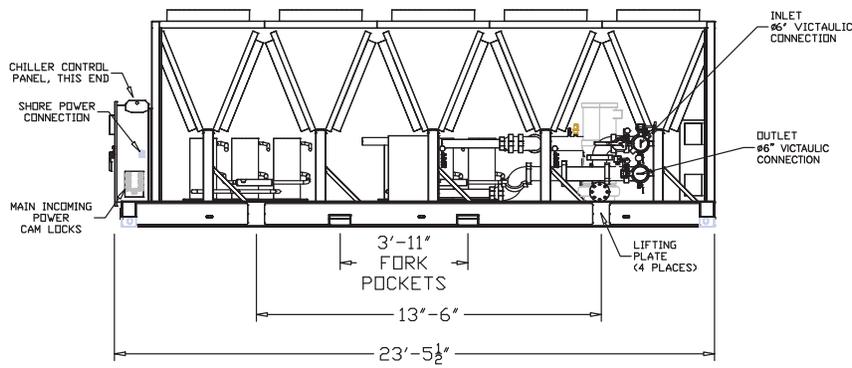
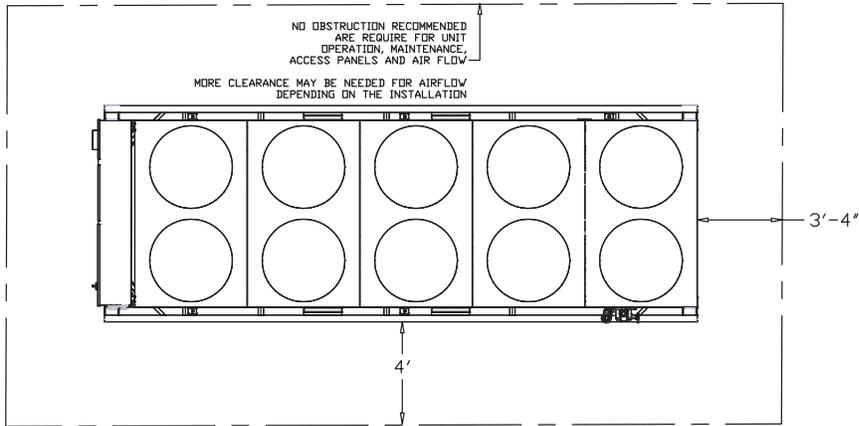
Leaving Water Temp	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	251.8	240.8	229.4	217.6
55°F	0	222.3	212.3	202.1	191.7
45°F	0	193.1	184.3	175.3	166.2
35°F	15	161.9	154.5	147	139.4
25°F	30	131.6	125.7	119.7	113.6
15°F	35	106.6	92.3	101.9	97.1
5°F	45	81.2	73.9	77.6	84.9
0°F	45	66.5	69.7	72.9	76.3

F0 and F1 Style ACSA Chillers - Single Speed Pump Curve



F0 and F1 Style ACSA Chillers - Multi Speed Pump Curve







# 200 Ton Air-Cooled ACXA

## General – RSCX0200F1 ACXA

**Table 85. General – RSCX0200F1**

Labels	Value
Model Number	ACXA200
Nominal Tons	200
Refrigerant	R-454B
Refrigerant Charge <sup>(a)</sup>	163/163 lbs
Water Connection Size	6 in. Victaulic
Cooling Mode Ambient Operating Conditions	-4°F to 125°F
Cooling Mode Setpoint Limits <sup>(b) (c)</sup>	40°F to 68°F
Heating Mode Ambient Operating Conditions	0°F to 95°F
Heating Mode Setpoint Limits <sup>(b) (d)</sup>	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 Only
SCCR	35,000A
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	401 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	379 A
<b>With Integral Pump</b>	
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	Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
68°F	0	288.6	273.7	258.2	242.3
65°F	0	276.6	262.2	247.4	232.2
60°F	0	256.9	243.5	229.8	215.8
55°F	0	237.8	225.4	212.8	200.0
50°F	0	219.5	208.1	196.5	184.6
45°F	0	202.1	191.5	180.9	170.0
40°F	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	Propylene Glycol (%)	Estimated Capacity (MBh) at 2.4 GPM / Nominal Cooling Ton			
		Ambient Air Wet Bulb/Dry Bulb			
		-1°F/0°F <sup>(a)</sup>	20°F/25°F <sup>(a)</sup>	40°F/50°F	60°F/75°F
70°F	25 <sup>(b)</sup>	854.4	1,434	2,212	2,972
80°F	0	852.8	1,419	2,189	2,934
90°F	0	860.8	1,409	2,164	2,853
100°F	0	-	1402.2	2,141	2,820
110°F	0	-	958.5	1,486	1,983
120°F	0	-	1409.4	2,107	2,756
130°F	0	-	-	2,096	2,725
140°F	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 <sub>2</sub> 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



## 200 Ton Air-Cooled ACXA

**Table 91. Heating mode water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> 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

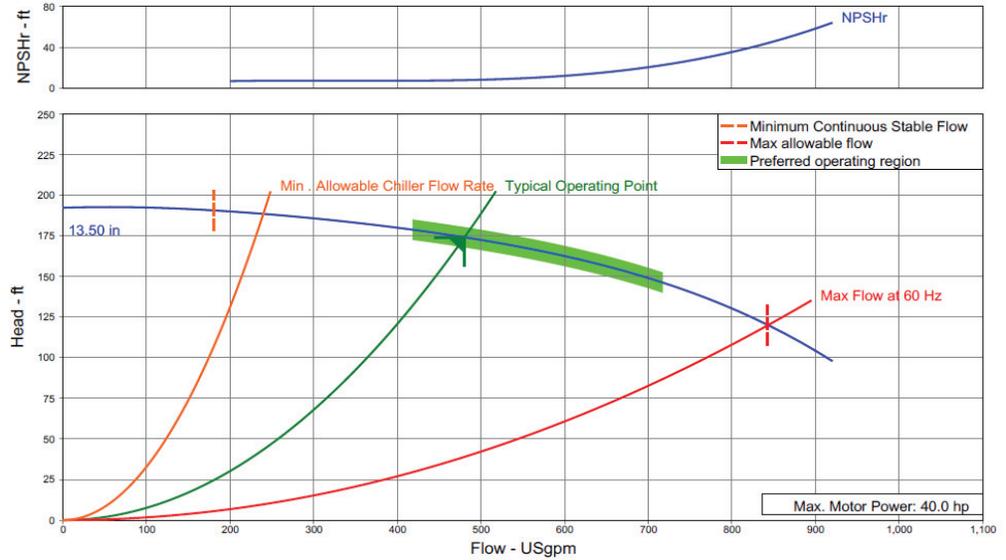
**Table 93. Installed/operating clearances**

Labels	Value
Front	40 in.
Back	40 in.
Sides	48 in. <sup>(a)</sup>
Top	No Obstructions

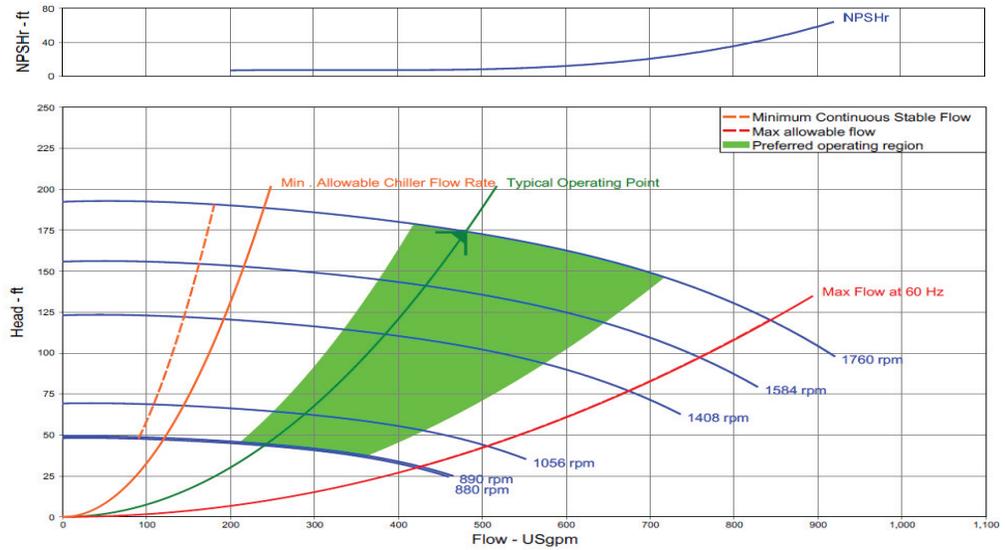
(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

## 200 Ton Air-Cooled ACXA

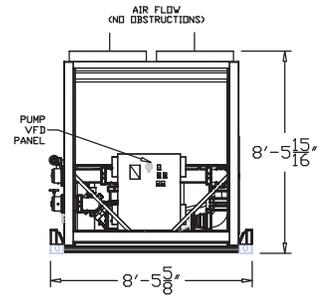
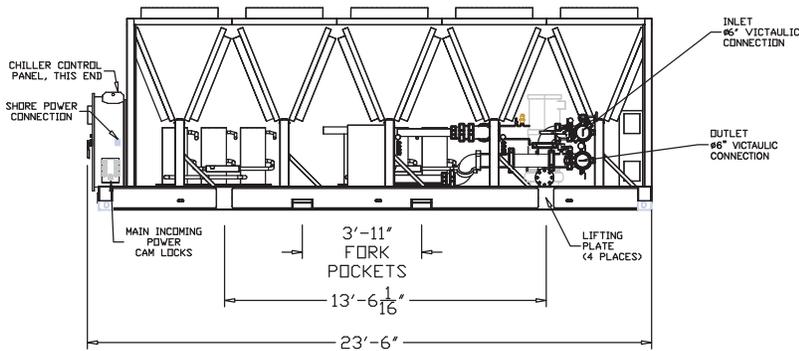
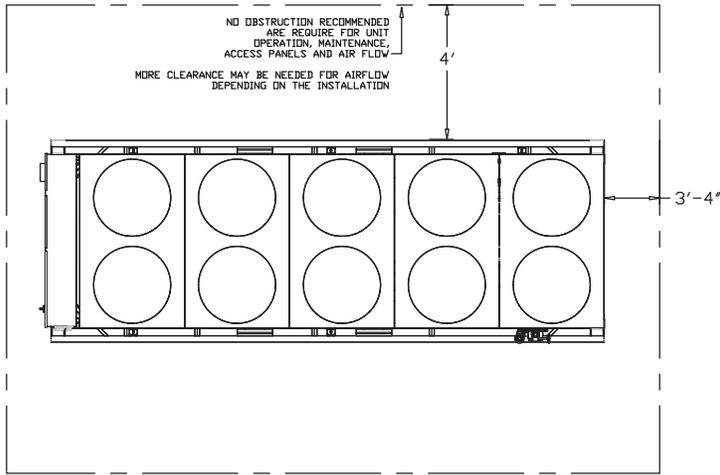
### Single Speed Pump Curve



### Multi-Speed Pump Curve



# 200 Ton Air-Cooled ACXA





# 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 <sup>(a)</sup>	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 <sup>(a)</sup>	250 MCM
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	160 A
Maximum Overcurrent Protection (MOP)	200 A
Full Load Amps (FLA)	144 A
<b>With Integral Pump (CSCA0080F1Only)</b>	
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<sup>(a)</sup>**

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

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

(a) Pump is mounted within the frame of chiller.

**Table 97. Cooling capacity (tons)**

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

**Note:** Contact Trane Rental Services for low temperature applications.



## 80 to 550 Ton Air Cooled Screw Chillers

**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. H<sub>2</sub>O = 1 psi).

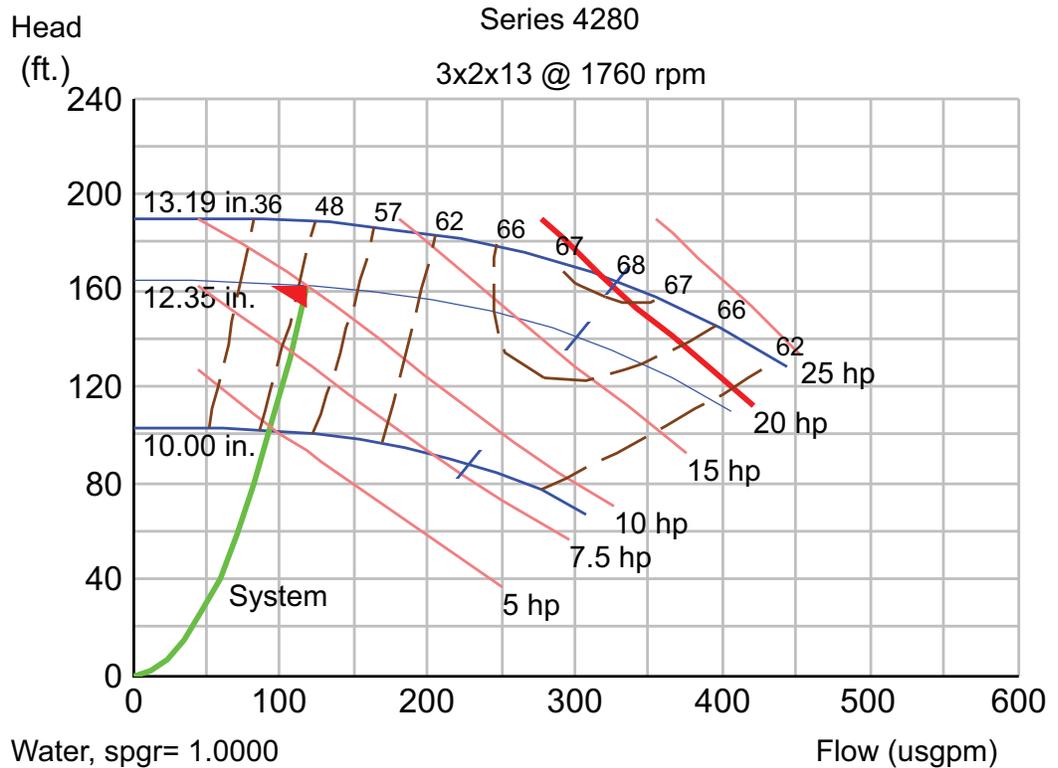
## General – CSCA0080F0 and CSCA0080F1

**Table 99. Dimensions and weights**

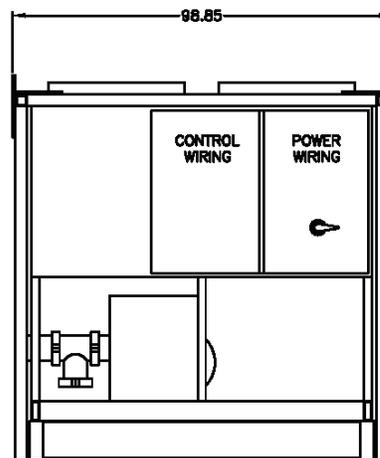
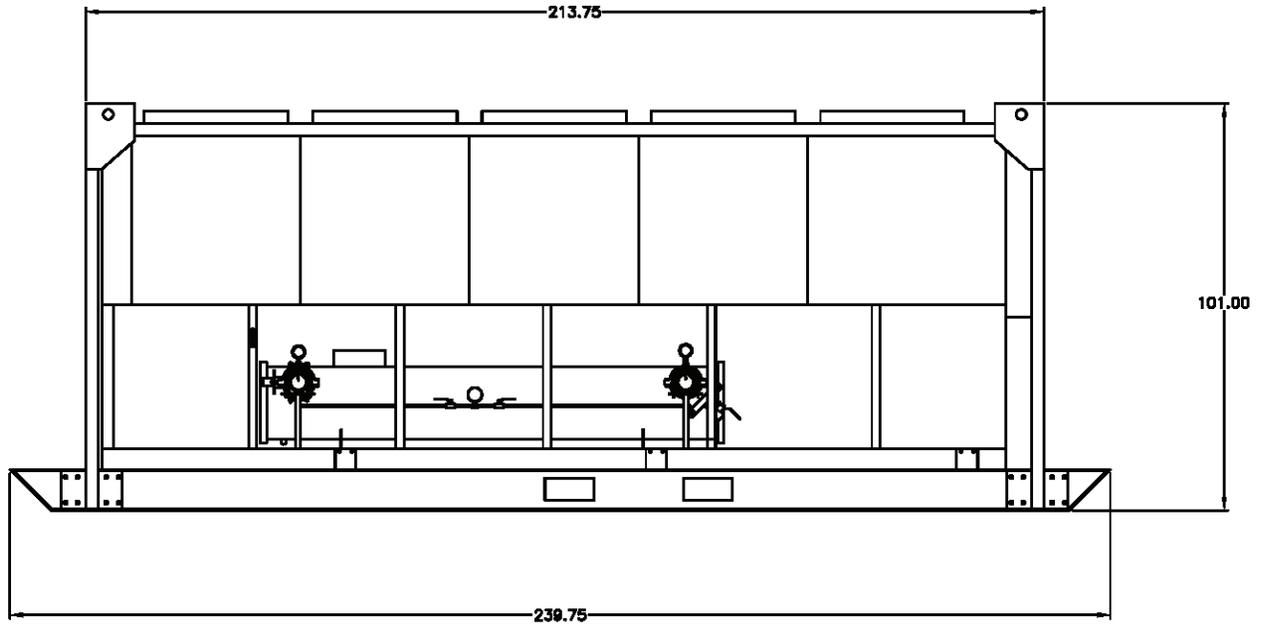
Labels	Value
Length	20 ft.
Width	8 ft. 3 in.
Height	8 ft. 5 in.
Shipping Weight <sup>(a)</sup> (lbs)	11,250
Operating Weight (lbs)	11,570

Note: Lifting device: Crane only.

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 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 <sup>(a)</sup>	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 101. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept <sup>(a)</sup>	250 MCM
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	214 A
Maximum Overcurrent Protection (MOP)	250 A
Full Load Amps (FLA)	193 A
<b>With Integral Pump (CSCA0100F1 Only)</b>	
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<sup>(a)</sup>**

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

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

(a) Pump is mounted within the frame of chiller.

**Table 103. Cooling capacity (tons)**

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

**Note:** Contact Trane Rental Services for low temperature applications.

## 80 to 550 Ton Air Cooled Screw Chillers

**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. H<sub>2</sub>O = 1 psi).

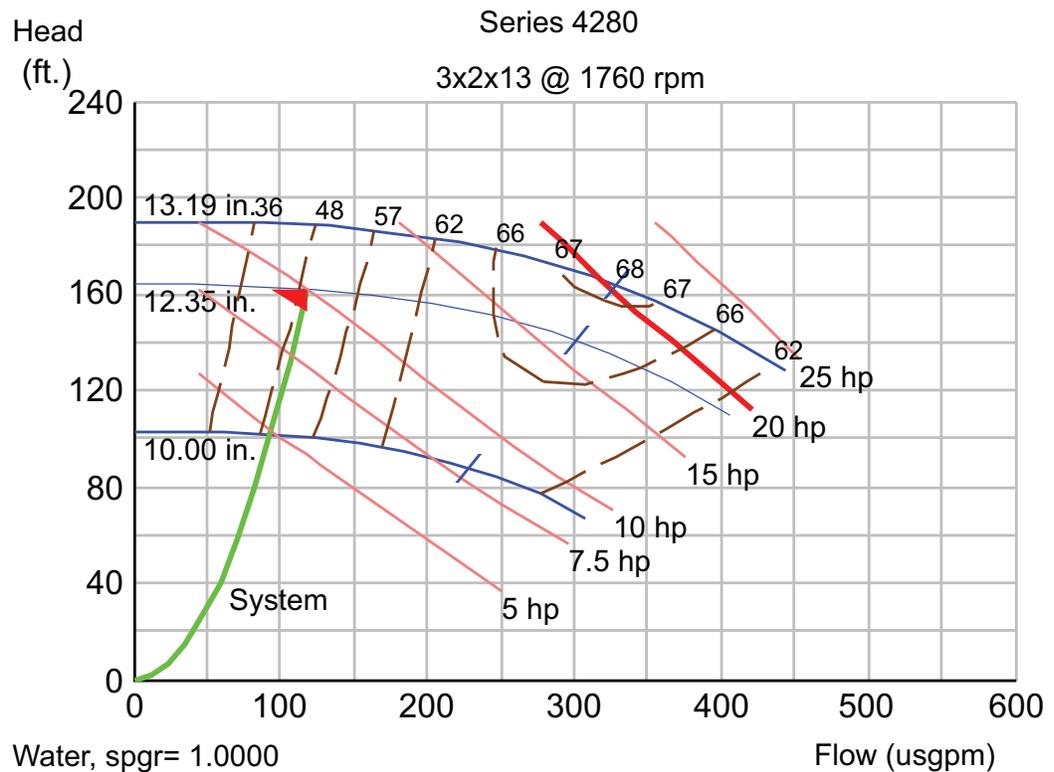
### General – CSCA0100F0 and CSCA0100F1

**Table 105. Dimensions and weights**

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

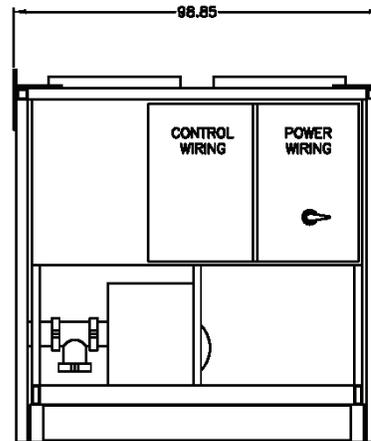
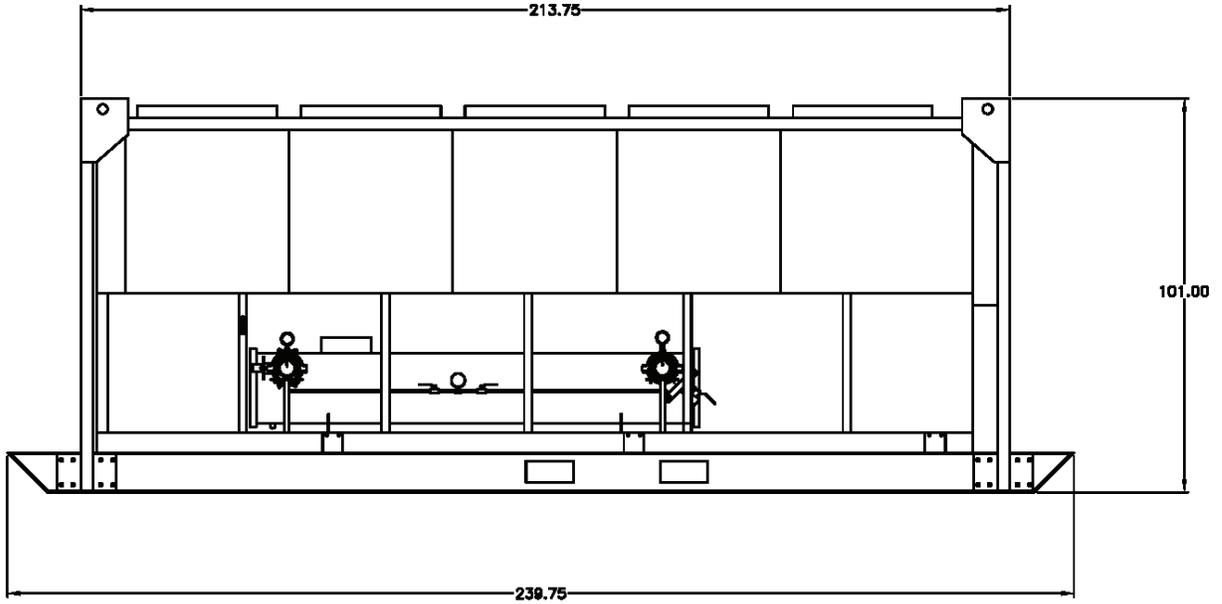
Note: Lifting device: Crane only.

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





# 80 to 550 Ton Air Cooled Screw Chillers



## 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 <sup>(a)</sup>	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 107. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept <sup>(a)</sup>	250 MCM
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	253 A
Maximum Overcurrent Protection (MOP)	350 A
Full Load Amps (FLA)	227 A
<b>With Integral Pump (CSCA0125F1_only)</b>	
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<sup>(a)</sup>**

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

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

(a) Pump is mounted within the frame of chiller.

**Table 109. Cooling capacity (Tons)**

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

**Note:** Contact Trane Rental Services for low temperature applications.



## 80 to 550 Ton Air Cooled Screw Chillers

**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. H<sub>2</sub>O = 1 psi).

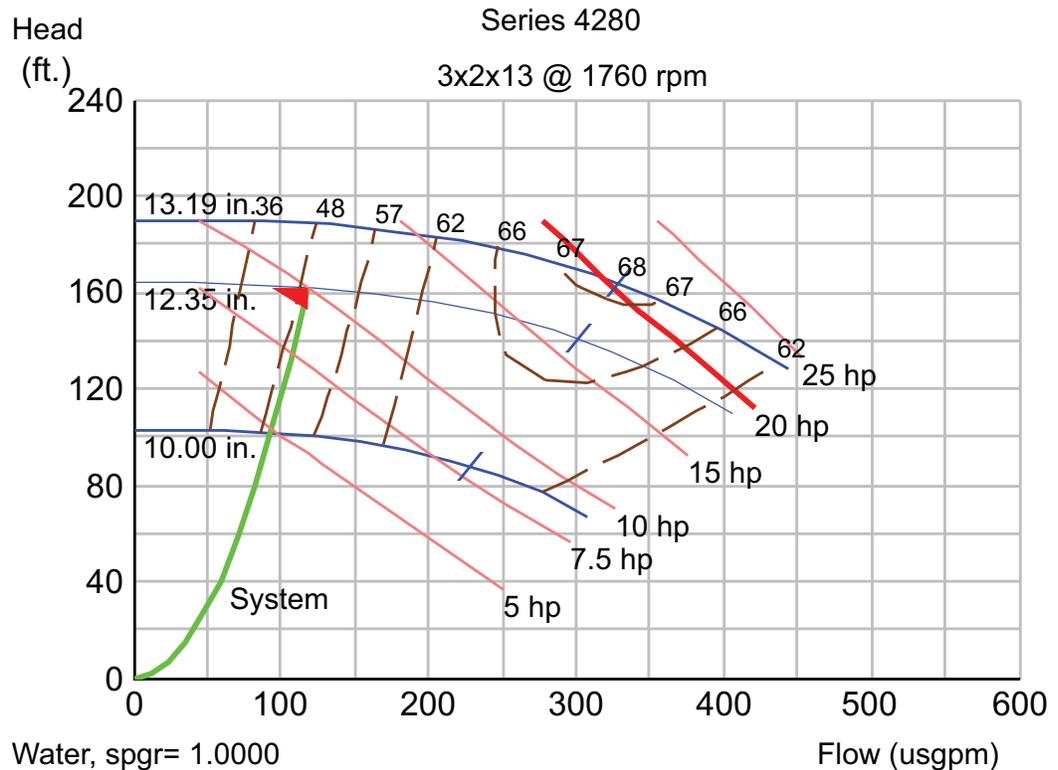
## General – CSCA0125F0 and CSCA0125F1

**Table 111. Dimensions and weights**

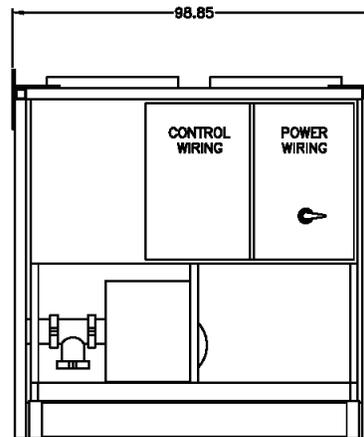
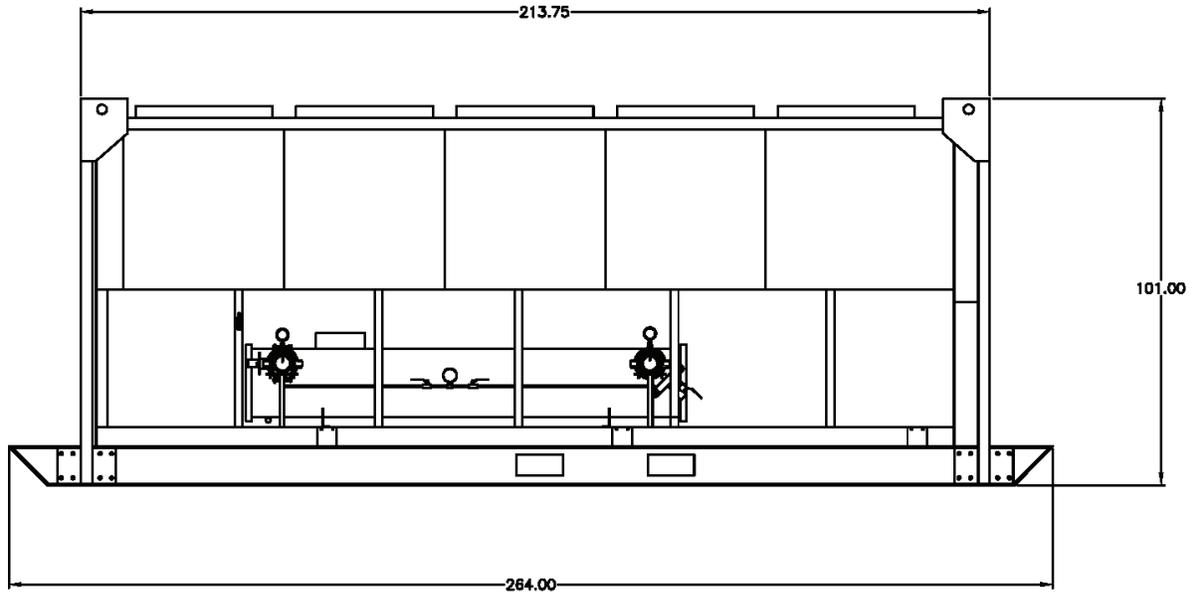
Labels	Value
Length	22 ft.
Width	8 ft. 3 in.
Height	8 ft. 5 in.
Shipping Weight <sup>(a)</sup> (lbs)	12,800
Operating Weight (lbs)	13,170

Note: Lifting device: Crane only.

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 155 Ton Air-Cooled RTAC

**Table 112. General – CSCA0155F0-F3**

Labels	Value
Model Number	RTAC155
Nominal Tons	155
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	175/165 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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) 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 113. Electrical data**

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

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

(a) 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 115. Pump data – CSCA0155F2-F3<sup>(a)</sup>**

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

(a) 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 116. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	215.2	200.5	181.1	156.4	117.4
55°F	0	198.9	185.3	169.7	147.8	115.0
50°F	0	183.0	170.4	156.3	139.5	112.8
45°F	0	167.7	156.0	143.1	128.9	108.8
40°F	0	153.0	142.2	130.4	117.0	101.7
35°F	10 <sup>(a)</sup>	138.2	128.3	117.6	105.1	91.9
30°F	20 <sup>(a)</sup>	121.9	113.2	103.6	92.2	80.1
25°F	25 <sup>(a)</sup>	105.1	97.6	89.2	79.0	68.2
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

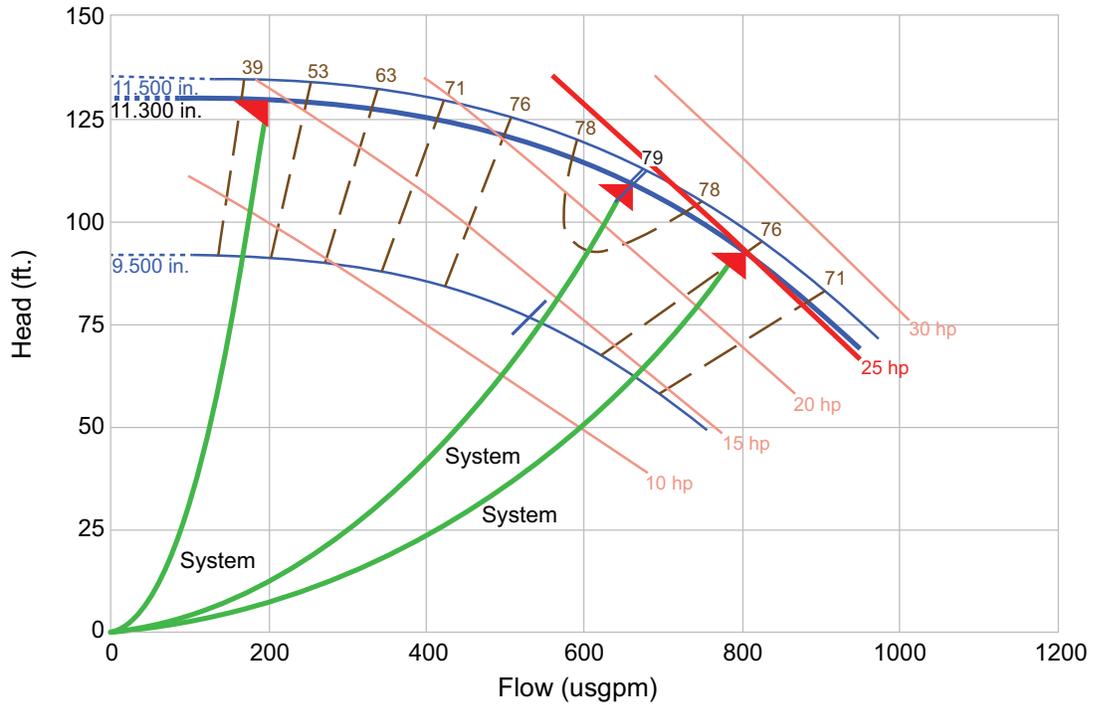
### General – CSCA0155F0

**Table 118. Dimensions and weights**

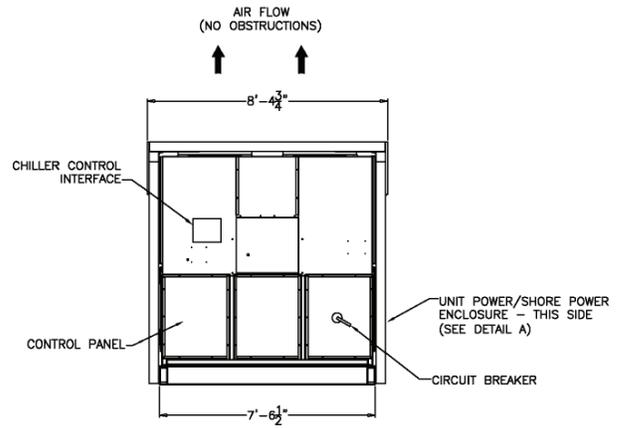
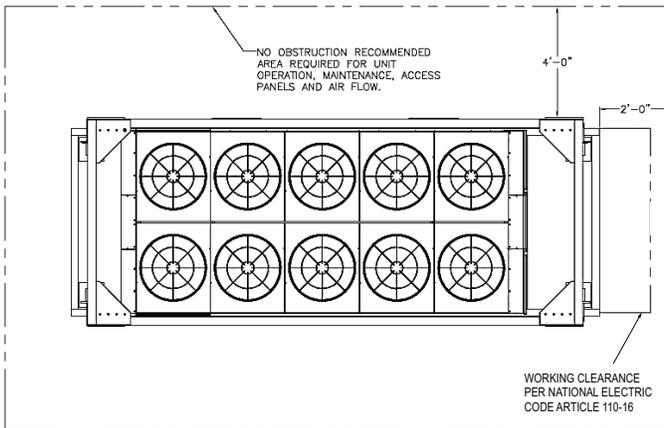
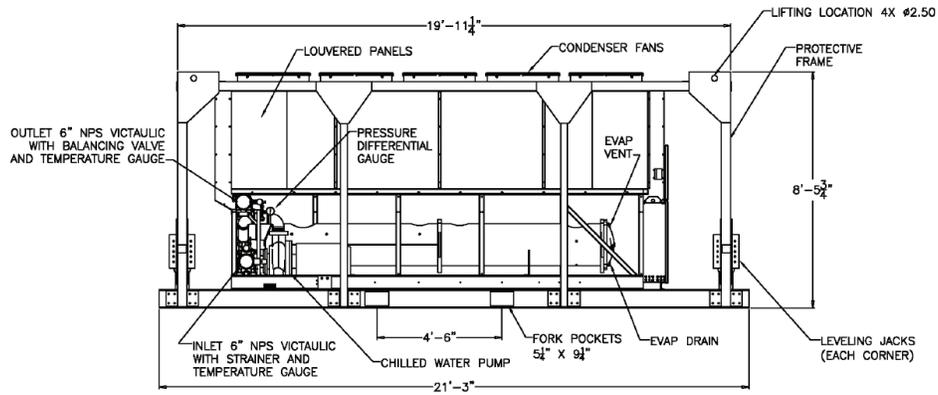
Labels	Value
Length	21 ft. 3 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,900
Operating Weight (lbs)	17,200
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 6.5 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

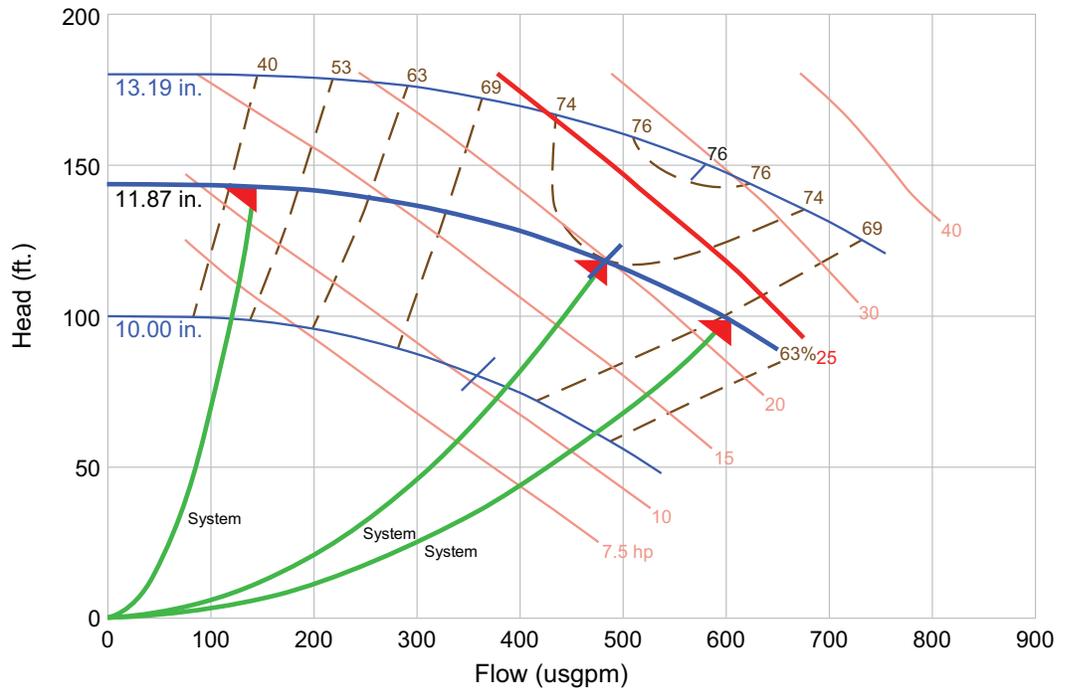
### General – CSCA0155F2

**Table 119. Dimensions and weights**

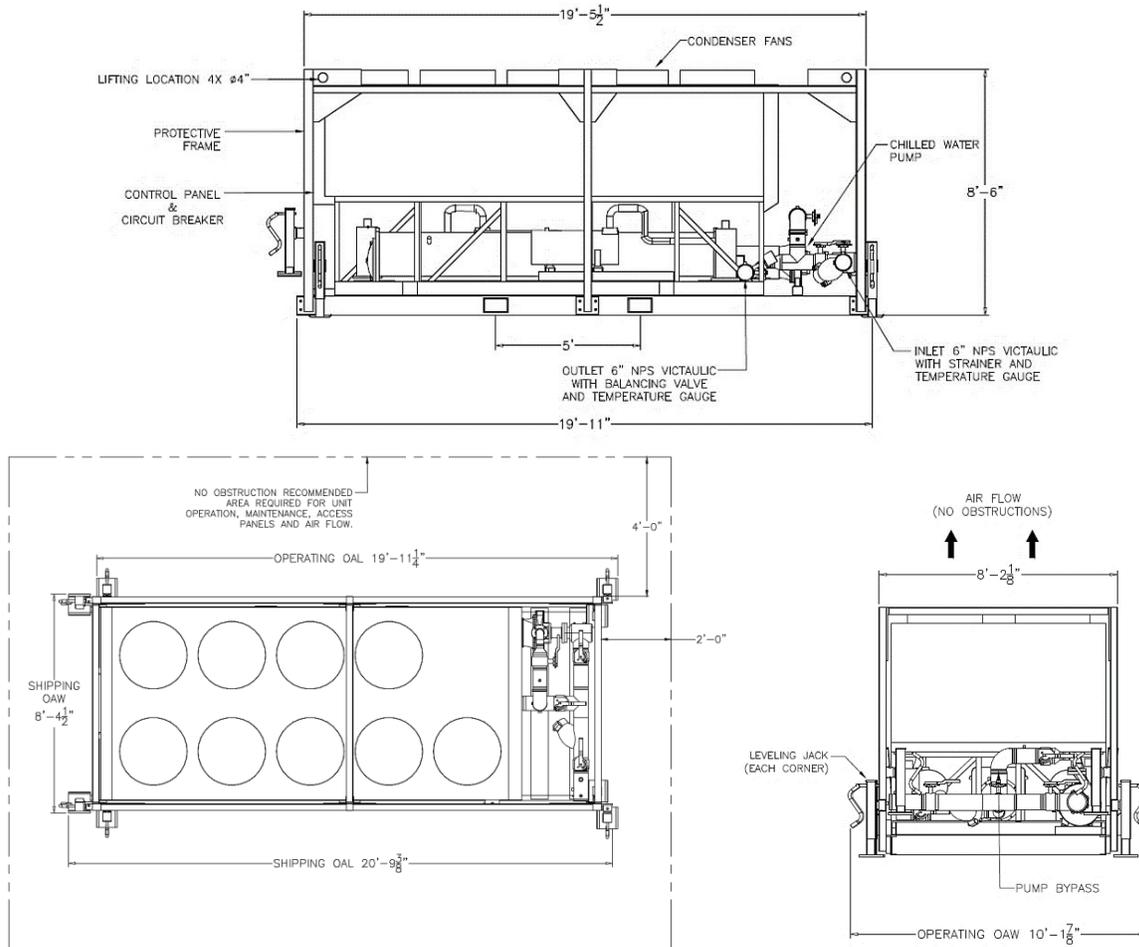
Labels	Value
Length	21 ft. 2 in.
Shipping Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	14,600
Operating Weight (lbs)	14,900
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

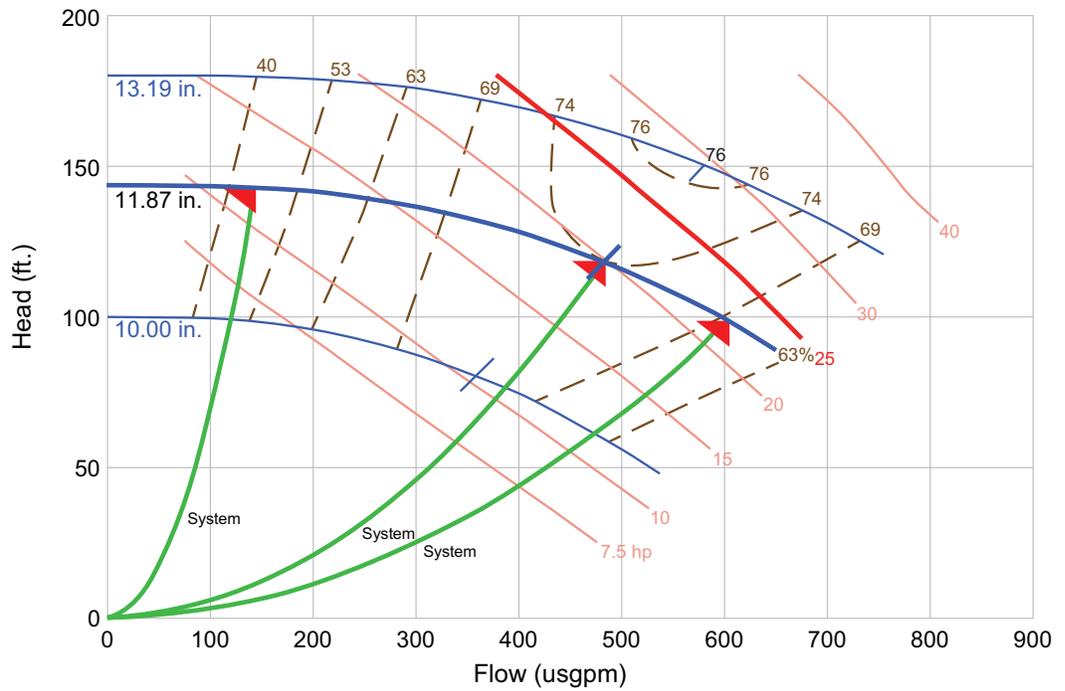
### General – CSCA0155F3

**Table 120. Dimensions and weights**

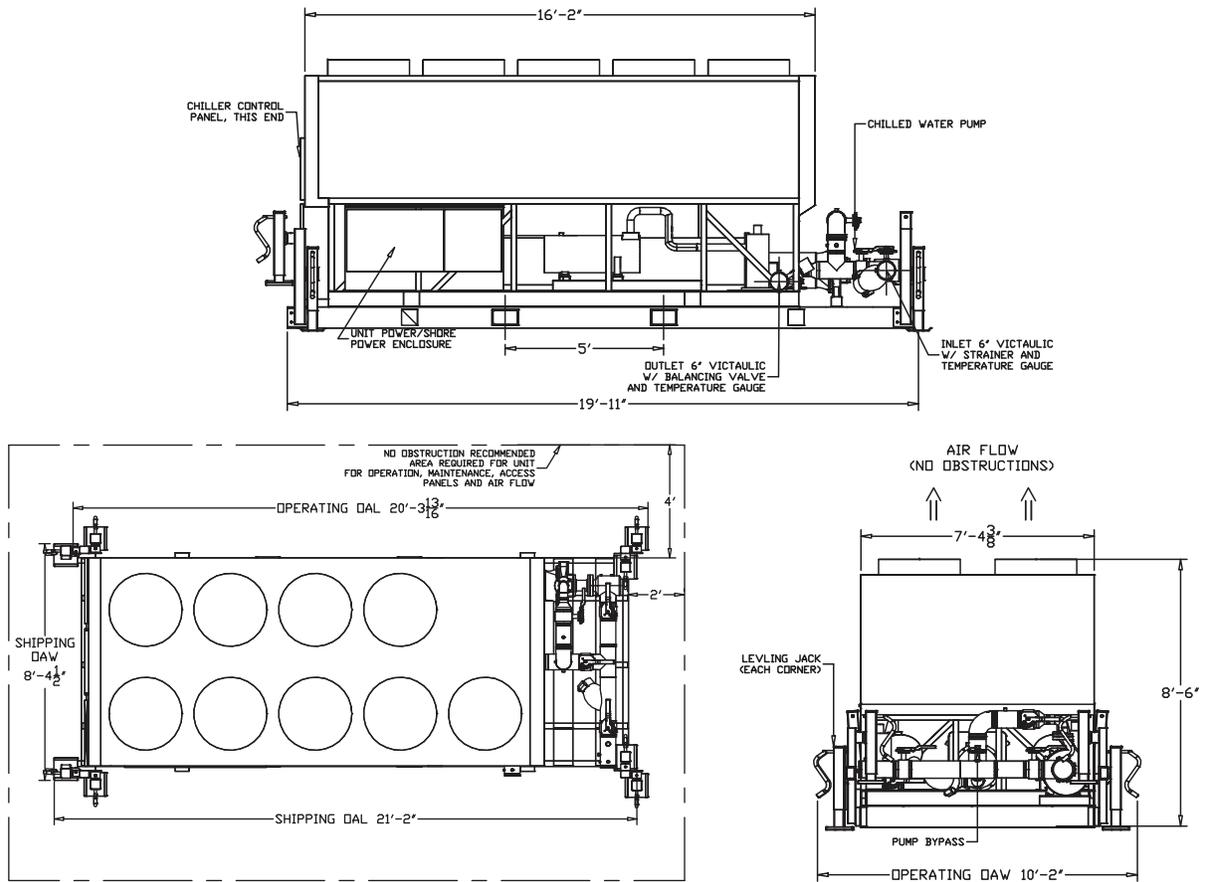
Labels	Value
Length	21 ft. 2 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,000
Operating Weight (lbs)	18,300
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 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 <sup>(a)</sup>	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 122. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept <sup>(a)</sup>	350 MCM
<b>Without Integral Pump</b>	
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	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44°F	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. H<sub>2</sub>O = 1 psi).

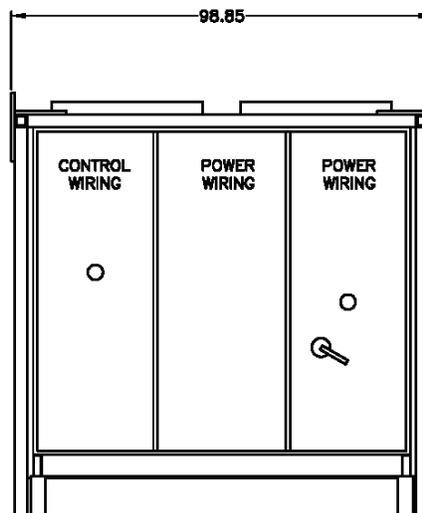
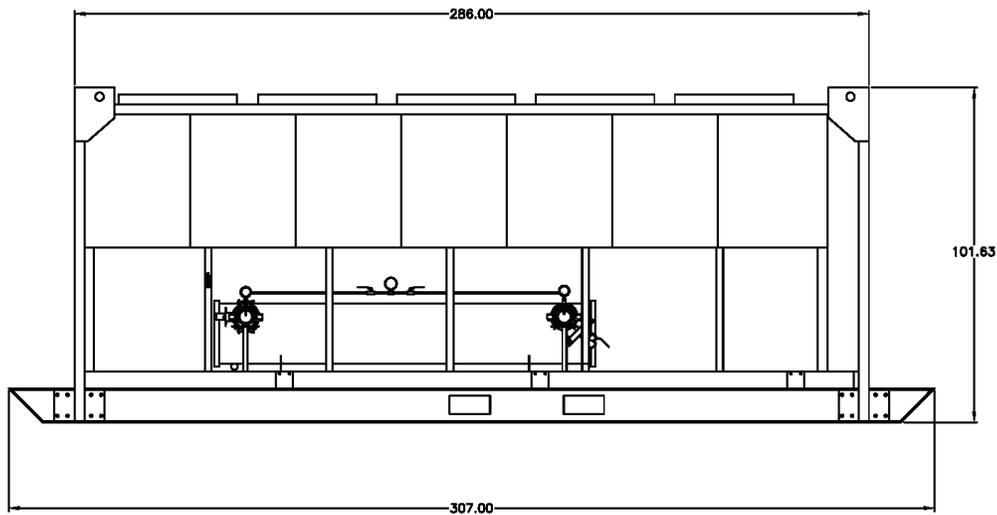
General – CSCA0170F0

Table 125. Dimensions and weights

Labels	Value
Length	25 ft. 7 in.
Width	8 ft. 3 in.
Height	8 ft. 7 in.
Shipping Weight <sup>(a)</sup> (lbs)	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.





## 80 to 550 Ton Air Cooled Screw Chillers

### 170 Ton Air-Cooled RTAC

**Table 126. General – CSCA0170F0 and CSCA0170F2**

Labels	Value
Model Number	RTAC170
Nominal Tons	170
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	175/175 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 127. Electrical data**

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

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

(a) 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 129. Pump data – CSCA0170F2<sup>(a)</sup>**

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

(a) 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	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°F	0	235.3	219.6	199.5	173.0	129.2
55°F	0	217.5	203.0	186.8	163.9	126.3
50°F	0	200.3	186.8	171.9	155.1	123.5
45°F	0	183.6	171.1	157.5	142.4	120.7
40°F	0	167.7	156.1	143.6	129.4	114.2
35°F	10 <sup>(a)</sup>	151.8	141.1	129.7	116.4	102.4
30°F	20 <sup>(a)</sup>	134.5	125.0	114.8	102.6	89.7
25°F	25 <sup>(a)</sup>	116.6	108.5	99.4	88.5	76.8
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

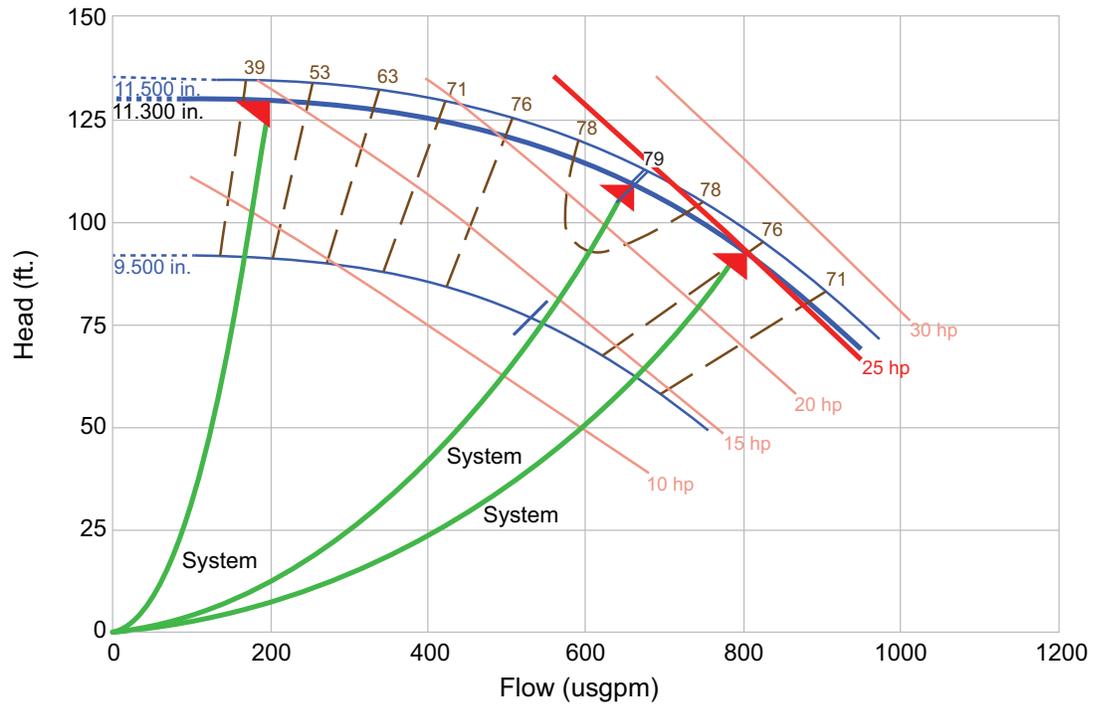
### General – CSCA0170F0

**Table 132. Dimensions and weights**

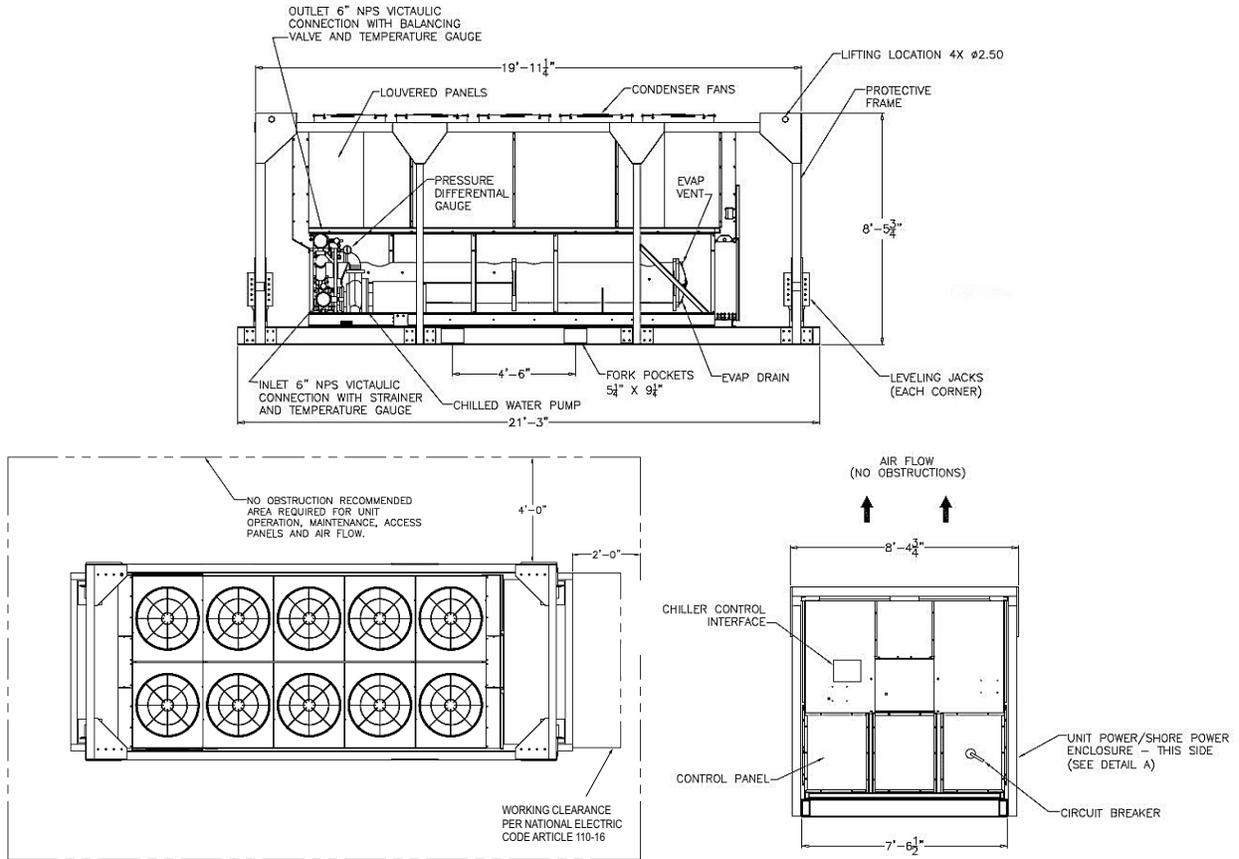
Labels	Value
Length	21 ft. 3 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,350
Operating Weight (lbs)	18,700
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**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





## 80 to 550 Ton Air Cooled Screw Chillers

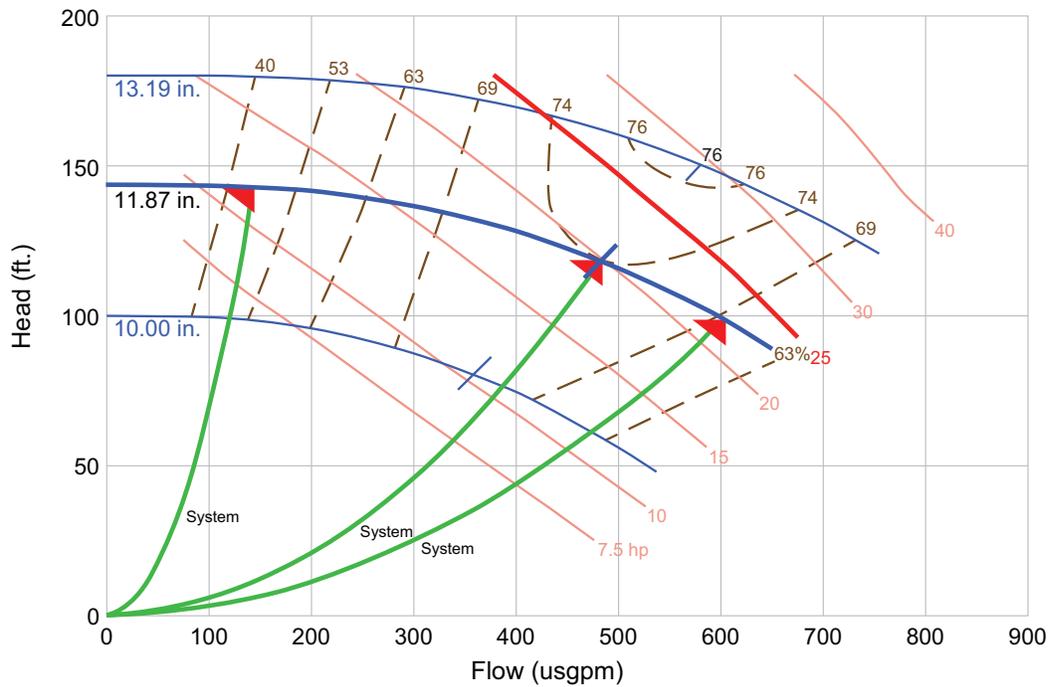
### General – CSCA0170F2

**Table 133. Dimensions and weights**

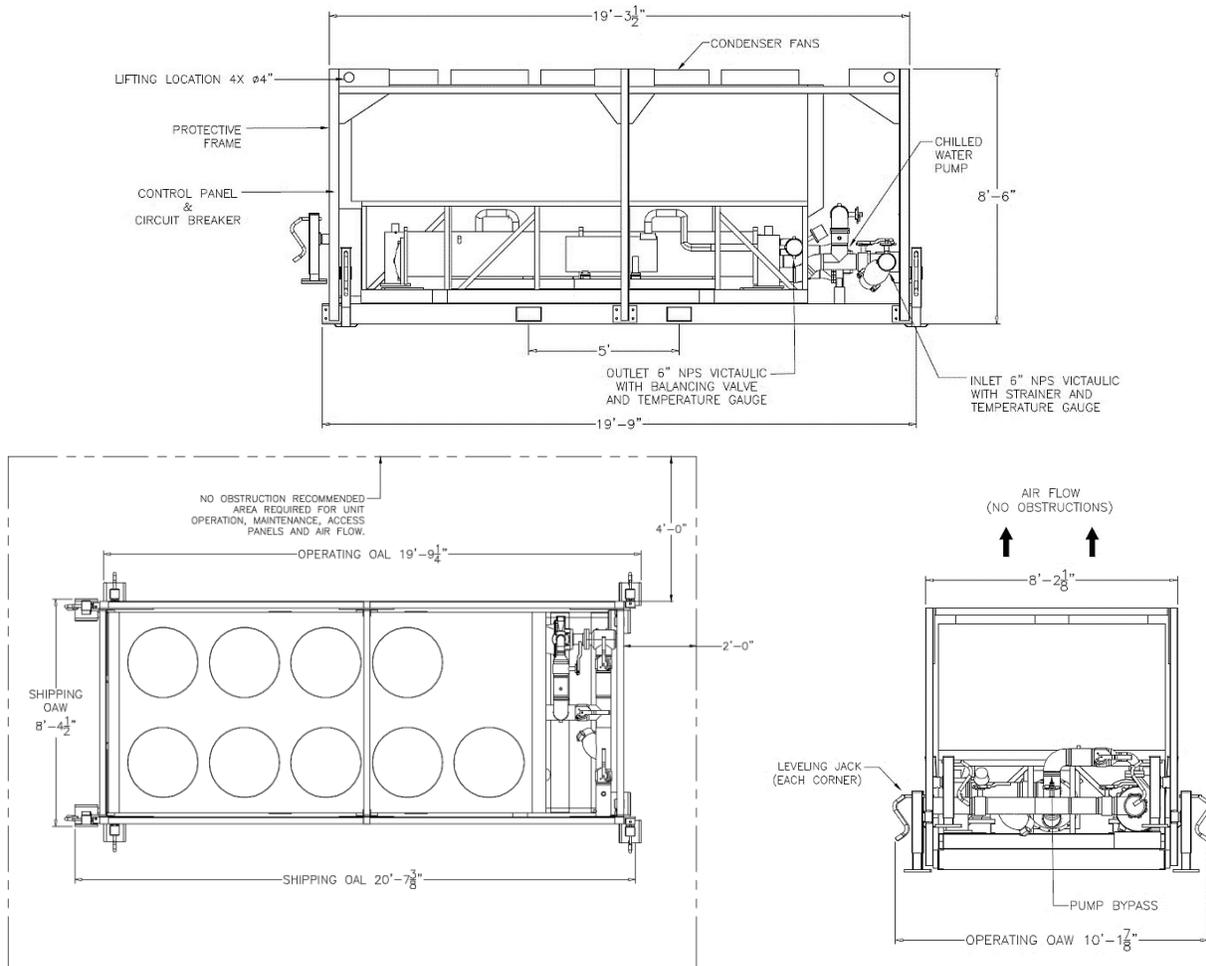
Labels	Value
Length	21 ft. 2 in.
Shipping Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,300
Operating Weight (lbs)	16,650
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**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





## 80 to 550 Ton Air Cooled Screw Chillers

### 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 <sup>(a)</sup>	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 <sup>(a)</sup>	350 MCM
<b>Without Integral Pump</b>	
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	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44°F	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. H<sub>2</sub>O = 1 psi).

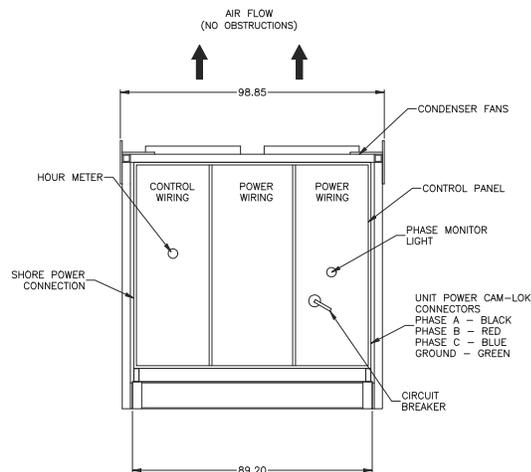
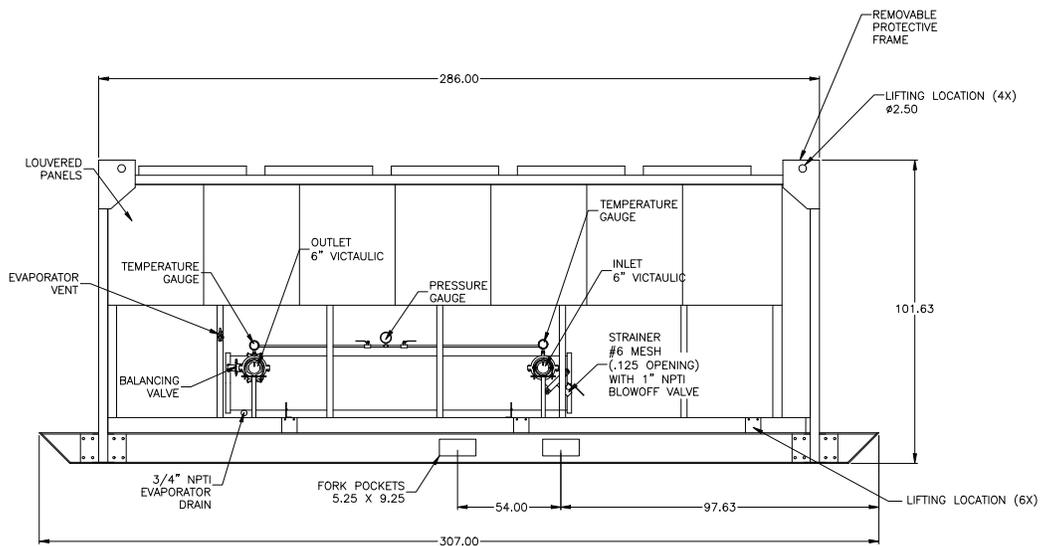
## General – CSCA0200F0

**Table 138. Dimensions and weights**

Labels	Value
Length	25 ft. 7 in.
Width	8 ft. 3 in.
Height	8 ft. 6 in.
Shipping Weight <sup>(a)</sup> (lbs)	17,000
Operating Weight (lbs)	17,450

**Note:** Lifting device: forklift or crane

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





## 80 to 550 Ton Air Cooled Screw Chillers

### 200 Ton Air-Cooled RTAC

**Table 139. General – CSCA0200F0-F3**

Labels	Value
Model Number	RTAC200
Nominal Tons	200
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	225/225 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2-F3 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	417 A
Maximum Overcurrent Protection (MOP)	500 A
Full Load Amps (FLA)	375 A
<b>With Integral Pump</b>	
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 (a)**

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

(a) 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<sup>(a)</sup>**

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

(a) 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	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°F	0	277.9	258.9	236.7	205.8	152.6
55°F	0	257.5	240.2	220.7	195.3	150.3
50°F	0	237.7	221.7	203.6	184.5	147.2
45°F	0	218.4	203.6	187.1	169.1	143.4
40°F	0	199.8	186.2	171.1	154.3	136.7
35°F	10 <sup>(a)</sup>	181.2	168.8	155.0	139.4	123.0
30°F	20 <sup>(a)</sup>	161.5	150.4	138.0	123.8	108.8
25°F	25 <sup>(a)</sup>	140.9	131.3	120.4	107.8	94.3
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

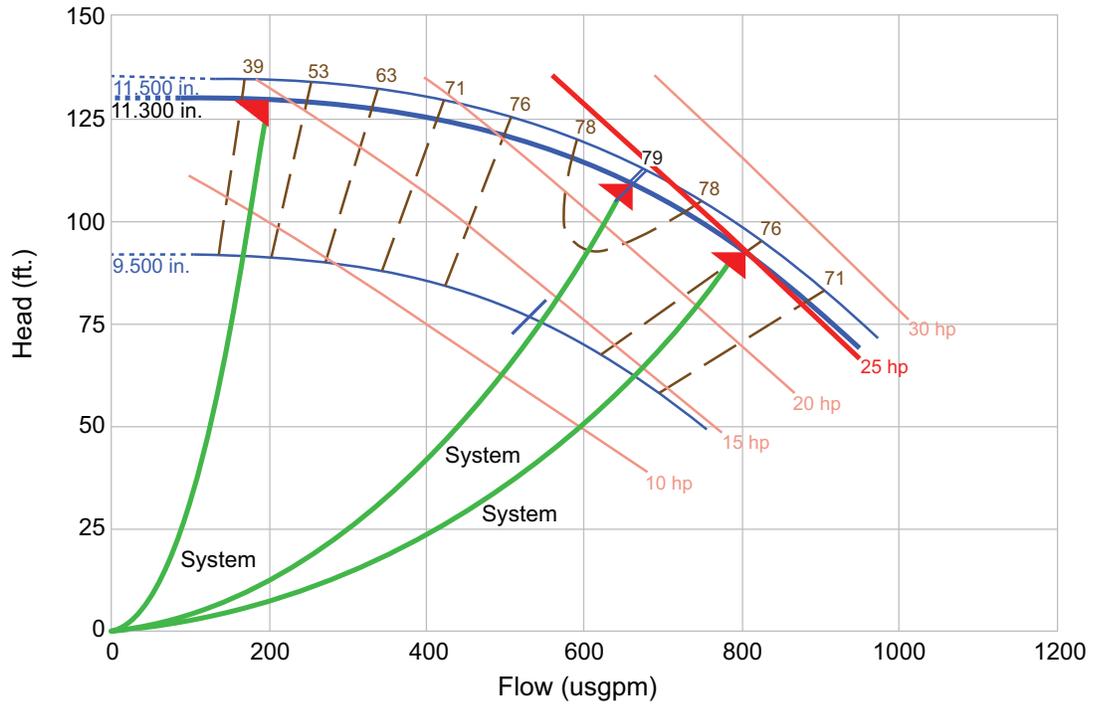
### General – CSCA0200F0

**Table 145. Dimensions and weights**

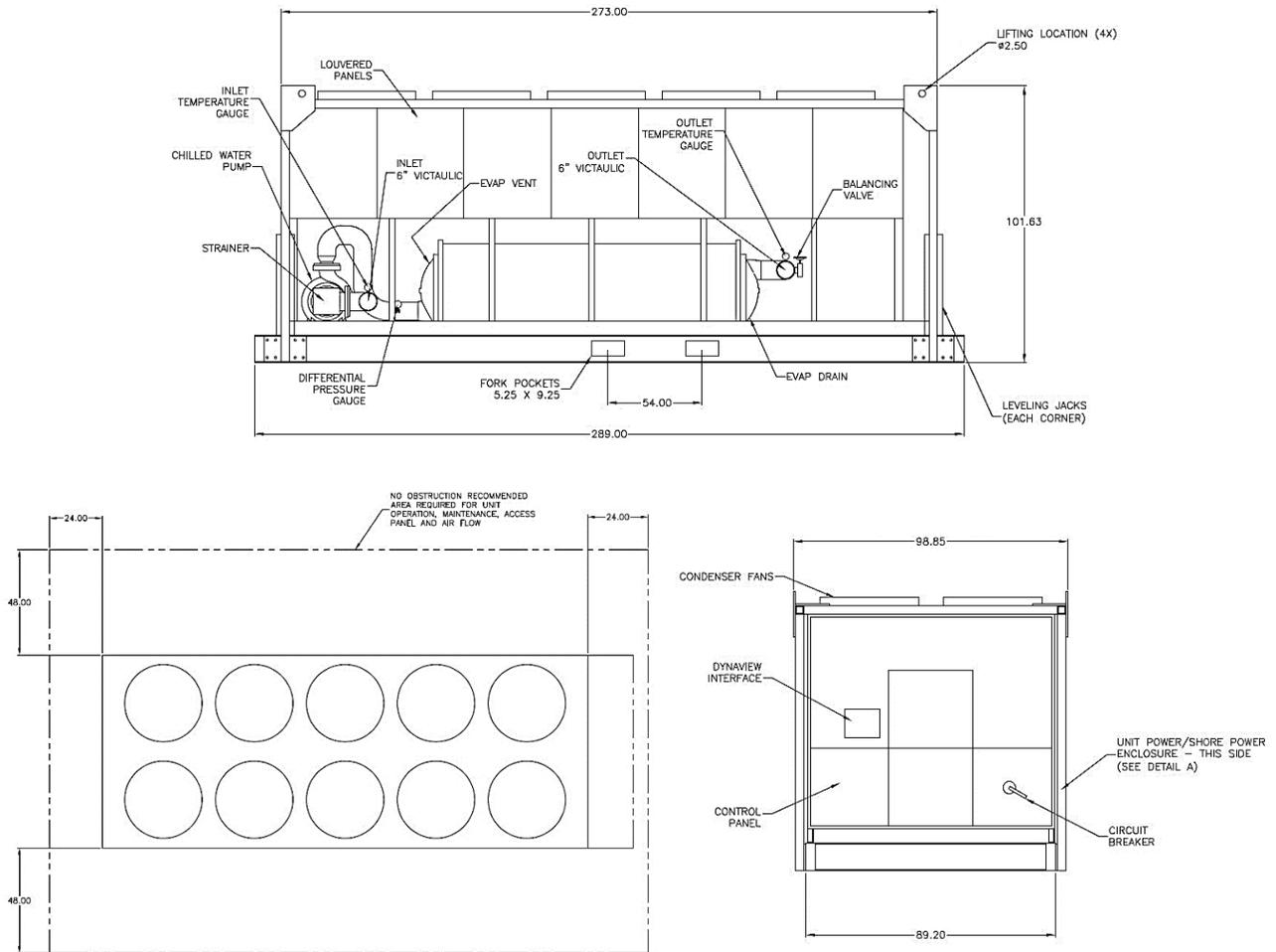
Labels	Value
Length	25 ft.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,650
Operating Weight (lbs)	18,333
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

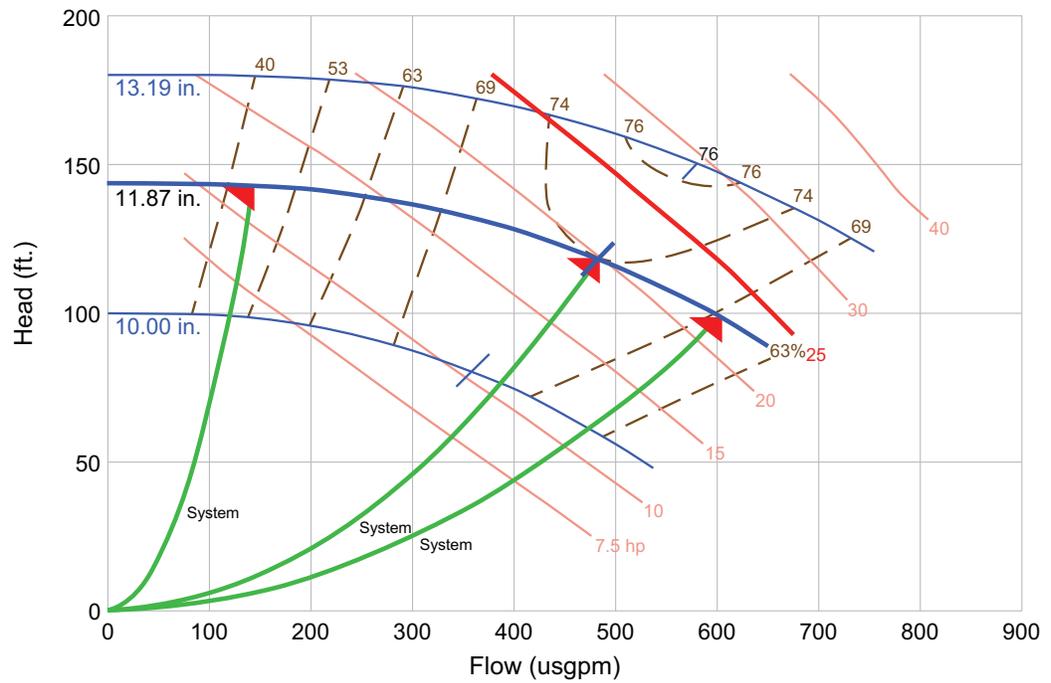
### General – CSCA0200F2

**Table 146. Dimensions and weights**

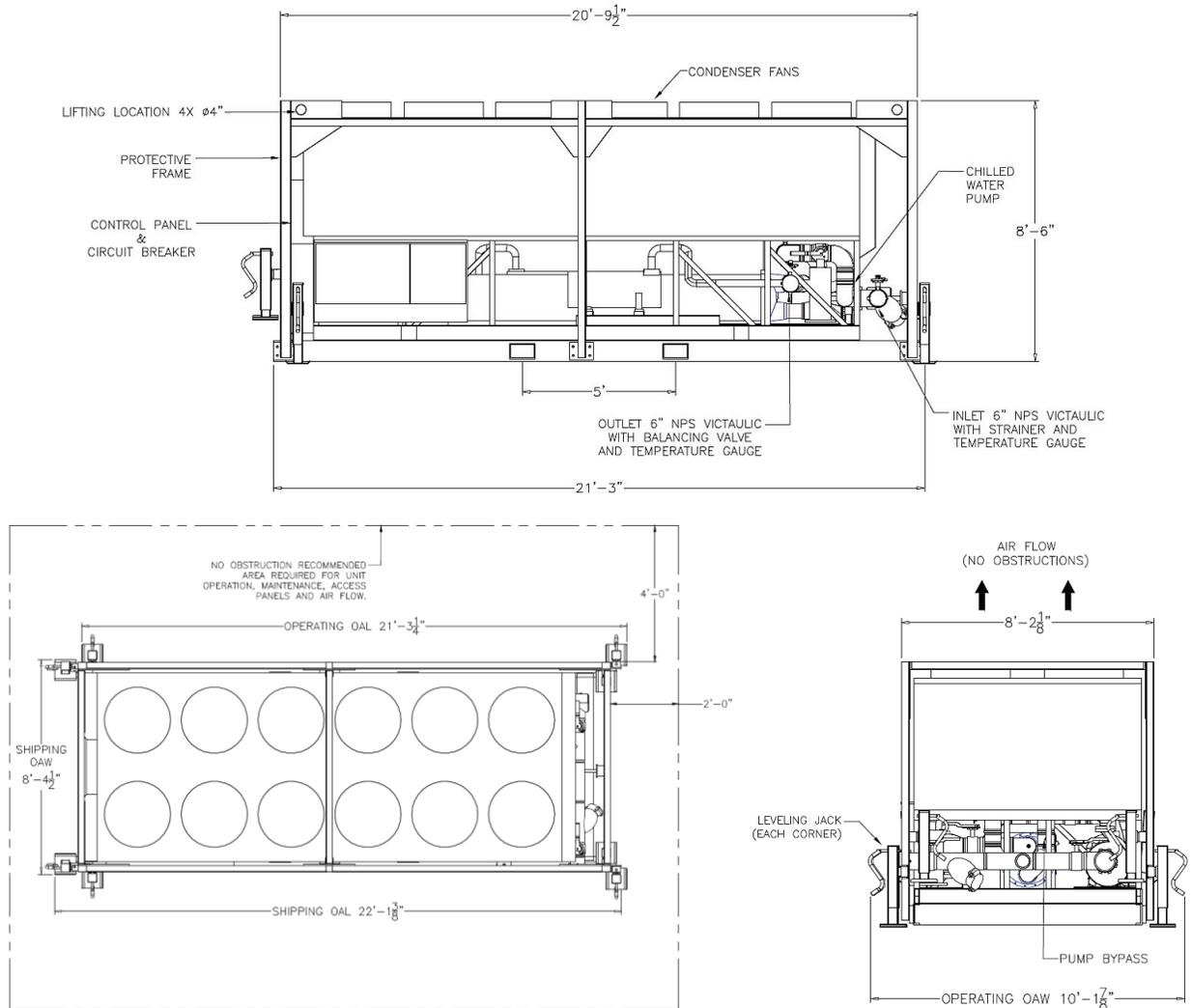
Labels	Value
Length	22 ft. 6 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	16,800
Operating Weight (lbs)	17,150
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

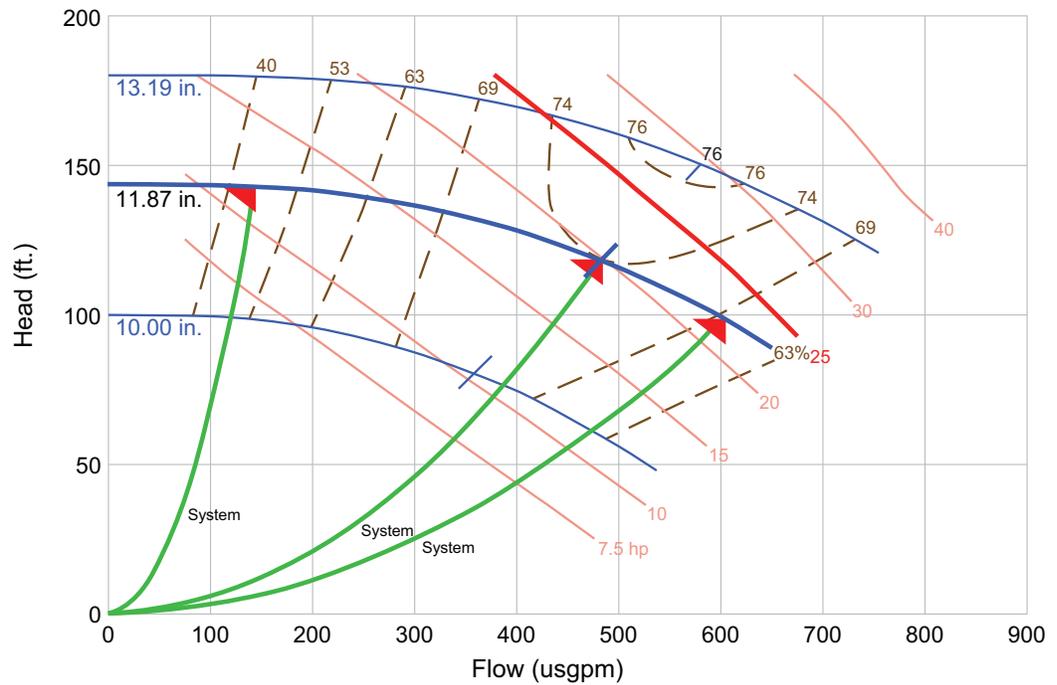
### General – CSCA0200F3

**Table 147. Dimensions and weights**

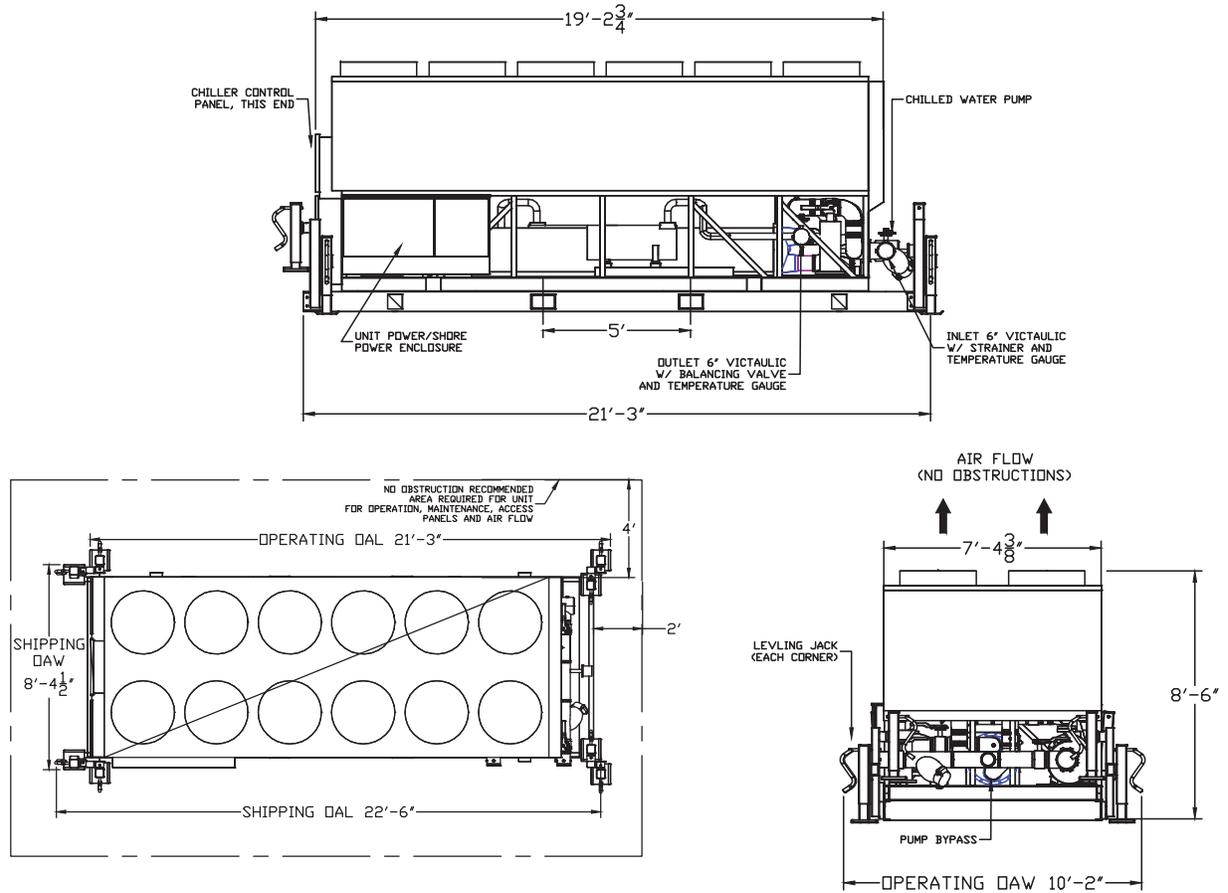
Labels	Value
Length	22 ft. 6 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	20,750
Operating Weight (lbs)	22,400
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 250 Ton Air-Cooled RTAC

**Table 148. General – CSCA0250F0-F3**

Labels	Value
Model Number	RTAC250
Nominal Tons	250
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	235-235 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 149. Electrical data**

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

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

(a) 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 151. Pump data – CSCA0250F2-F3<sup>(a)</sup>**

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

(a) 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	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°F	0	336.0	312.7	279.0	244.2	180.5
55°F	0	310.9	289.9	265.8	231.2	175.4
50°F	0	286.5	267.5	245.8	218.9	172.1
45°F	0	263.0	245.6	226.0	204.8	168.4
40°F	0	240.5	224.5	206.7	187.1	164.3
35°F	10 <sup>(a)</sup>	218.3	203.7	187.6	169.5	150.5
30°F	20 <sup>(a)</sup>	196.4	183.2	168.6	152.1	134.6
25°F	25 <sup>(a)</sup>	174.1	162.4	149.4	134.4	118.5
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

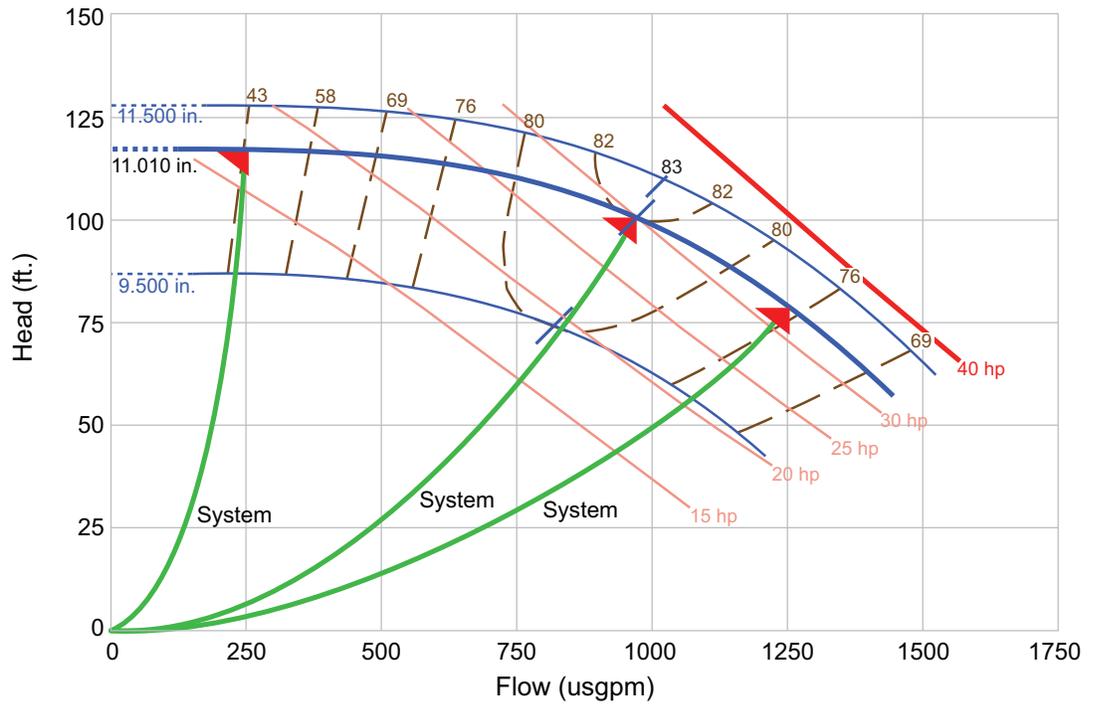
### General – CSCA0250F0

**Table 154. Dimensions and weights**

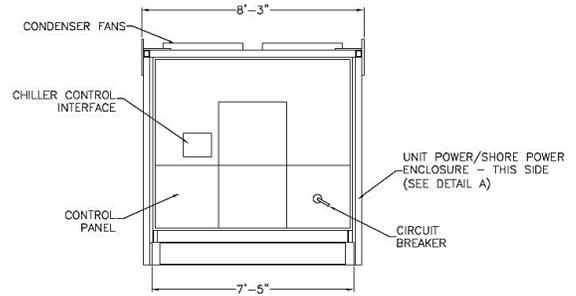
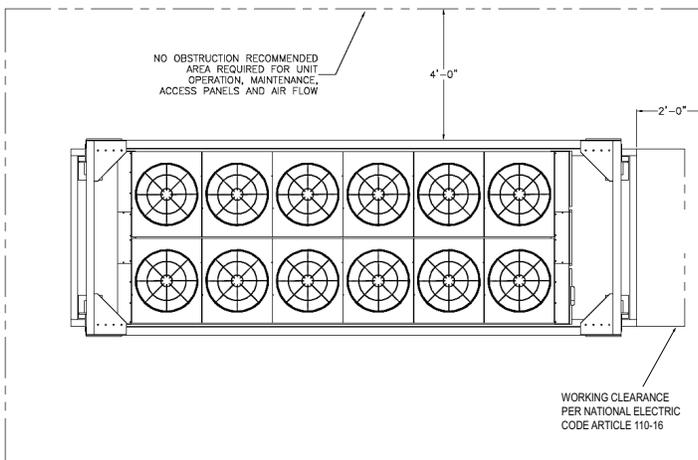
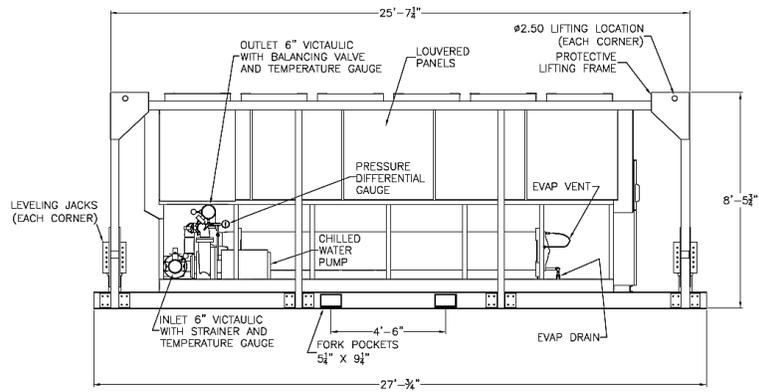
Labels	Value
Length	27 ft. 1 in.
Width	8 ft. 5 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	18,700
Operating Weight (lbs)	19,300
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	4 ft. 6 in.

**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





## 80 to 550 Ton Air Cooled Screw Chillers

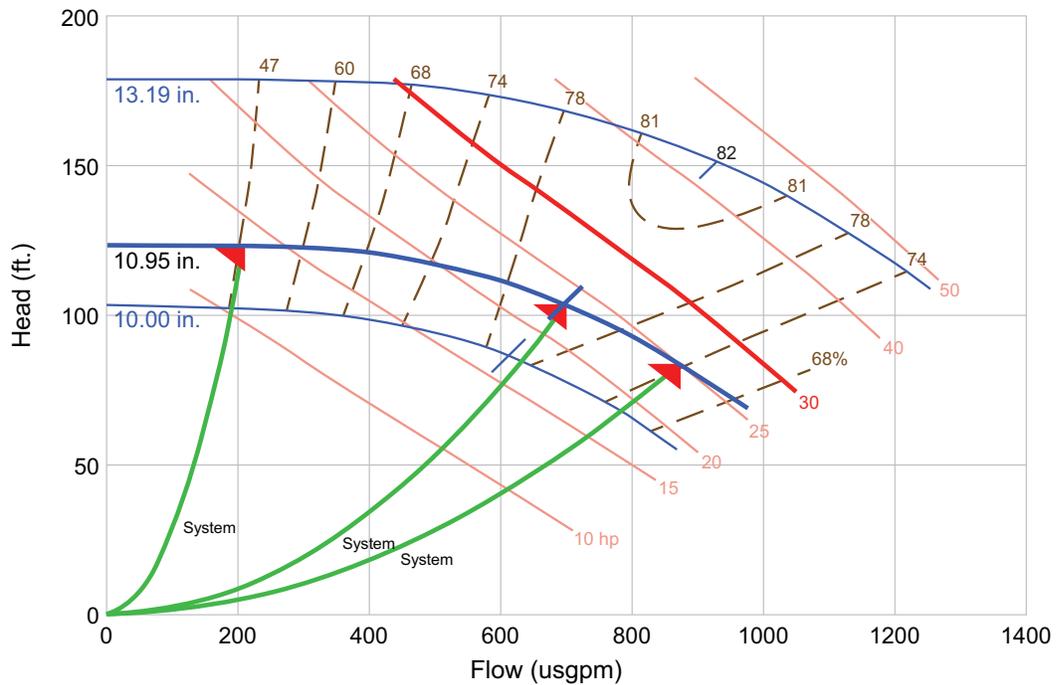
### General – CSCA0250F2

**Table 155. Dimensions and weights**

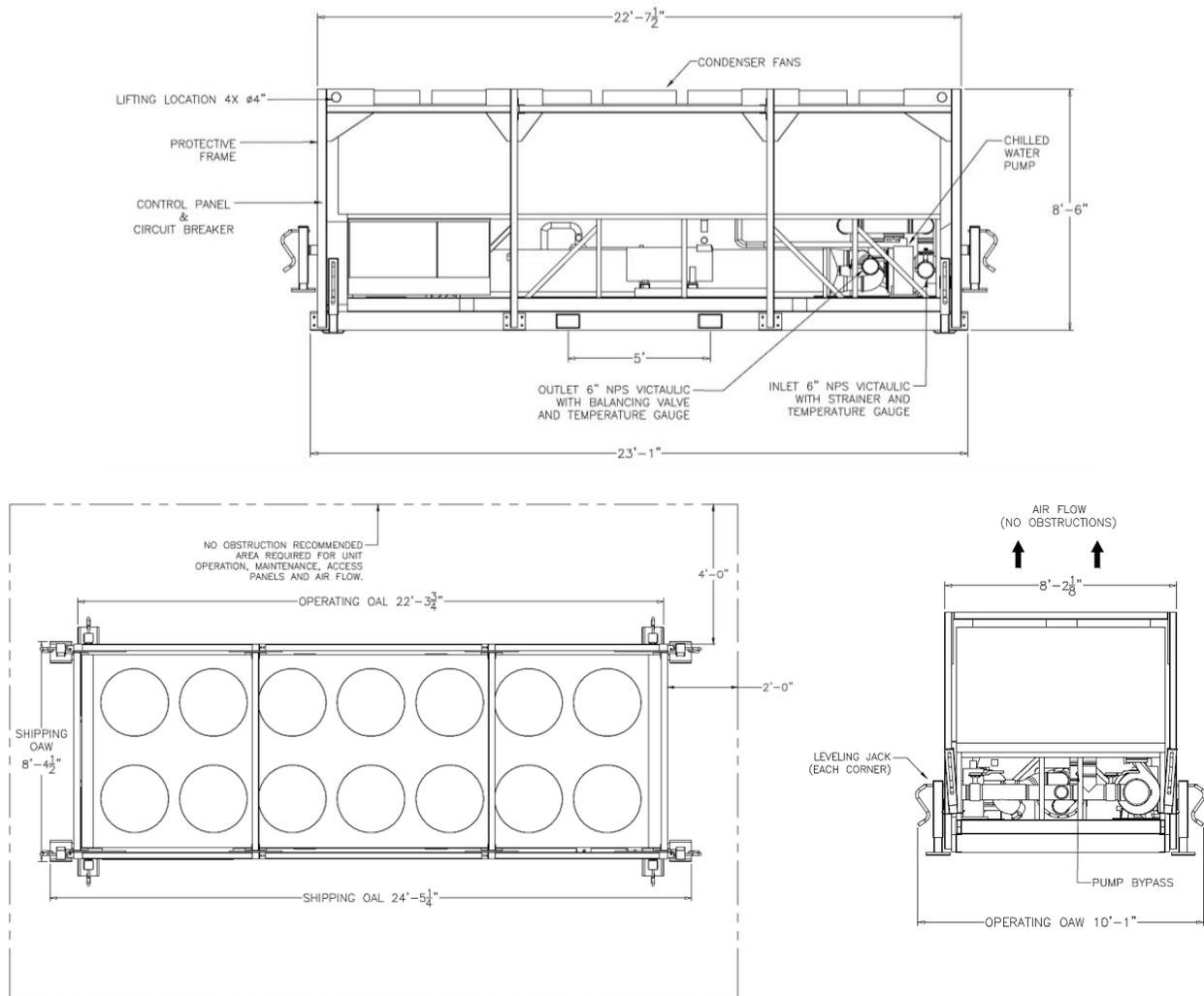
Labels	Value
Length	25 ft. 3.25 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	24,000
Operating Weight (lbs)	24,600
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

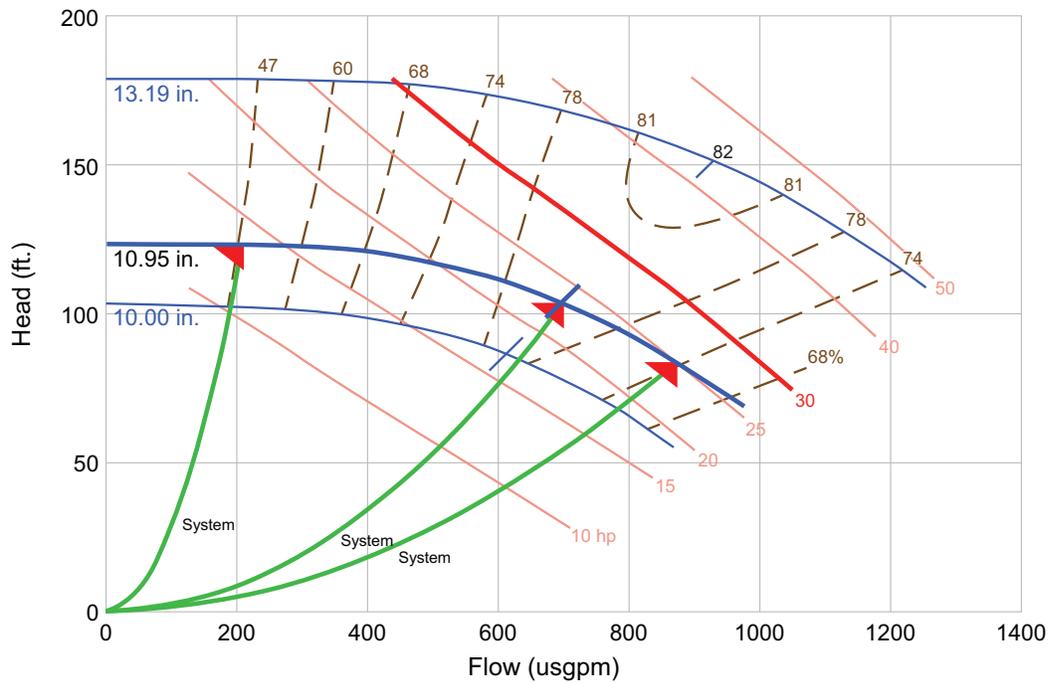
### General – CSCA0250F3

**Table 156. Dimensions and weights**

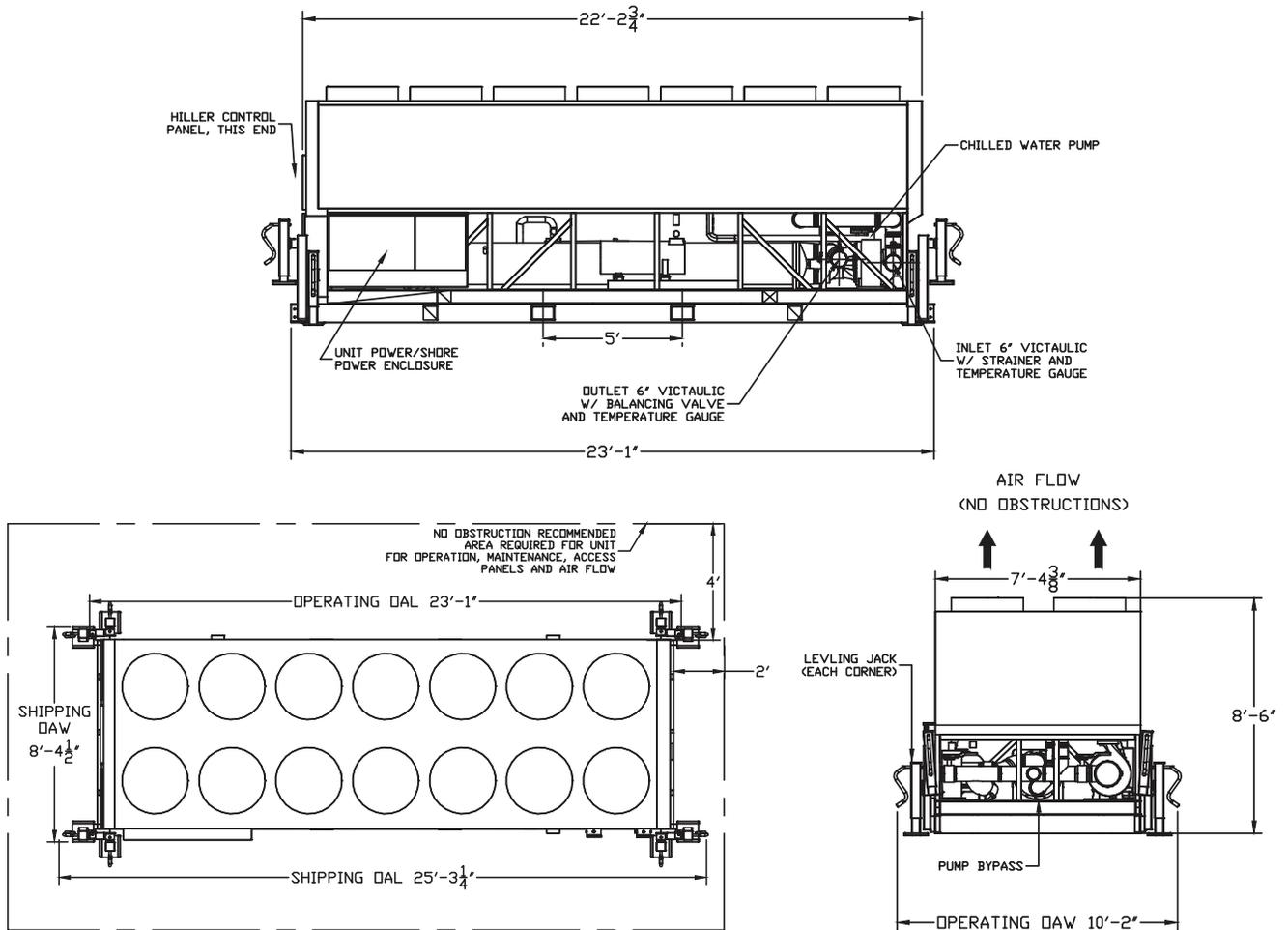
Labels	Value
Length	25 ft. 3.25 in.
Width	8 ft. 4.5 in.
Operating Width (Leveling Jacks Installed)	10 ft. 2 in.
Height	8 ft. 6 in.
Shipping Weight (lbs)	23,000
Operating Weight (lbs)	23,600
Fork Pocket Dimensions	9.25 in. x 5.25 in. x 7 ft. 8 in.
Fork Pocket Center to Center Distance	5 ft.

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 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 <sup>(a)</sup>	540 lbs
Water Connection Size	6 in.
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	0°F to 65°F
Number of Electrical Circuits	1
Number of Refrigerant Circuits	2

(a) Setpoints are to be used only as a guide. Selection is required for actual chiller performance.

(b) Several of the RTAA300s 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.

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

**Table 158. Electrical data – single point**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept <sup>(a)</sup>	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 Chilled Water Temperature	Outdoor Ambient Temperature		
	85°F	95°F	105°F
44°F	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. H<sub>2</sub>O = 1 psi).

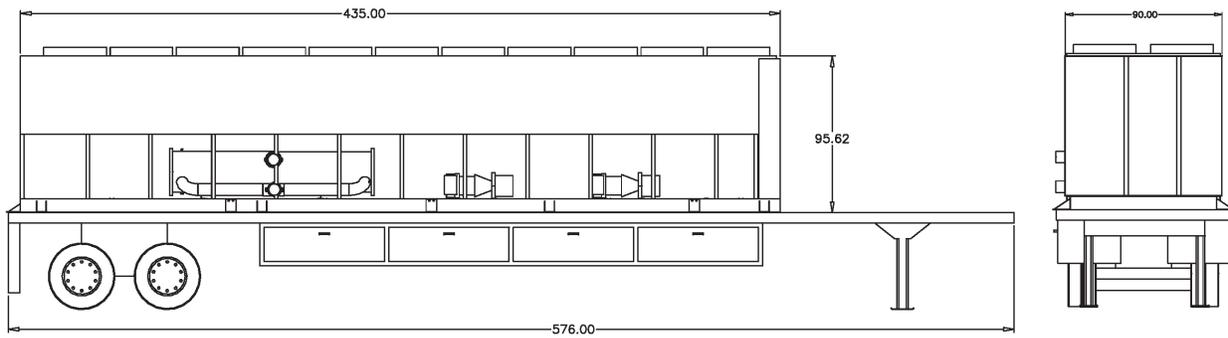
### General – CSCA0300F0

**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 <sup>(a)</sup> (lbs)	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.





## 80 to 550 Ton Air Cooled Screw Chillers

### 300 Ton Air-Cooled RTAC

**Table 163. General – CSCA0300F0**

Labels	Value
Model Number	RTAC300
Nominal Tons	300
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	415/200 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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
Maximum Wire Size Lug(s) Can Accept <sup>(a)</sup>	600 MCM
<b>Single Point - With Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	678 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	635 A
<b>Single Point - Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	606 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	563 A
<b>Dual Point - With Integral Pump</b>	
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
<b>Dual Point - Without Integral Pump</b>	
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 (a)**

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

(a) 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 166. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	419.0	389.9	353.7	308.4	225.4
55°F	0	388.3	361.7	332.2	292.0	221.9
50°F	0	358.4	334.0	306.5	277.0	217.4
45°F	0	329.3	307.0	281.5	254.4	212.2
40°F	0	301.3	280.7	257.3	232.0	205.4
35°F	10 <sup>(a)</sup>	273.3	254.5	233.2	209.6	184.9
30°F	20 <sup>(a)</sup>	244.2	227.3	208.1	186.6	163.8
25°F	25 <sup>(b)</sup>	214.0	199.3	182.3	162.9	142.3
20°F	30 <sup>(b)</sup>	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 167. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

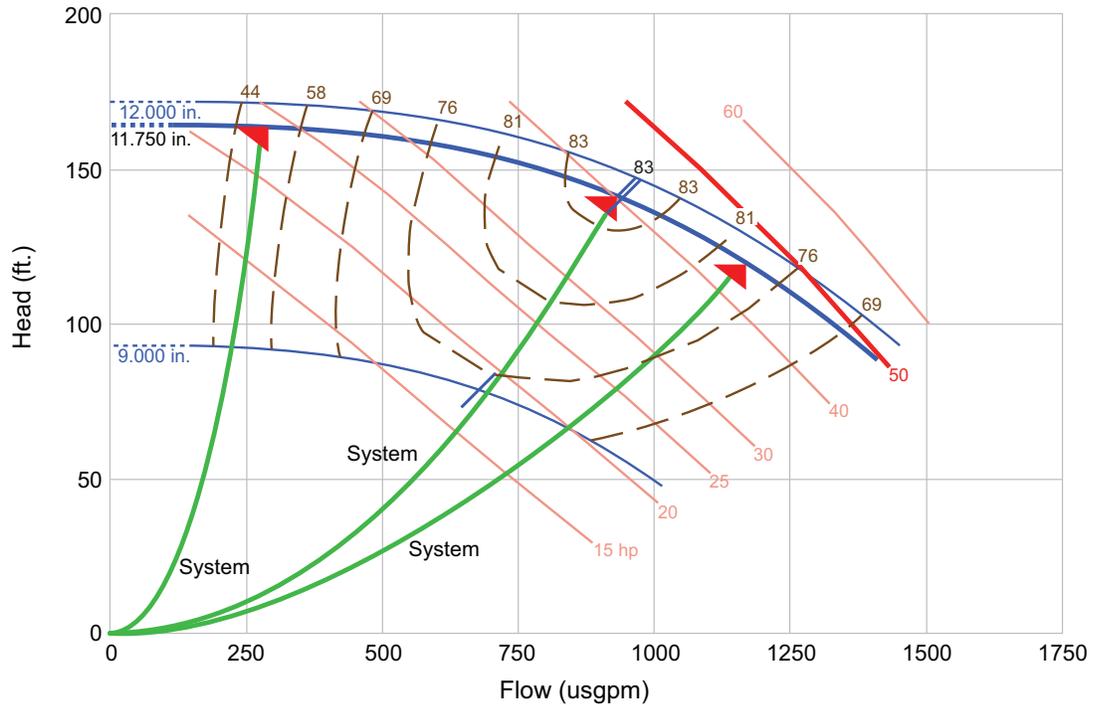
### General – CSCA0300F0

Table 168. Dimensions and weights

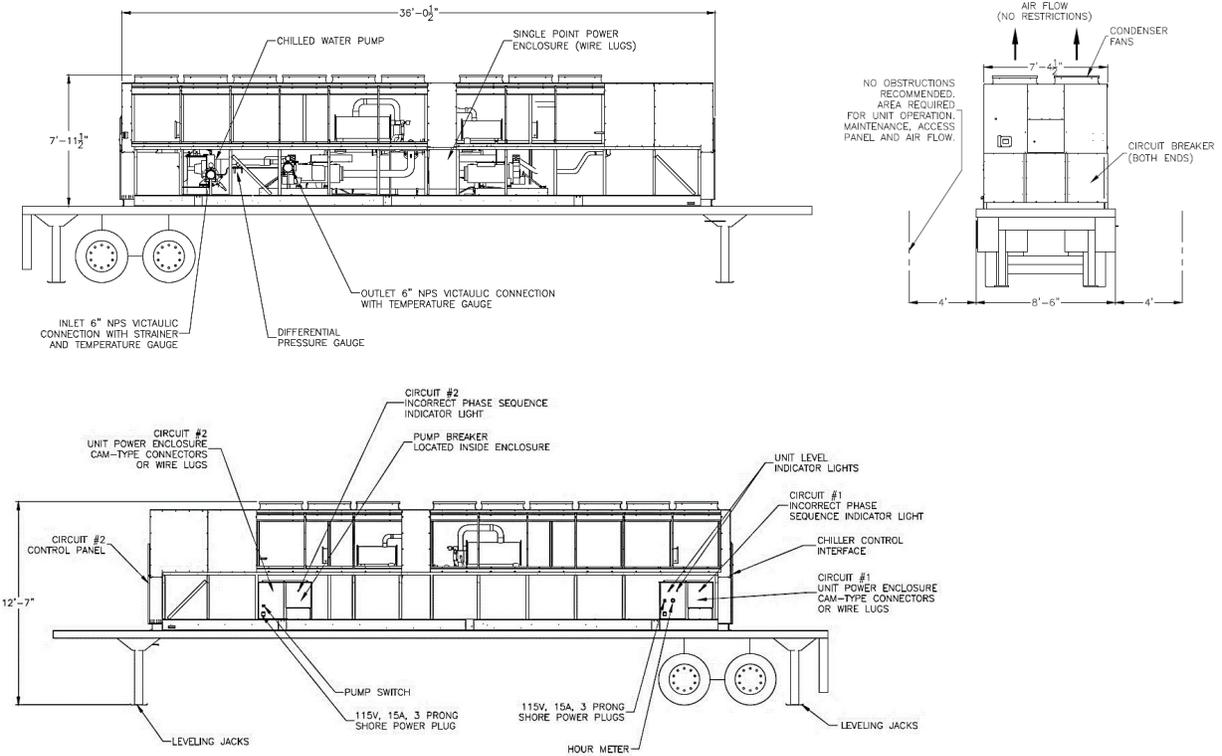
Chiller Only	
Labels	Value
Length	36 ft.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	23,400
Operating Weight (lbs)	25,400
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**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





## 80 to 550 Ton Air Cooled Screw Chillers

**Table 169. General – CSCA0300F2-F3**

Labels	Value
Model Number	RTAC300
Nominal Tons	300
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	415/200 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 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 170. Electrical data – Dual point only**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Power Supply Connections <sup>(a)</sup>	Series 16 Cam-Type Connections Only
<b>With Integral Pump</b>	
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
<b>Without Integral Pump</b>	
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 (a)**

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

(a) 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 172. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	419.0	389.9	353.7	308.4	225.4
55°F	0	388.3	361.7	332.2	292.0	221.9

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 172. Cooling capacity (tons) (continued)**

Leaving Water Temp	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
50°F	0	358.4	334.0	306.5	277.0	217.4
45°F	0	329.3	307.0	281.5	254.4	212.2
40°F	0	301.3	280.7	257.3	232.0	205.4
35°F	10 <sup>(a)</sup>	273.3	254.5	233.2	209.6	184.9
30°F	20 <sup>(a)</sup>	244.2	227.3	208.1	186.6	163.8
25°F	25 <sup>(a)</sup>	214.0	199.3	182.3	162.9	142.3
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> O)
309 (min flow)	3.55
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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

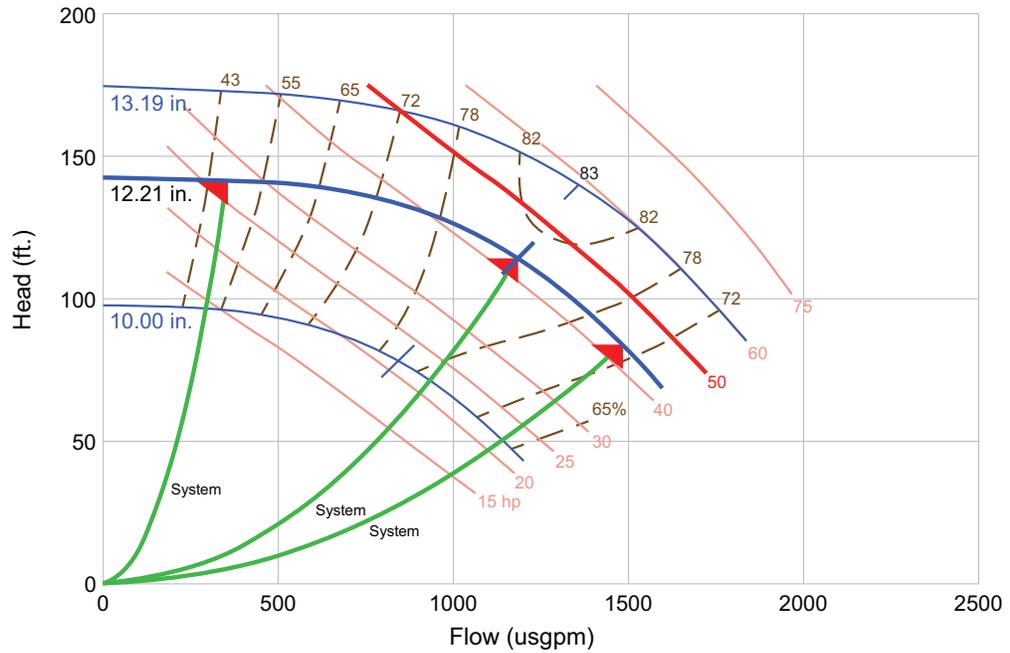
### General – CSCA0300F2-F3

Table 174. Dimensions and weights

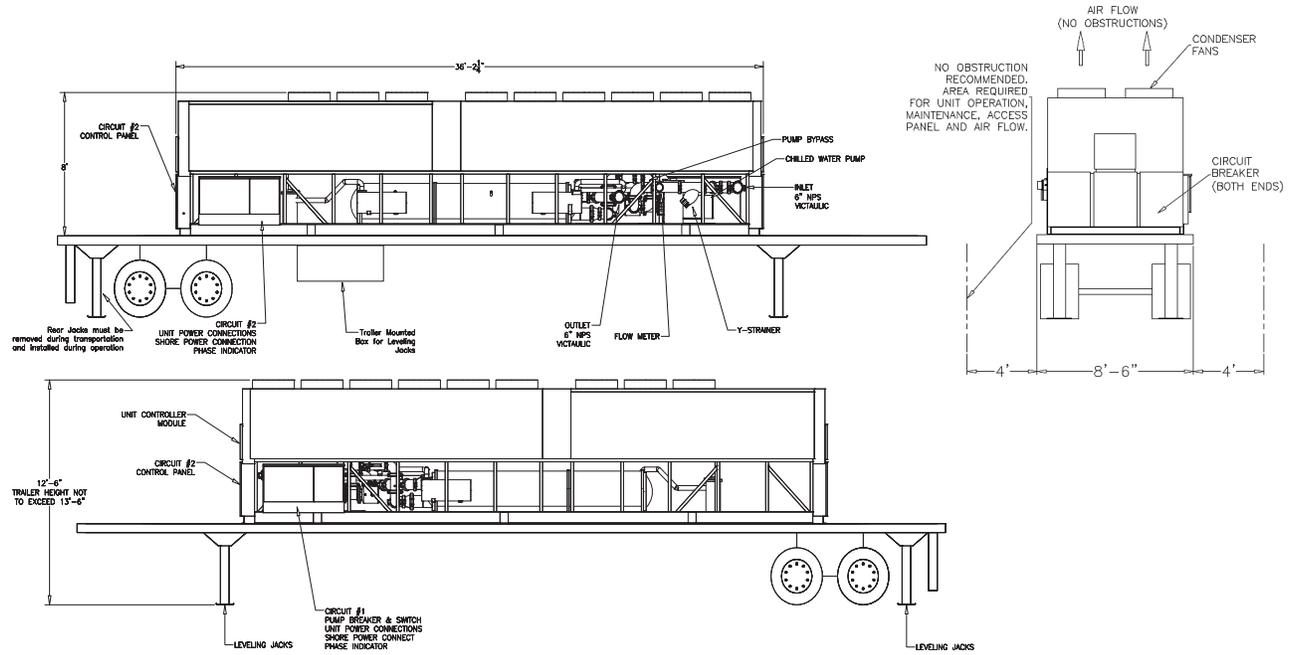
Chiller Only	
Labels	Value
Length	36 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	28,000
Operating Weight (lbs)	30,049
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 300 Ton Air-Cooled ACRC

**Table 175. General – RSCA0300F0**

Labels	Value
Model Number	ACRC300
Nominal Tons	300
Refrigerant	R-513a
Refrigerant Charge <sup>(a)</sup>	263/263 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	543.6 A
Maximum Overcurrent Protection (MOP)	700 A
Full Load Amps (FLA)	489.8 A
<b>With Integral Pump</b>	
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 <sub>2</sub> O
Max Flow	1,276 gpm @ 113 ft.H <sub>2</sub> O

**Table 178. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> 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 <sub>2</sub> O)
700	12.2
750	14
800	15.9
850	17.9
950	22.2
1050	27
1150	32.2
1299 (max flow)	40.8

*Note:* Maximum water side pressure is 150 psi (2.31 ft. H<sub>2</sub>O = 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	
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.

**Table 180. Installed/operating clearances**

Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
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)**

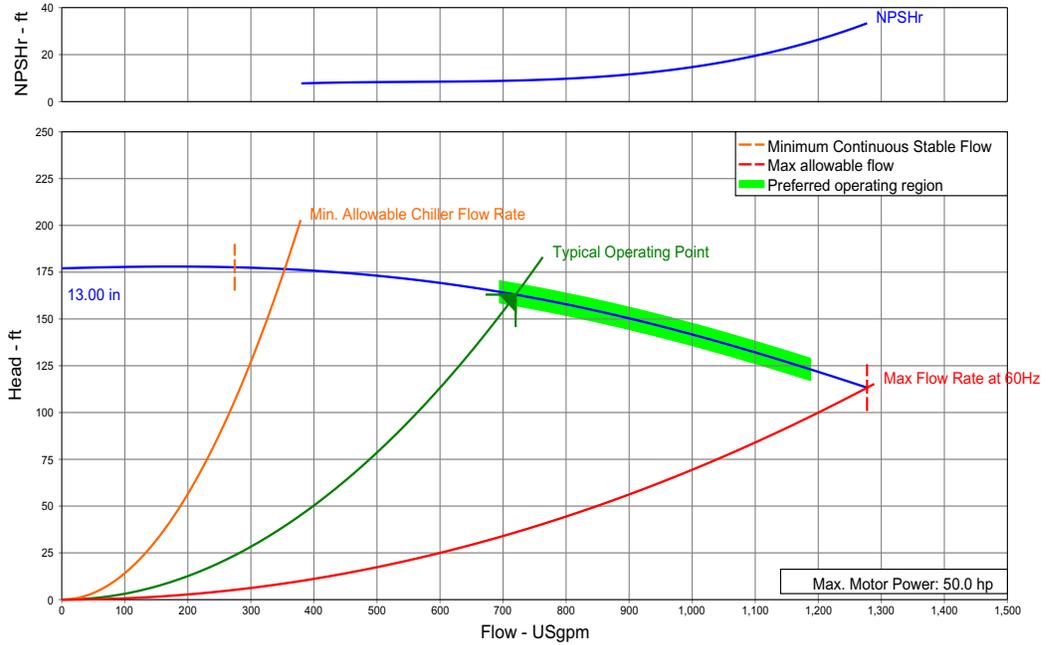
Leaving Water Temp	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton <sup>(a)</sup>			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	422.3	424.4	422.8	424.2
55°F	0	391.9	395.2	390	360.1
45°F	0	340.9	343.6	318.8	294.3
35°F	10	293.1 <sup>(a)</sup>	273.9 <sup>(a)</sup>	254.6 <sup>(a)</sup>	235 <sup>(a)</sup>
25°F	25	211.1 <sup>(a)</sup>	198.1 <sup>(a)</sup>	184.4 <sup>(a)</sup>	171.8 <sup>(a)</sup>

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

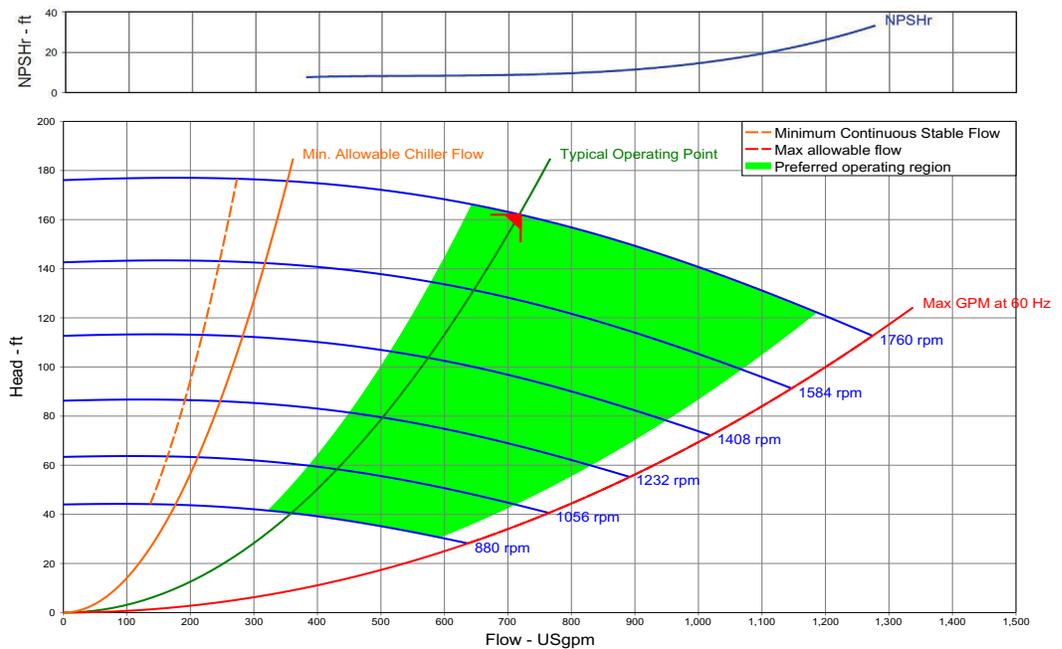


# 80 to 550 Ton Air Cooled Screw Chillers

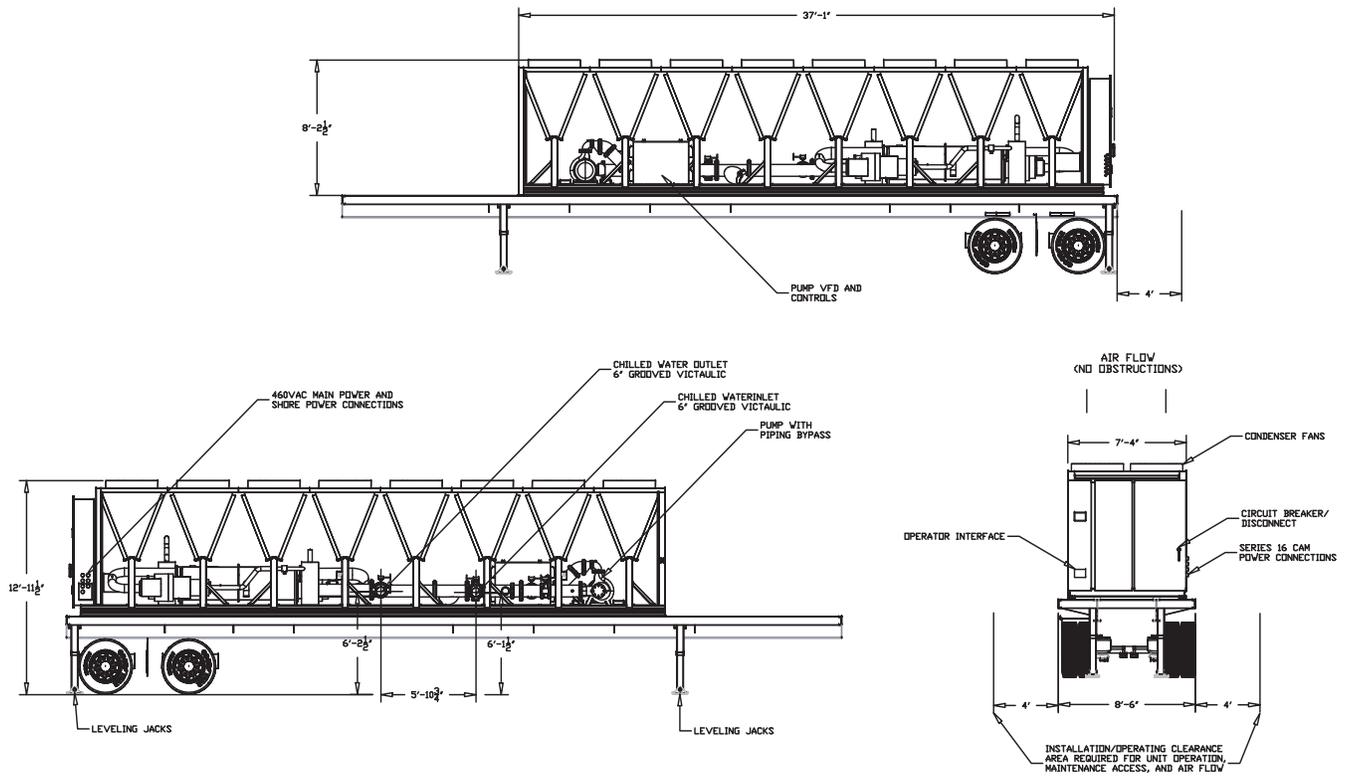
### Single Speed Pump Curve



### Multi Speed Pump Curve



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 300 Ton Air-Cooled RTAG

**Table 182. General – RSCA0300F0**

Labels	Value
Model Number	RTAG 300
Nominal Tons	300
Refrigerant	R-513a
Refrigerant Charge <sup>(a)</sup>	335/159 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 Connection
SCCR	35kA at 460VAC Symmetrical Max
<b>Dual Point - Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	421/230 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	500/400 A
Full Load Amps (FLA) (circuit 1/circuit 2)	379/191 A
<b>Dual Point - With Integral Pump</b>	
Minimum Circuit Ampacity (MCA) (circuit 1/circuit 2)	472/230 A
Maximum Overcurrent Protection (MOP) (circuit 1/circuit 2)	600/400 A
Full Load Amps (FLA) (circuit 1/circuit 2)	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 <sub>2</sub> O
Max Flow	1,742 gpm @ 79 ft.H <sub>2</sub> O

**Table 185. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
495 (min flow)	5.9
600	8.6
650	10.1

## 80 to 550 Ton Air Cooled Screw Chillers

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

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
700	11.7
750	13.4
800	15.2
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. H<sub>2</sub>O = 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: Crane only.
2. All weights and dimensions listed above are subject to change without notice or liability.

**Table 187. Installed/operating clearances**

Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
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	Ethylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	514.4	484.9	454.4	422.9
55°F	0	442.1	416.6	390.4	362.7
45°F	0	374.1	352.3	329.6	306
35°F	20	303.7	286.1	267.5	248.2
25°F	25	238.5	224.7	210.1	194.7



## 80 to 550 Ton Air Cooled Screw Chillers

Table 188. Cooling capacity (tons) (continued)

Leaving Water Temp	Ethylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
20°F	30	200.3	188.9	176.8	164.1

Figure 4. Single Speed Pump Curve

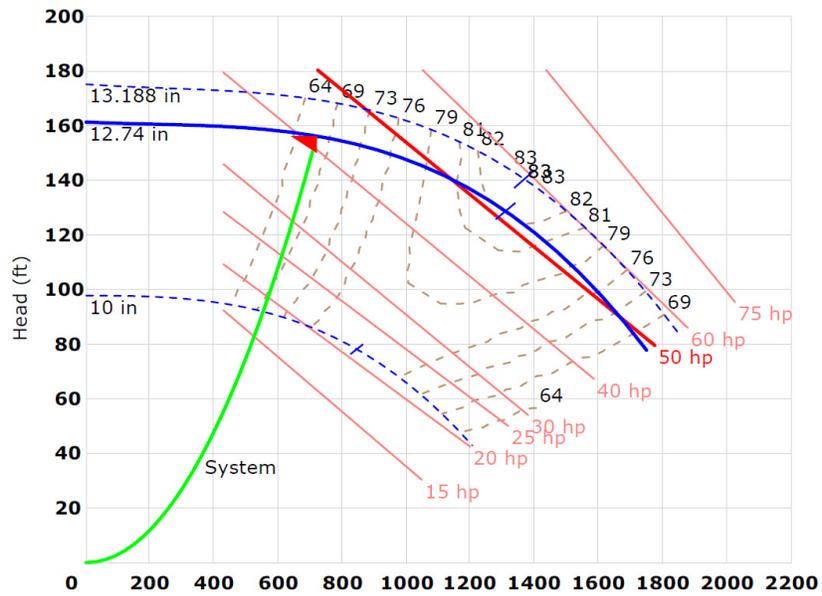
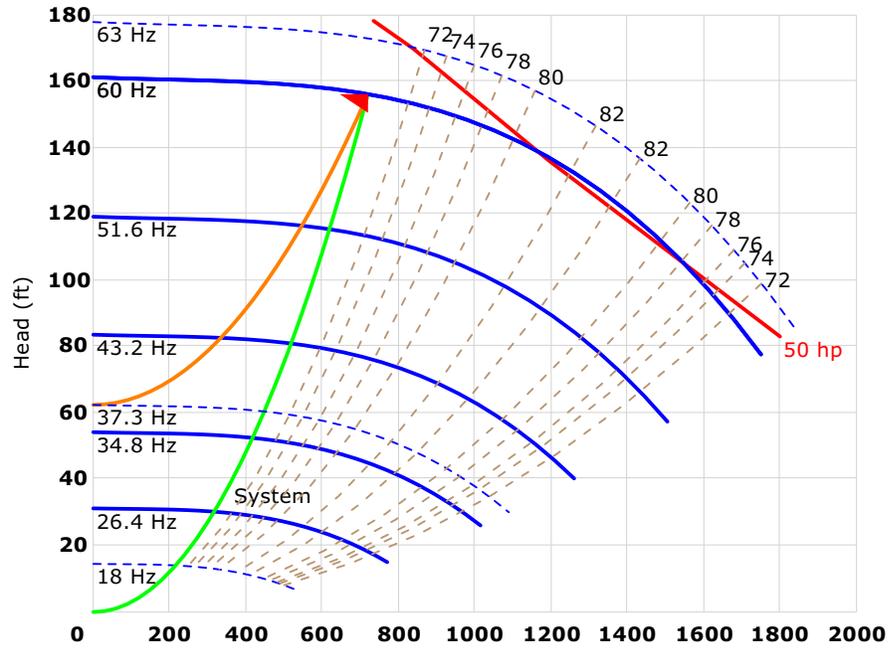
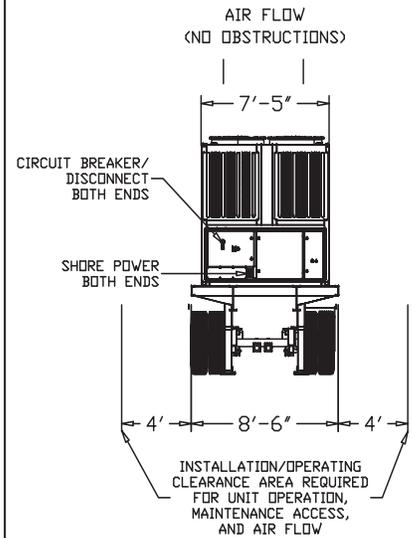
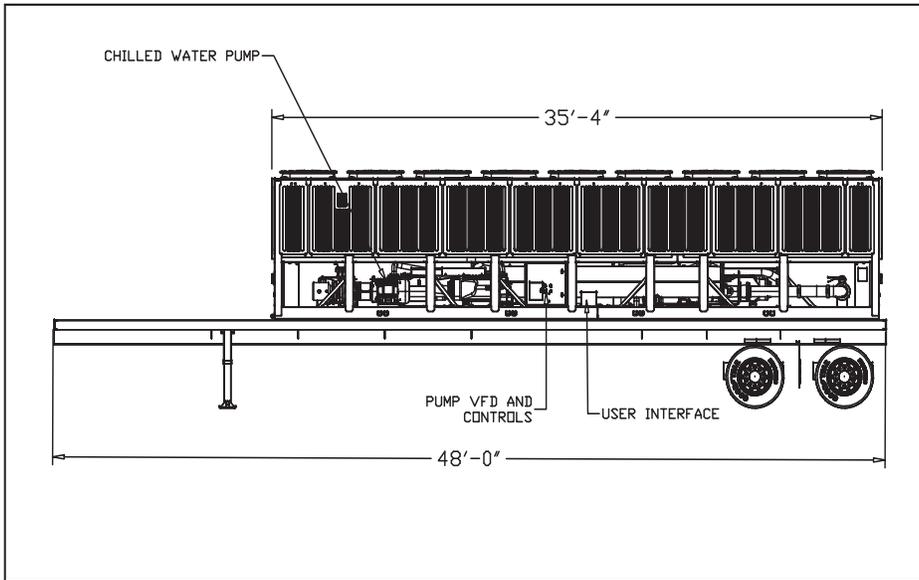
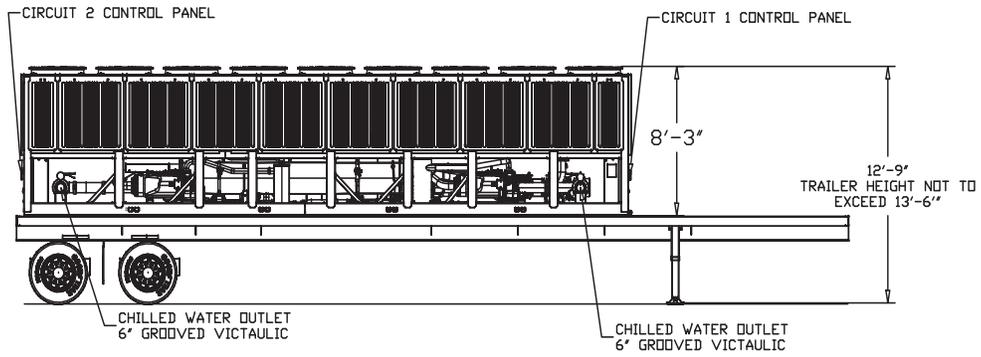


Figure 5. Multi Speed Pump Curve



# 80 to 550 Ton Air Cooled Screw Chillers



## 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 <sup>(a)</sup>	10°F to 65°F
Number of Electrical Circuits <sup>(b)</sup>	2
Number of Refrigerant Circuits	2

**Note:** Selection is required for actual chiller performance.

(a) Setpoints are to be used only 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 <sup>(a)</sup>	350 MCM
<b>Single Point - With Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	830 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	790 A
<b>Single Point - Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	774 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	734 A
<b>Dual Point</b>	
Voltage	460V 3-phase
Frequency	60 Hz
Maximum Wire Size Lug(s) can accept <sup>(a)</sup>	600 MCM
<b>Dual Point - With Integral Pump</b>	
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
<b>Dual Point - Without Integral Pump</b>	
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.



## 80 to 550 Ton Air Cooled Screw Chillers

**Table 191. Pump data<sup>(a)</sup>**

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

(a) Pump is mounted within the chiller.

**Table 192. Cooling capacity (tons)**

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

*Note:* Contact Trane Rental Services for low temperature applications.

**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. H<sub>2</sub>O = 1 psi).

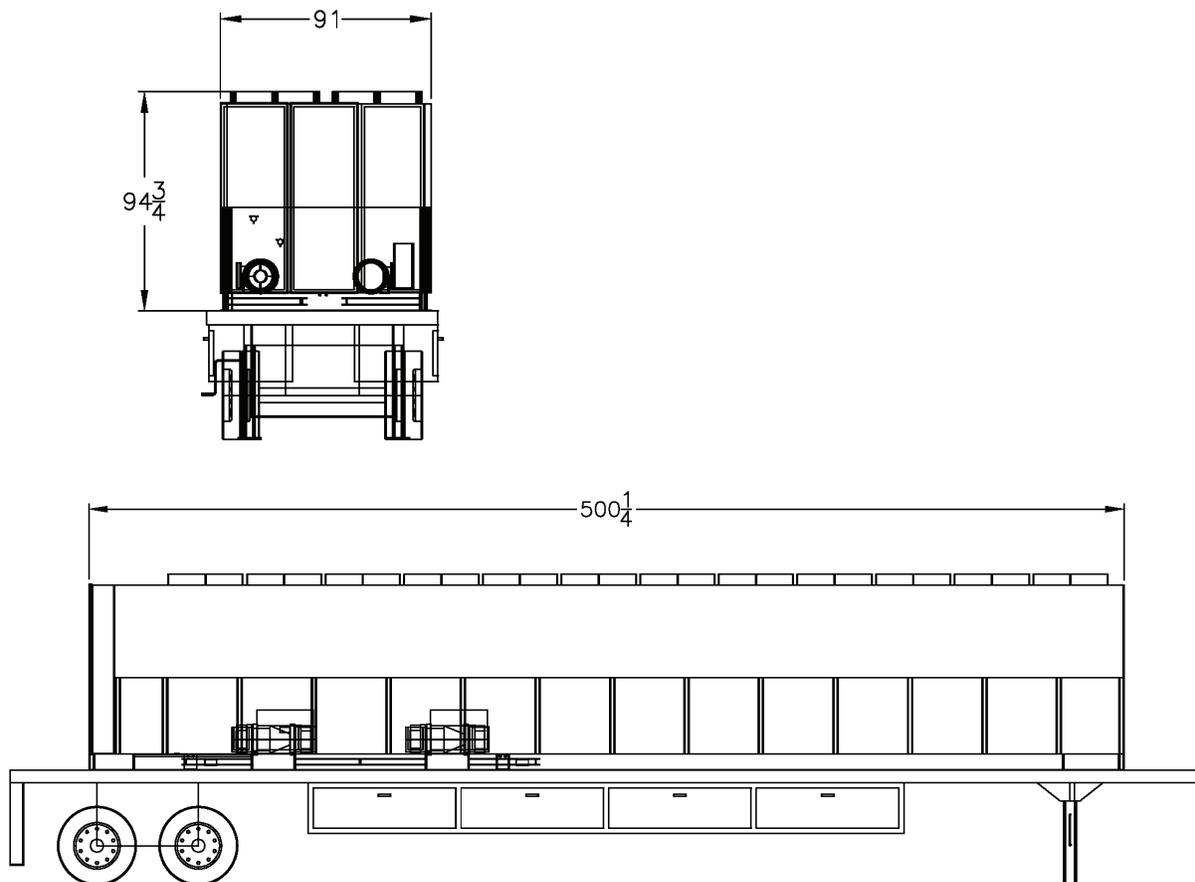
General – CSCA0400F0

Table 194. Dimensions and weights

	Chiller <sup>(a)</sup>	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.

(a) Refer to trailer and overall dimensions.





## 80 to 550 Ton Air Cooled Screw Chillers

### 400 Ton Air-Cooled RTAC

**Table 195. General – CSCA0400F0**

Labels	Value
Model Number	RTAC400
Nominal Tons	400
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	415/415 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 <sup>(a)</sup>	600 MCM
<b>Single Point - With Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	855 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	812 A
<b>Single Point - Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	792 A
Maximum Overcurrent Protection (MOP)	800 A
Full Load Amps (FLA)	750 A
<b>Dual Point - With Integral Pump</b>	
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
<b>Dual Point - Without Integral Pump</b>	
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.

**Table 197. Pump data – CSCA0400F0 (a)**

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

(a) 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 198. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	563.0	523.9	473.0	412.3	299.2
55°F	0	522.3	486.3	447.0	390.8	294.4
50°F	0	482.6	449.7	412.8	371.5	288.4
45°F	0	444.0	414.0	379.6	343.3	281.5
40°F	0	406.6	379.0	347.4	313.5	275.6
35°F	10 <sup>(a)</sup>	369.5	344.2	315.4	283.8	250.6
30°F	20 <sup>(a)</sup>	331.8	309.1	282.9	253.8	223.1
25°F	25 <sup>(a)</sup>	292.9	272.8	249.4	223.1	195.2
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

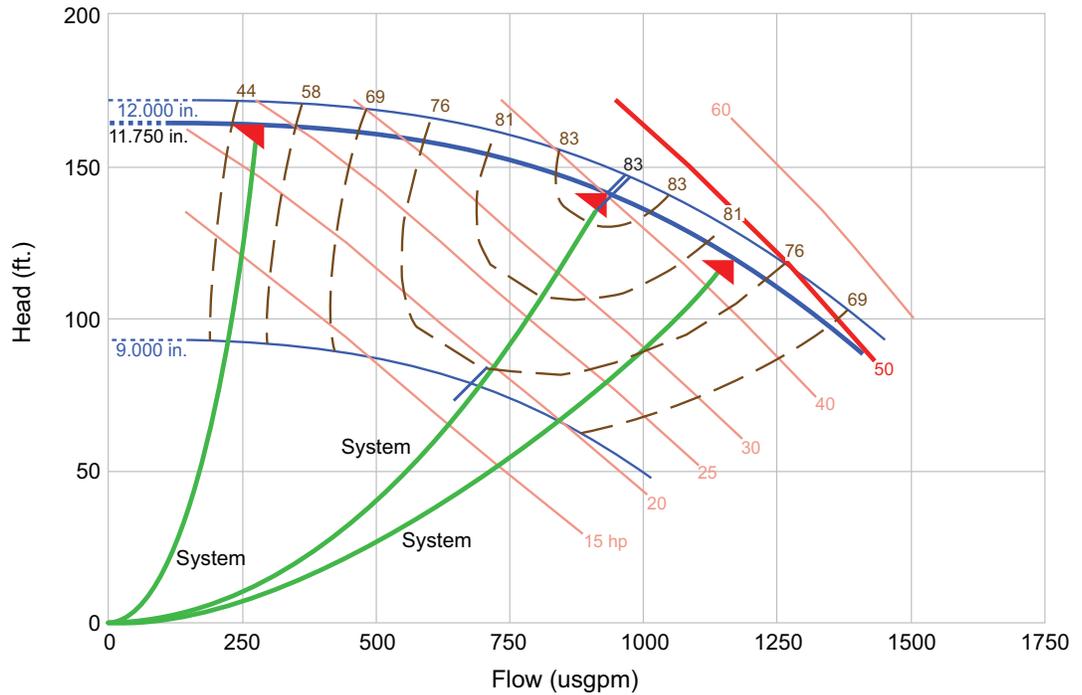
### General – CSCA0400F0

Table 200. Dimensions and weights

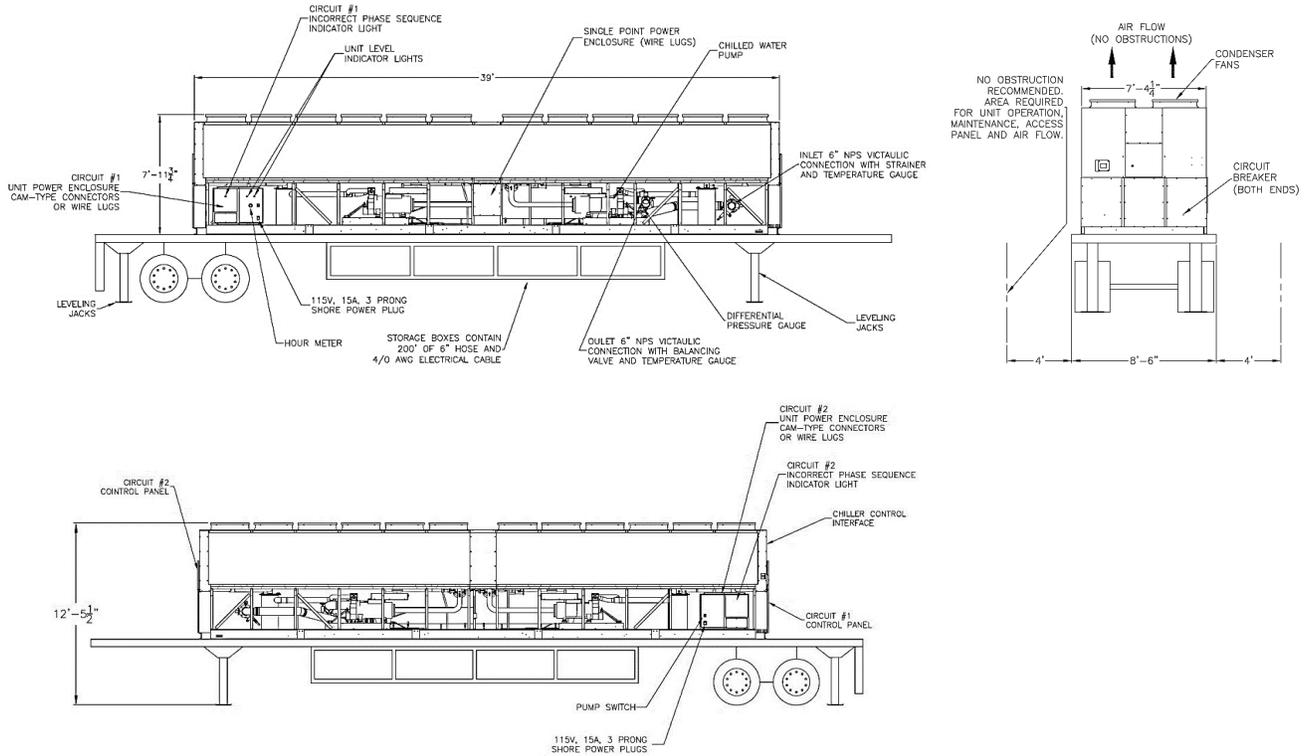
Chiller Only	
Labels	Value
Length	39 ft. 8 in.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	28,700
Operating Weight (lbs)	30,860
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**Notes:**

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



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

**Table 201. General – CSCA0400F2-F3**

Labels	Value
Model Number	RTAC400
Nominal Tons	400
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	415/415 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 <sup>(a)</sup>	Series 16 Cam-Type Connections Only
<b>With Integral Pump</b>	
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
<b>Without Integral Pump</b>	
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 – CSCA0400F2-F3 (a)**

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

(a) 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 204. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	563.0	523.9	473.0	412.3	299.2
55°F	0	522.3	486.3	447.0	390.8	294.4

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 204. Cooling capacity (tons) (continued)**

Leaving Water Temp	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM / Nominal Ton				
		Ambient Air Temp				
		85°F	95°F	105°F	115°F	125°F
50°F	0	482.6	449.7	412.8	371.5	288.4
45°F	0	444.0	414.0	379.6	343.3	281.5
40°F	0	406.6	379.0	347.4	313.5	275.6
35°F	10 <sup>(a)</sup>	369.5	344.2	315.4	283.8	250.6
30°F	20 <sup>(a)</sup>	331.8	309.1	282.9	253.8	223.1
25°F	25 <sup>(a)</sup>	292.9	272.8	249.4	223.1	195.2
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

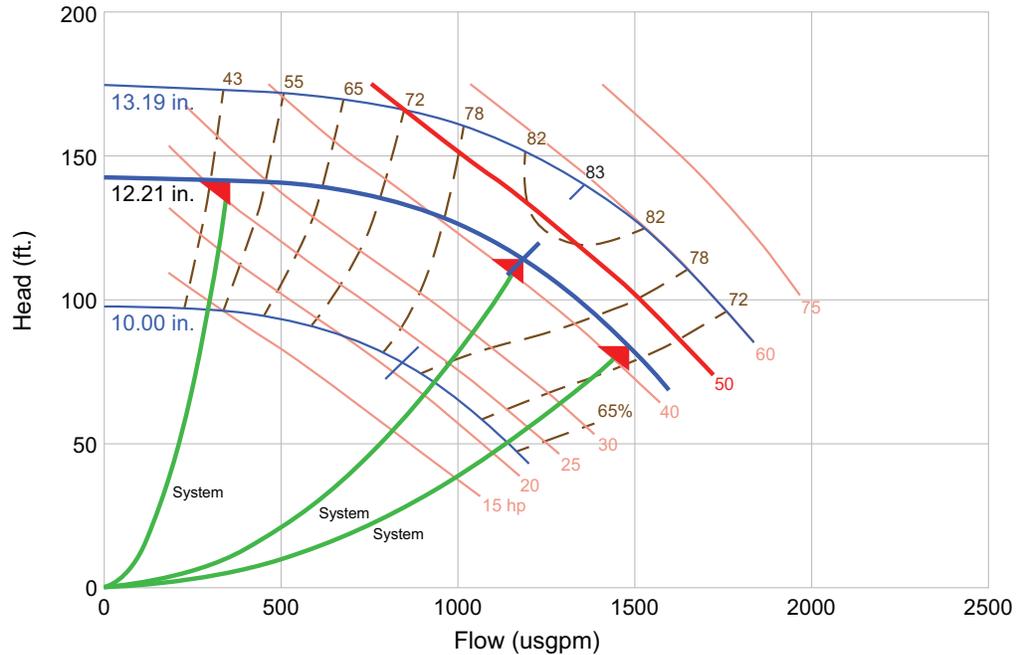
### General – CSCA0400F2-F3

Table 206. Dimensions and weights

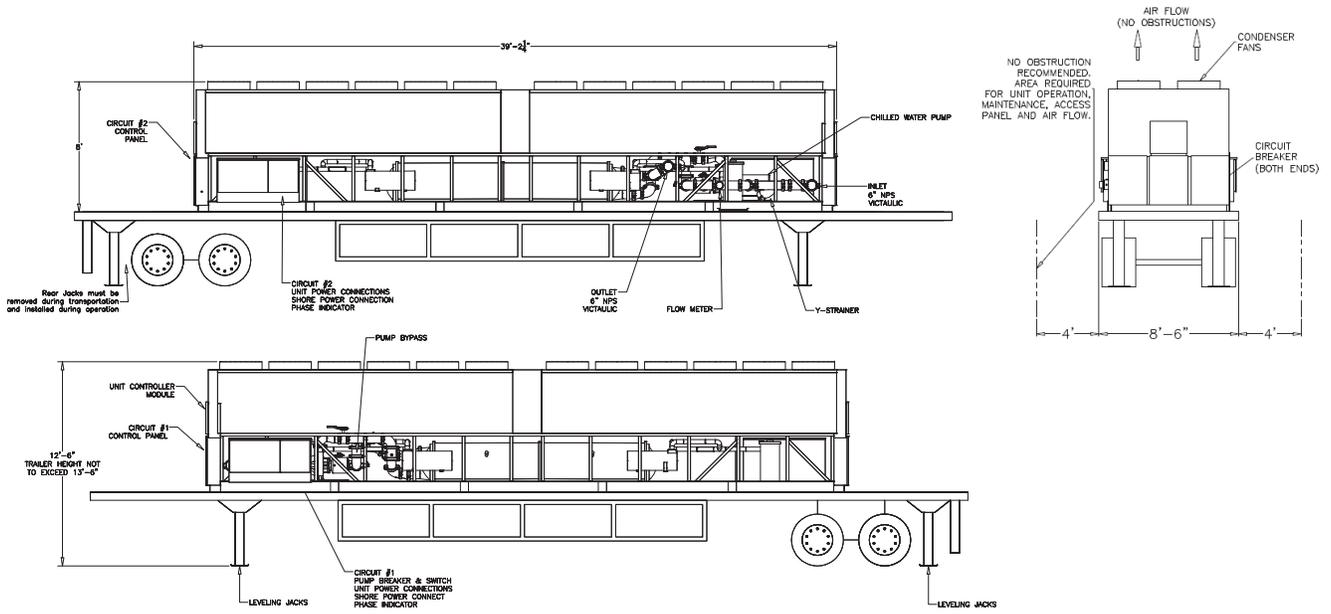
Chiller Only	
Labels	Value
Length	39 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	35,800
Operating Weight (lbs)	37,974
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 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 <sup>(a)</sup>	344/333 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 low 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 Connection
SCCR	35kA at 460Vac Symmetrical Max
<b>Dual Point - Without Integral Pump</b>	
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
<b>Dual Point - With Integral Pump</b>	
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 <sub>2</sub> O
Max Flow	1240 gpm @ 103 ft. H <sub>2</sub> O

**Table 210. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
674 (min flow)	4.6
750	5.7
800	6.5
850	7.3

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 210. Water flow rates and pressure drops (continued)**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
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. H<sub>2</sub>O = 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	
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.

**Table 212. Installed/operating clearances**

Labels	Value
Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
Top	No obstructions

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

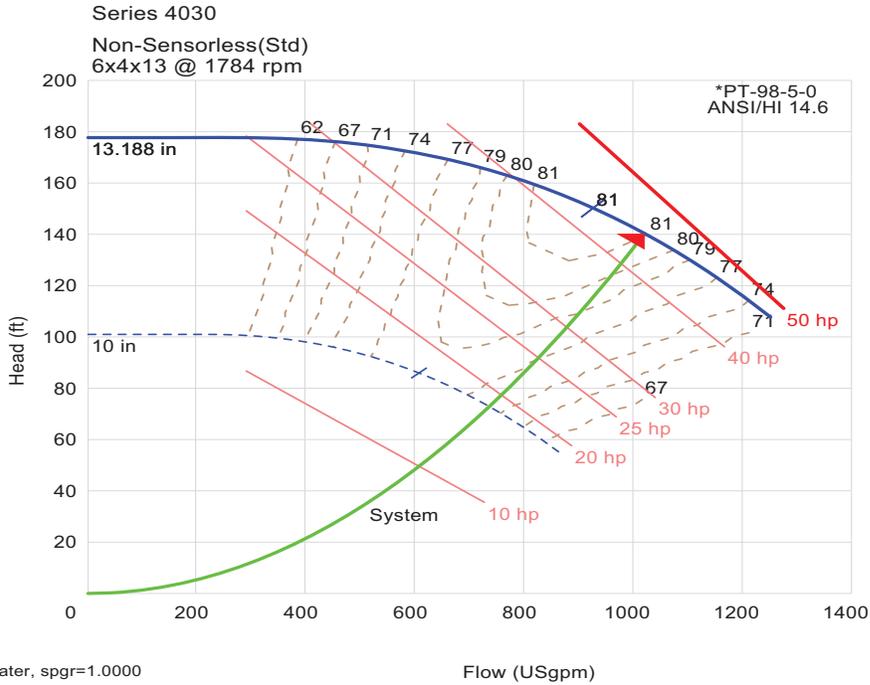
**Table 213. Cooling capacity (tons)**

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

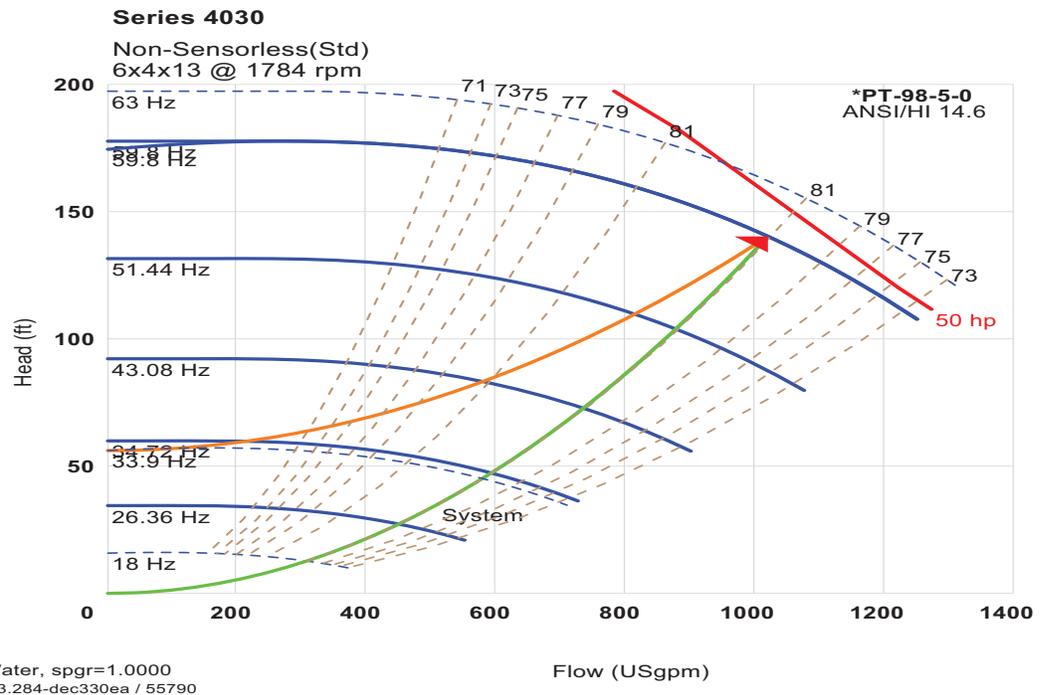


# 80 to 550 Ton Air Cooled Screw Chillers

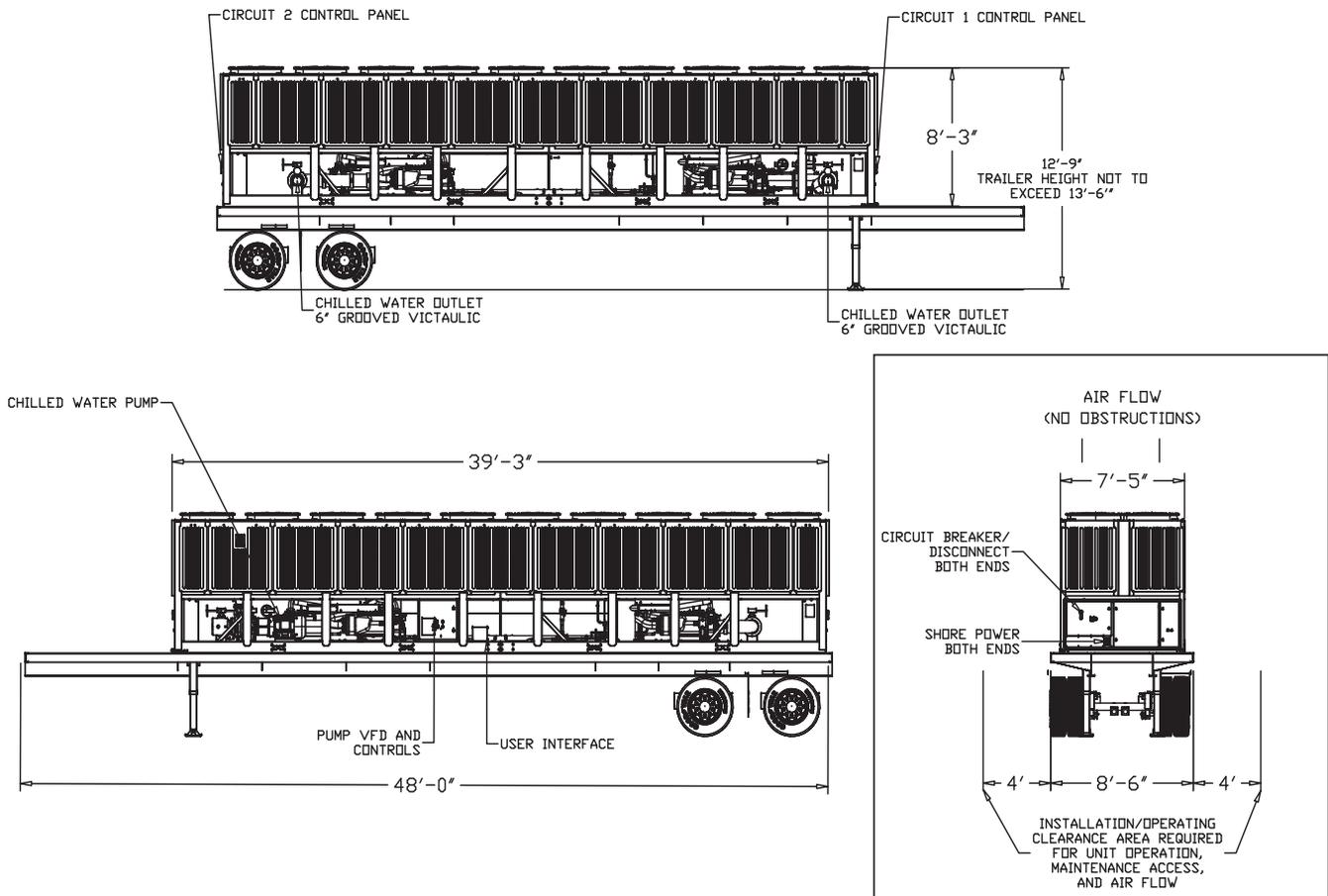
Single Speed Pump Curve



Multi Speed Pump Curve



## 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 440 Ton Air-Cooled ACRC

**Table 214. General – RSCA0440F0 ACRC**

Labels	Value
Model Number	ACRC 440
Nominal Tons	440
Refrigerant	R-513a
Refrigerant Charge <sup>(a)</sup>	366/177 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 215. Electrical data**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
Wire Connection Type	Series 16 Cam-Type Connection
SCCR	35kA Symmetrical at 460V Max
<b>Dual Point - Without Integral Pump</b>	
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
<b>Dual Point - With Integral Pump</b>	
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 <sub>2</sub> O
Max Flow	1,276 gpm @ 113 ft. H <sub>2</sub> O

**Table 217. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
450 (min flow)	2.48
550	3.7
700	5.93
850	8.62
1000	11.8

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 217. Water flow rates and pressure drops (continued)**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
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. H<sub>2</sub>O = 1 psi).

**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	
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.

**Table 219. Installed/operating clearances**

Labels	Value
Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
Top	No obstructions

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

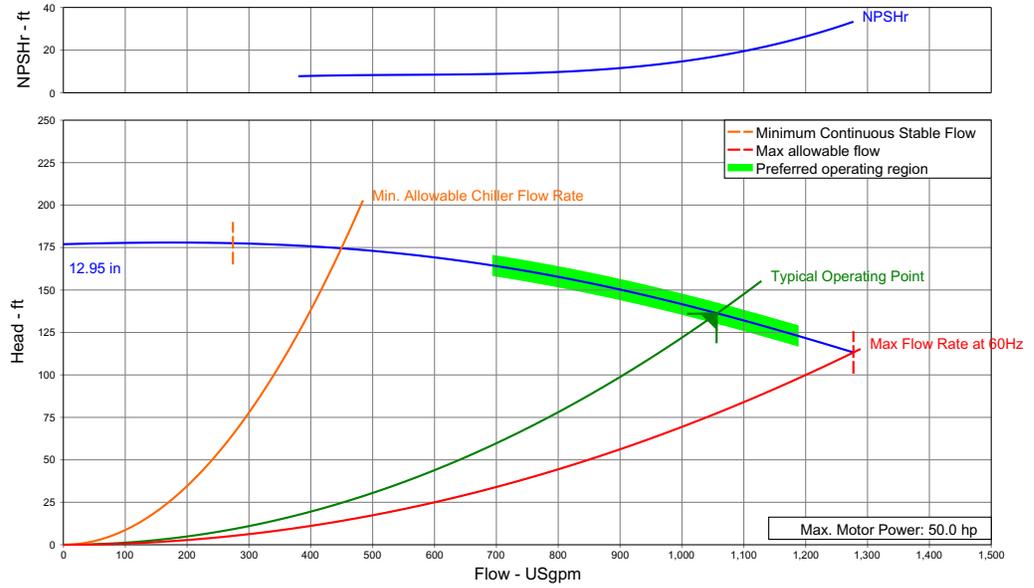
**Table 220. Cooling capacity (tons)**

Leaving Water Temp	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	597.5	597.5	597.5	589.8
55°F	0	557.9	546.1	552.4	504.5
45°F	0	499.1	485.0	456.6	420
35°F	10	381*	379.2*	359.6*	340.1*
25°F	25	322.9*	307.6*	285.1*	262*

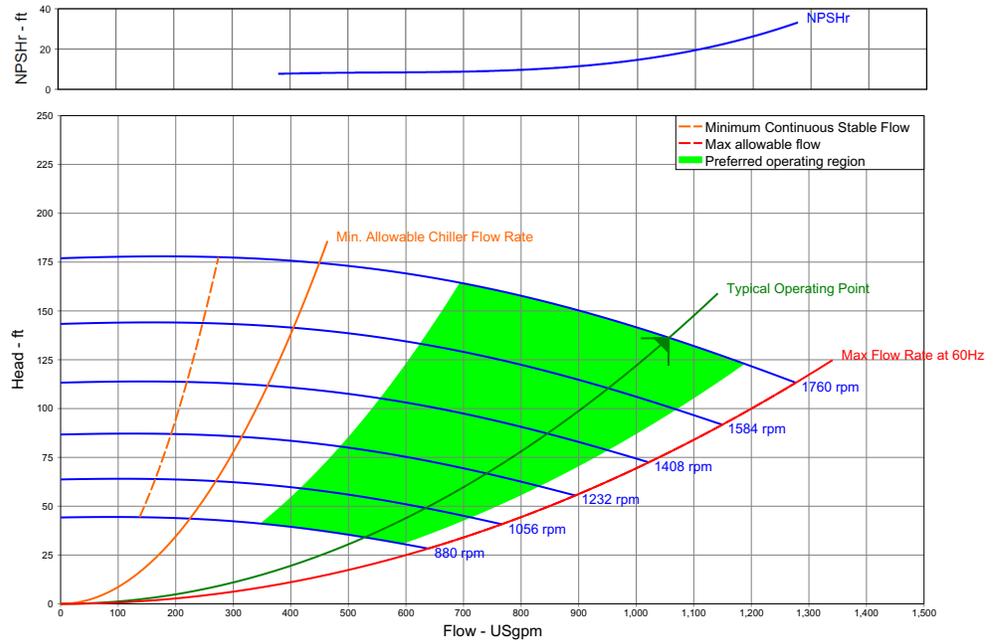
*Note:* Low temperature selections shown at elevated flow rate of 2.7 GPM/Nominal Ton

# 80 to 550 Ton Air Cooled Screw Chillers

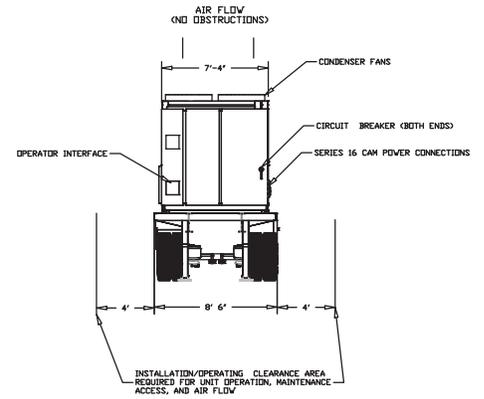
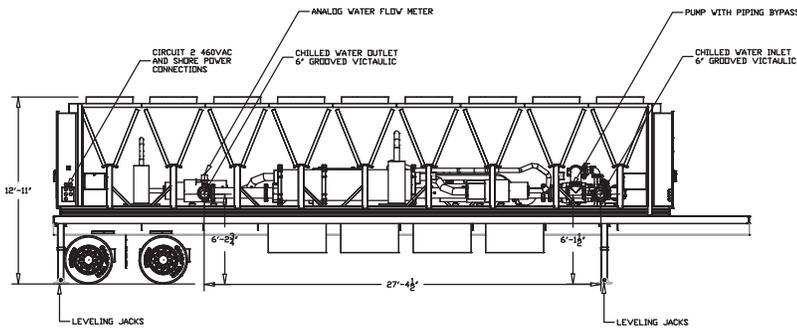
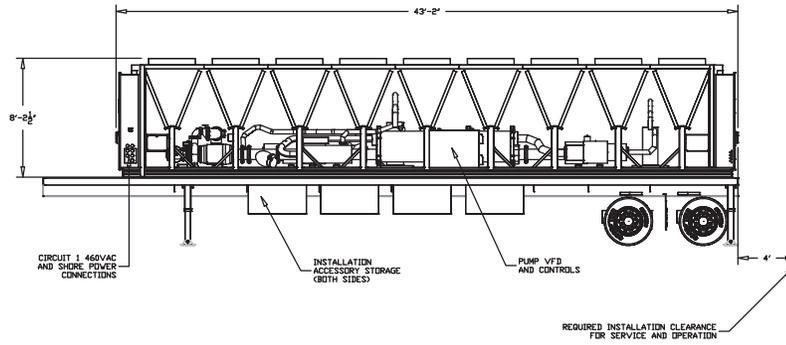
**Figure 6. Single Speed Pump Curve**



**Figure 7. Multi Speed Pump Curve**



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 500 Ton Air-Cooled RTAC

**Table 221. General – CSCA0500F0-F4**

Labels	Value
Model Number	RTAC500
Nominal Tons	500
Refrigerant	R-134a
Refrigerant Charge <sup>(a)</sup>	460/460 lbs
Water Connection Size	6 in. Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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 222. Electrical data – dual point only**

Labels	Value
Voltage	460V 3-phase
Frequency	60 Hz
F0 Power Supply Connections <sup>(a) (b)</sup>	Lugs or Series 16 Cam-Type Connections
F2-F4 Power Supply Connections <sup>(b)</sup>	Series 16 Cam-Type Connections Only
<b>F0 Series Electrical With Integral Pump</b>	
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
<b>F0 Series Electrical - Without Integral Pump</b>	
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
<b>F2-F4 Series Electrical With Integral Pump</b>	
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
<b>F2-F4 Series Electrical Without Integral Pump</b>	
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.

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 223. Pump data – CSCA0500F0 (a)**

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

(a) 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(a)**

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

(a) 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 225. Cooling capacity (tons)**

Leaving Water Temp	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°F	0	679.0	626.3	556.4	483.4	352.8
55°F	0	629.3	585.5	529.5	462.1	343.4
50°F	0	580.9	541.3	497.4	437.0	335.2
45°F	0	534.0	498.3	457.8	414.1	329.1
40°F	0	488.9	456.5	419.3	379.6	320.4
35°F	10 <sup>(a)</sup>	444.3	414.8	381.0	344.5	305.9
30°F	20 <sup>(a)</sup>	400.6	373.8	343.3	309.8	274.3
25°F	25 <sup>(a)</sup>	356.0	332.2	304.8	274.4	242.2
20°F	30 <sup>(b)</sup>	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 <sub>2</sub> 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. H<sub>2</sub>O = 1 psi).



## 80 to 550 Ton Air Cooled Screw Chillers

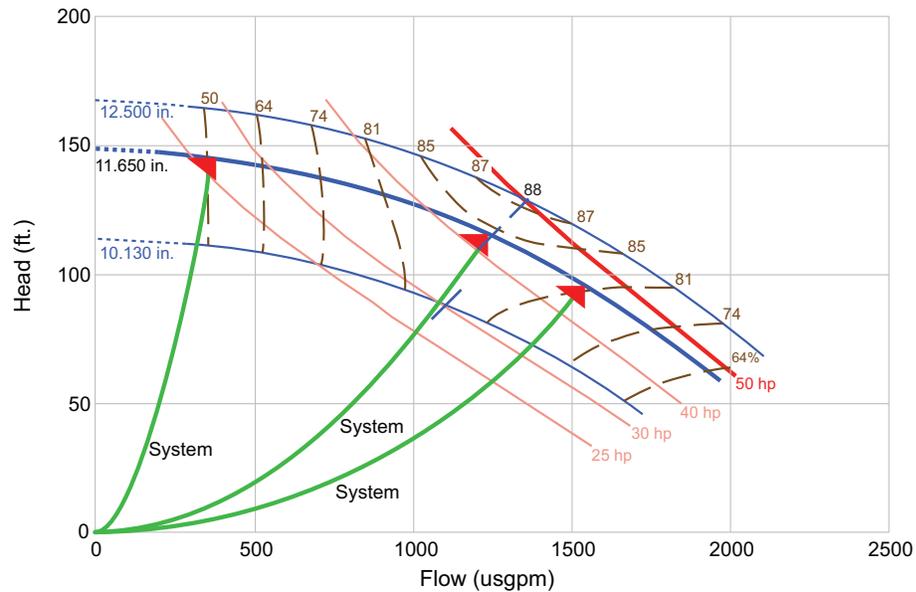
### General – CSCA0500F0

Table 227. Dimensions and weights

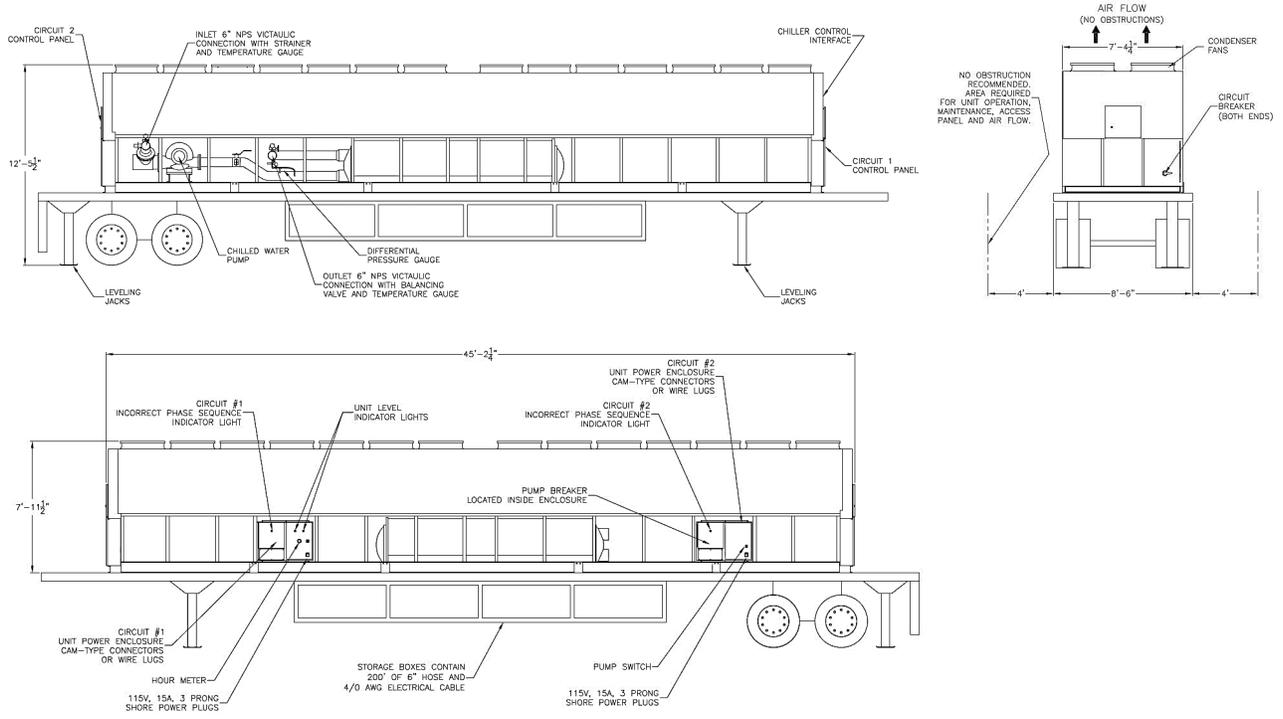
Chiller Only	
Labels	Value
Length	45 ft. 3 in.
Width	8 ft. 1 in.
Height	8 ft.
Shipping Weight (lbs)	31,640
Operating Weight (lbs)	32,990
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

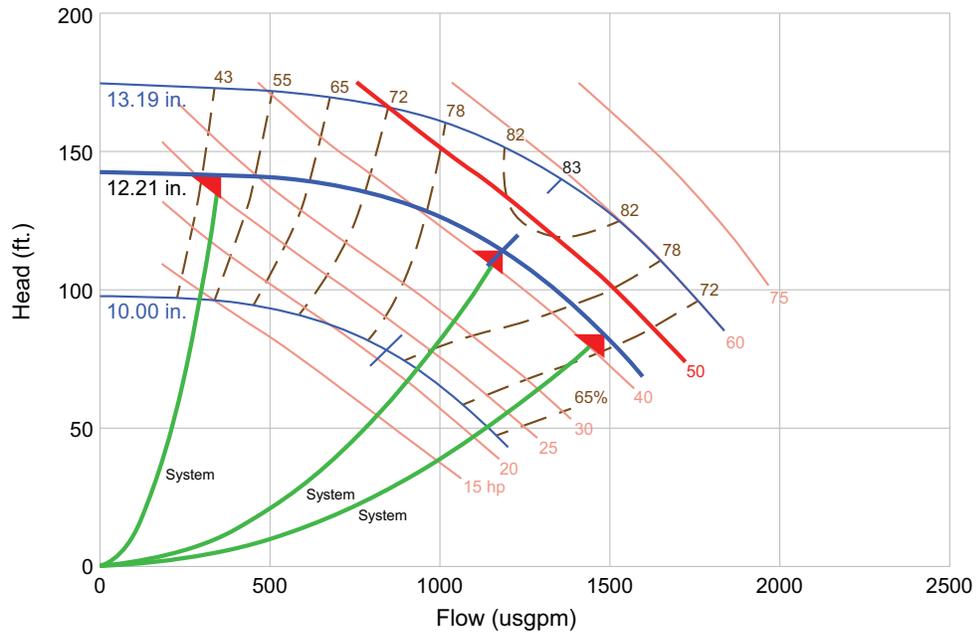
### General – CSCA0500F2-F4

Table 228. Dimensions and weights

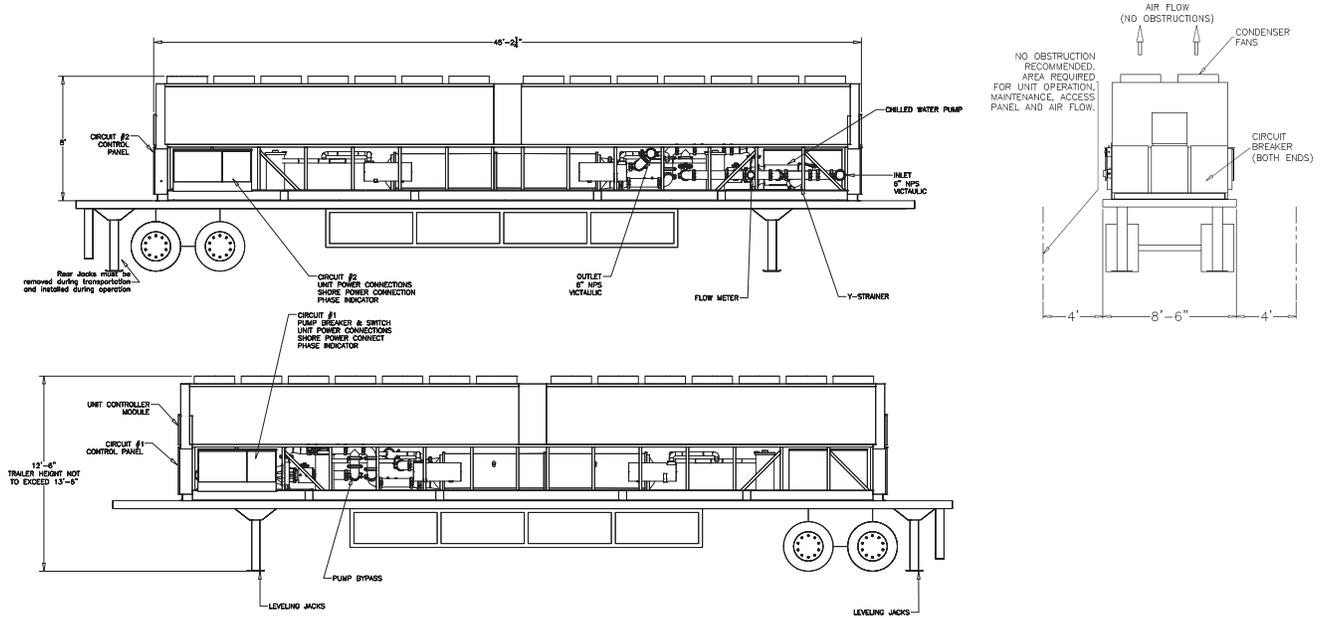
Chiller Only	
Labels	Value
Length	45 ft. 2.25 in.
Width	8 ft. 6 in.
Height	8 ft.
Shipping Weight (lbs)	36,000
Operating Weight (lbs)	37,350
Trailer	
Labels	Value
Length	48 ft.
Width	8 ft. 6 in.
Height	5 ft. 0.25 in.
Shipping Weight (lbs)	14,760

**Notes:**

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



# 80 to 550 Ton Air Cooled Screw Chillers





## 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 <sup>(a)</sup>	275.6/288.4 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	-4°F to 130°F
Chilled Water Setpoint Limits <sup>(b)</sup> (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
<b>Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA)	934 A
Maximum Overcurrent Protection (MOP)	1000 A
Full Load Amps (FLA)	848.1 A
<b>With Integral Pump</b>	
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 <sub>2</sub> O
Max Flow	2,153 gpm @ 88 ft.H <sub>2</sub> O

*Note: Maximum water side pressure is 150 PSIG (2.31 ft. H<sub>2</sub>O = 1 PSI).*

**Table 232. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
506 (min flow)	5.25
600	7.37
750	11.5

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 232. Water flow rates and pressure drops (continued)**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
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. H<sub>2</sub>O = 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	
Labels	Value
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. Installed/Operating clearances**

Labels	Value
Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
Top	No obstructions

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

**Table 235. Cooling capacity (tons)**

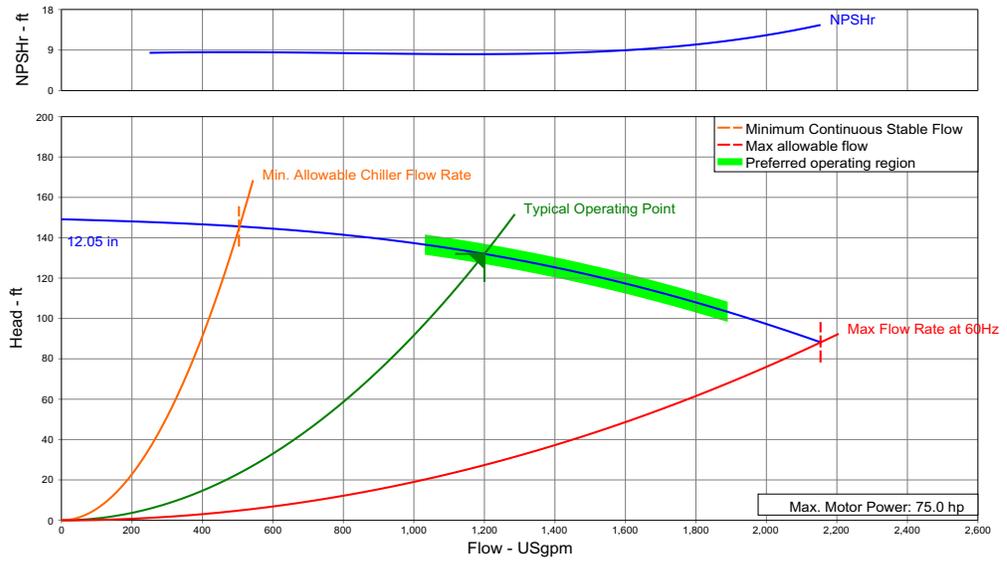
Leaving Water Temp	Glycol (%)	Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	800.2	754.2	707.1	658.2
55°F	0	686.2	646.4	605.5	563.8
45°F	0	579.5	545.6	510.9	475.2
35°F	10	477.1	449.4	420.6	391

# 80 to 550 Ton Air Cooled Screw Chillers

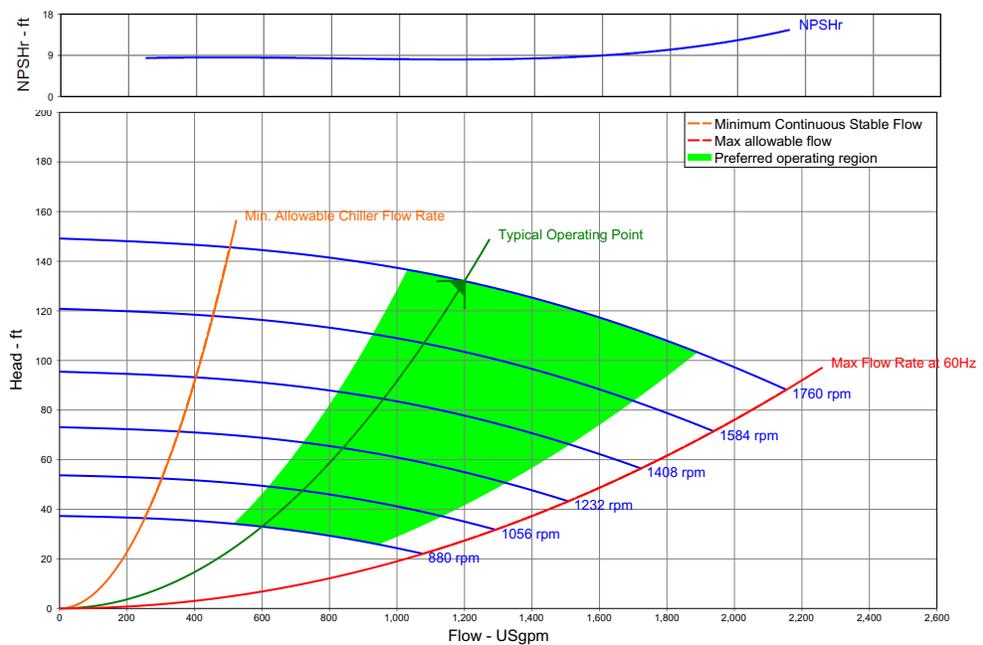
**Table 235. Cooling capacity (tons) (continued)**

Leaving Water Temp	Glycol (%)	Ambient Air Temp			
		65°F	75°F	85°F	95°F
25°F	25	375	353.8	331.4	308.2
20°F	30	326.5	308.2	288.9	268.7

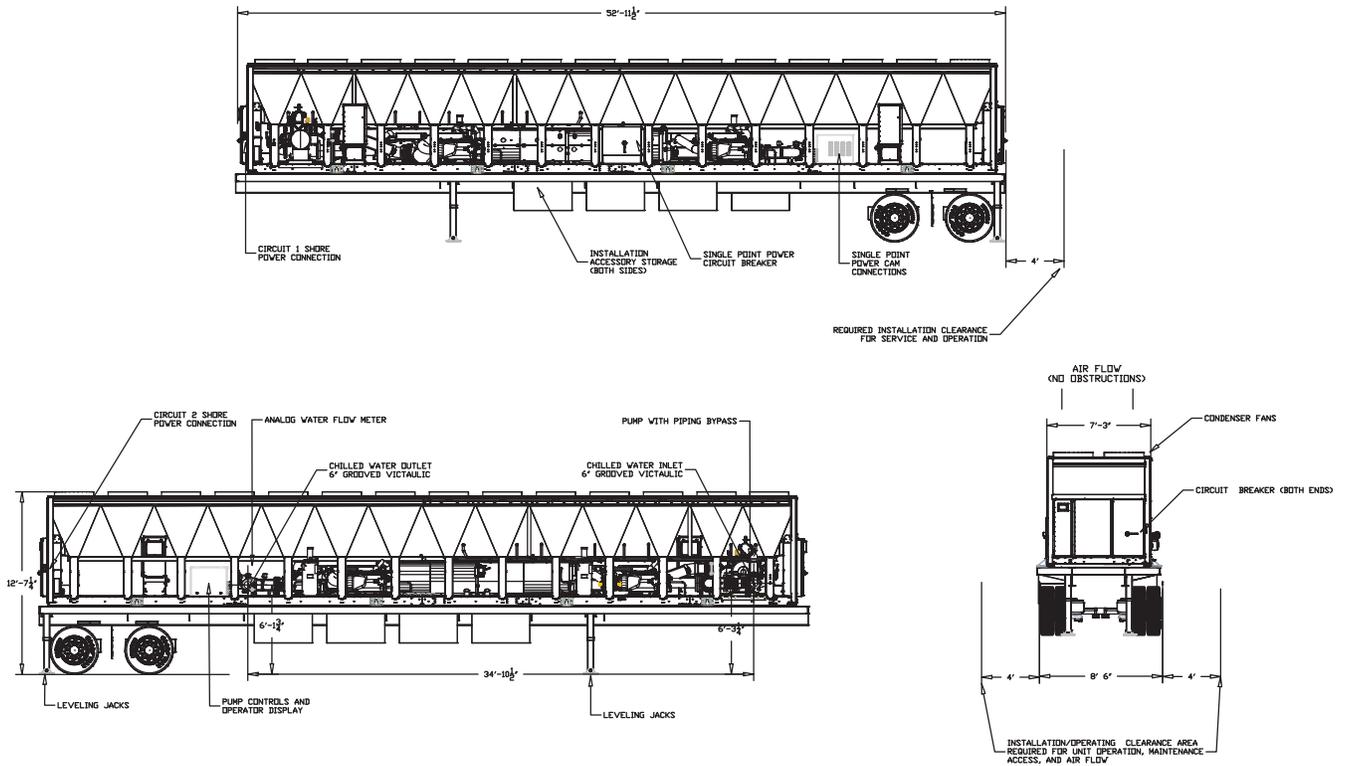
**Figure 8. Single Speed Pump Curve**



**Figure 9. Multi Speed Pump Curve**



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

### 550 Ton Air-Cooled ACRC

**Table 236. General – RSCA0550F0 ACRC**

Labels	Value
Model Number	ACRC 550
Nominal Tons	550
Refrigerant	R-513a
Refrigerant Charge <sup>(a)</sup>	348/309 lbs
Water Connection Size	6 in. Grooved Victaulic
Ambient Operating Conditions	0°F to 125°F
Chilled Water Setpoint Limits <sup>(b) (c)</sup>	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	35kA Symmetrical at 460V Max
<b>Dual Point - Without Integral Pump</b>	
Minimum Circuit Ampacity (MCA) (circuit1/circuit2)	569.6/571.2 A
Maximum Overcurrent Protection (MOP) (circuit1/circuit2)	800/800 A
Full Load Amps (FLA)(circuit1/circuit2)	507.3/505.5 A
<b>Dual Point - With Integral Pump</b>	
Minimum Circuit Ampacity (MCA) (circuit1/circuit2)	647/571 A
Maximum Overcurrent Protection (MOP) (circuit1/circuit2)	800/800 A
Full Load Amps (FLA) (circuit1/circuit2)	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 238. Pump data**

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

**Table 239. Water flow rates and pressure drops**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
591 (min flow)	2.6
800	4.7
1,000	7.2
1,200	10.2

## 80 to 550 Ton Air Cooled Screw Chillers

**Table 239. Water flow rates and pressure drops (continued)**

Flow Rate (GPM)	Pressure Drop (ft. H <sub>2</sub> O)
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. H<sub>2</sub>O = 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	Value
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 241. Installed/Operating clearances**

Labels	Value
Front	48 in.
Back	48 in.
Sides	48 in. <sup>(a)</sup>
Top	No obstructions

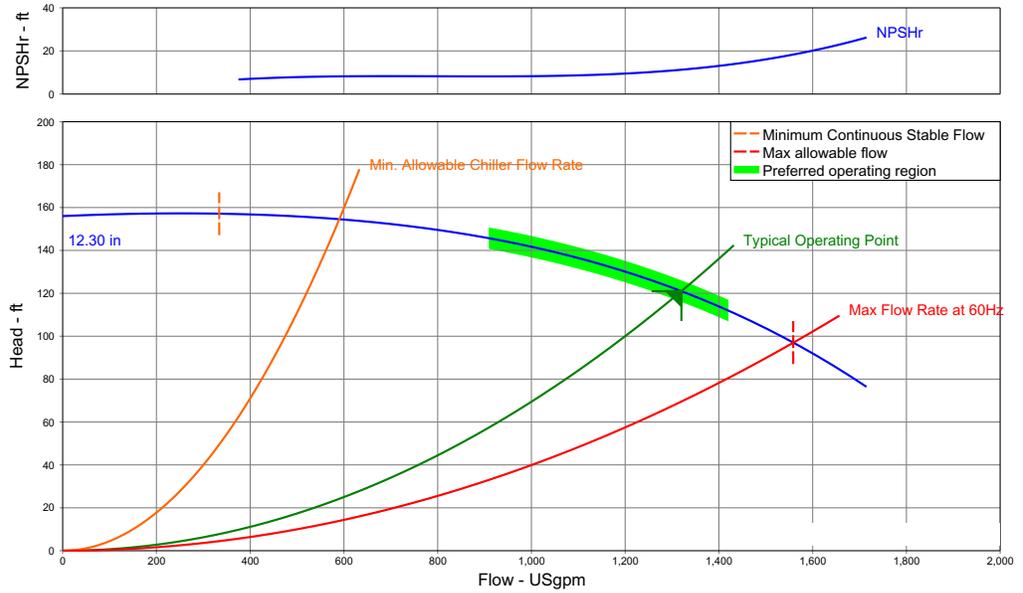
(a) Based on no obstructions; contact Trane Rental Services for side-by-side or close spacing applications.

**Table 242. Cooling capacity (tons)**

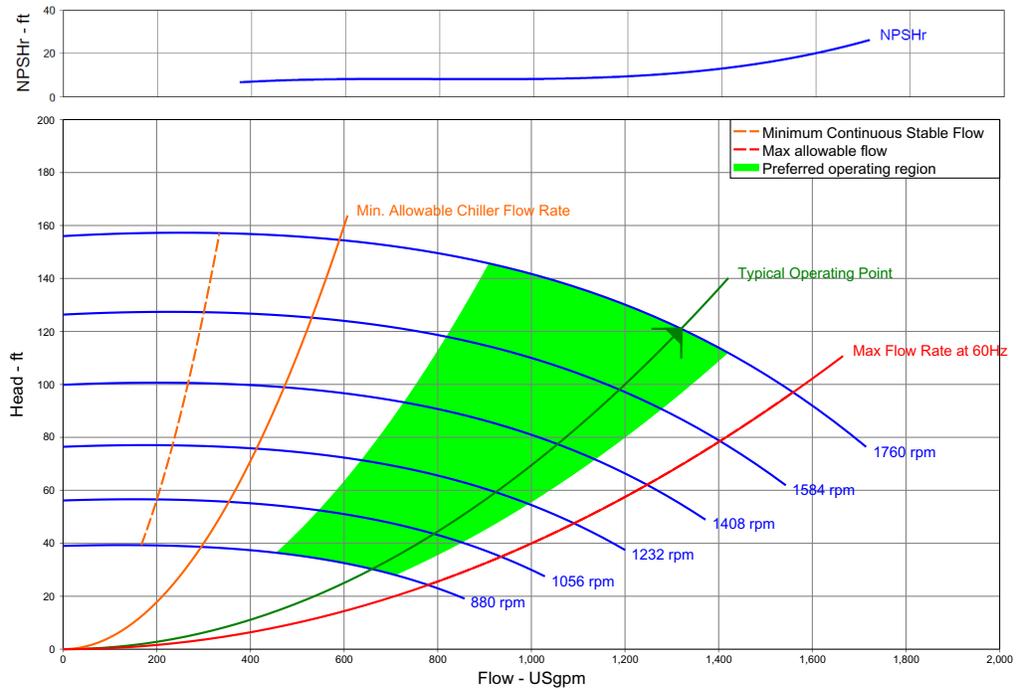
Leaving Water Temp	Propylene Glycol (%)	Estimated Capacity (Tons) at 2.4 GPM/ Nominal Ton			
		Ambient Air Temp			
		65°F	75°F	85°F	95°F
65°F	0	733.1	739.6	789.4	741.2
55°F	0	700.7	738.9	694.8	646.8
45°F	0	632.8	593.9	578.8	538.1
35°F	10	530.0	502.4	473.8	435.6
25°F	25	395.8	382.0	354.7	326.3

# 80 to 550 Ton Air Cooled Screw Chillers

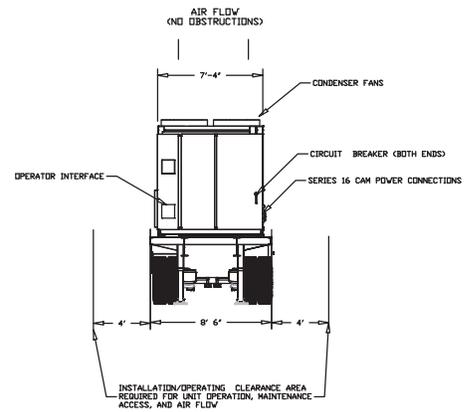
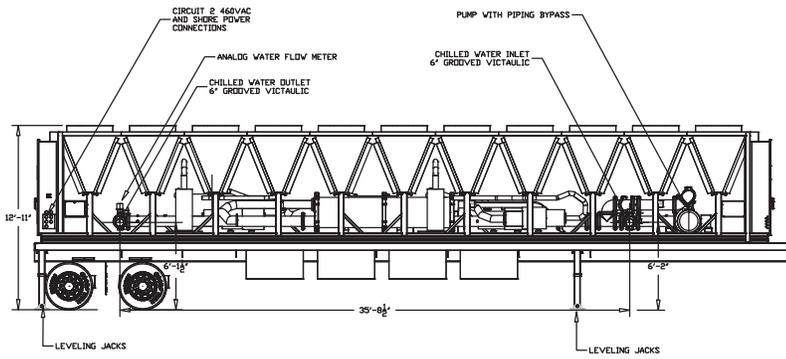
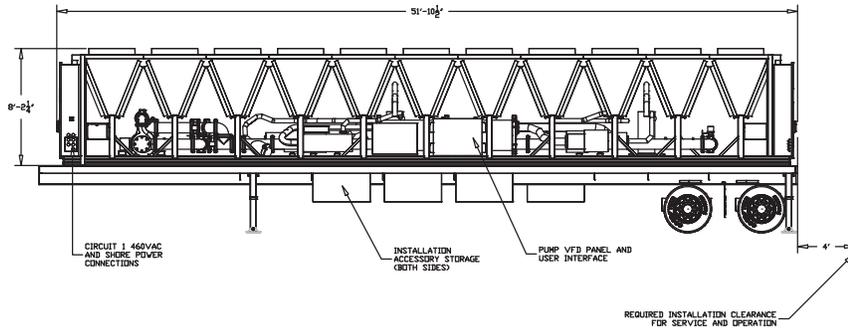
**Figure 10. Single Speed Pump Curve**



**Figure 11. Multi Speed Pump Curve**



# 80 to 550 Ton Air Cooled Screw Chillers





## 80 to 550 Ton Air Cooled Screw Chillers

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## Notes

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