



AquaForce®
30XV140-500, Series B
Variable Speed Air-Cooled Liquid Chillers
with Greenspeed® Intelligence

Installation Instructions

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SAFETY CONSIDERATIONS

Installation and servicing of air-conditioning equipment can be hazardous due to system pressure and electrical components. Only trained and qualified service personnel should install, repair, or service air-conditioning equipment.

Untrained personnel can perform basic maintenance functions of cleaning coils and filters and replacing filters. All other operations should be performed by trained service personnel.

When working on air-conditioning equipment, observe precautions in the literature, tags and labels attached to the unit, and other safety precautions that may apply.

Follow all safety codes. Wear safety glasses and work gloves. Use quenching cloth for unbrazing operations. Have fire extinguisher available for all brazing operations.

It is important to recognize safety information. This is the safety-alert symbol . When you see this symbol on the unit and in instructions or manuals, be alert to the potential for personal injury.

Understand the signal words DANGER, WARNING, CAUTION, and NOTE. These words are used with the safety-alert symbol. DANGER identifies the most serious hazards which **will** result in severe personal injury or death. WARNING signifies hazards which **could** result in personal injury or death. CAUTION is used to identify unsafe practices, which **may** result in minor personal injury or product and property damage. NOTE is used to highlight suggestions which **will** result in enhanced installation, reliability, or operation.

WARNING

Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

WARNING

Electrical shock can cause personal injury and death. After unit power is disconnected, wait at least 20 minutes for the VFD (variable frequency drive) capacitors to discharge before opening drive.

WARNING

DO NOT VENT refrigerant relief valves within a building. Outlet from relief valves must be vented in accordance with the latest edition of ANSI/ASHRAE (American National Standards Institute/American Society of Heating, Refrigerating and Air-Conditioning Engineers) 15 (Safety Code for Mechanical Refrigeration). The accumulation of refrigerant in an enclosed space can displace oxygen and cause asphyxiation. Provide adequate ventilation in enclosed or low overhead areas. Inhalation of high concentrations of vapor is harmful and may cause heart irregularities, unconsciousness or death. Misuse can be fatal. Vapor is heavier than air and reduces the amount of oxygen available for breathing. Product causes eye and skin irritation. Decomposition products are hazardous.

WARNING

DO NOT USE TORCH to remove any component. System contains oil and refrigerant under pressure.

To remove a component, wear protective gloves and goggles and proceed as follows:

- a. Shut off electrical power to unit.
- b. Recover refrigerant to relieve all pressure from system using both high-pressure and low pressure ports.
- c. Traces of vapor should be displaced with nitrogen and the work area should be well ventilated. Refrigerant in contact with an open flame produces toxic gases.
- d. Cut component connection tubing with tubing cutter and remove component from unit. Use a pan to catch any oil that may come out of the lines and as a gage for how much oil to add to the system.
- e. Carefully un-sweat remaining tubing stubs when necessary. Oil can ignite when exposed to torch flame.

Failure to follow these procedures may result in personal injury or death.

CAUTION

Standard Tier units (units with S in the 10th position of the model number) without condenser fan VFDs (units with “-”, “1”, “3”, or “5” in the 13th position of the model number) must have the condenser fan(s) rotation verified to ensure proper phasing. Correct rotation is counter-clockwise (reference arrow on fan cap). Swap any two incoming power leads to correct condenser fan rotation before starting chiller. Operating the unit without testing the condenser fan(s) for proper phasing could result in equipment damage.

CAUTION

DO NOT re-use compressor oil or any oil that has been exposed to the atmosphere. Dispose of oil per local codes and regulations. DO NOT leave refrigerant system open to air any longer than the actual time required to service the equipment. Seal circuits being serviced and charge with dry nitrogen to prevent oil contamination when timely repairs cannot be completed. Failure to follow these procedures may result in damage to equipment.

CAUTION

This unit uses a microprocessor control system. Do not short or jumper between terminations on circuit boards or modules; control or board failure may result.

Be aware of electrostatic discharge (static electricity) when handling or making contact with circuit boards or module connections. Always touch a chassis (grounded) part to dissipate body electrostatic charge before working inside control center.

Use extreme care when handling tools near boards and when connecting or disconnecting terminal plugs. Circuit boards can easily be damaged. Always hold boards by the edges and avoid touching components and connections.

This equipment uses, and can radiate, radio frequency energy. If not installed and used in accordance with the instruction manual, it may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to International Standard in North America EN 61000-2/3 which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference, in which case the user, at his own expense, will be required to take whatever measures may be required to correct the interference.

Always store and transport replacement or defective boards in anti-static shipping bag.

CAUTION

To prevent potential damage to heat exchanger tubes, always run fluid through heat exchanger when adding or removing refrigerant charge. Use appropriate antifreeze solutions in evaporator fluid loop to prevent the freezing of heat exchanger or interconnecting piping when the equipment is exposed to temperatures below 32°F (0°C). Proof of flow switch is factory installed on all models. Do NOT remove power from this chiller during winter shut down periods without taking precaution to remove all water from heat exchanger. Failure to properly protect the system from freezing may constitute abuse and may void warranty.

INTRODUCTION

These instructions cover installation of 30XV140-500 air-cooled liquid chillers with Greenspeed® intelligence, electronic controls, and units with factory-installed options (FIOPs). See Fig. 2.

INSTALLATION

Storage

If the unit is to be stored for a period of time before installation or start-up, be sure to protect the machine from construction dirt. Keep protective shipping covers in place until the machine is ready for installation. Follow these storage guidelines:

- Store the unit in a clean and dry location.
- Avoid contamination.
- Maintain storage temperature of -13 to 149°F (-25 to 65°C).
- Before applying power, perform a complete physical inspection. Check for carbon deposits inside the drive, burned or damaged components, and blown fuses.
- The unit can be stored for a maximum of 3 years without power. If the unit is stored for long periods of time without use, special procedures must be performed to ensure the safe and efficient operation of the VFD capacitor banks. If the unit has been stored for more than 3 years without power applied to the drives, contact Carrier Service to obtain information and instructions for reforming the capacitor banks.
- Perform a Variable Frequency Drive (VFD) static test before applying power.
- Ensure a proper operating environment before applying power: clean and dry; 5 to 100% humidity, non-condensing; maximum temperature 126°F (52°C). If the temperature is below 14°F (-10°C), the drive must be started with 50% load for 10 minutes.
- When removing from storage, apply power for 3 to 4 hours to exercise capacitors before start-up.

Step 1 — Inspect Shipment

Inspect unit for damage upon arrival. If damage is found, immediately file a claim with the shipping company, and contact your local Carrier representative.

Step 2 — Place, Mount, and Rig the Unit

When considering a location for the unit, be sure to consult NEC (National Electrical Code, U.S.A.) and/or local code requirements. Allow sufficient space for airflow, wiring, piping, and service. See Fig. 3-23.

NOTE: To facilitate refrigerant vent piping, all units have fusible plugs with $\frac{3}{8}$ in. SAE (Society of Automotive Engineers) flares and pressure reliefs with $\frac{3}{4}$ in. NPT and $\frac{3}{8}$ in. SAE flare fittings (if required by local codes).

PLACING UNIT

Locate the unit so that the condenser airflow is unrestricted both above and on the sides of the unit. Airflow and service

clearances are 6 ft (1.8 m) around the unit. Acceptable clearance on the sides or ends without control boxes or VFDs can be reduced to 3 ft (1 m) without sacrificing performance as long as the remaining three sides are unrestricted. Acceptable clearance on the side with a control box or VFD can be reduced to 4 ft (1.3 m) due to NEC regulations, without sacrificing performance as long as the remaining three sides are unrestricted. Provide ample room for servicing and removing the evaporator. See Fig. 3-23 for required clearances. Local codes for clearances take precedence over the manufacturer's recommendations when local codes call for greater clearances.

If multiple units are installed at the same site, a minimum separation of 10 ft (3 m) between the sides of the machines is required to maintain proper airflow and minimize the chances of condenser air recirculation.

MOUNTING UNIT

The unit may be mounted on a level pad directly on the base rails, on a raised mounting rail around the unit, or on vibration isolation springs. See Fig. 1. For all units, ensure placement area is strong enough to support unit operating weight. See Table 1. Mounting holes are provided for securing the unit to the pad, mounting rail or vibration isolation springs. Bolt the unit securely to pad or rails. If vibration isolators (field-supplied) are required for a particular installation, refer to unit weight distribution in Fig. 24 to aid in the proper selection of isolators. Once installed, the unit must be level to within $\frac{1}{8}$ -in. per ft (1 cm per meter) along the long axis of the unit. This is required for oil return to the compressor(s). For more details about physical data, see Tables 2 and 3.

NOTE: For units that are point loaded, such as those using rubber and shear isolators, the mounting pocket in the base rail must be supported. If the isolator includes a plate that spans across the mounting pocket, no further support is needed. If the isolator is point loaded, add a backup plate to the base $\frac{1}{4}$ in. thick x 6 in. wide x 8 in. long, centered on unit mounting point.

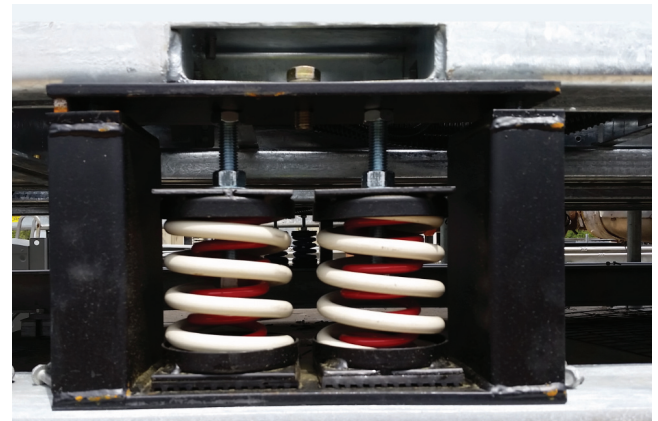


Fig. 1 — Isolator

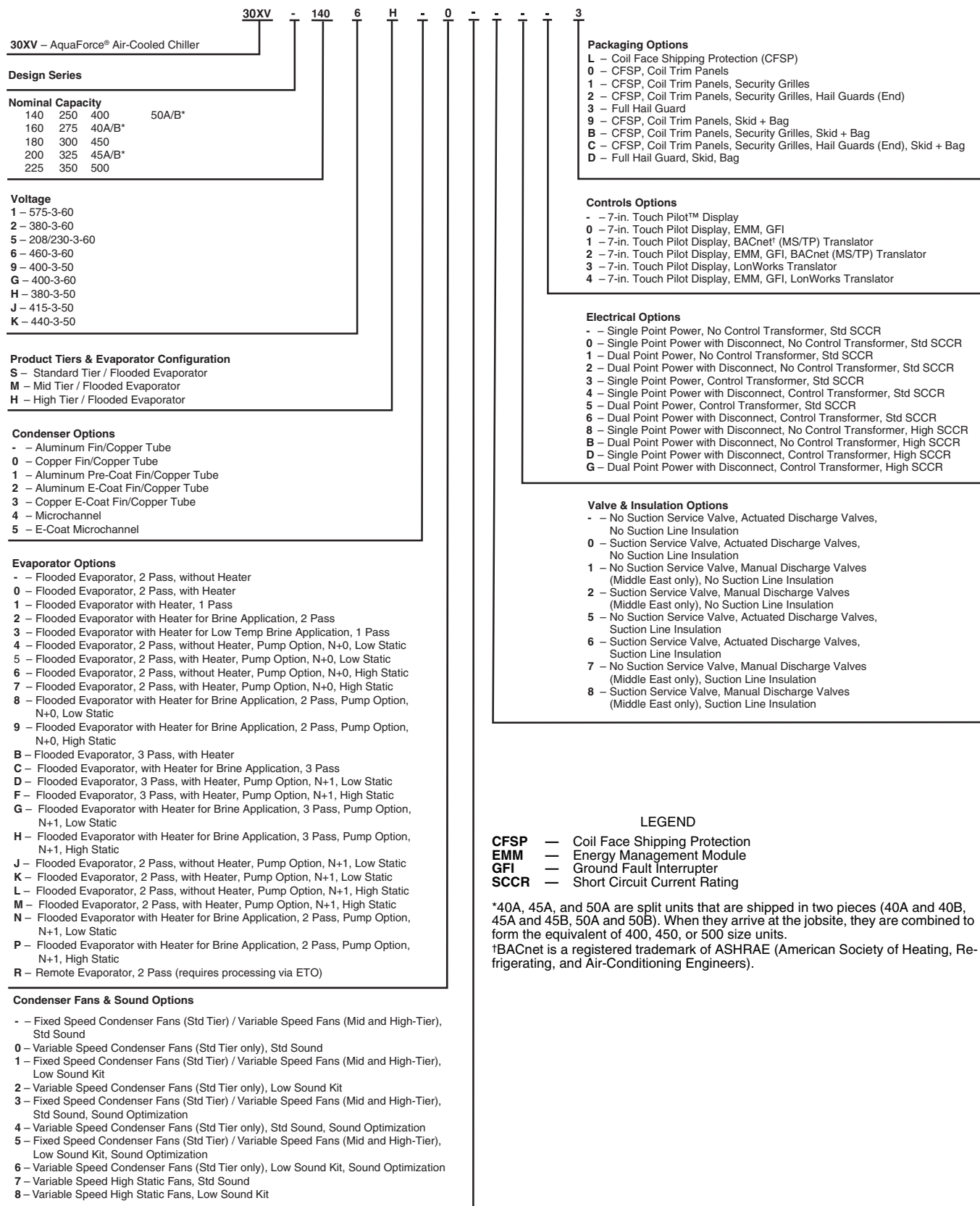


Fig. 2 — AquaForce® Chiller with GreenSpeed® Intelligence Model Number Designation

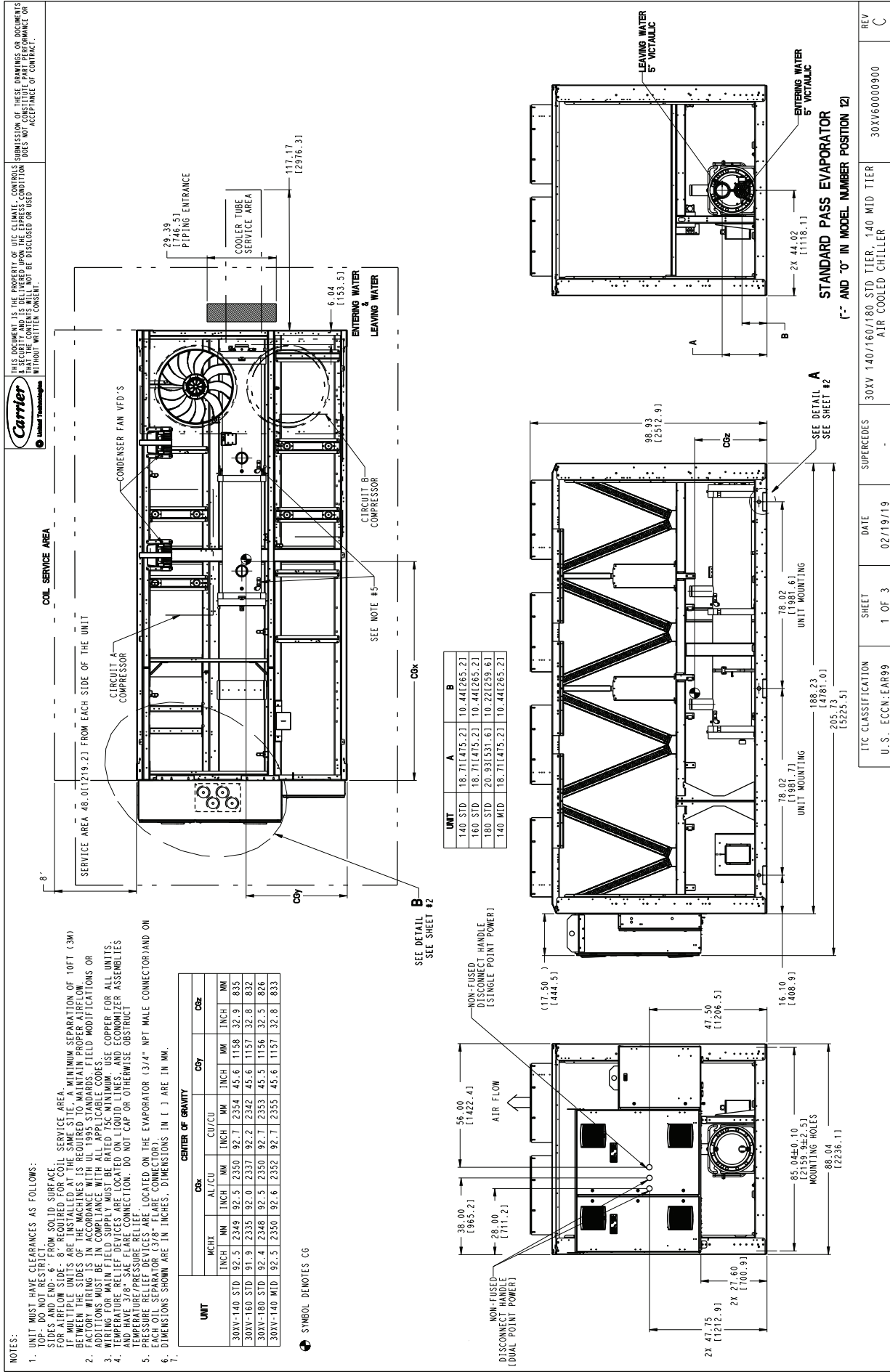


Fig. 3 — 30XV 140,160,180 Std Tier; 140 Mid Tier Air-Cooled Chiller

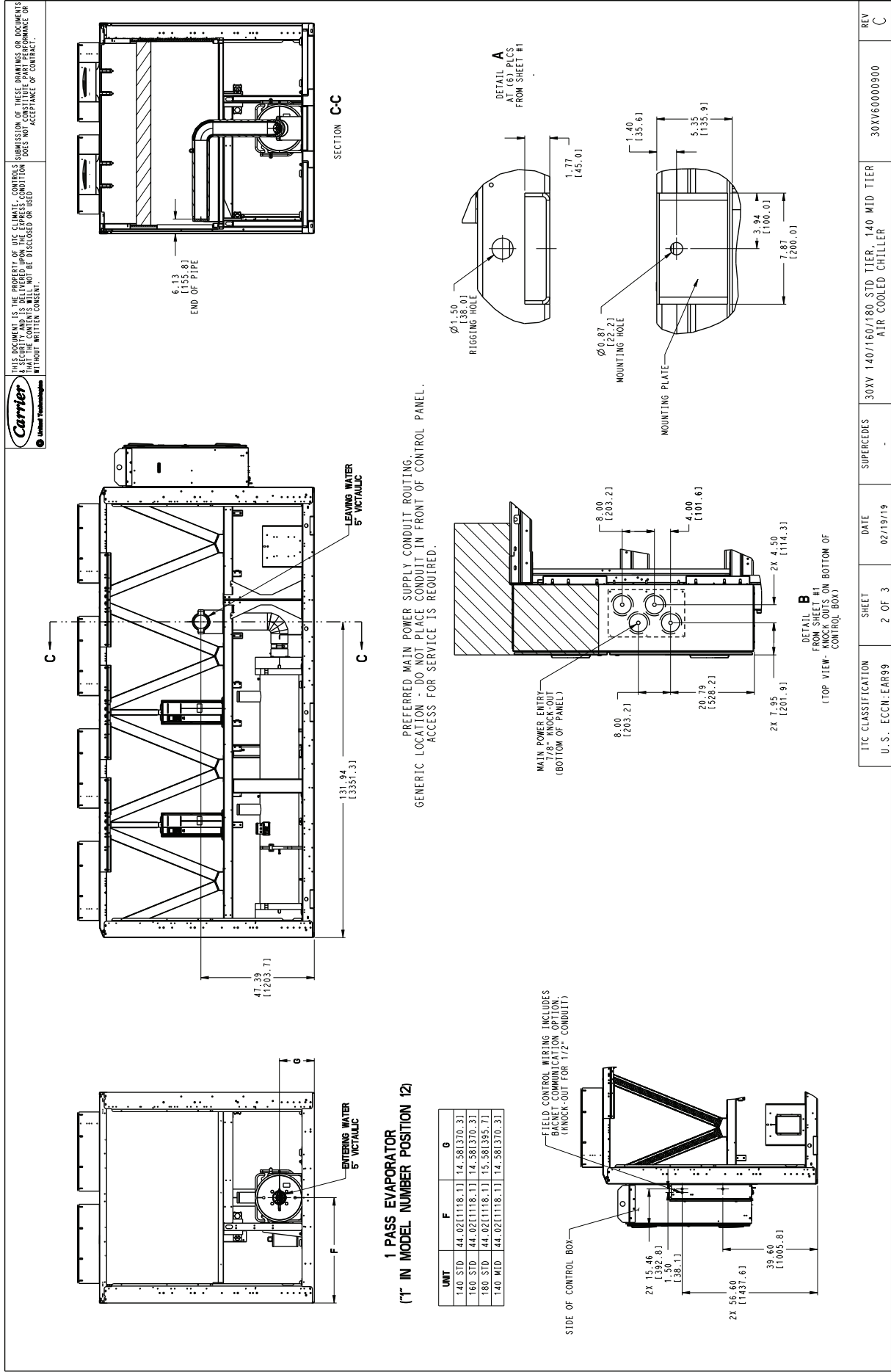
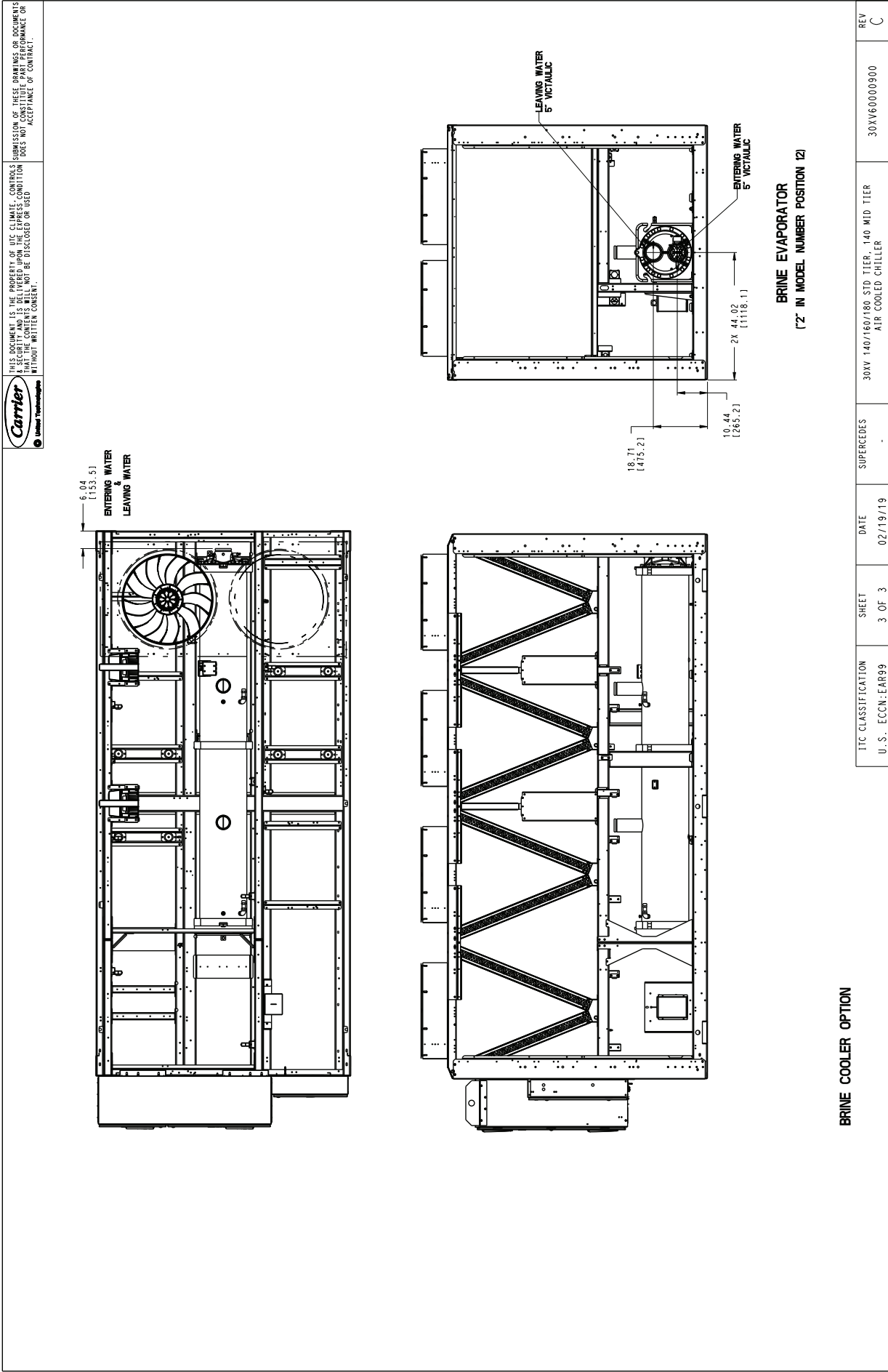


Fig. 3 — 30XV 140,160,180 Std Tier; 140 Mid Tier Air-Cooled Chiller (cont)



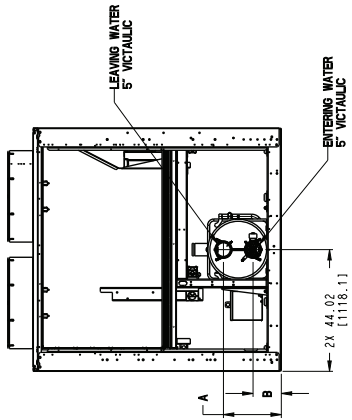
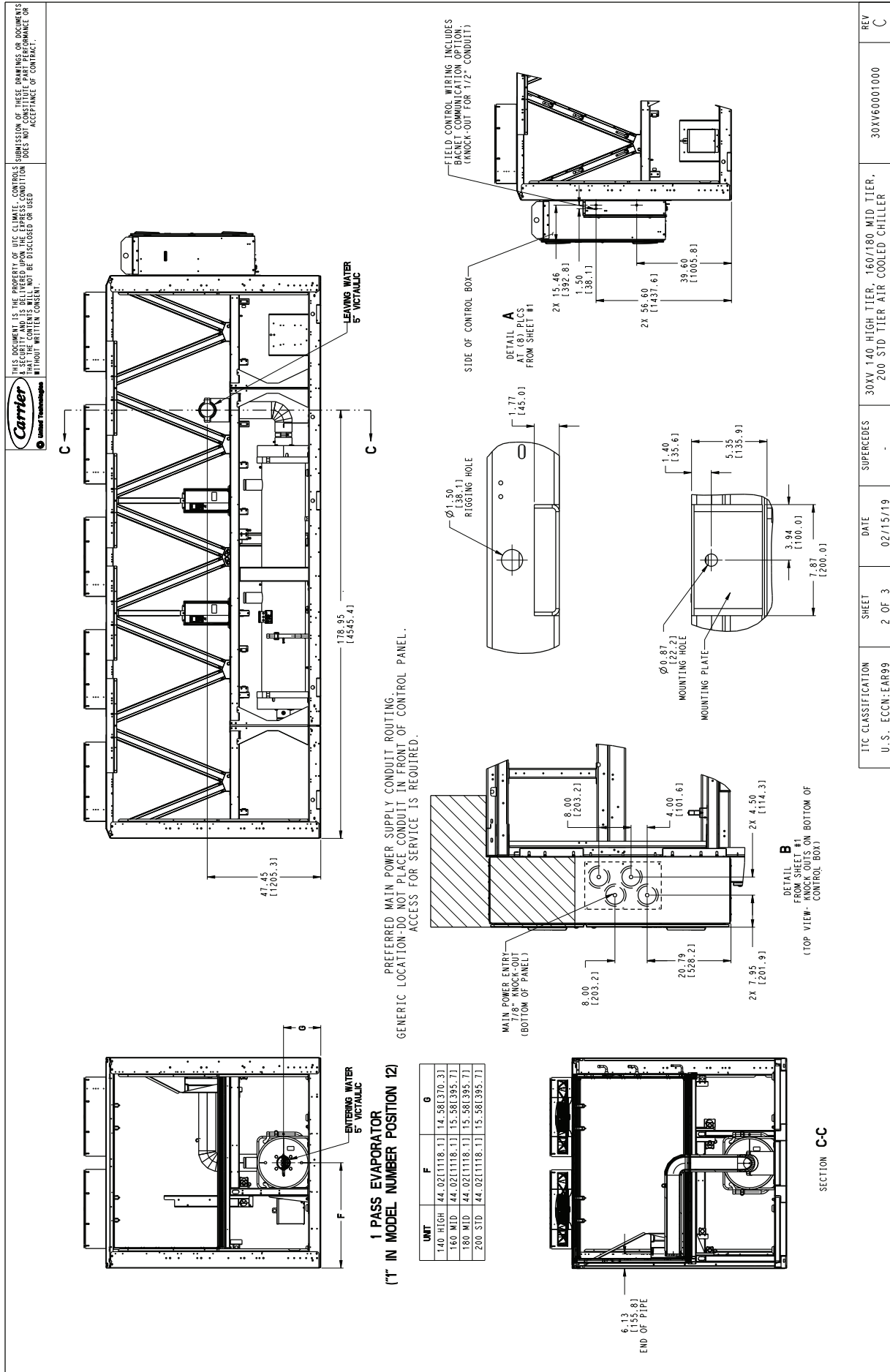


Fig. 4 — 30XV 140 High Tier; 160,180 Mid Tier; 200 Std Tier Air-Cooled Chiller



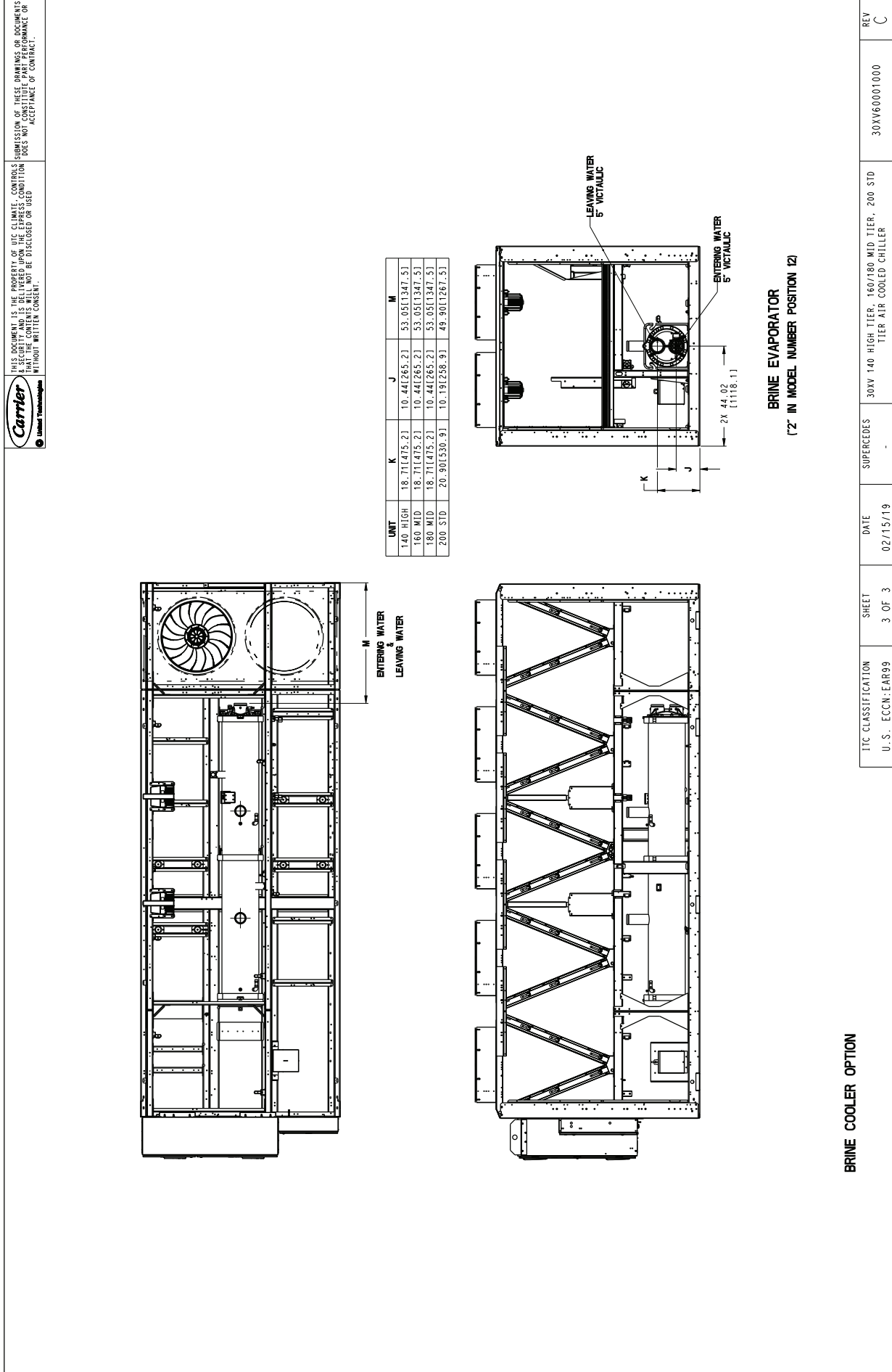


Fig. 4 — 30XV 140 High Tier; 160,180 Mid Tier; 200 Std Tier Air-Cooled Chiller (cont)

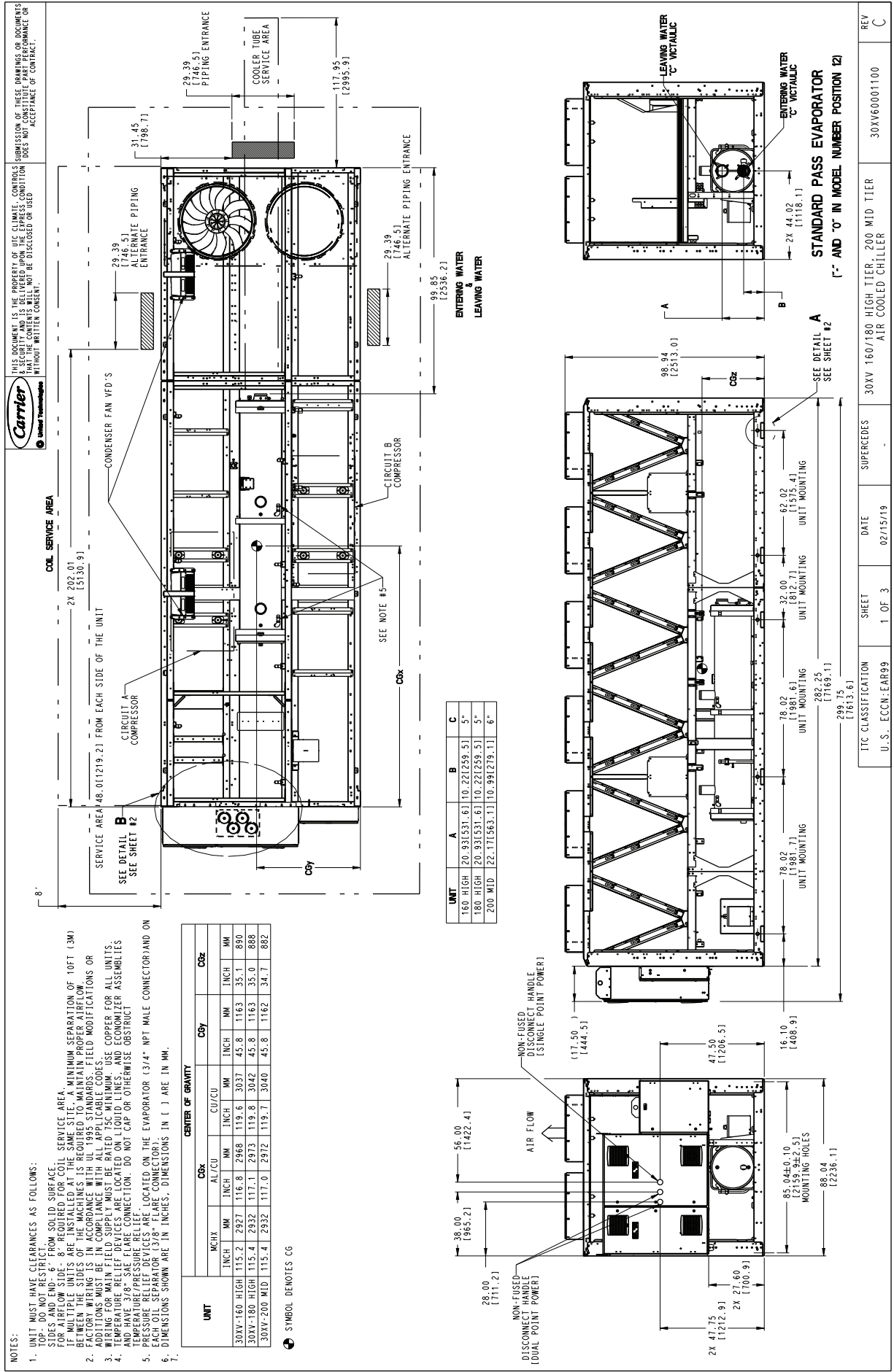


Fig. 5 — 30XV 160,180 High Tier; 200 Mid Tier Air-Cooled Chiller

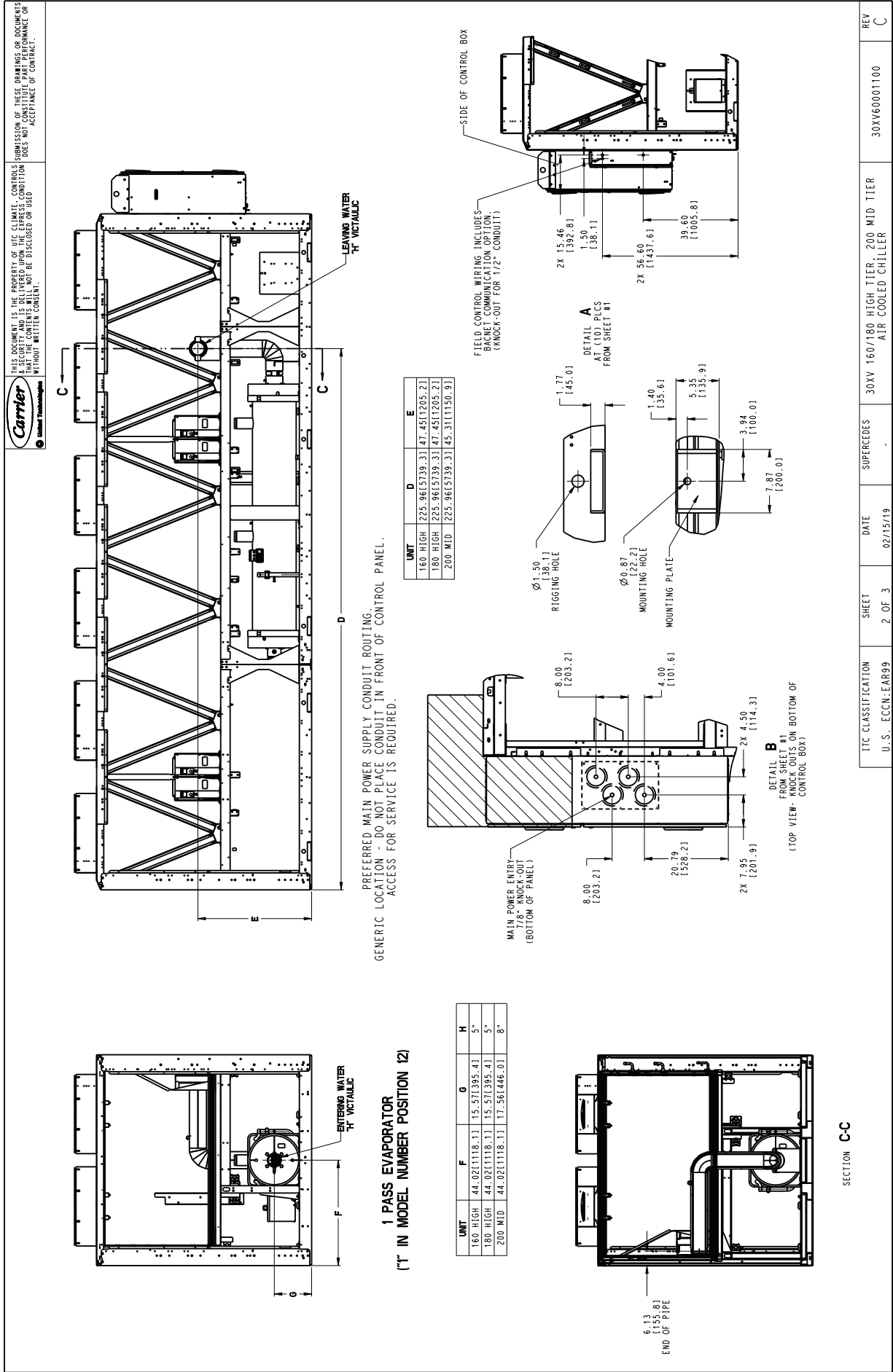


Fig. 5 — 30XV 160,180 High Tier; 200 Mid Tier Air-Cooled Chiller (cont)

SECTION C-C

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 160/180 HIGH TIER, 200 MID TIER AIR COOLED CHILLER	REV
U.S. ECCN:EAR99	2 OF 3	02/15/19		30XV60001100	C

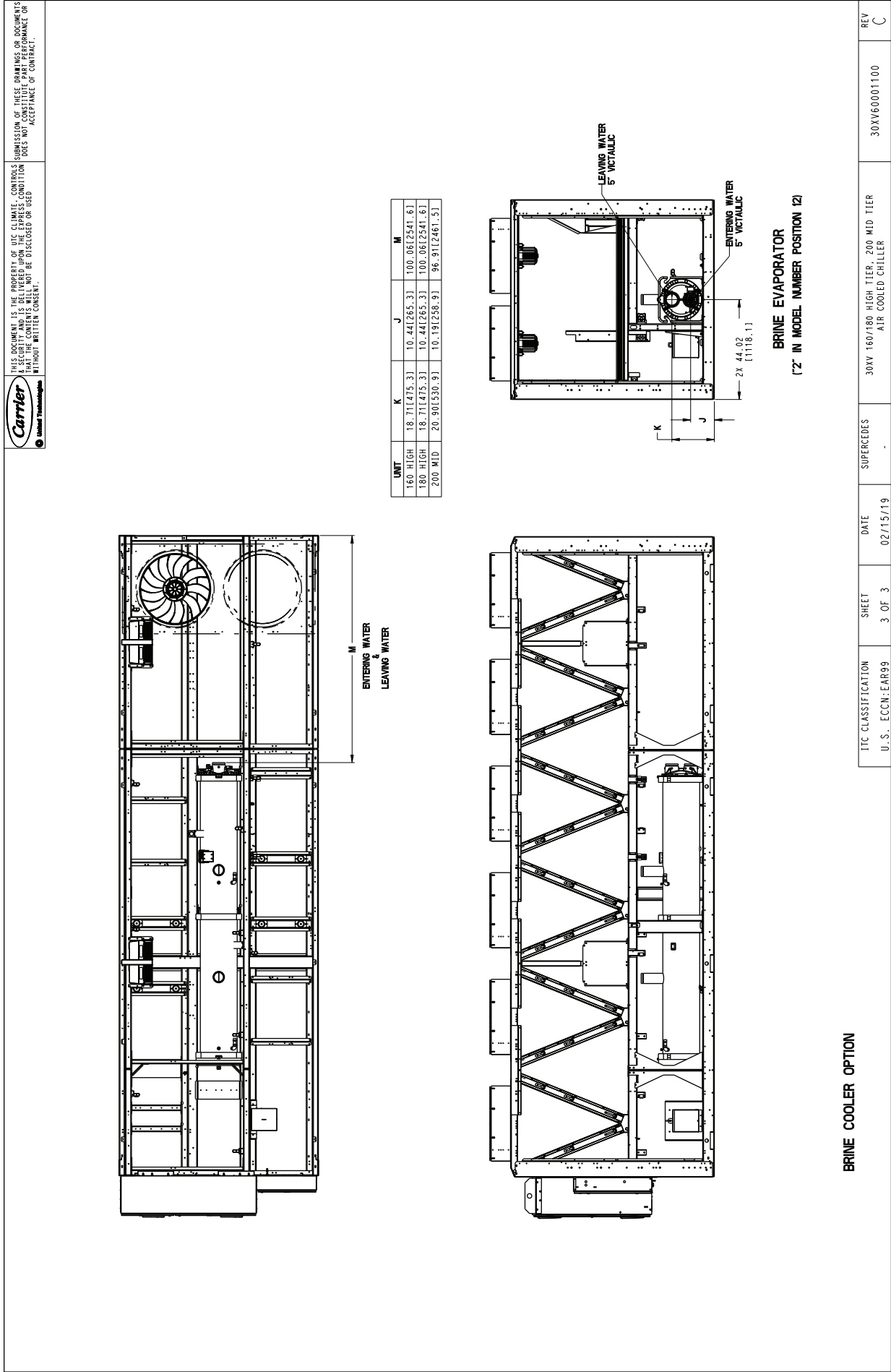


Fig. 5 — 30XV 160,180 High Tier; 200 Mid Tier Air-Cooled Chiller (cont)

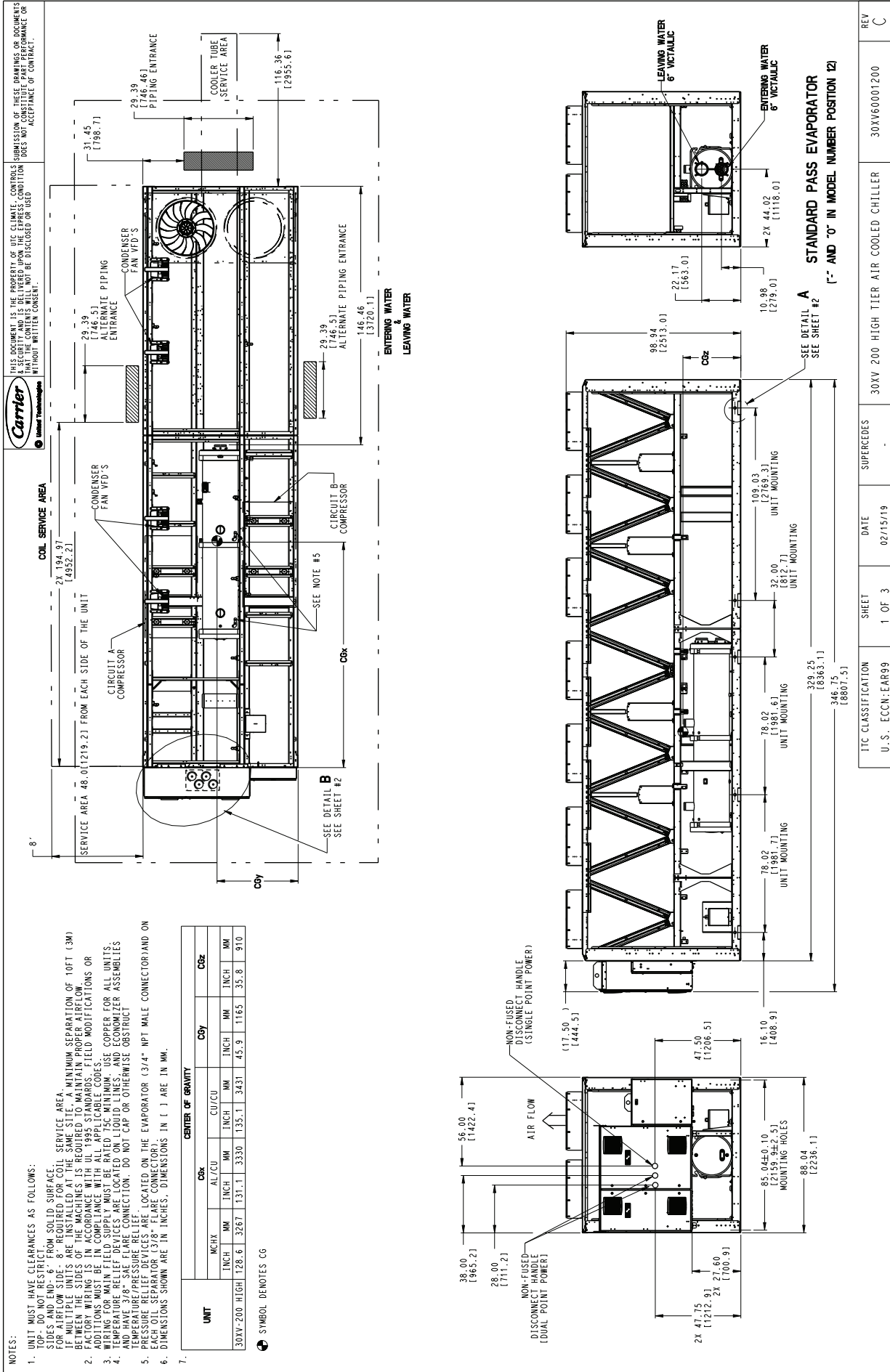


Fig. 6 — 30XV 200 High Tier Air-Cooled Chiller

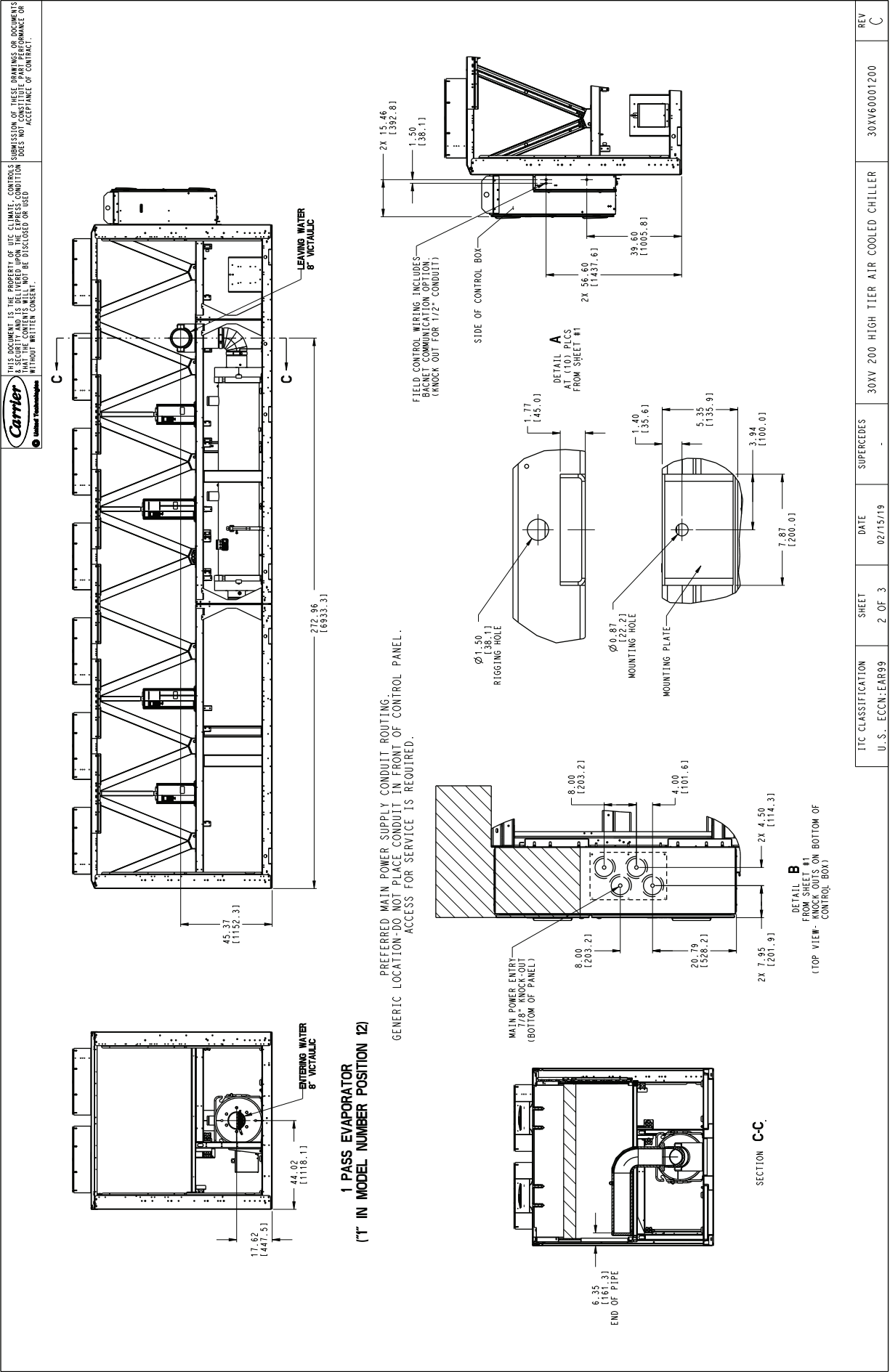


Fig. 6 — 30XV 200 High Tier Air-Cooled Chiller (cont)

I/C CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 200 HIGH TIER AIR COOLED CHILLER	30XV60001200	REV
U.S. ECCN:EAR99	2 OF 3	02/15/19				C

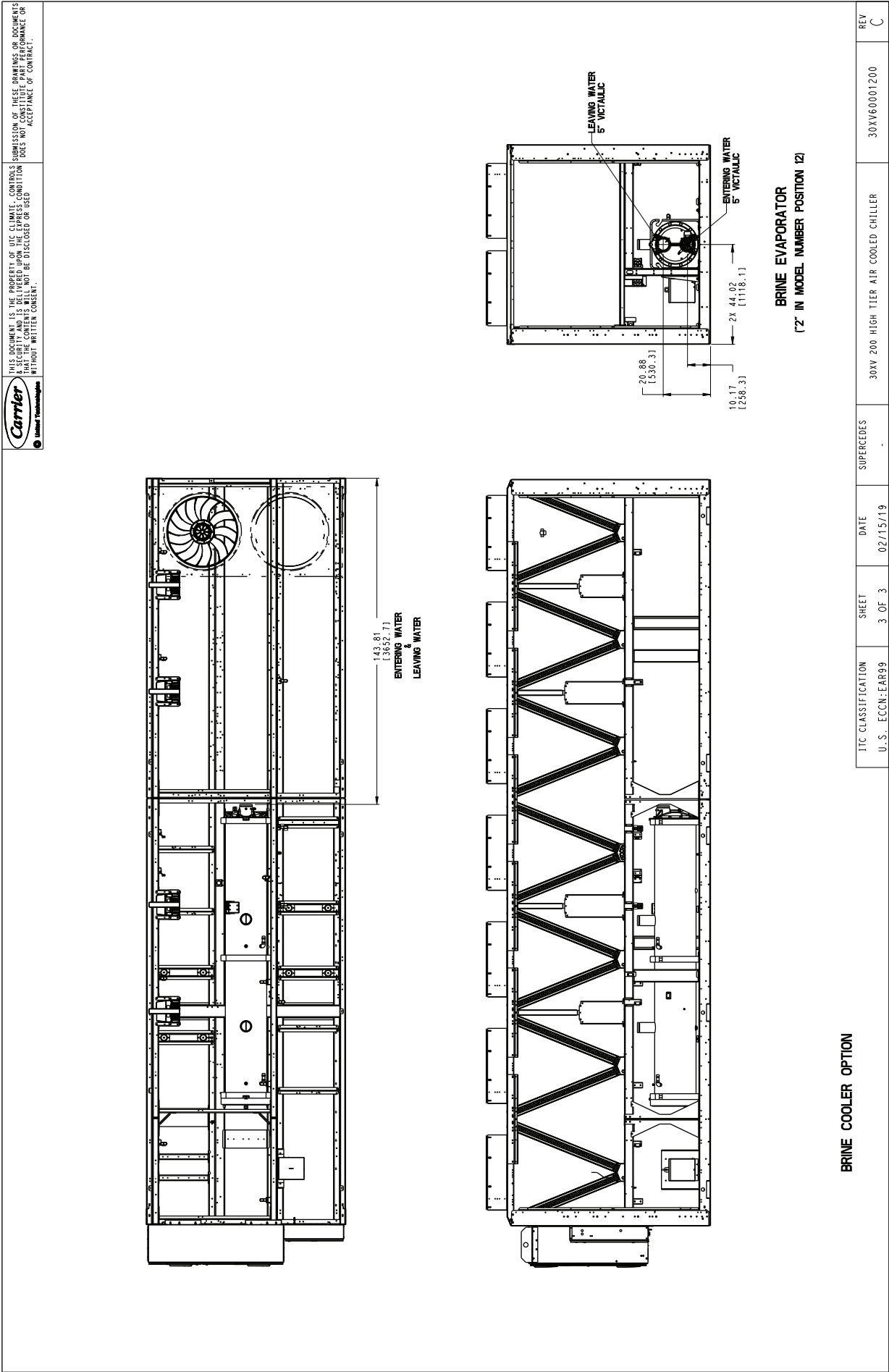
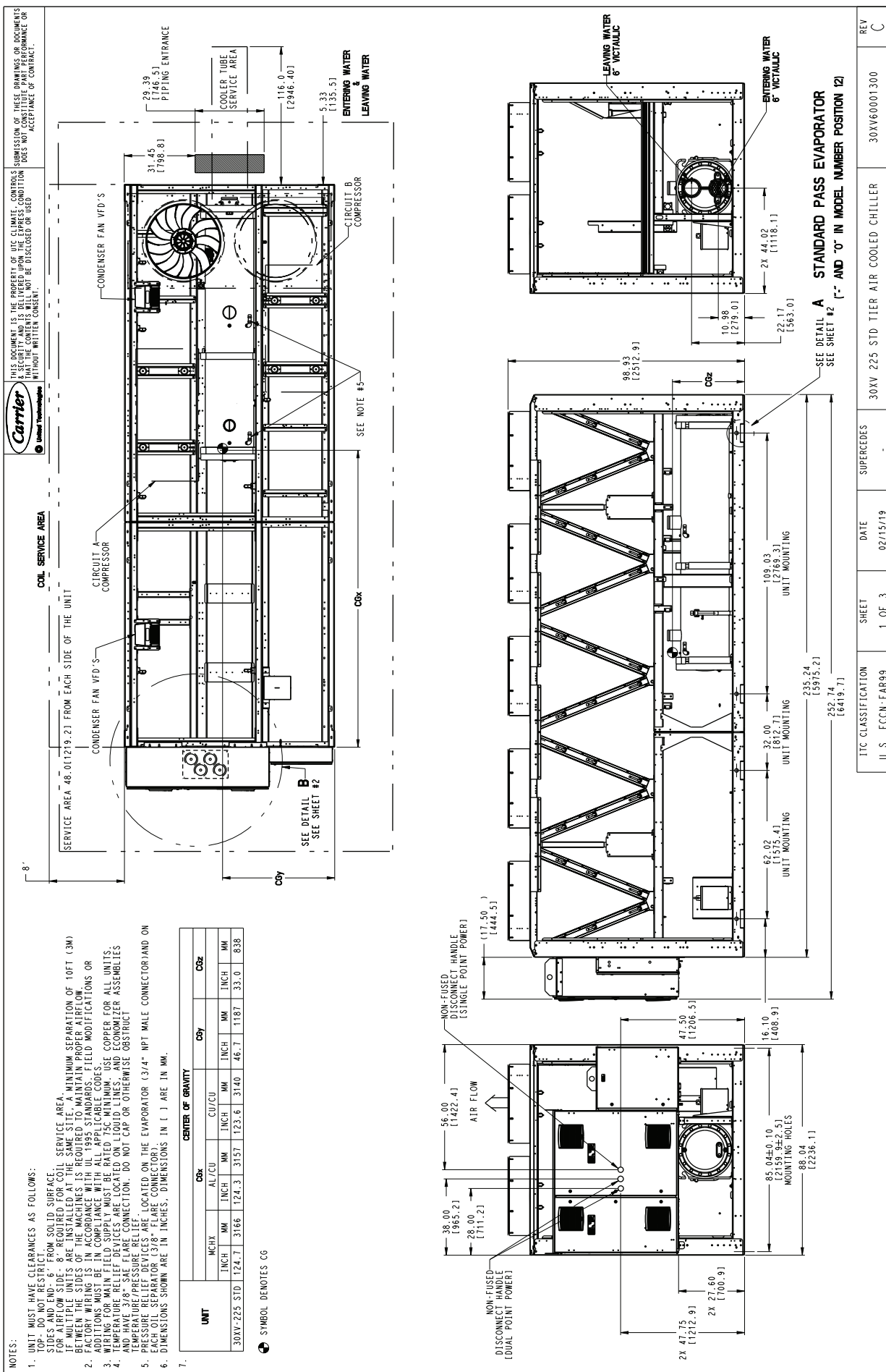


Fig. 6 — 30XV 200 High Tier Air-Cooled Chiller (cont)



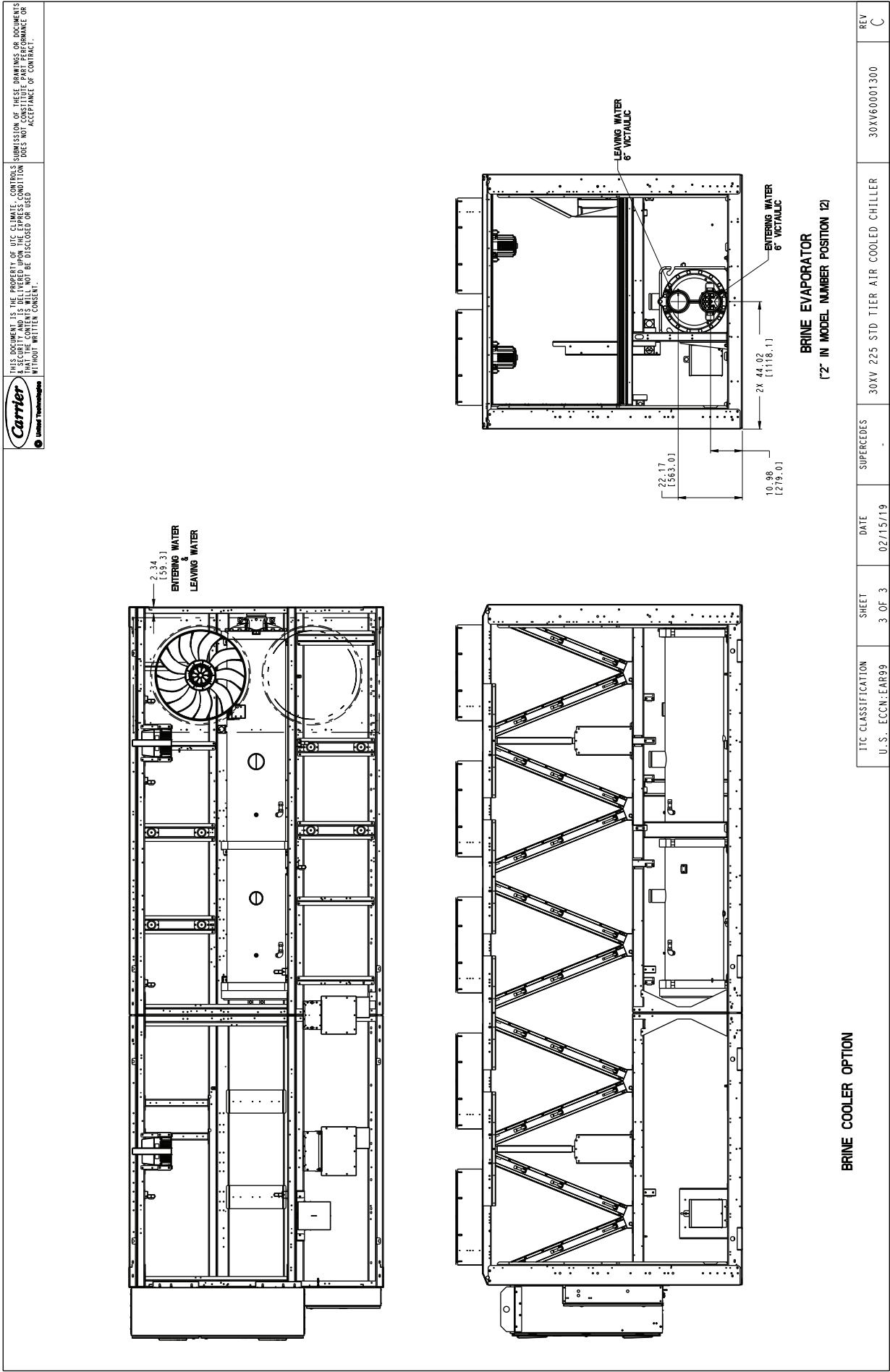


Fig. 7 — 30XV 225 Std Tier Air-Cooled Chiller (cont)

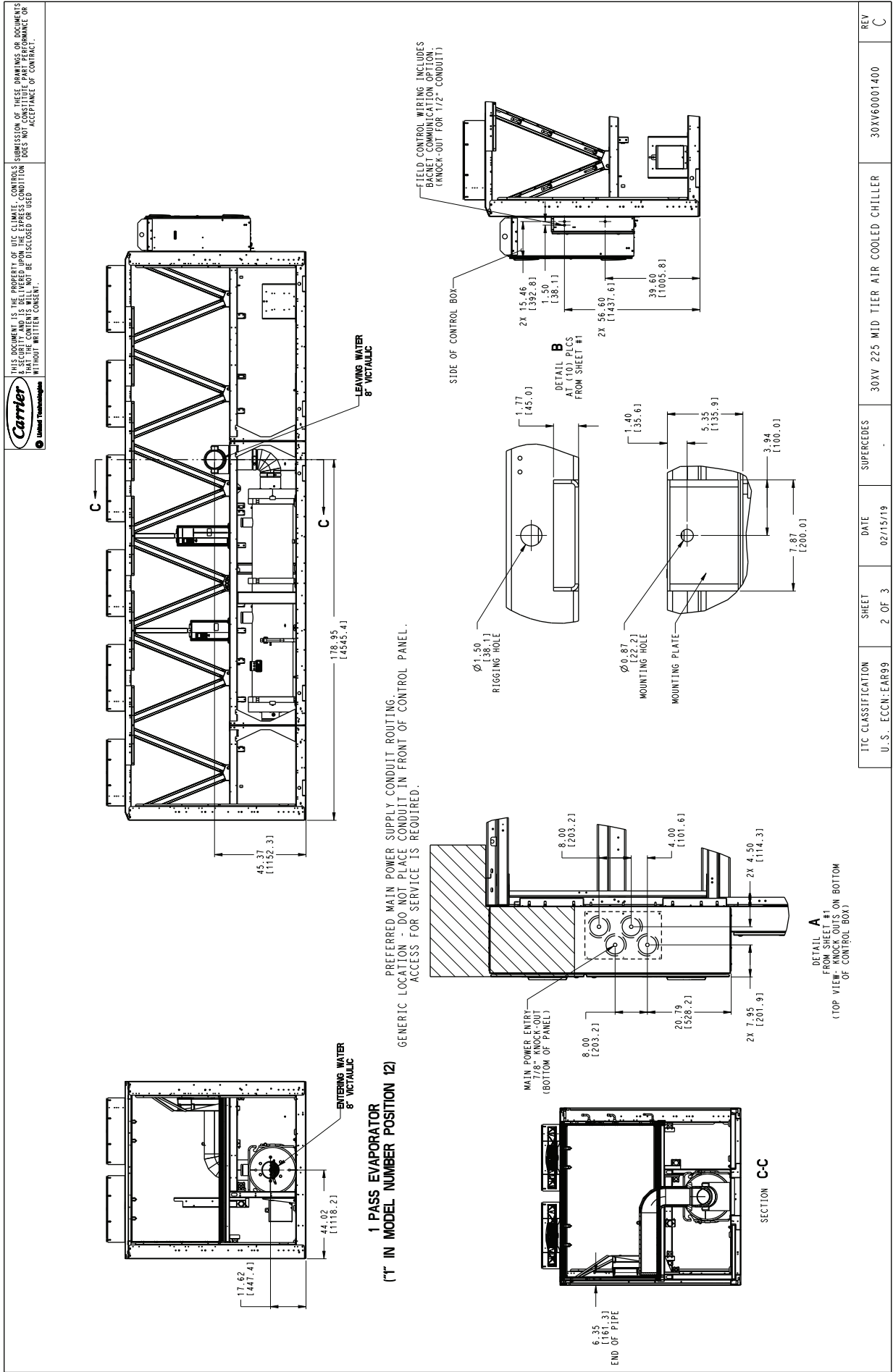


Fig. 8 — 30XV 225 Mid Tier Air-Cooled Chiller (cont)

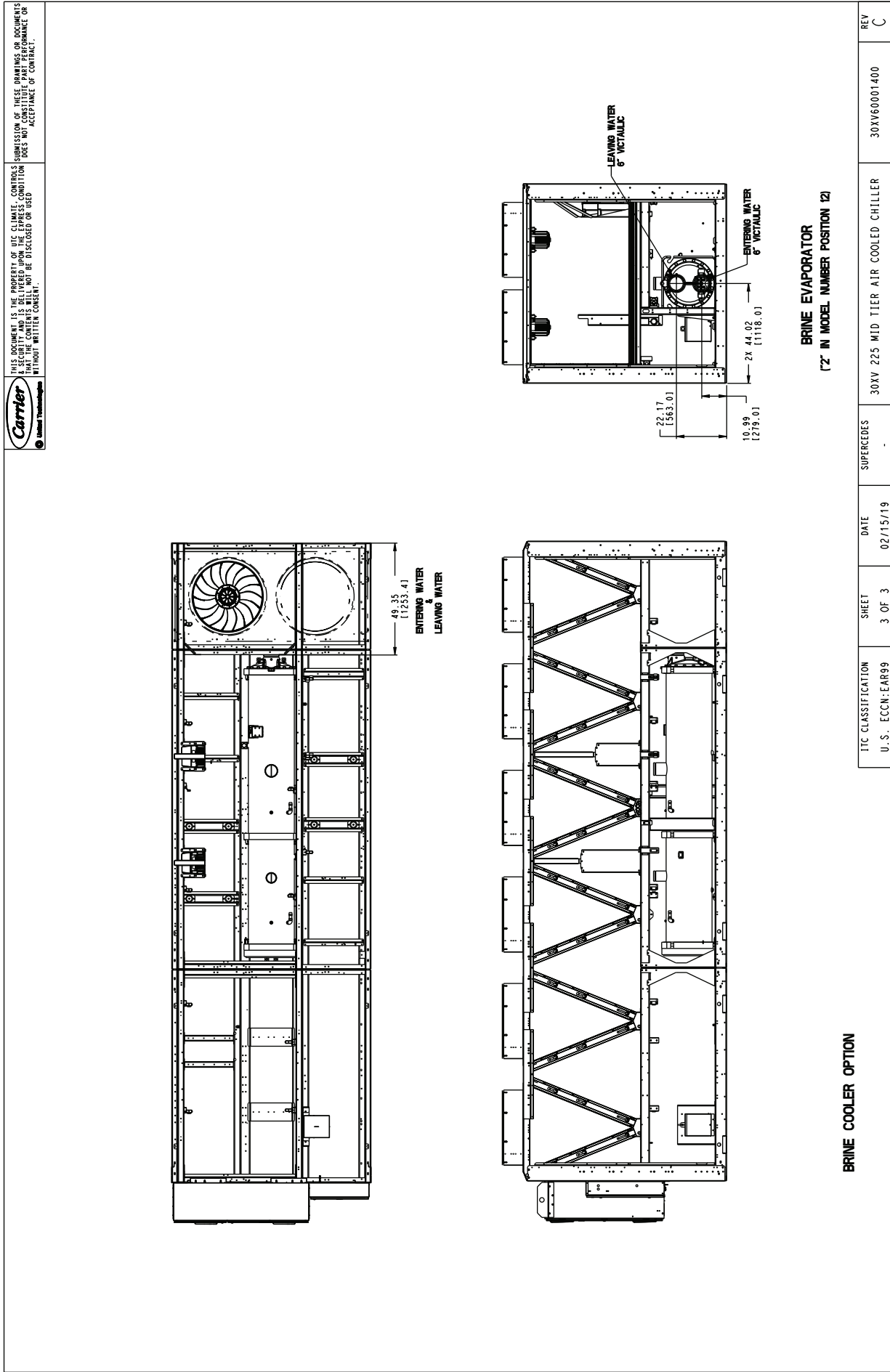
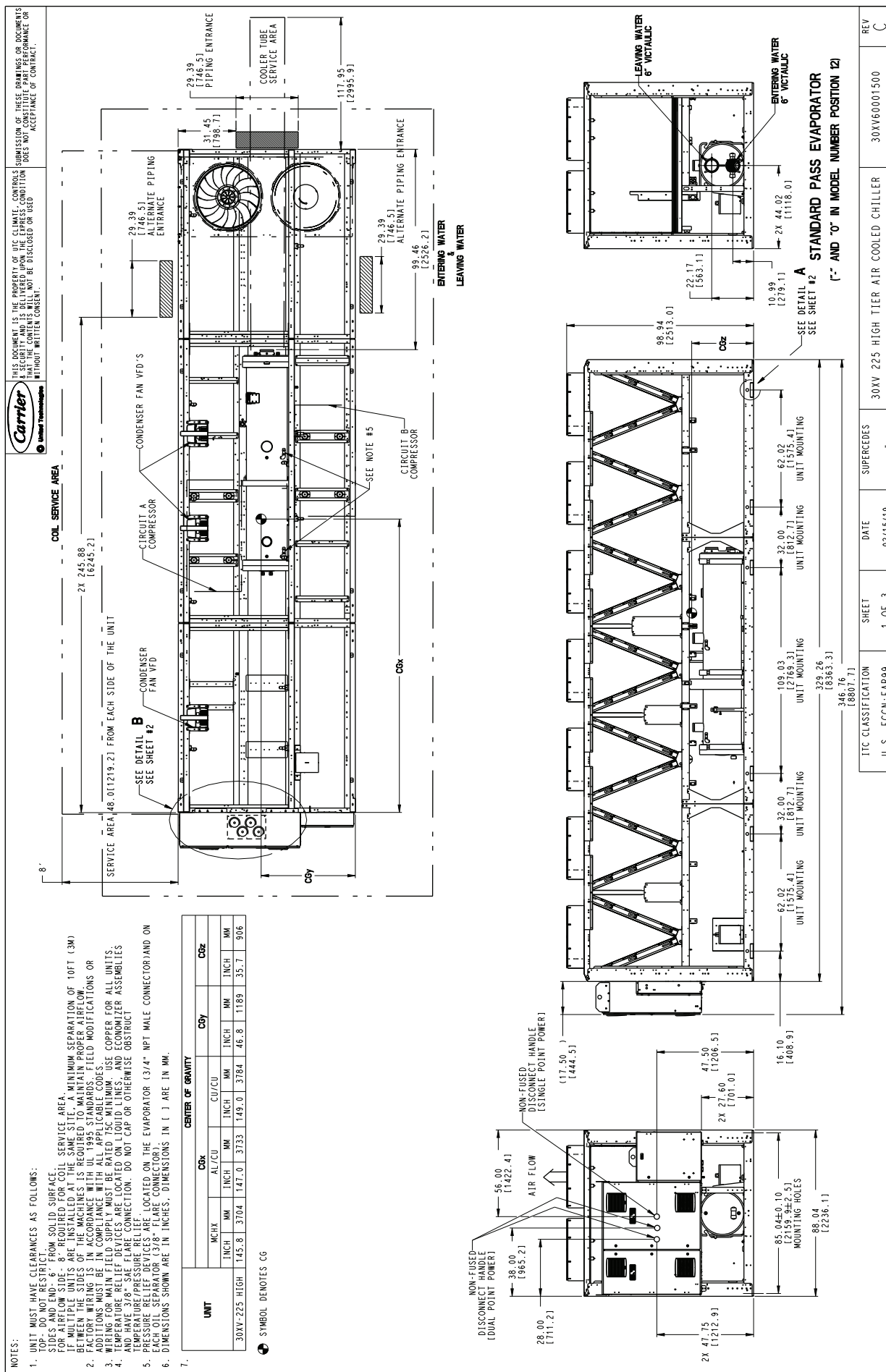
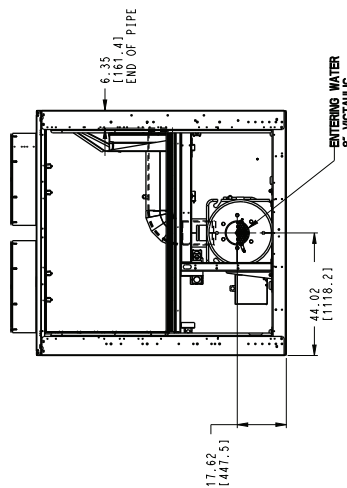
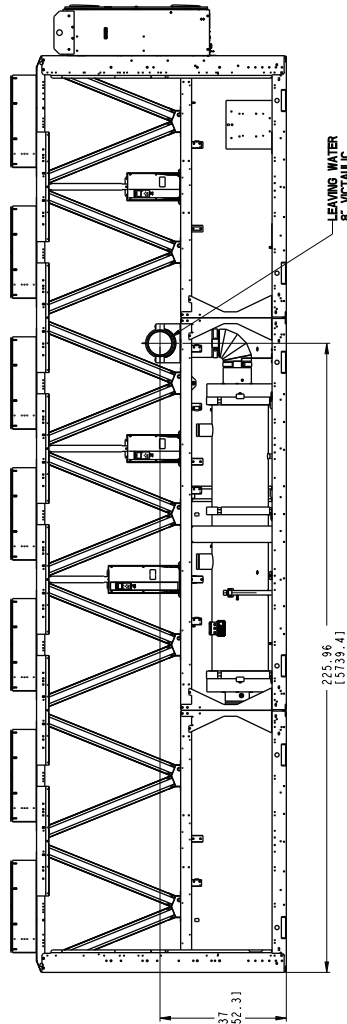


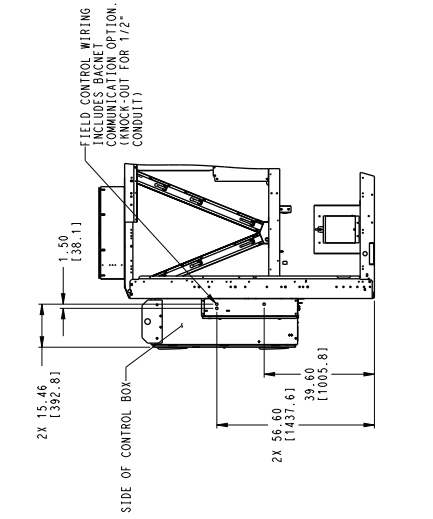
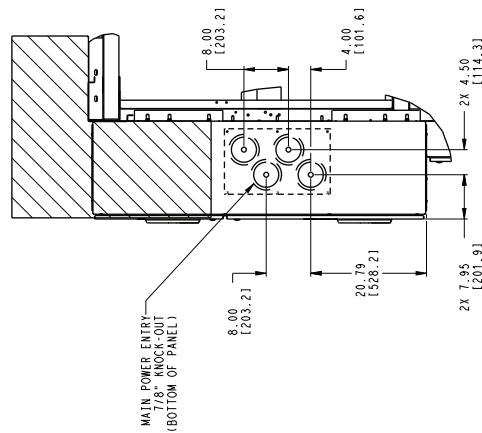
Fig. 8 — 30XV 225 Mid Tier Air-Cooled Chiller (cont)





1 PASS EVAPORATOR ("T" IN MODEL NUMBER POSITION 12)

PREFERRED MAIN POWER SUPPLY CONDUIT ROUTING.
 GENERIC LOCATION - DO NOT PLACE CONDUIT IN FRONT OF CONTROL PANEL.
 ACCESS FOR SERVICE IS REQUIRED.



DETAIL B
 FROM SHEET #1
 (TOP VIEW - KNOCK OUTS ON BOTTOM OF CONTROL BOX)

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 225 HIGH TIER AIR COOLED CHILLER	REV
U.S. ECCN:EAR99	2 OF 3	02/15/19	-	30XV60001500	C

Fig. 9 — 30XV 225 High Tier Air-Cooled Chiller (cont)

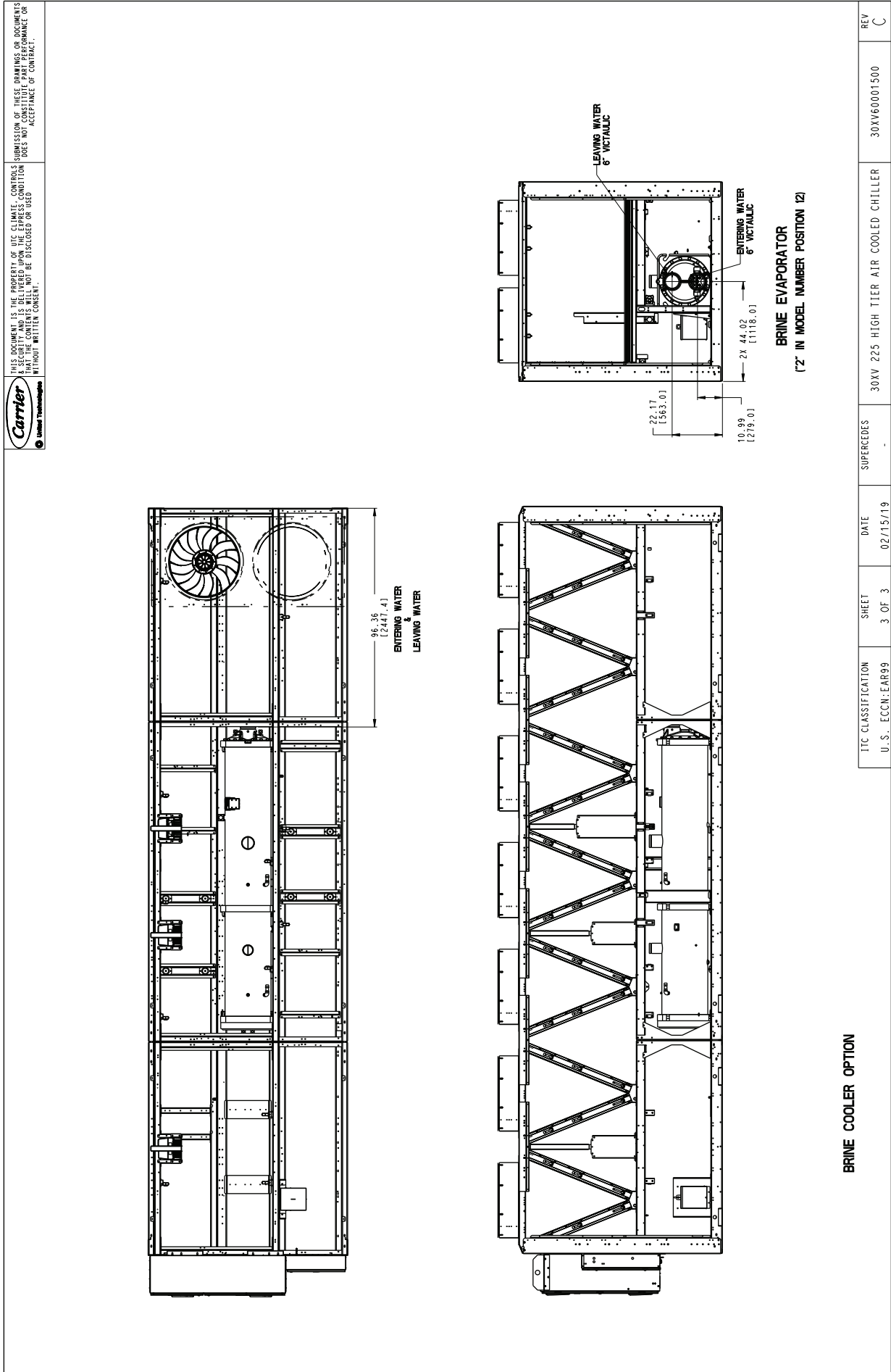


Fig. 9 — 30XV 225 High Tier Air-Cooled Chiller (cont)

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- Carrier**
United Technologies

8'-

COIL SERVICE AREA

SERVICE AREA 48.0' (219.21) FROM EACH SIDE OF THE UNIT

CONDENSER FAN VFD

CIRCUIT A COMPRESSOR

CONDENSER FAN VFD

CIRCUIT B COMPRESSOR

SEE NOTE #5

COX

COY

SEE DETAIL B
SEE SHEET #2

29.39
[746.51]
PIPING ENTRANCE

31.45
[798.81]

COOLER TUBE SERVICE AREA

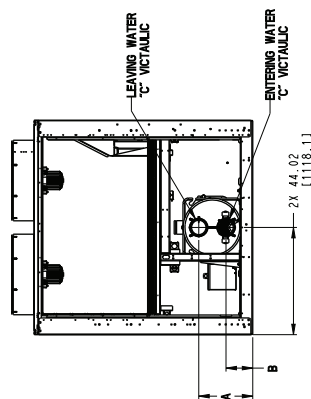
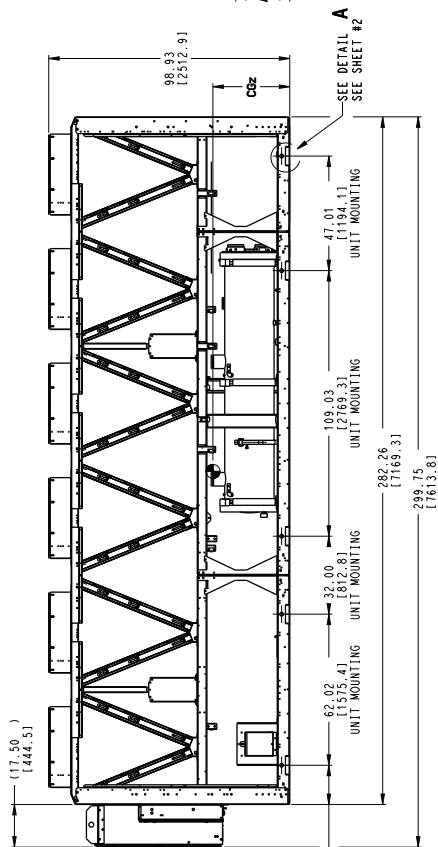
115.74
[2939.9]

52.44
[1331.9]

ENTERING WATER & LEAVING WATER

UNIT	A	B	C
------	---	---	---

UNIT	A	B	C
250 STD	22.17[563.1]	10.99[279.1]	6"
275 STD	23.28[591.3]	11.87[301.5]	8"

STANDARD PASS EVAPORATOR
 ("-" AND "0" IN MODEL NUMBER POSITION 12)

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 250/275 STD TIER AIR COOLED CHILLER	REV C
II S. ECCC-EA000	1 OF 2	02/21/10			30XV60001600

Fig. 10 — 30XV 250,275 Std Tier Air-Cooled Chiller

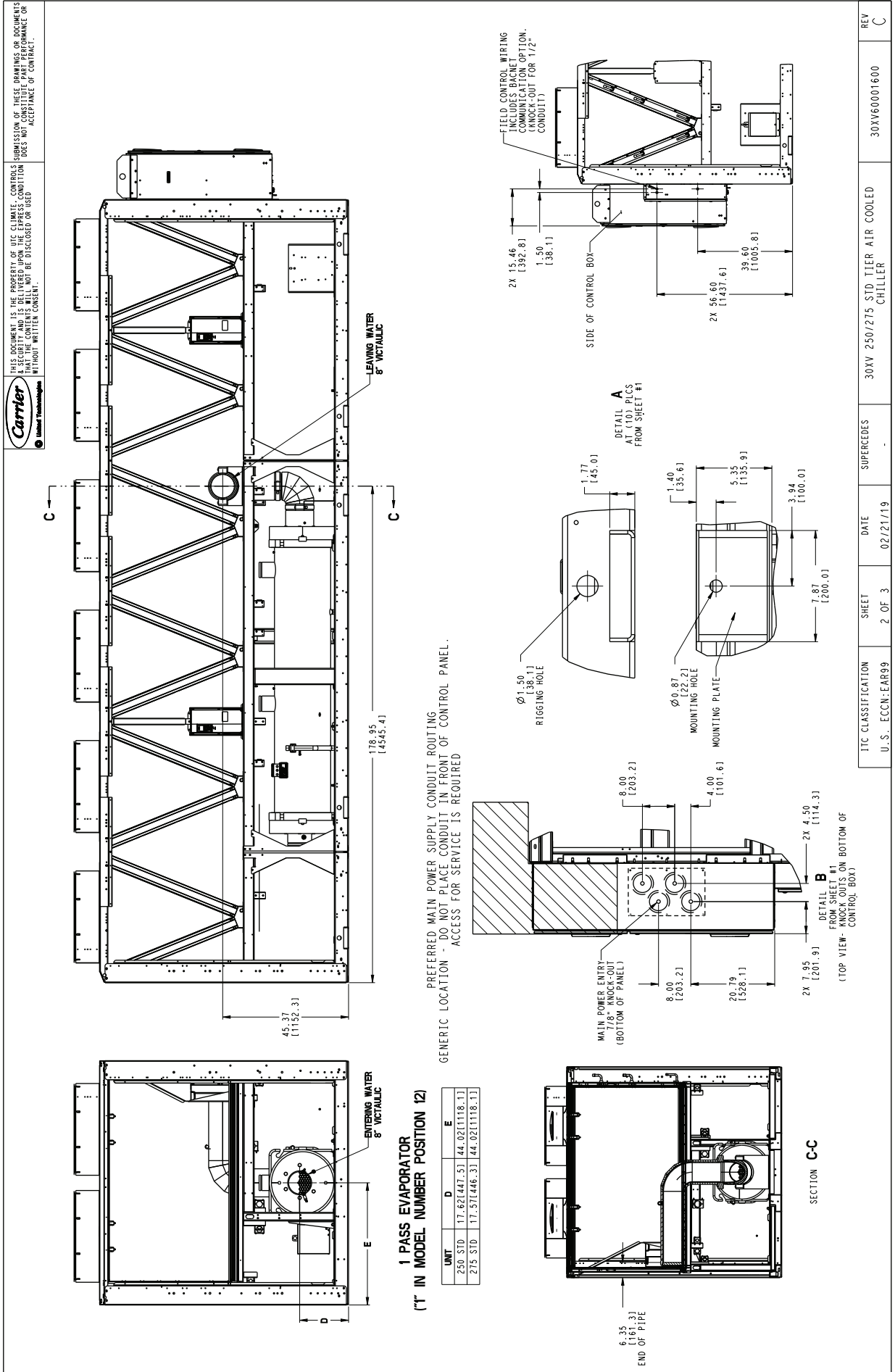
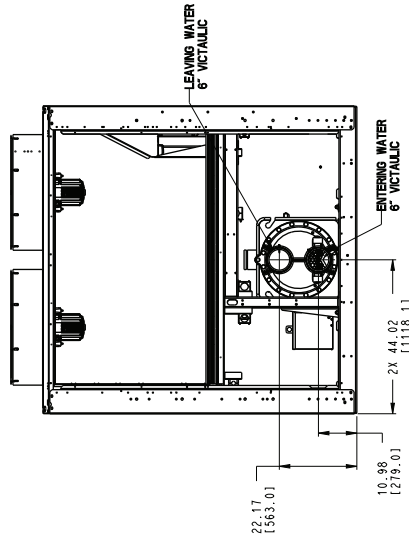
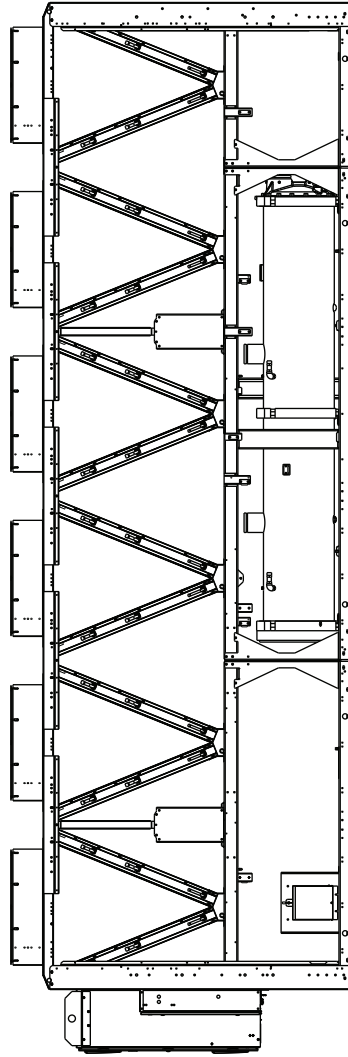
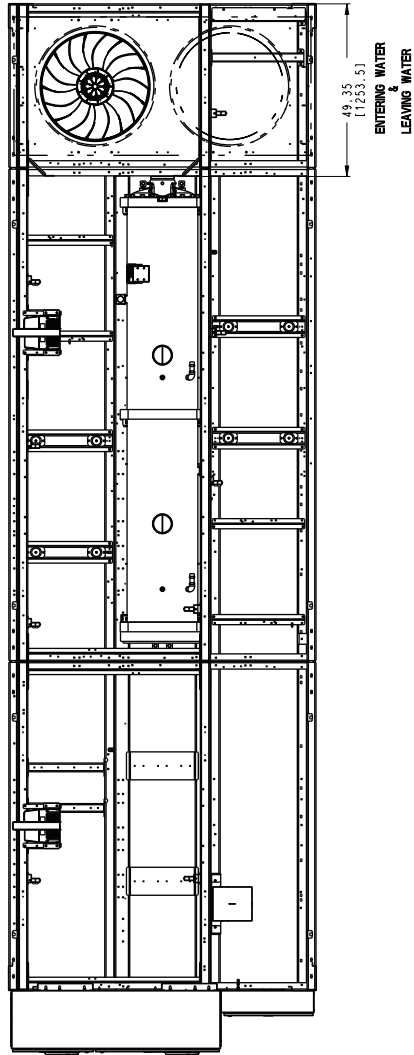


Fig. 10 — 30XV 250,275 Std Tier Air-Cooled Chiller (cont)



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BRINE EVAPORATOR
("2" IN MODEL NUMBER POSITION 12)

BRINE COOLER OPTION

I/T CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 250/275 STD TIER AIR COOLED CHILLER	30XV60001600	REV
U.S. ECCN:EAR99	3 OF 3	02/21/19	-			C

Fig. 10 — 30XV 250,275 Std Tier Air-Cooled Chiller (cont)

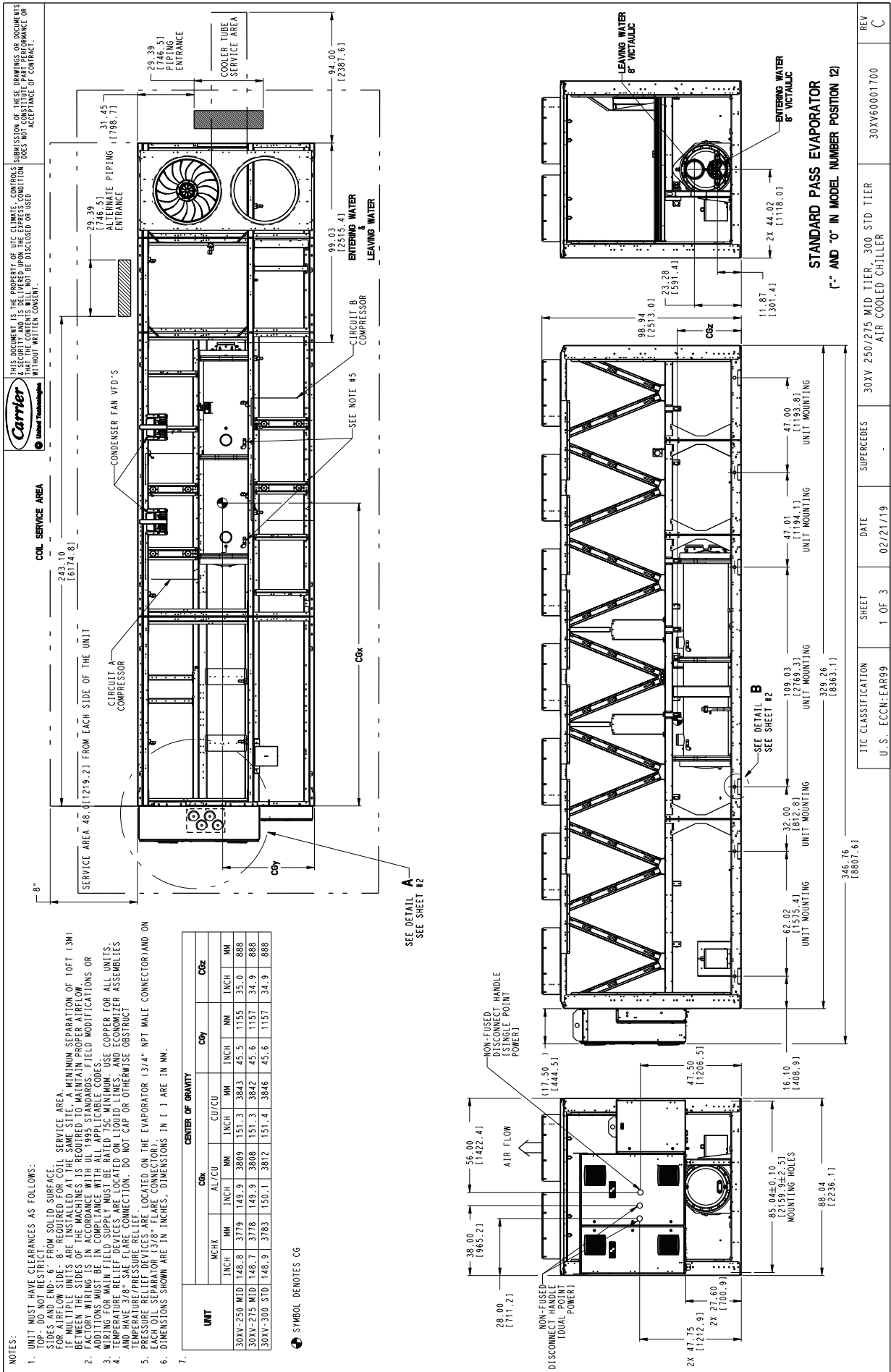


Fig. 11 — 30XV 250,275 Mid Tier; 300 Std Tier Air-Cooled Chiller

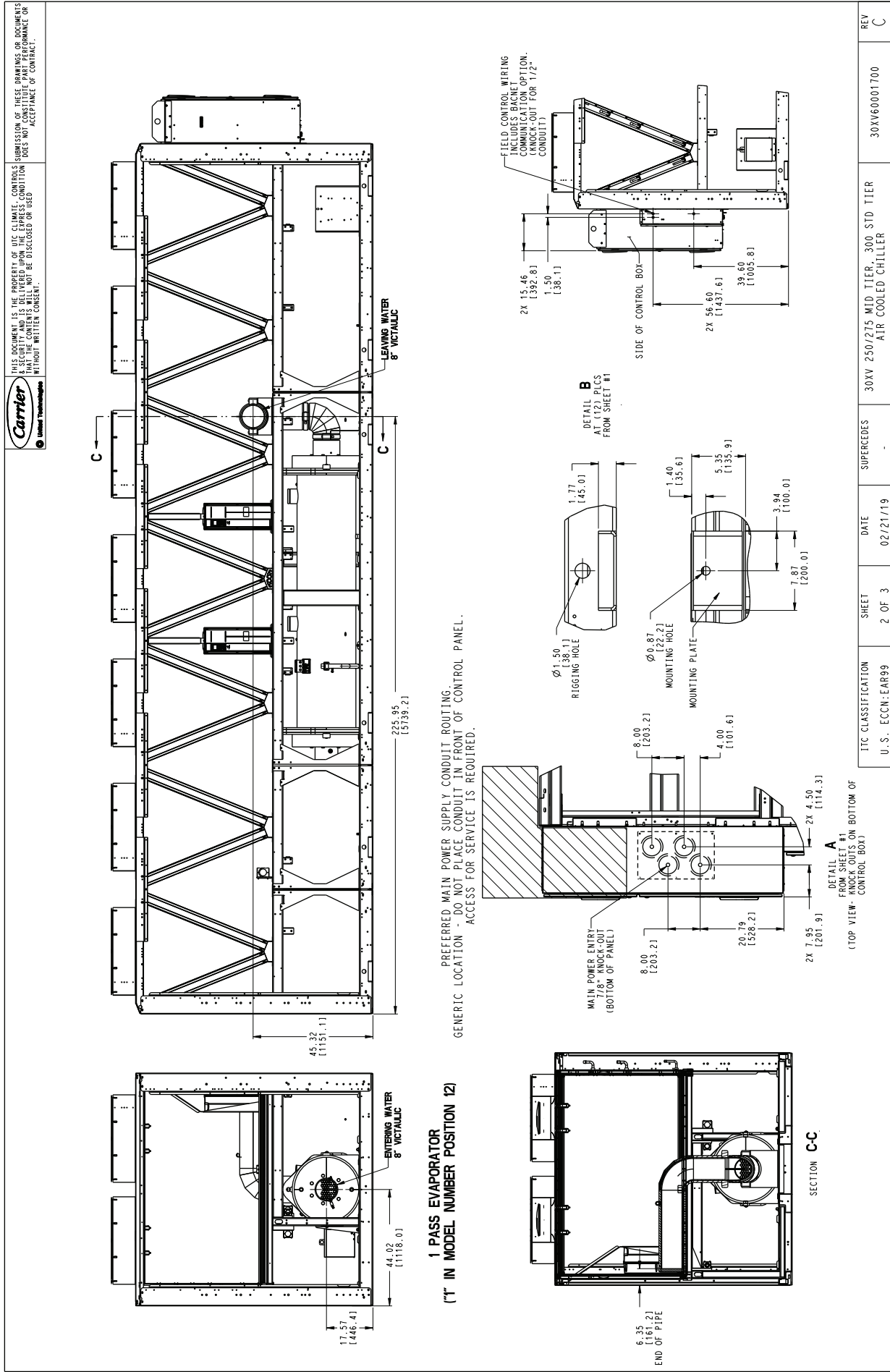


Fig. 11 — 30XV 250,275 Mid Tier; 300 Std Tier Air-Cooled Chiller (cont)

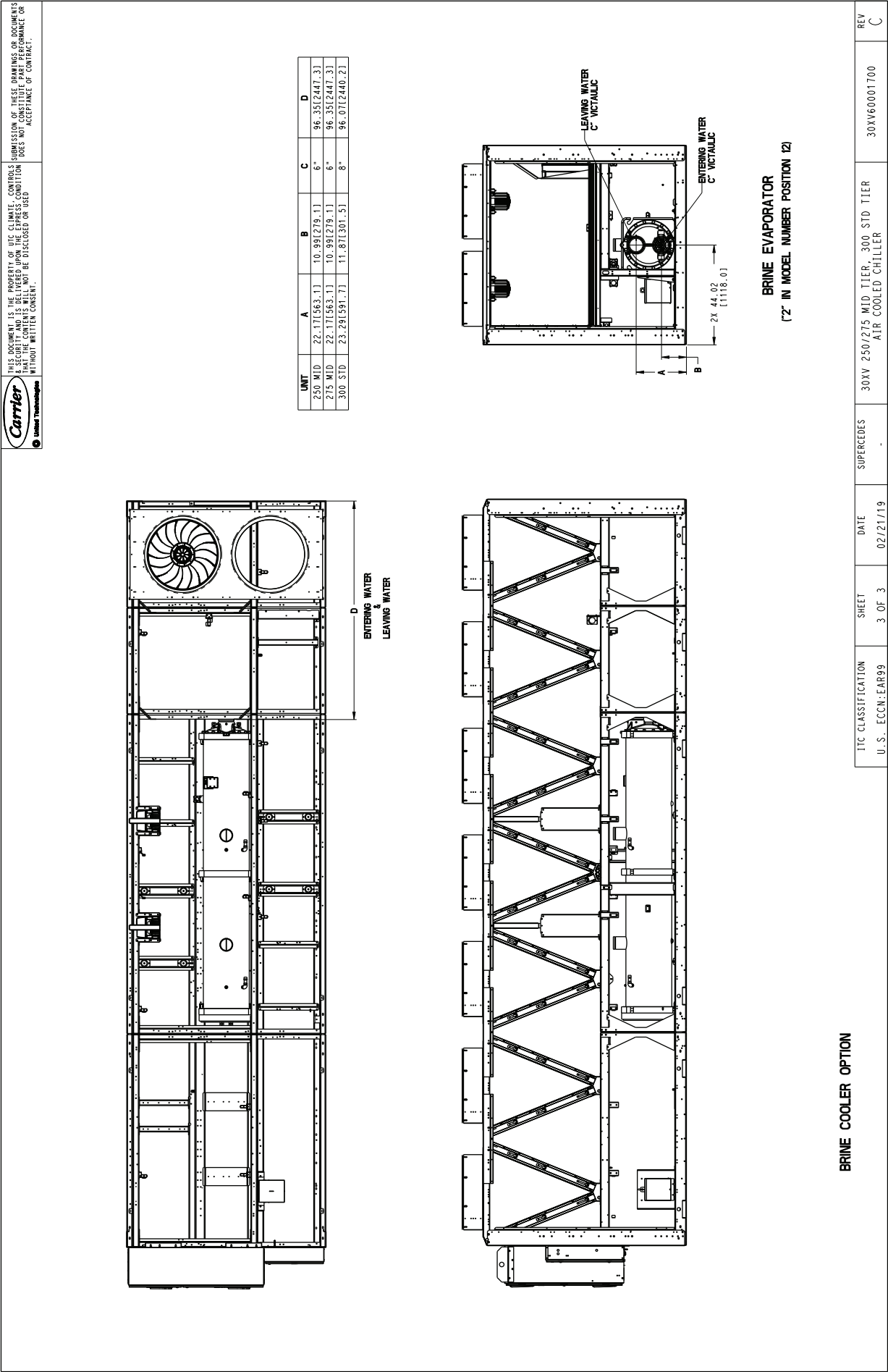
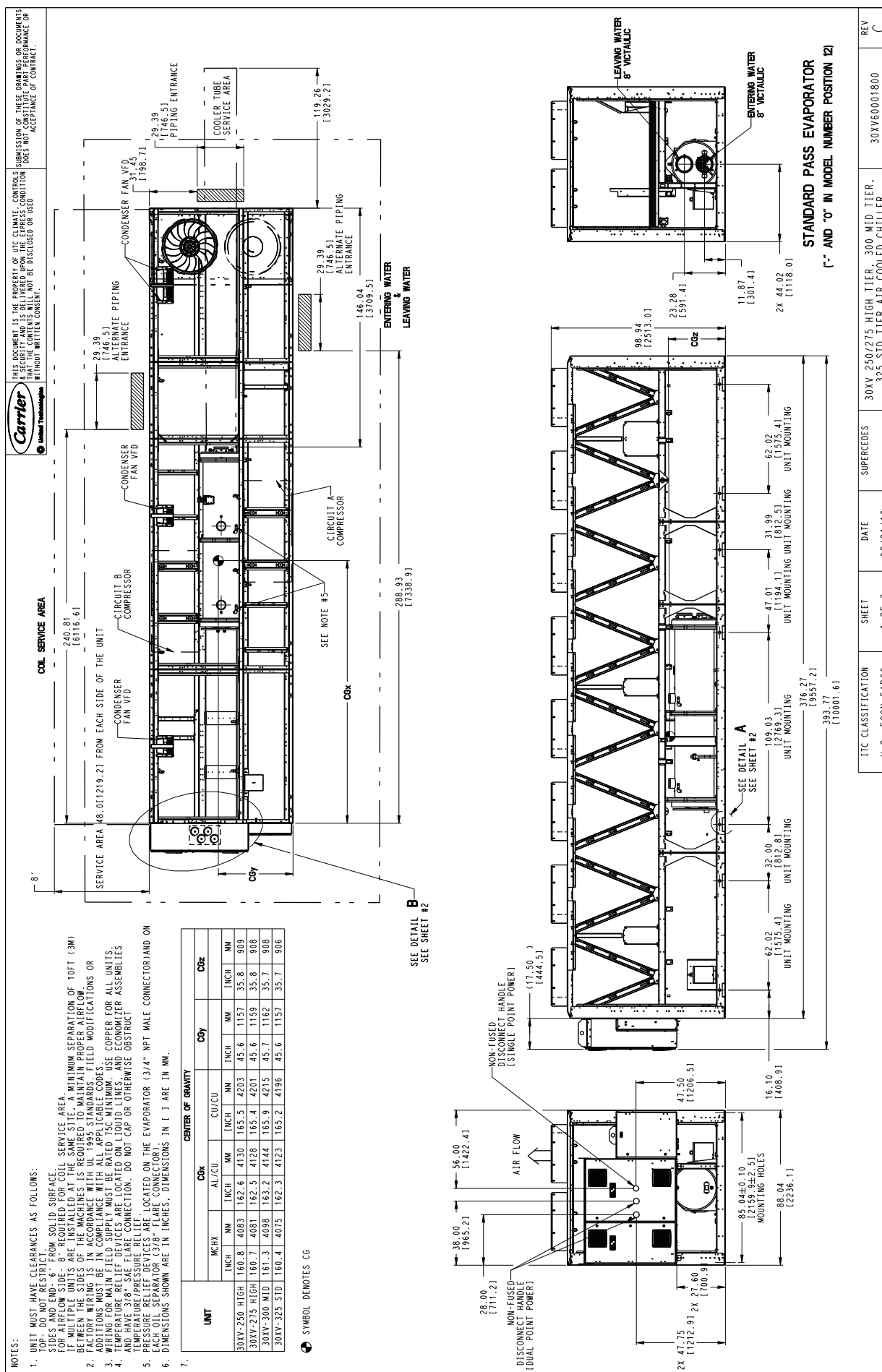
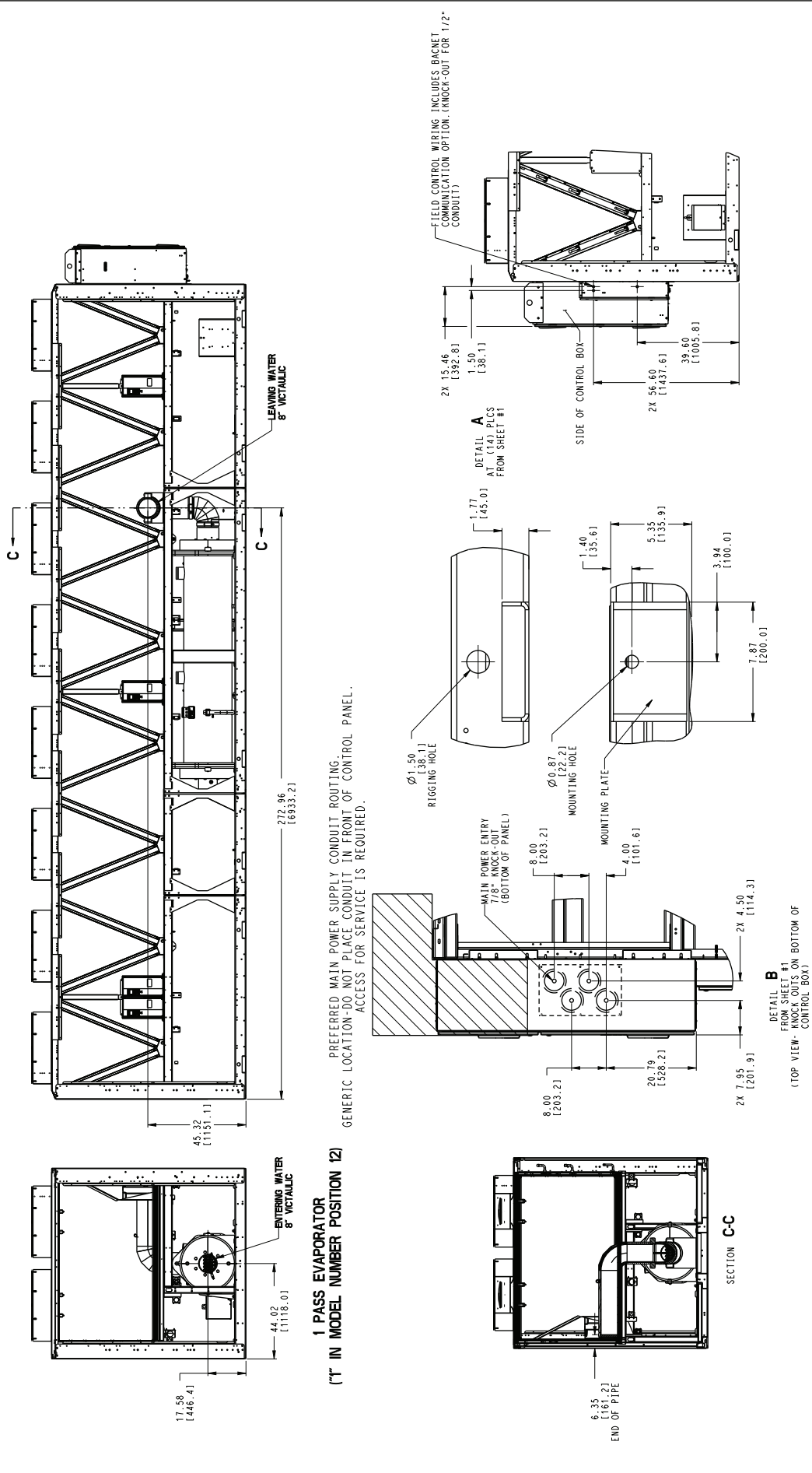


Fig. 11 — 30XV 250,275 Mid Tier; 300 Std Tier Air-Cooled Chiller (cont)



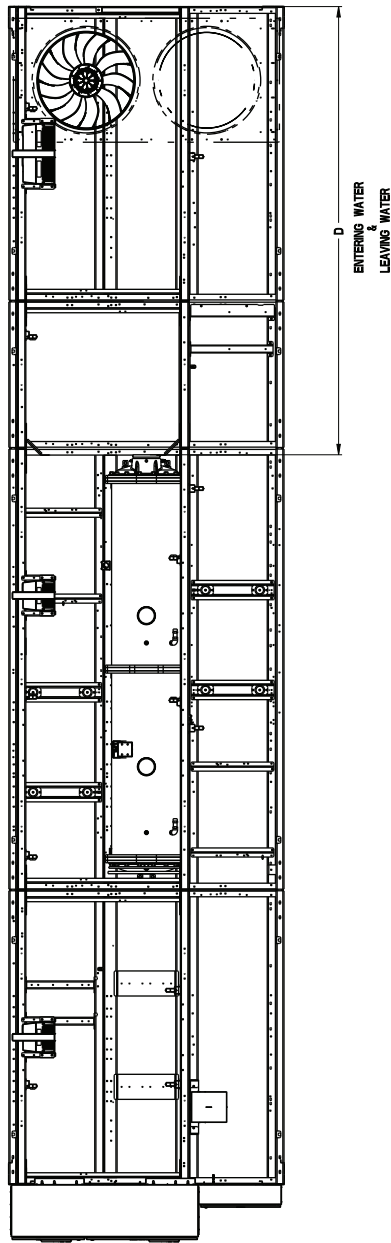


ITC CLASSIFICATION	SHEET	DATE	SUPERCEDS	REV
U.S. ECCN:EAR99	2 OF 3	02/21/19	30XV 250/275 HIGH TIER, 300 MID TIER, 325 STD TIER AIR COOLED CHILLER	C

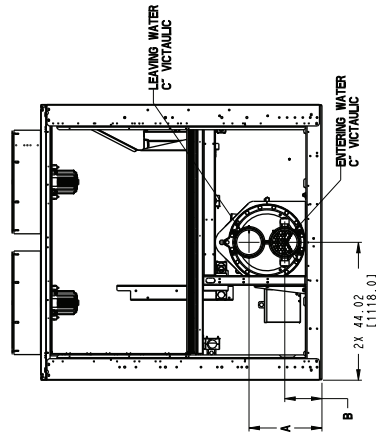
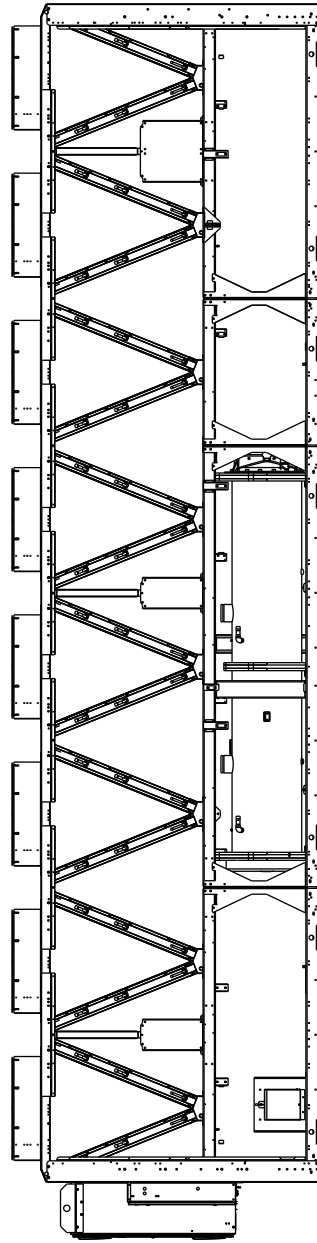
Fig. 12 — 30XV 250,275 High Tier; 300 Mid Tier; 325 Std Tier Air-Cooled Chiller (cont)



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UNIT	A	B	C	D
250 HIGH	22.17(563.11)	10.99(279.11)	6"	143.36(3641.31)
275 HIGH	22.17(563.11)	10.99(279.11)	6"	143.36(3641.31)
300 MID	23.28(591.31)	11.81(301.51)	8"	143.09(3634.51)
325 STD	23.28(591.31)	11.81(301.51)	8"	143.09(3634.51)

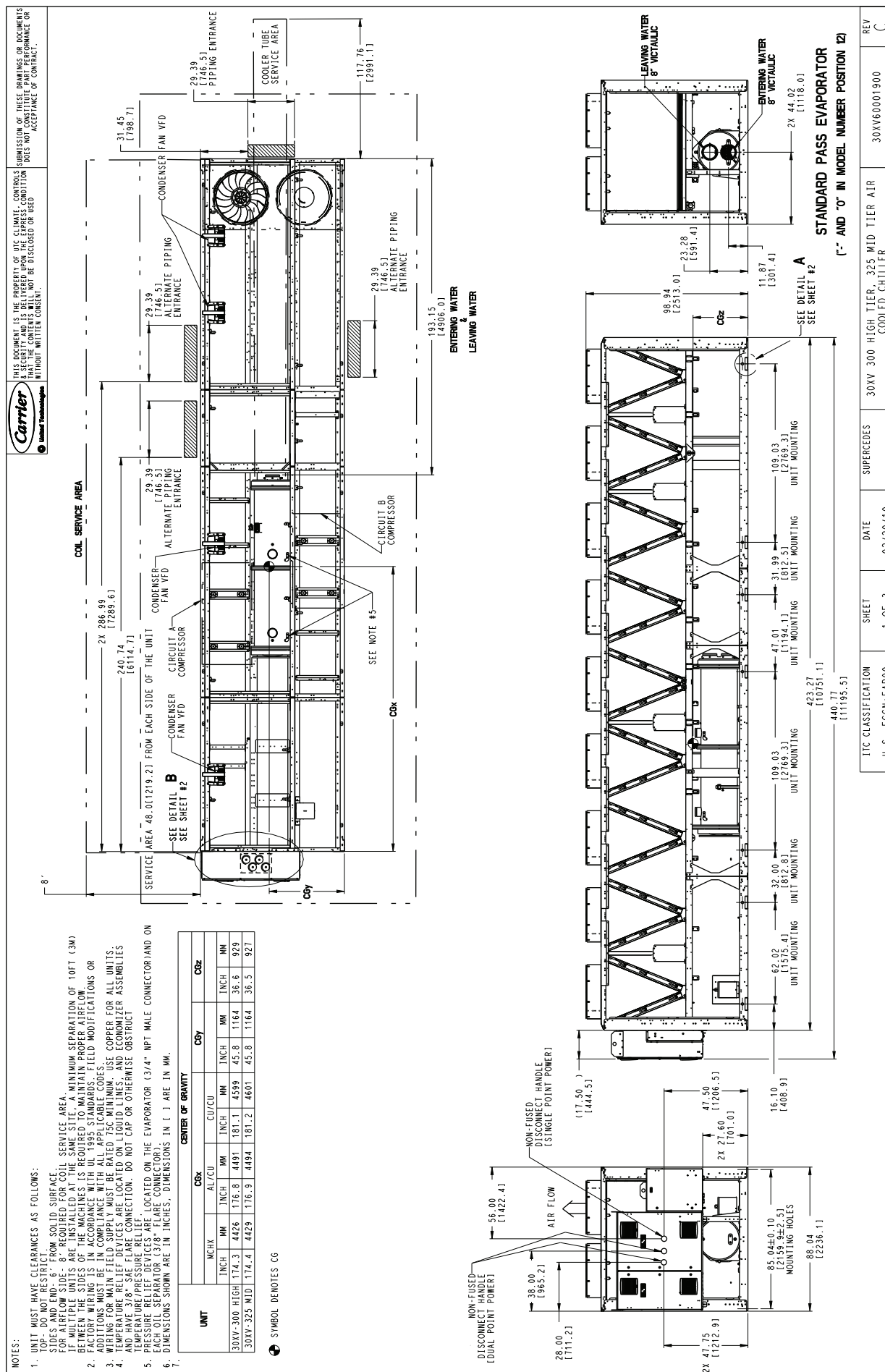


BRINE EVAPORATOR
("2" IN MODEL NUMBER POSITION 12)

BRINE COOLER OPTION

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 250/275 HIGH TIER, 300 MID TIER, 325 STD TIER AIR COOLED CHILLER	REV
U.S. ECCN:EAR99	3 OF 3	02/21/19	-	30XV60001800	C

Fig. 12 — 30XV 250,275 High Tier; 300 Mid Tier; 325 Std Tier Air-Cooled Chiller (cont)



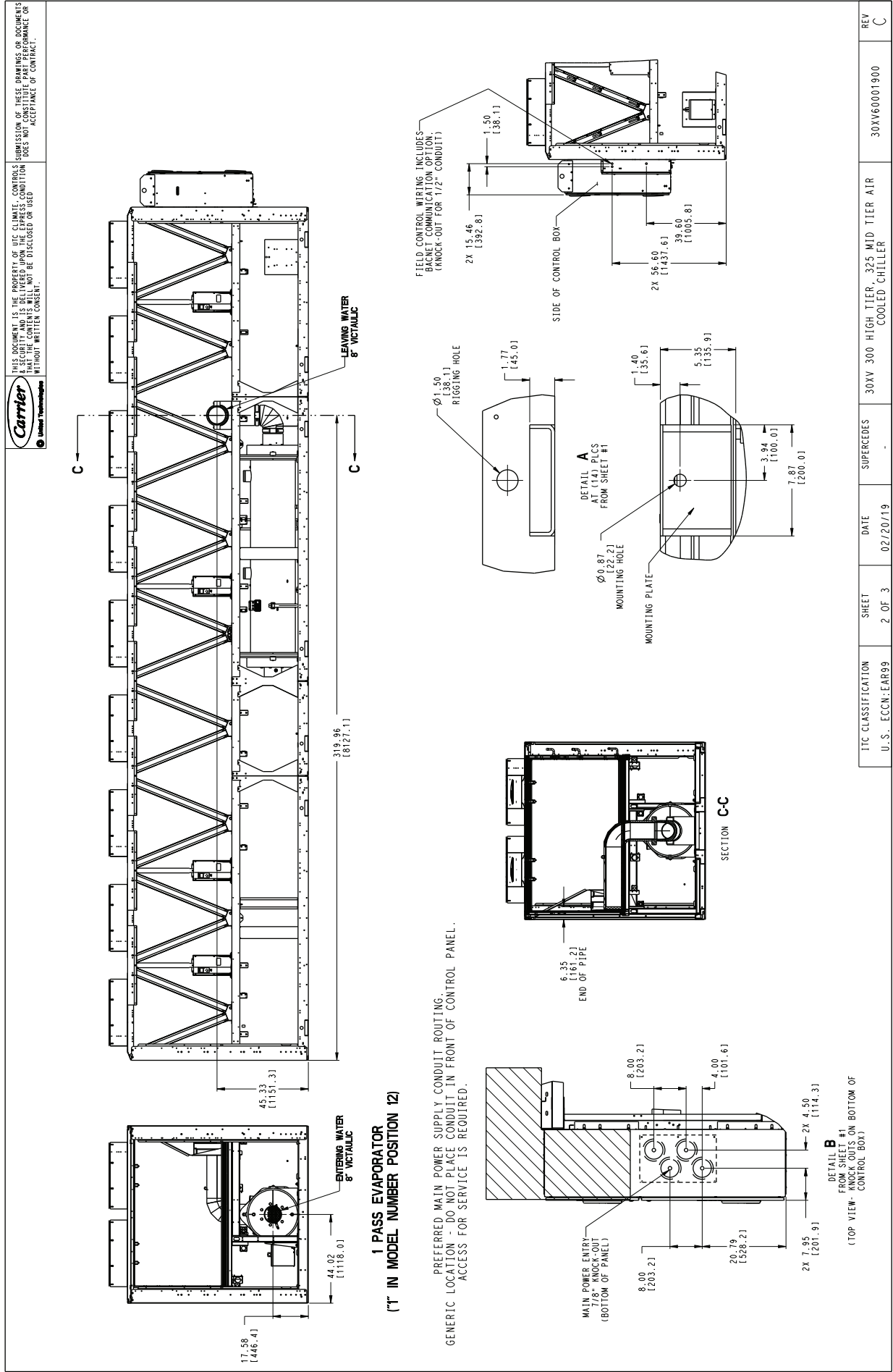
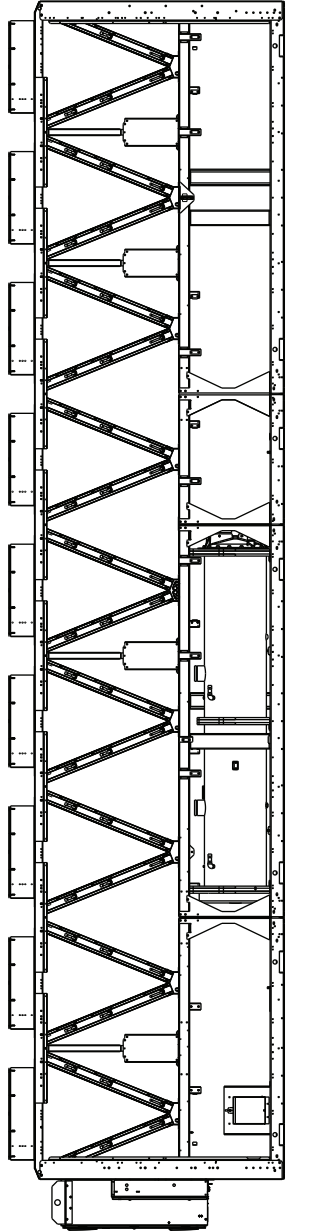
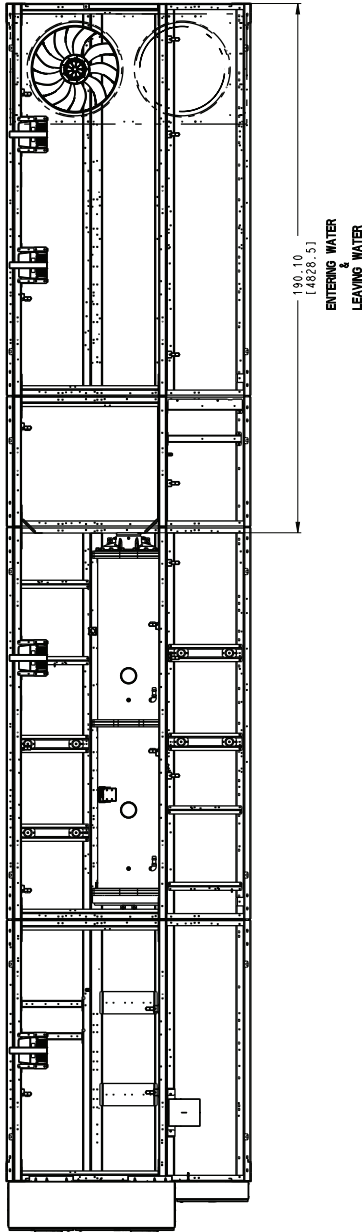


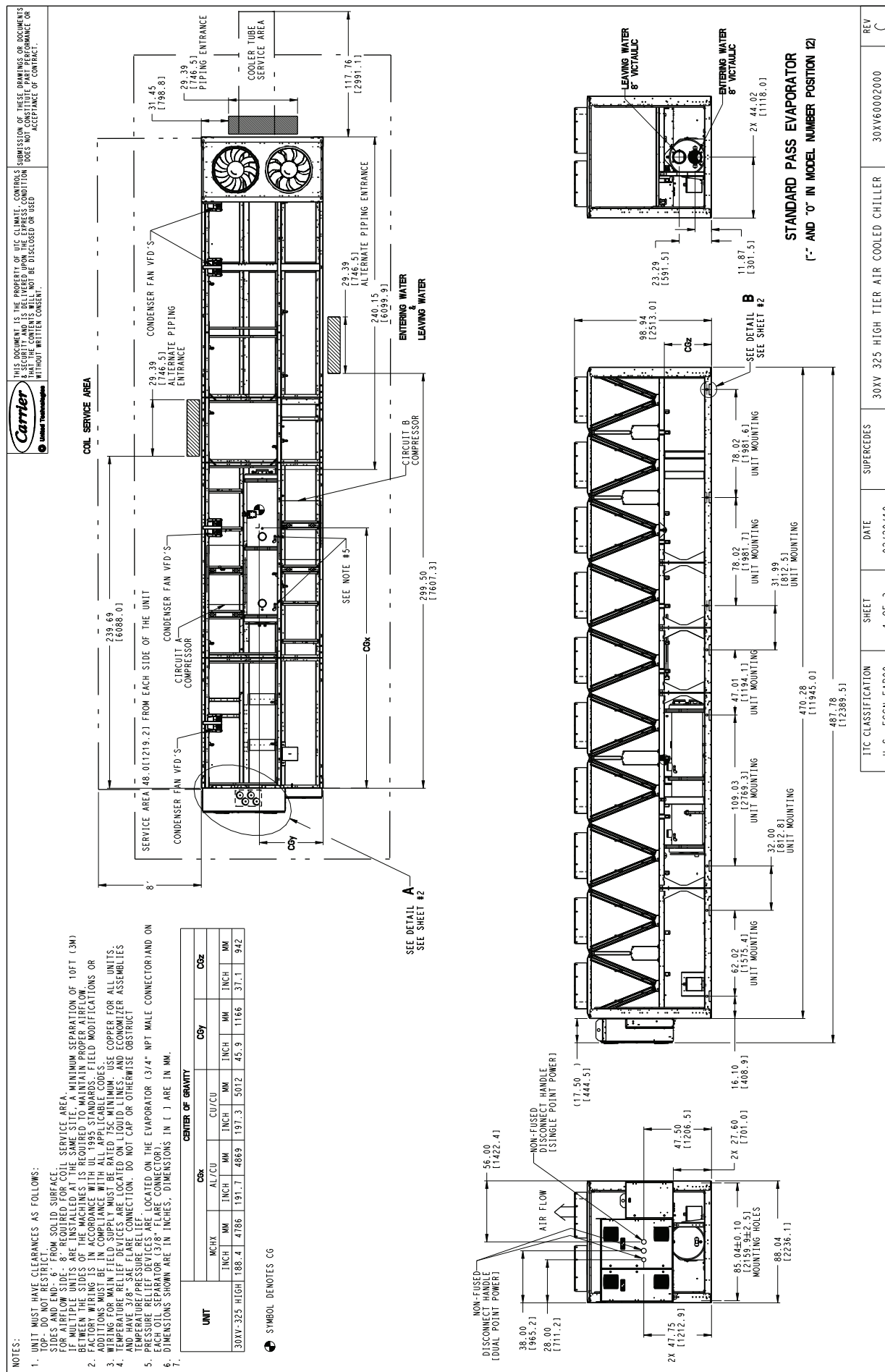
Fig. 13 — 30XV 300 High Tier; 325 Mid Tier Air-Cooled Chiller (cont)



BRINE COOLER OPTION
 BRINE EVAPORATOR
 (72" IN MODEL NUMBER POSITION 12)

TTC CLASSIFICATION		SHEET	DATE	SUPERCEDES	30XV 300 HIGH TIER, 325 MID TIER AIR COOLED CHILLER	30XV60001900	REV
U.S. ECCN:EAR99		3 OF 3	02/20/19				C

Fig. 13 — 30XV 300 High Tier; 325 Mid Tier Air-Cooled Chiller (cont)



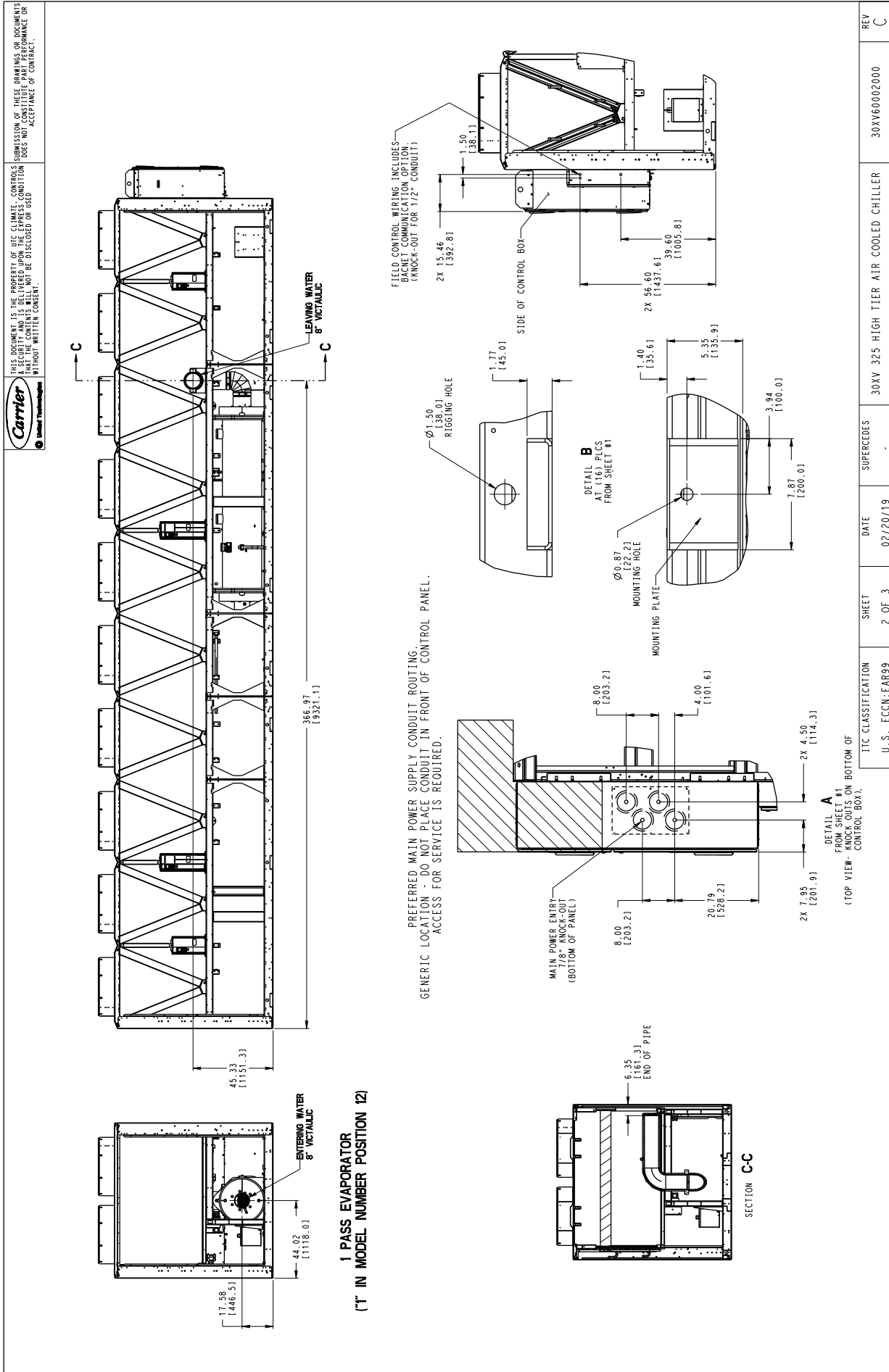
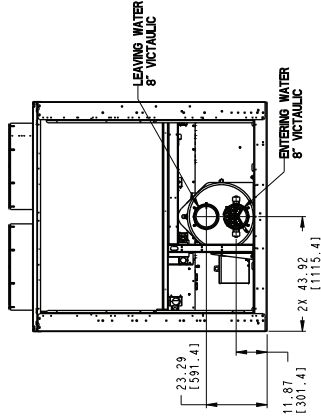
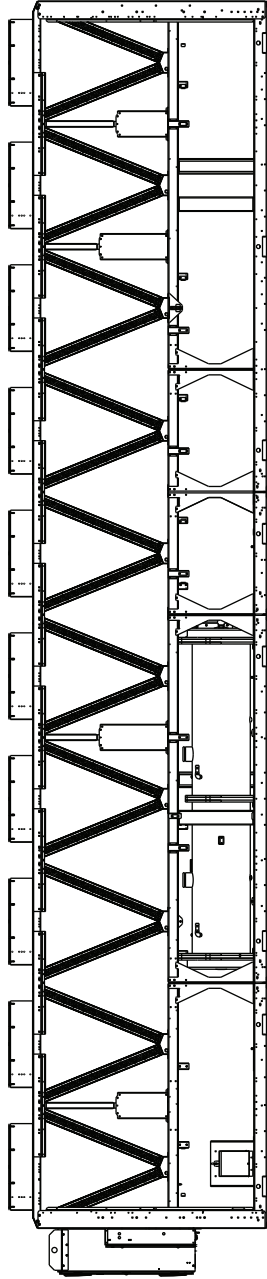
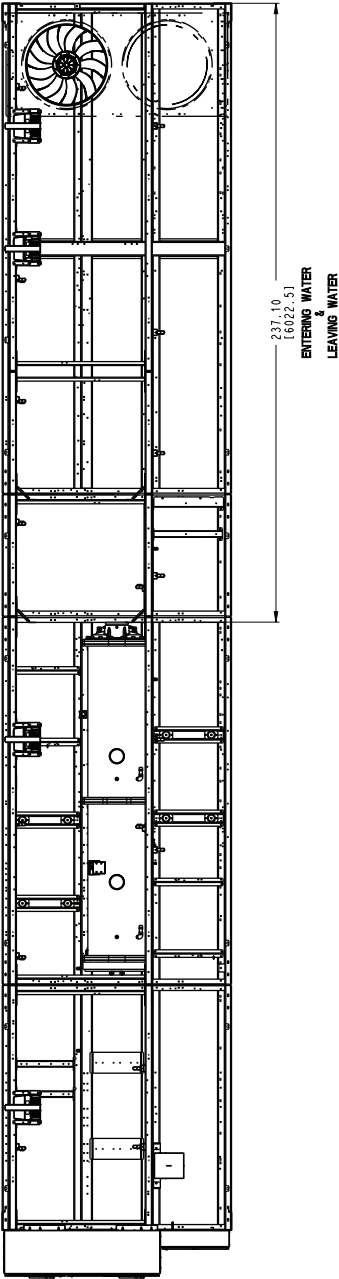


Fig. 14 — 30XV 325 High Tier Air-Cooled Chiller (cont)



BRINE EVAPORATOR
 (2" IN MODEL NUMBER POSITION 12)

BRINE COOLER OPTION

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 325 HIGH TIER AIR COOLED CHILLER	30XV60002000	REV
U.S. ECCN:EAR99	3 OF 3	02/20/19	-			C

Fig. 14 — 30XV 325 High Tier Air-Cooled Chiller (cont)

- TOP - DO NOT RESTRICT FLOW TO THE SOLID SURFACE.
1. FOR AIRFLOW SIDE - 8" REQUIRED FOR COIL SERVICE AREA.
- IF MULTIPLE UNITS ARE INSTALLED AT THE SAME SITE, A MINIMUM SEPARATION OF 10 FT (3 M) BETWEEN THE SIDES OF THE MACHINES IS REQUIRED TO MAINTAIN PROPER AIRFLOWS OR PREVENT EXCESSIVE PRESSURE DROPS AND/OR EXCESSIVE NOISE LEVELS.
2. ADDITIONAL MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES.
3. WIRING FOR MAIN FIELD SUPPLY MUST BE RATED 75C MINIMUM. USE COPPER FOR ALL UNITS.
4. ALL ELECTRICAL CONNECTIONS SHALL BE MADE TO THE BACK OF THE CONDENSER ASSEMBLIES AND HAVE 3/8" SAE TUBING CONNECTION. DO NOT CAP OR OTHERWISE OBSTRUCT TEMPERATURE/PRESSURE RELIEF.
5. PRESSURE RELIEF DEVICES ARE LOCATED ON THE EVAPORATOR (3/4" NPT MALE CONNECTOR) AND ON THE CONDENSER (1/2" NPT MALE CONNECTOR). DIMENSIONS SHOWN ARE IN INCHES. DIMENSIONS IN () ARE IN MM.

UNIT	CENTER OF GRAVITY													
	CGx						CGy						CGz	
	MCHX		AL/CU		CU/CU									
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM		
30XV-350 STD	157	3987	158.6	4029	161.6	4105	47.5	1206	35.9	912				

SYMBOL DENOTES CG

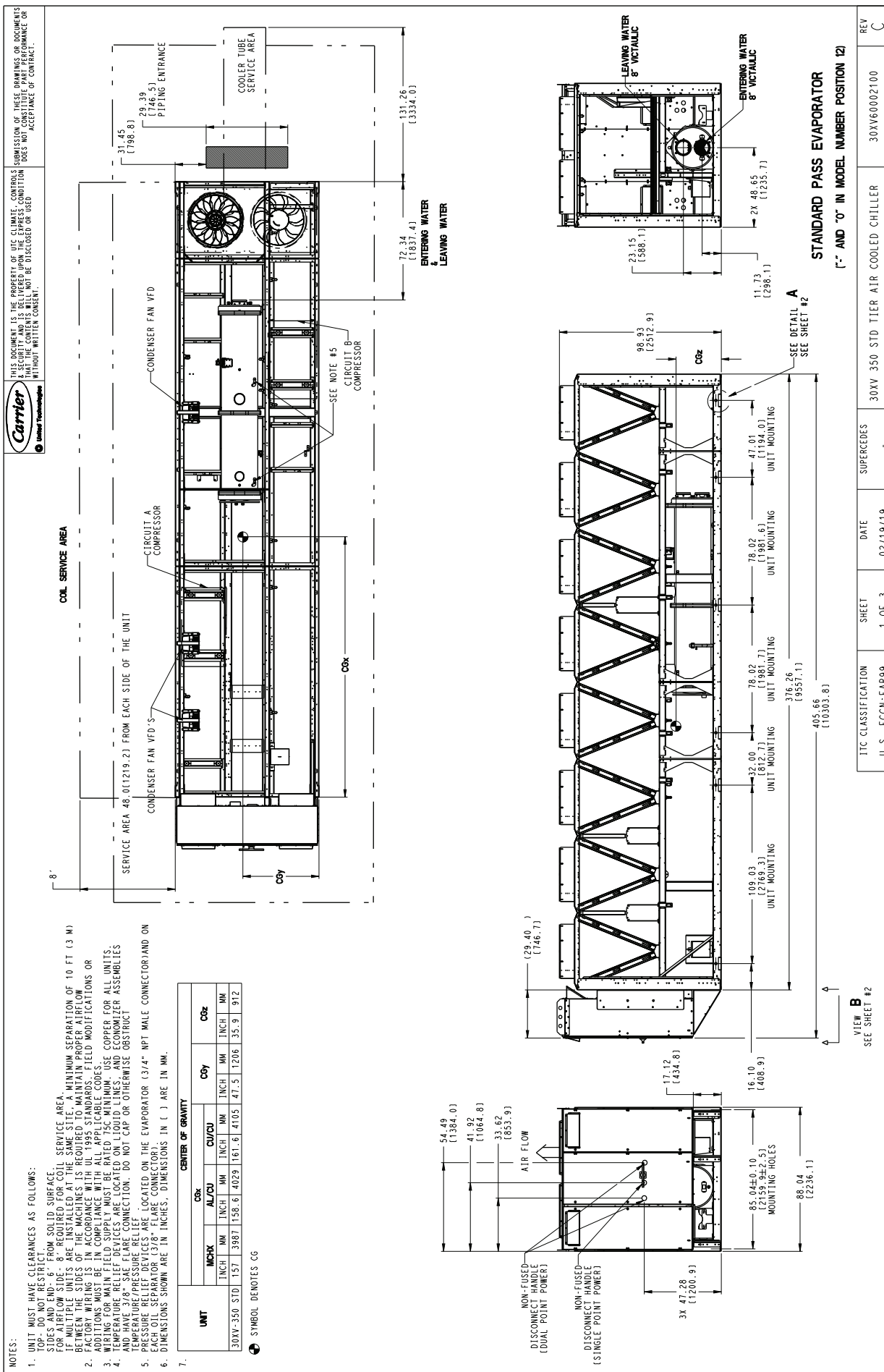


Fig. 15 — 30XV 350 Standard Tier Air-Cooled Chiller

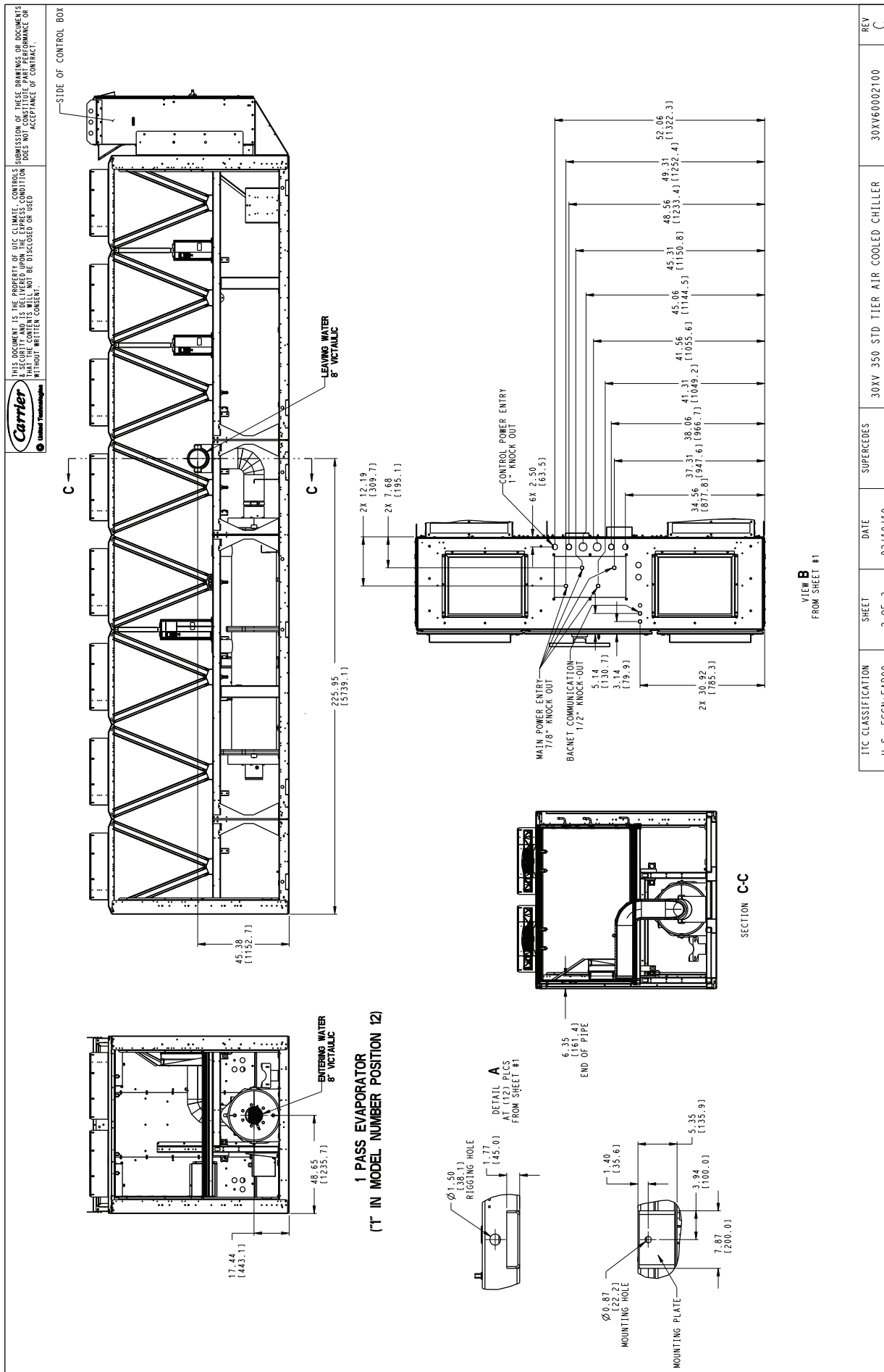
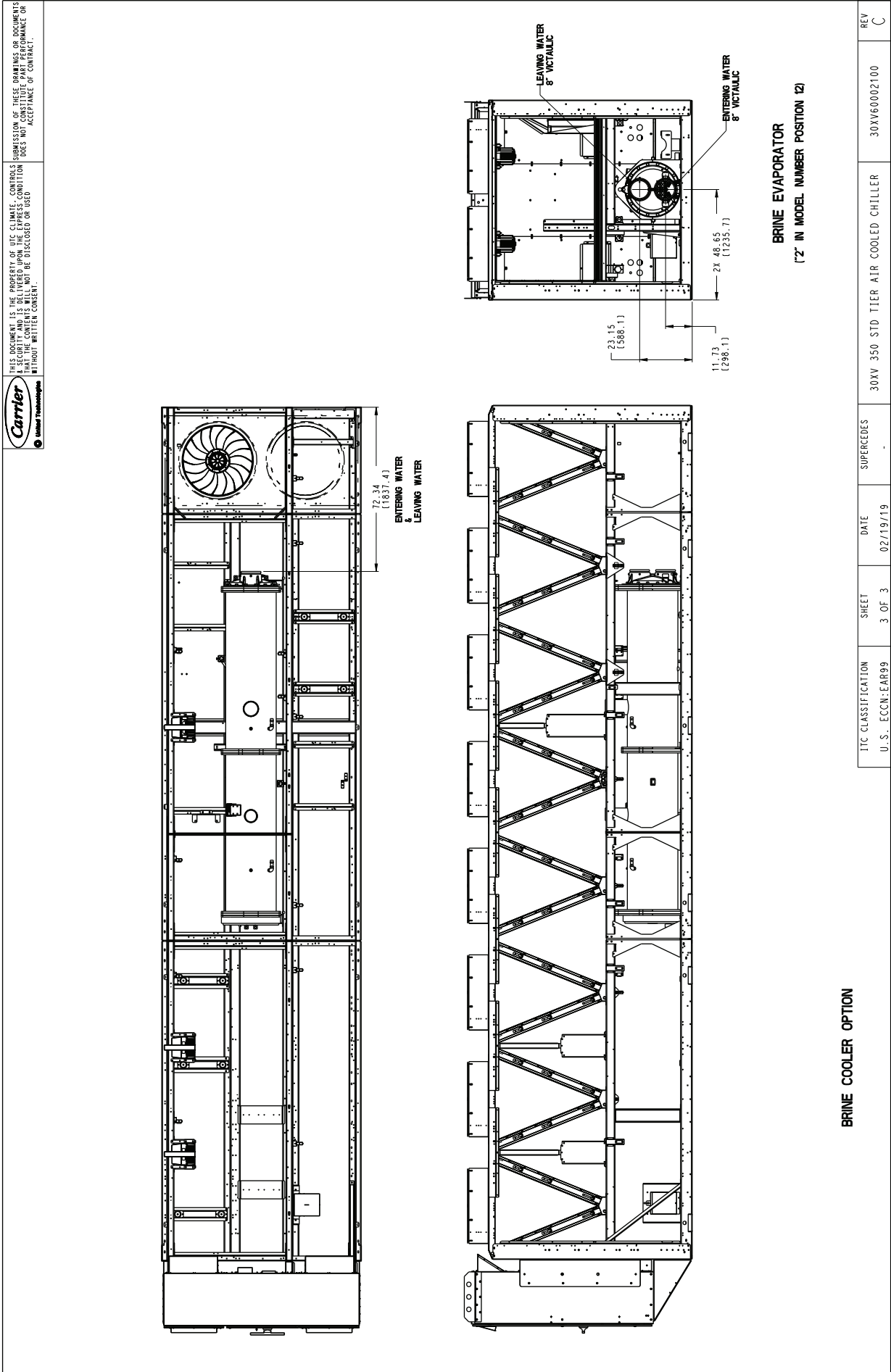


Fig. 15 — 30XV 350 Standard Tier Air-Cooled Chiller (cont)



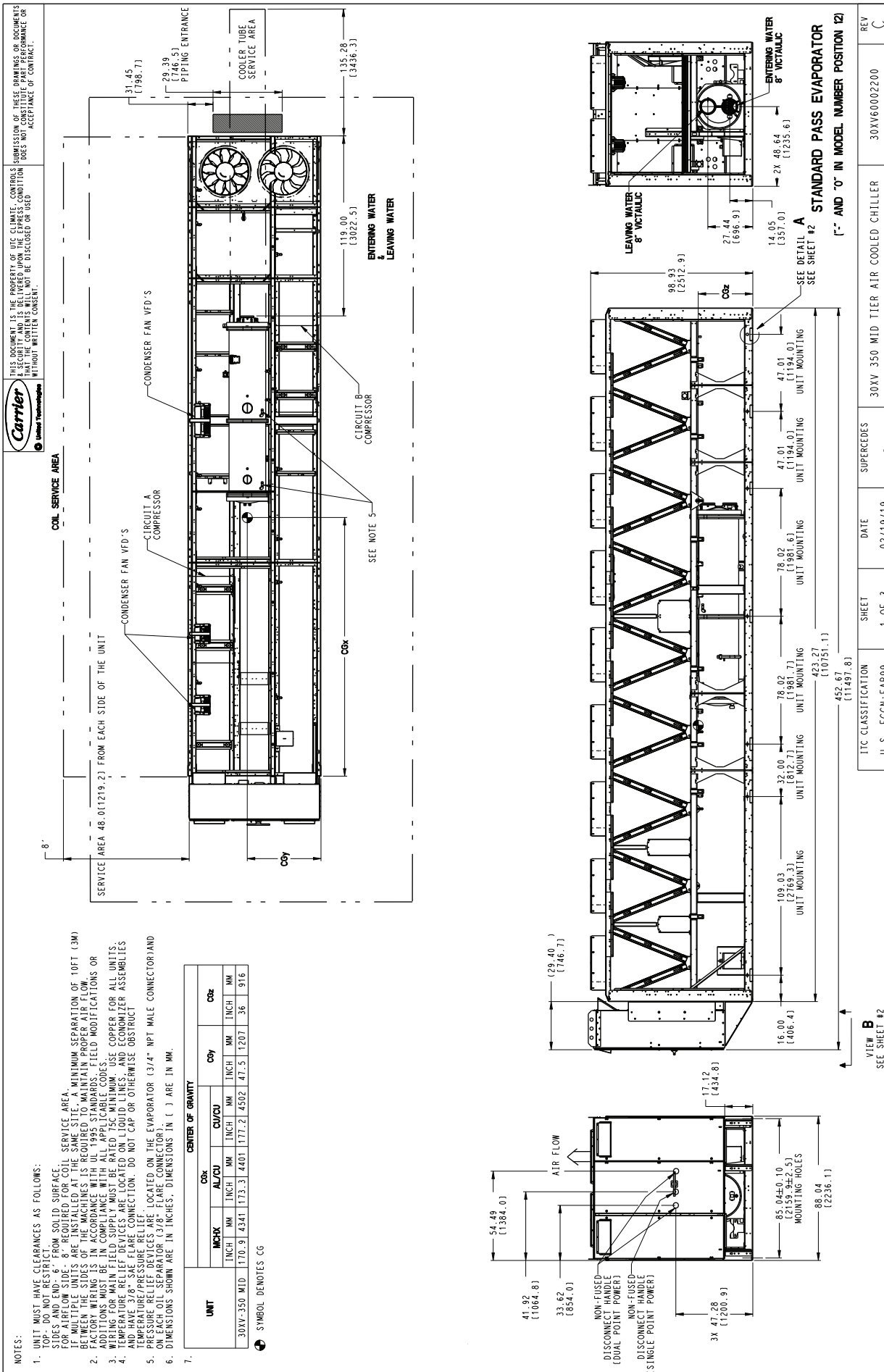


Fig. 16 — 30XV 350 Mid Tier Air-Cooled Chiller

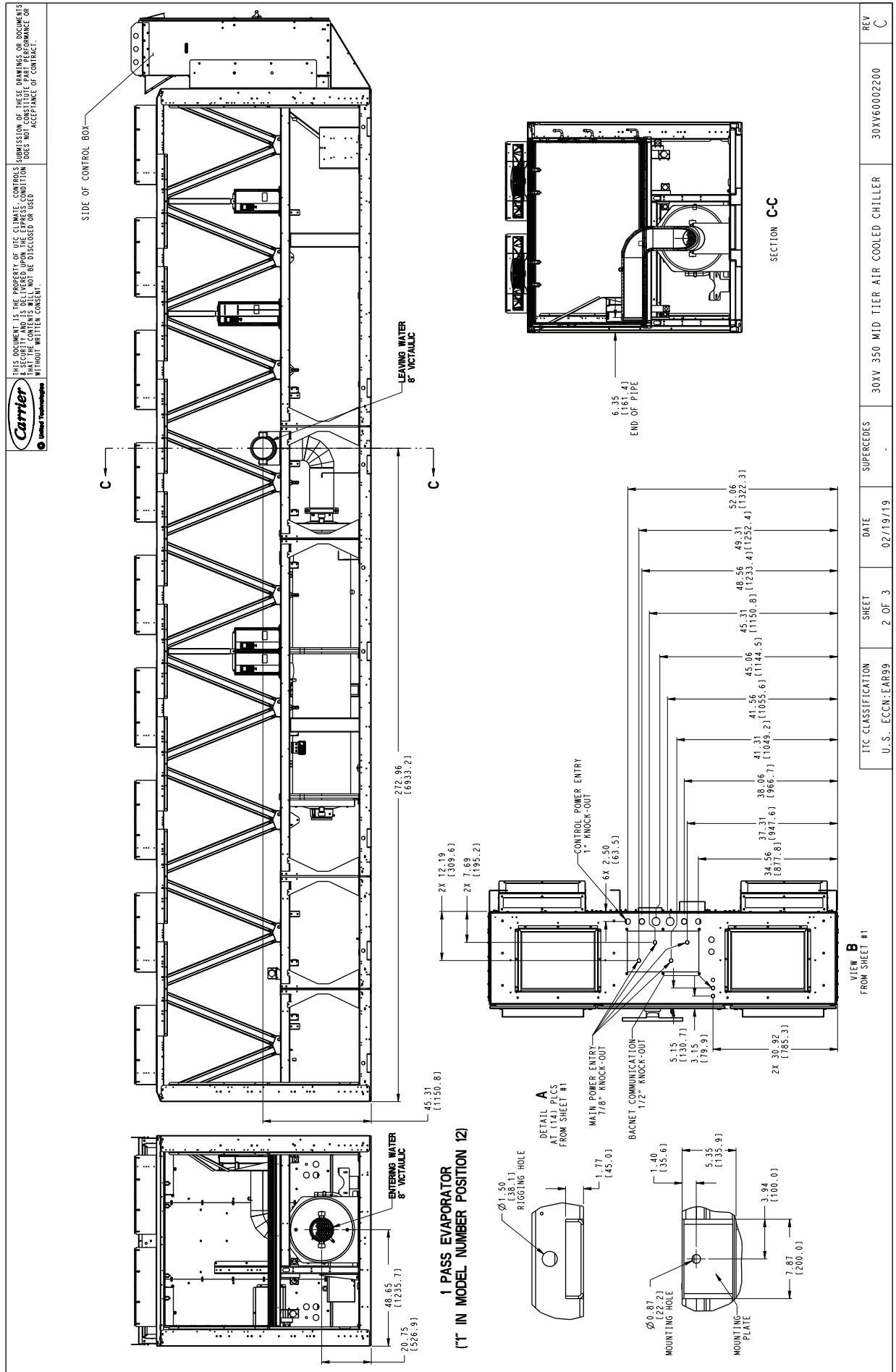


Fig. 16 — 30XV 350 Mid Tier Air-Cooled Chiller (cont)

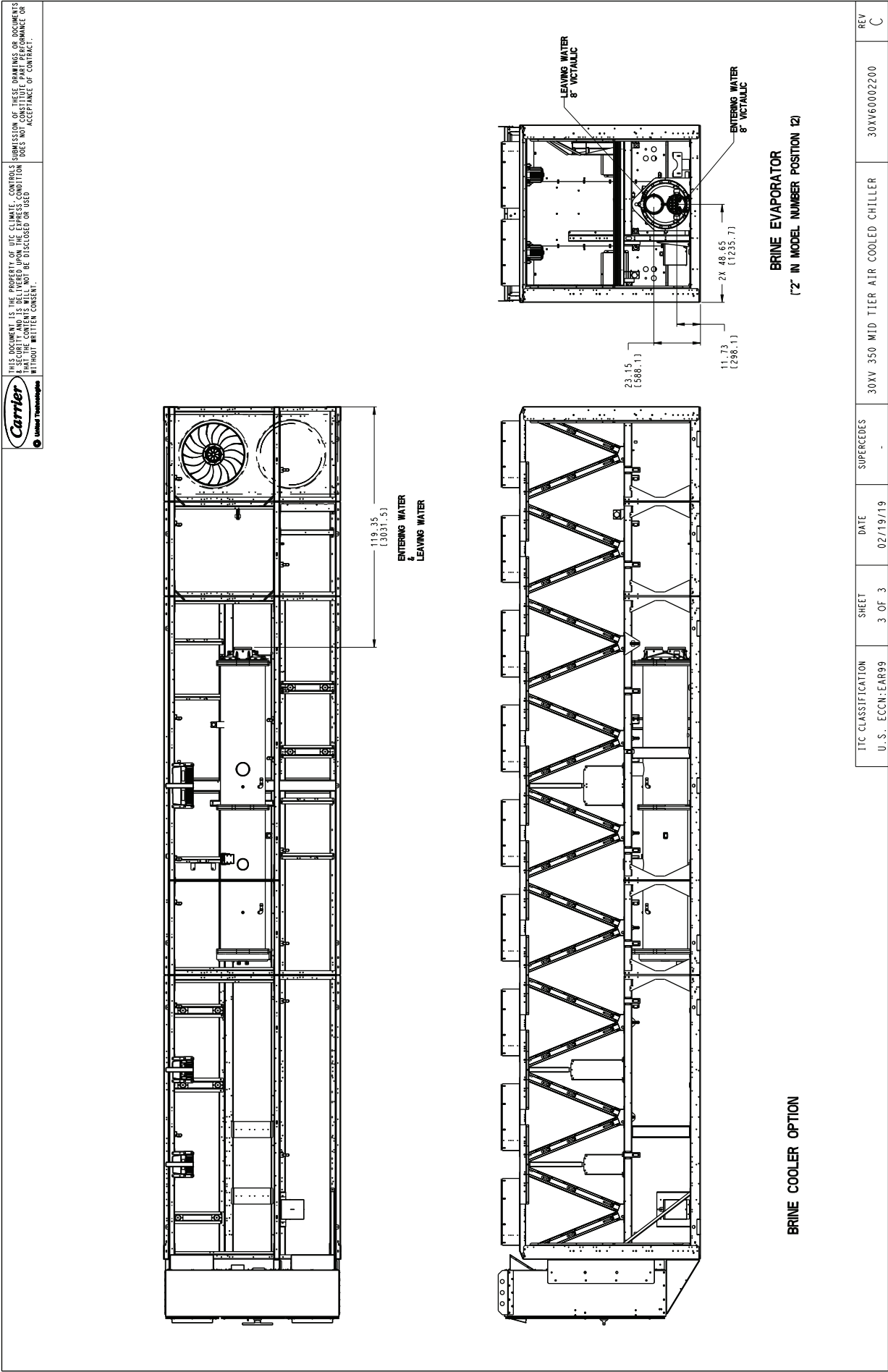
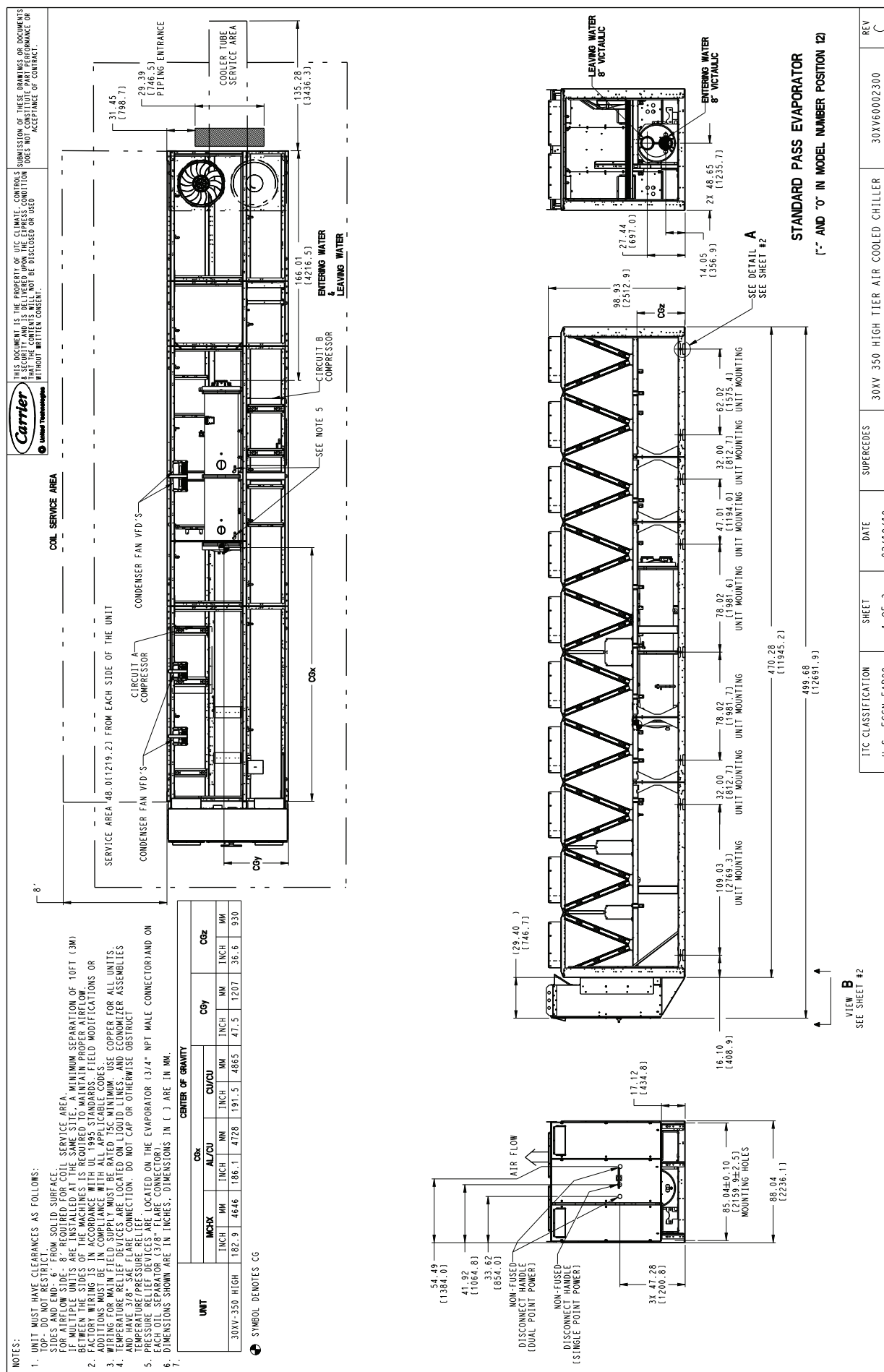


Fig. 16 — 30XV 350 Mid Tier Air-Cooled Chiller (cont)



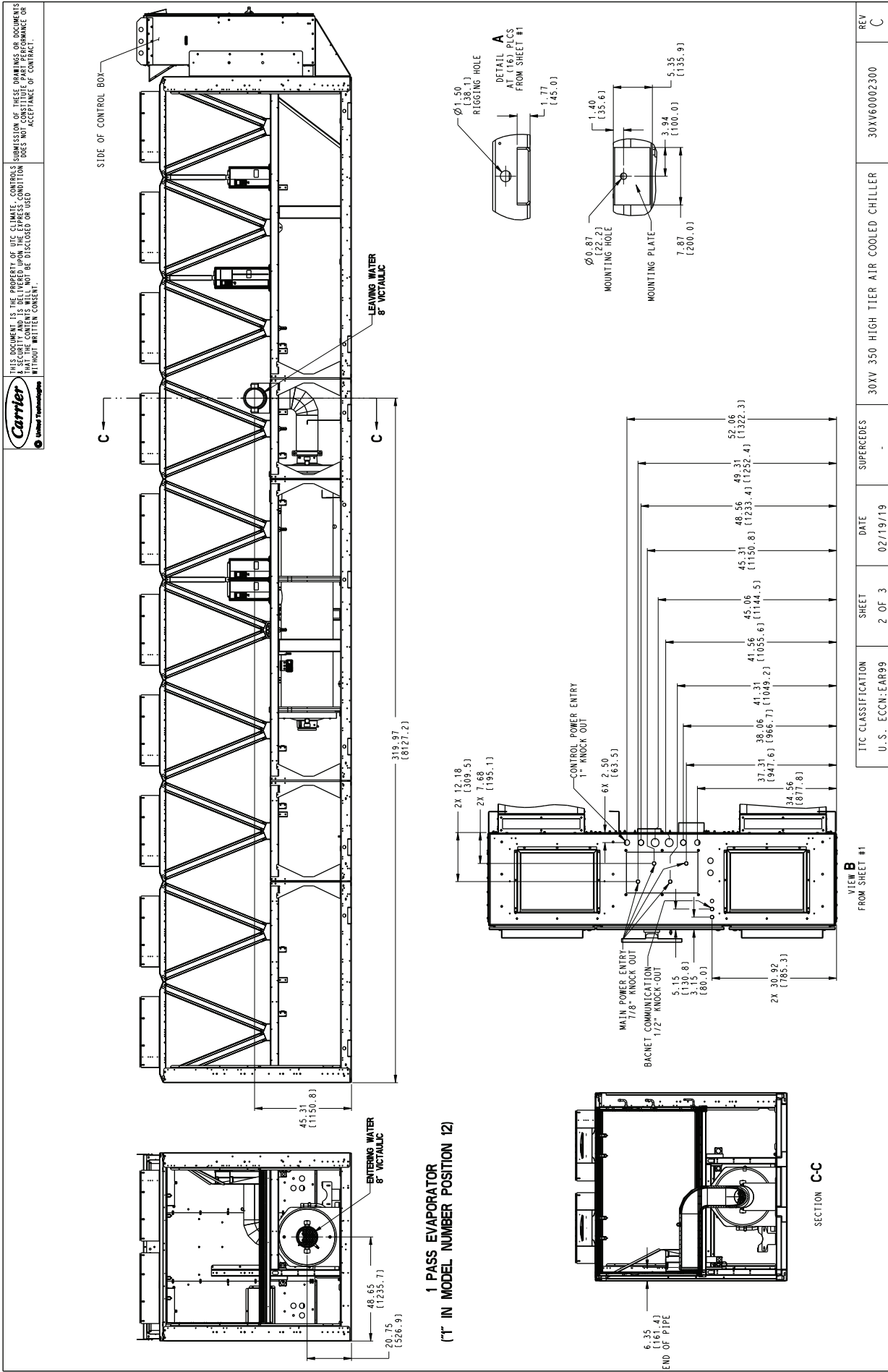


Fig. 17 — 30XV 350 High Tier Air-Cooled Chiller (cont)

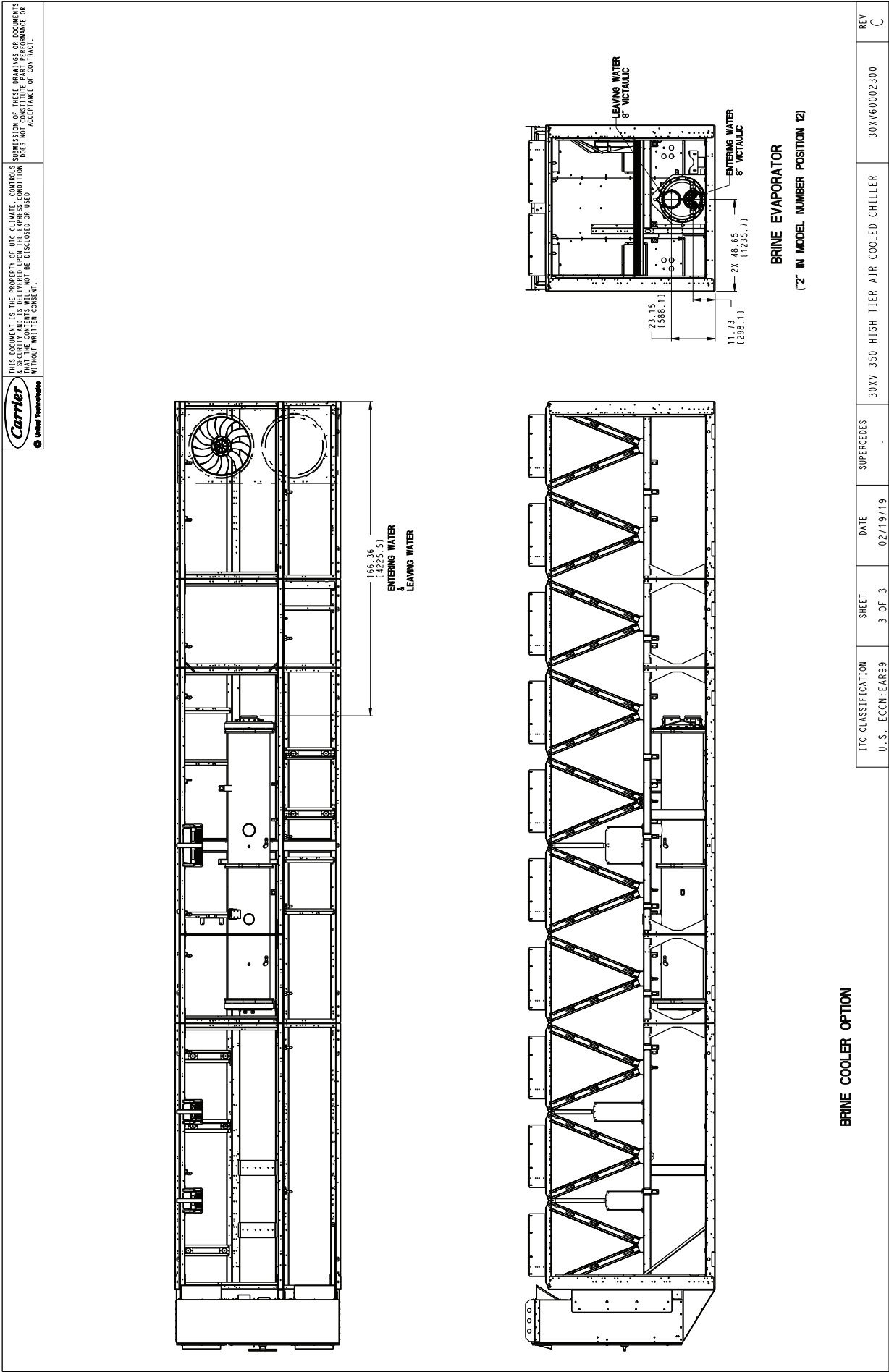


Fig. 17 — 30XV 350 High Tier Air-Cooled Chiller (cont)

1. UNIT MUST HAVE CLEARANCES AS FOLLOWS:

1. UNIT MUST HAVE CLEARANCES AS FOLLOWS:
 - SIDES AND END - 6" FROM SOLID SURFACE.
 - FOR AIRFLOW SIDE - 6" REQUIRED FOR COIL SERVICE AREA.
 - FOR FIELD WIRING SIDE - 10 FT (3M) MINIMUM SEPARATION OF 10 FT (3M).
2. BETWEEN THE SIDES OF THE MACHINES IS REQUIRED TO MAINTAIN PROPER AIRFLOW.
3. FACTORY WIRING IS IN ACCORDANCE WITH UL 919 STANDARDS. FIELD MODIFICATIONS TO THE WIRING MUST BE IN ACCORDANCE WITH ALL APPLICABLE CODES.
4. ADDITIONS MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES.
5. TEMPERATURE RELIEF DEVICES ARE LOCATED ON ALL UNITS.
6. TEMPERATURE RELIEF DEVICES ARE LOCATED ON LIQUID LINES AND ECONOMIZER ASSEMBLIES.
7. AND HAVE 3/8" SAE FLARE CONNECTION. DO NOT CAP OR OTHERWISE OBSTRUCT.
8. TEMPERATURE/PRESSURE RELIEF LOCATED ON THE EVAPORATOR (3/4" NPT MALE CONNECTOR AND ON THE LIQUID SEPARATOR (1/2" NPT MALE CONNECTOR).
9. EXCESSIVE SEPARATION IS NOT ALLOWED.
10. DIMENSIONS SHOWN ARE IN INCHES. DIMENSIONS IN () ARE IN MM.

UNIT	CENTER OF GRAVITY										
	CGx						CGy				CGz
	MOHY		AL/CU		CU/CU		INCH		MM		
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	
30XY-400 STD	179.3	4554	181.1	4599	184.1	4676	46.0	1169	35.0	890	
30XY-450 STD	190.5	4839	193.1	4905	197.5	5017	46.1	1171	35.5	903	

CENTER OF GRAVITY

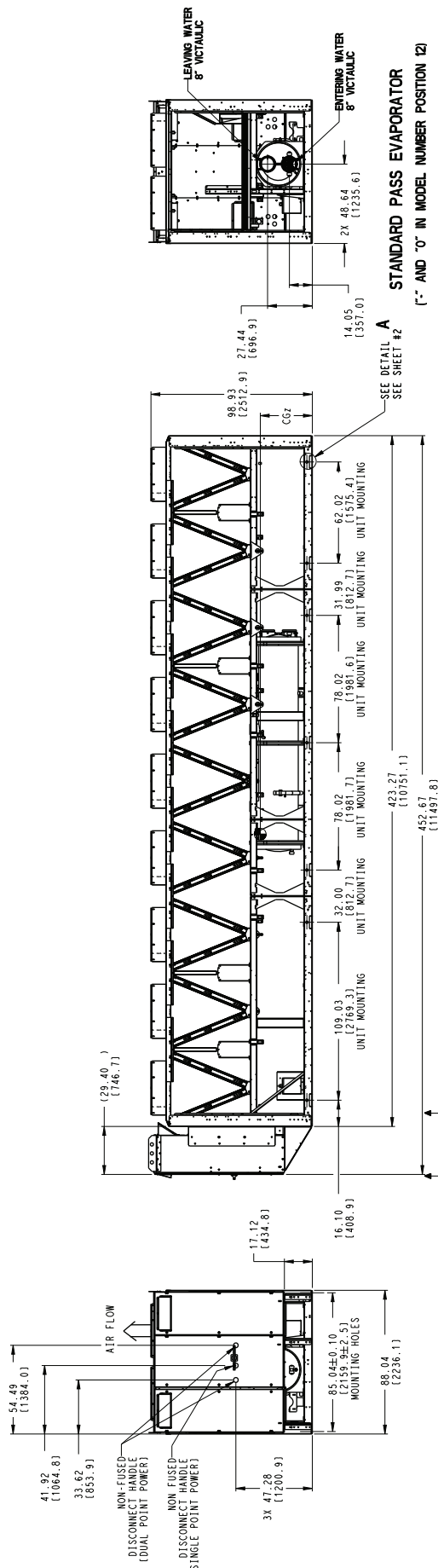
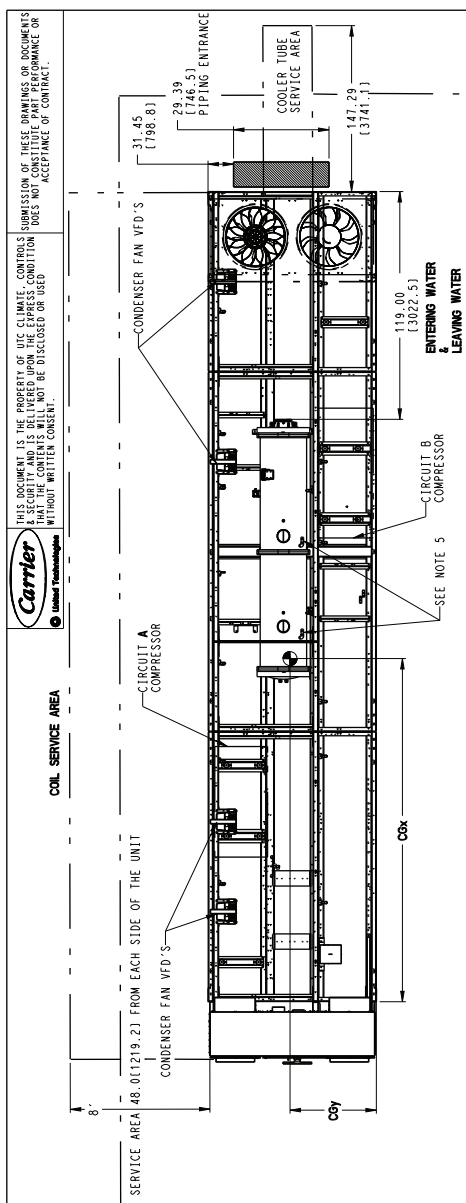


Fig. 18 — 30XV 400 Standard Tier Air-Cooled Chiller

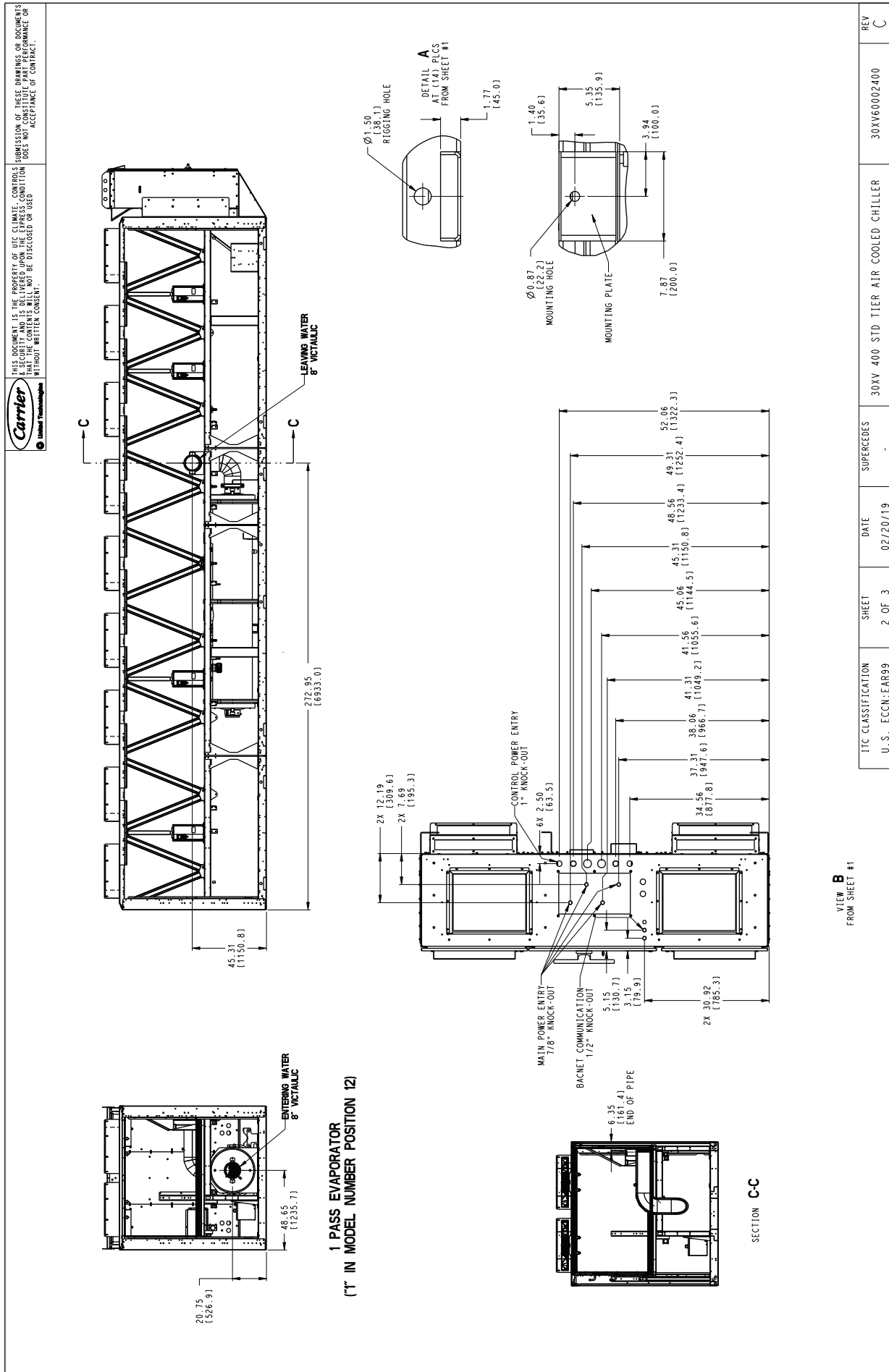
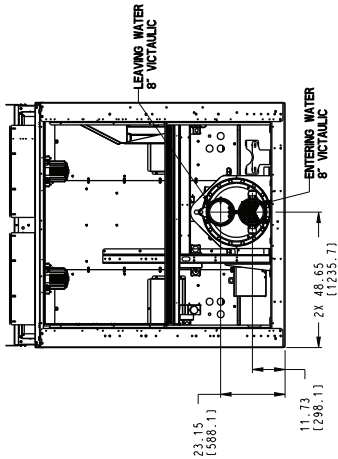
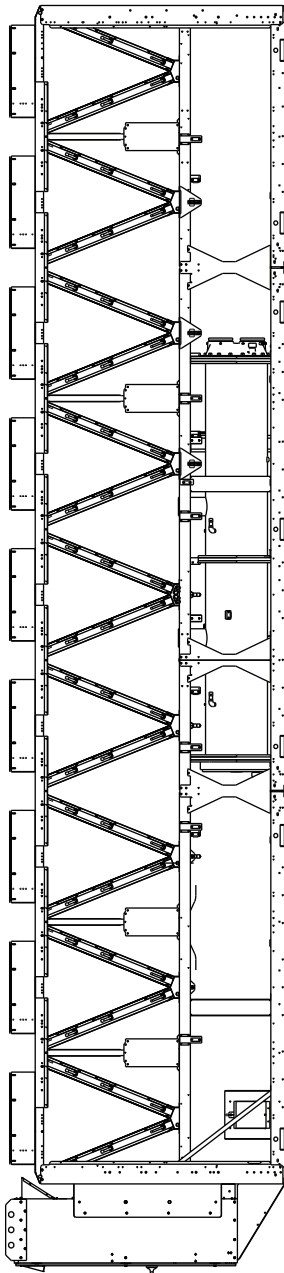
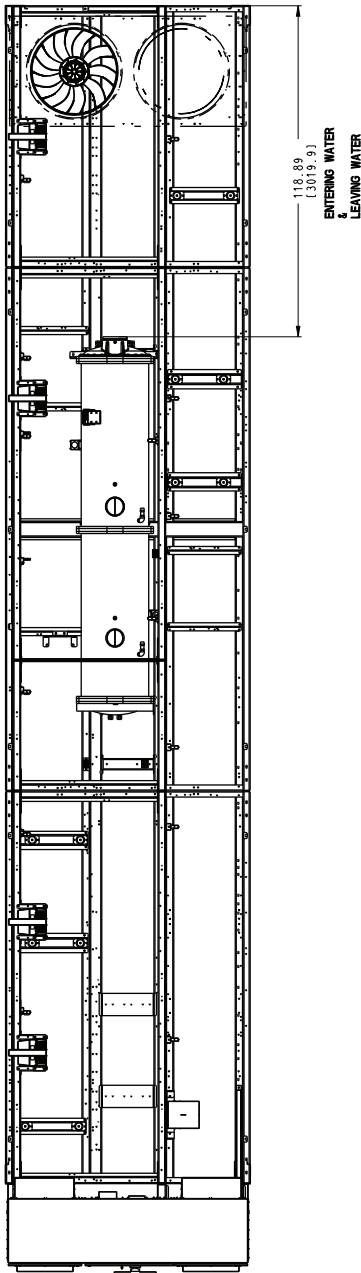


Fig. 18 — 30XV 400 Standard Tier Air-Cooled Chiller (cont)

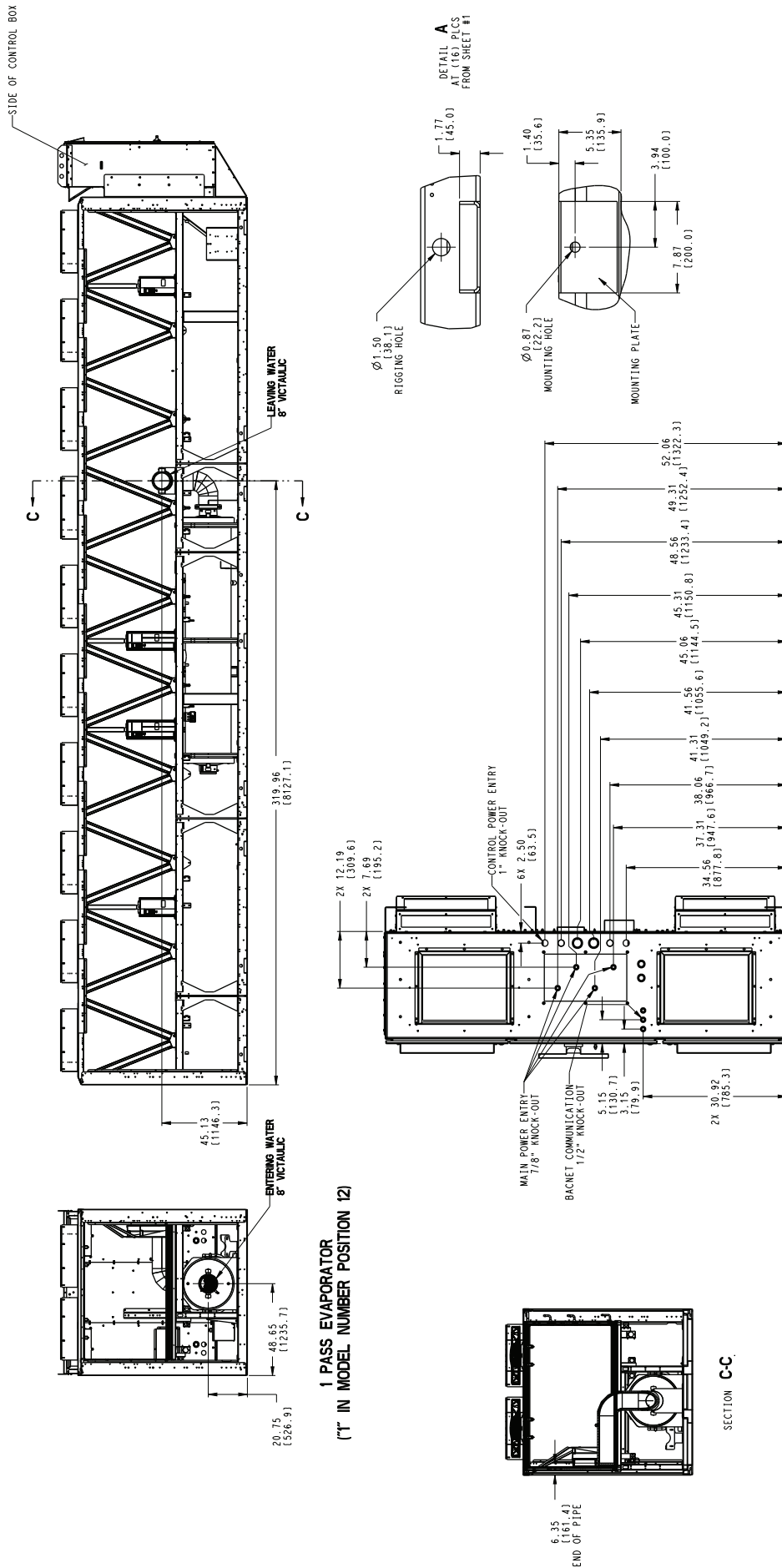


BRINE EVAPORATOR
 ("2" IN MODEL NUMBER POSITION 12)

BRINE COOLER OPTION

ITC CLASSIFICATION U.S. ECCN:EAR99	SHEET 3 OF 3	DATE 02/20/19	SUPERCEDES	30XV 400 STD TIER AIR COOLED CHILLER	30XV60002400	REV C
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Fig. 18 — 30XV 400 Standard Tier Air-Cooled Chiller (cont)



ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 400 MID TIER, 450 STD TIER AIR COOLED CHILLER	REV
U.S. ECCN:EAR99	2 OF 3	02/19/19	-	30XV60002500	C

Fig. 19 — 30XV 400 Mid, 450 Standard Tier Air-Cooled Chiller (cont)

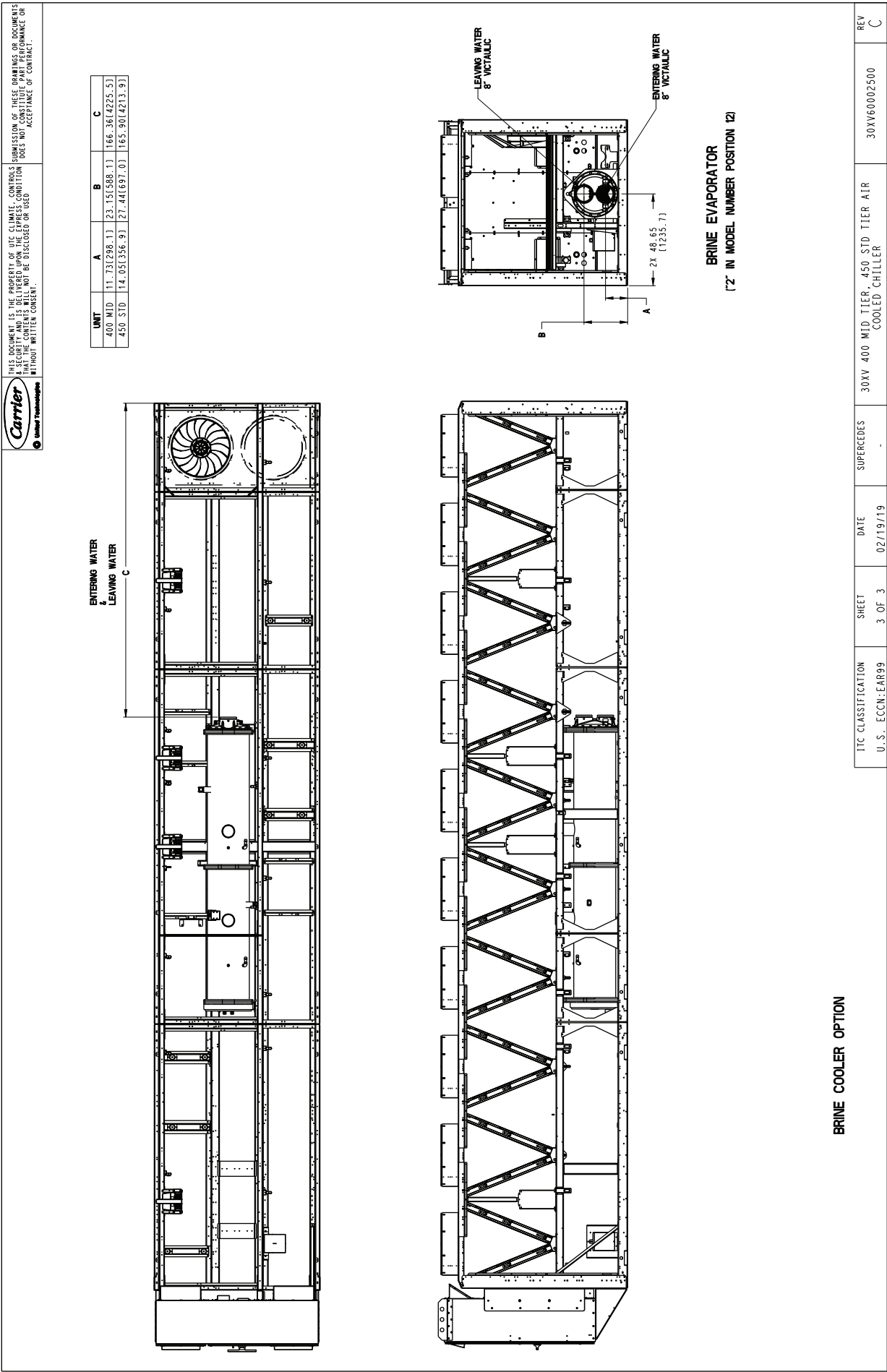


Fig. 19 — 30XV 400 Mid, 450 Standard Tier Air-Cooled Chiller (cont)

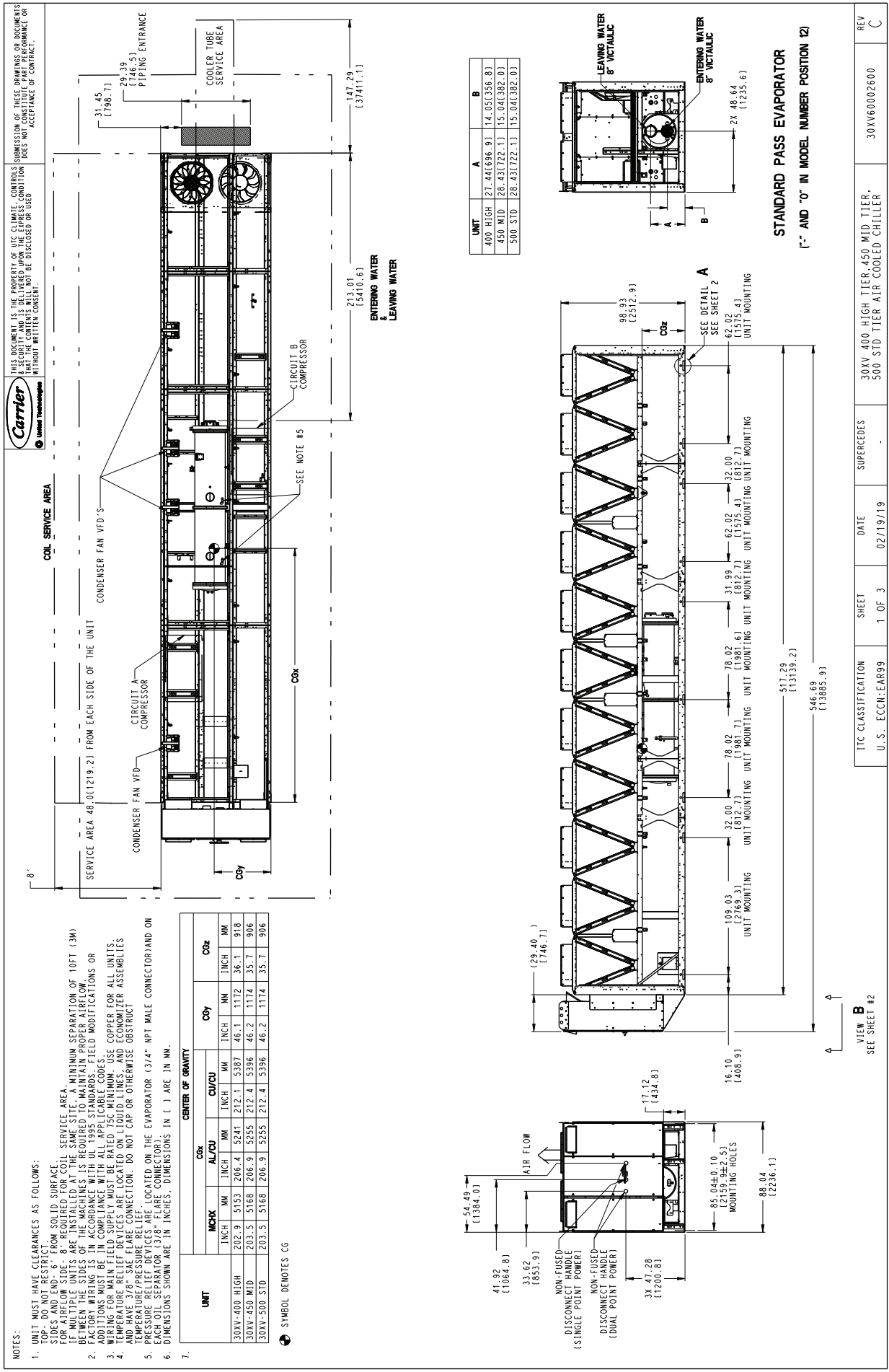


Fig. 20 — 30XV 400 High, 450 Mid, 500 Std Tier Air-Cooled Chiller

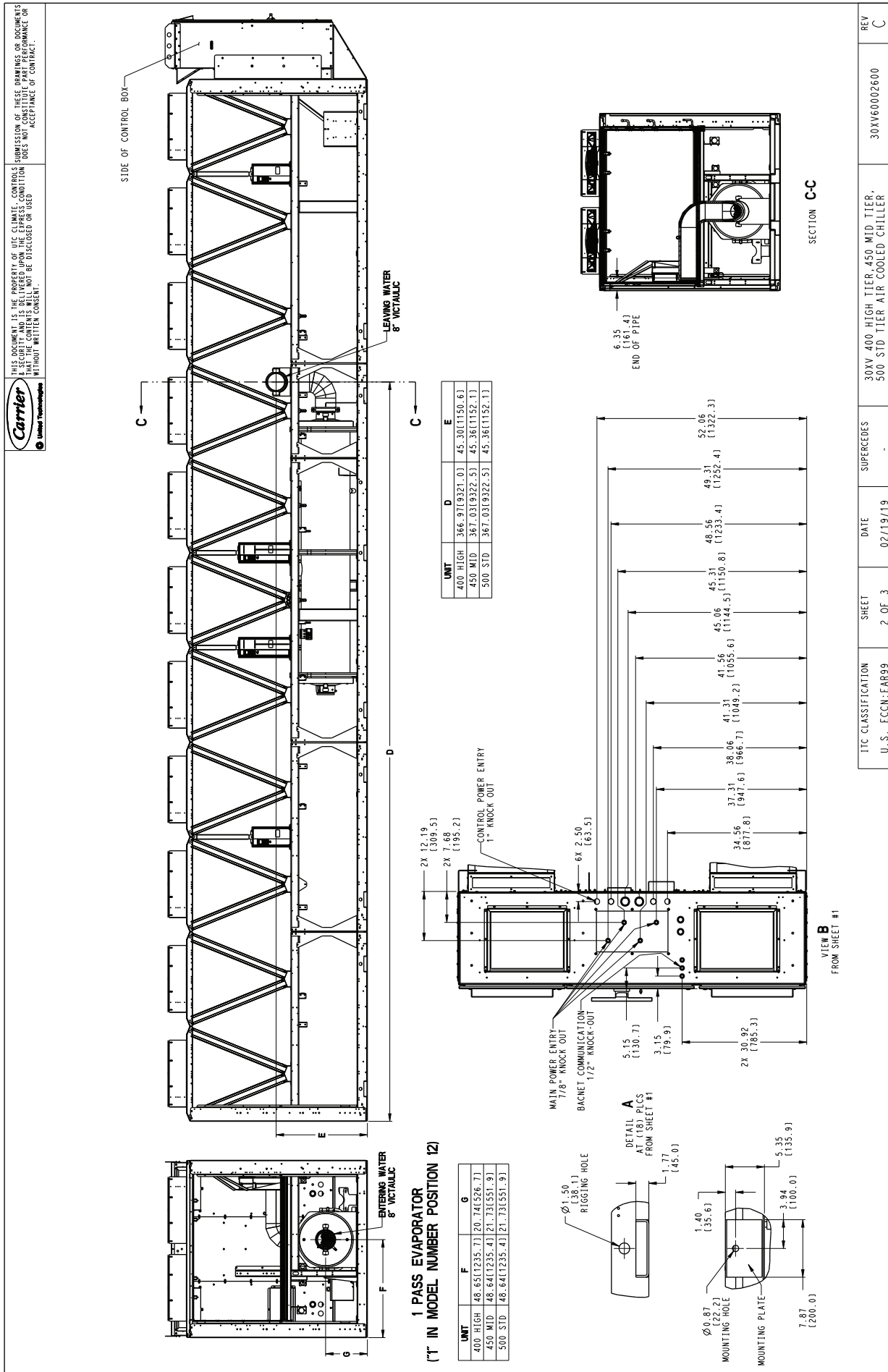


Fig. 20 — 30XV 400 High, 450 Mid, 500 Std Tier Air-Cooled Chiller (cont)

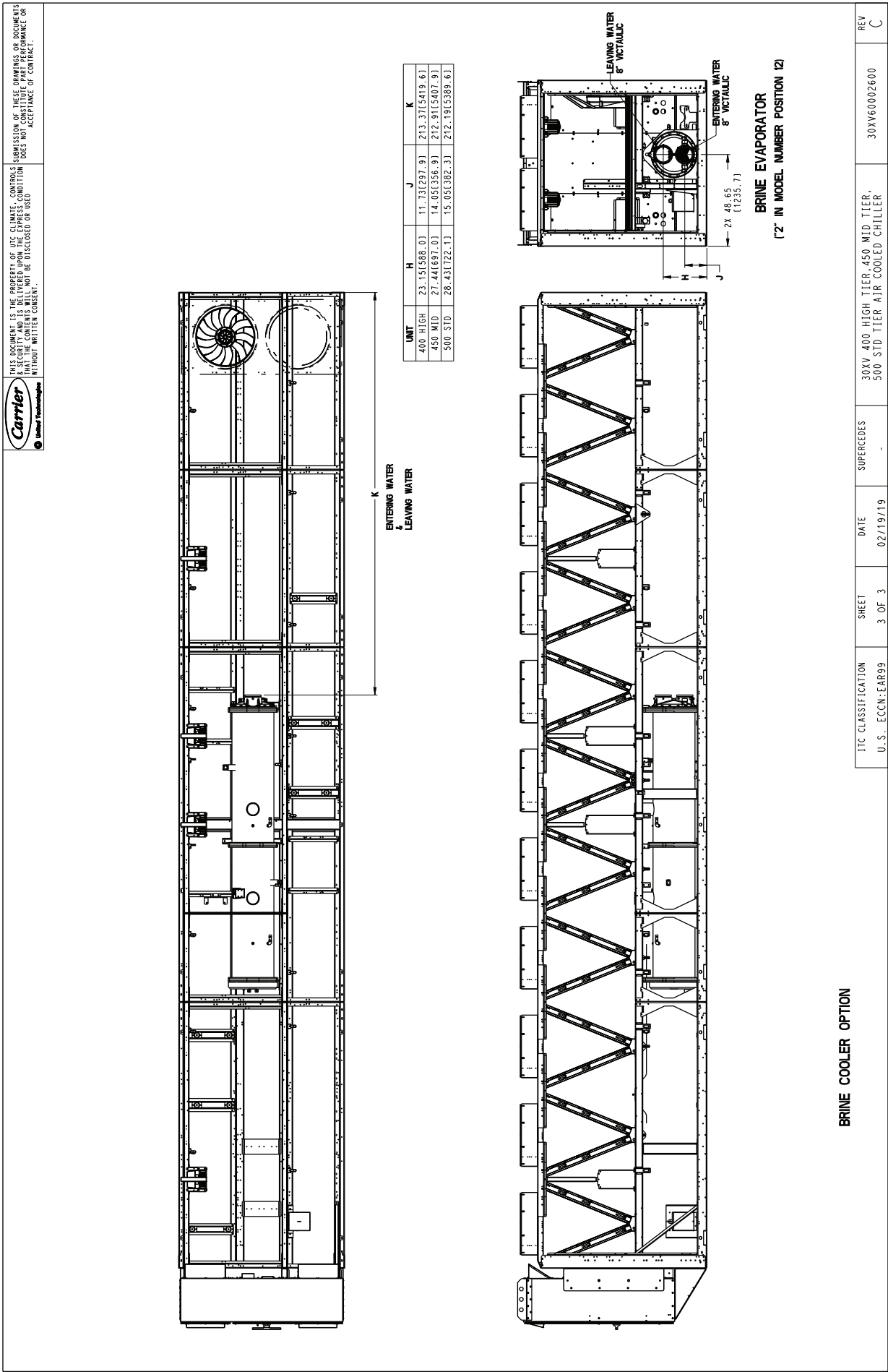


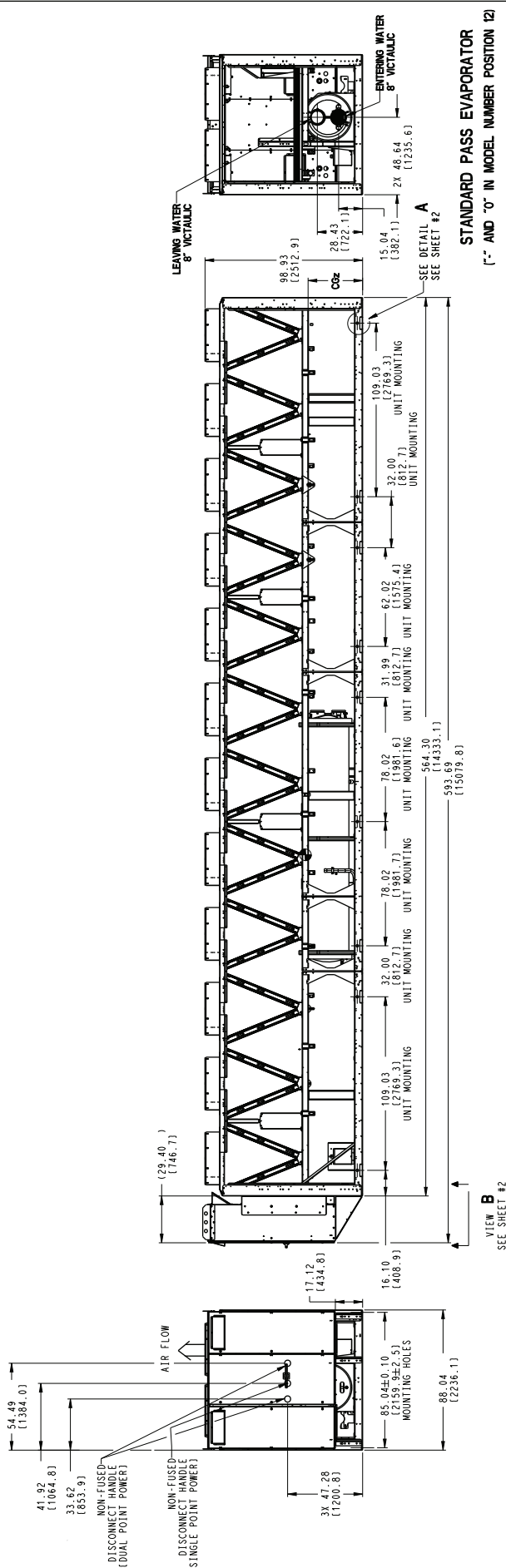
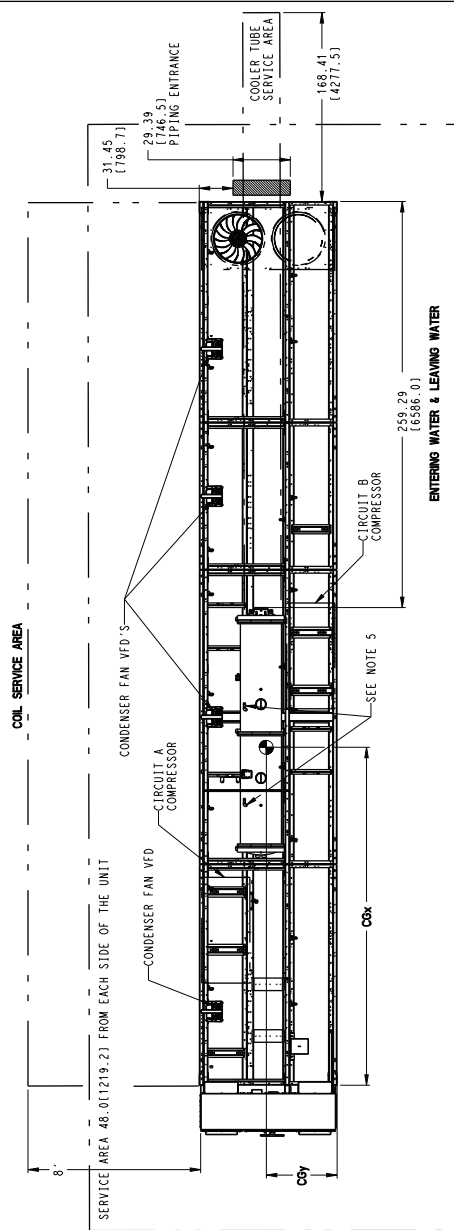
Fig. 20 — 30XV 400 High, 450 Mid, 500 Std Tier Air-Cooled Chiller (cont)

NOTES: 1. UNIT MUST HAVE CLEARANCES AS FOLLOWS:		THIS DOCUMENT IS THE PROPERTY OF UTC CLIMATE CONTROLS IT IS LOANED TO YOU AND IS TO BE RETURNED TO THE SOURCE FROM WHICH IT WAS OBTAINED. IT IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, WITHOUT WRITTEN CONSENT OF THE COMPANY.	SUBMISSION OF THESE DRAWINGS OR DOCUMENTS DOES NOT CONSTITUTE AN ACCEPTANCE OF CONTRACT.
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1. TOP MUST HAVE CLEARANCES AS FOLLOWS:
 a. 1" DO NOT RESTRICT.
 b. SIDES AND END "6" FROM SOLID SURFACE.
 c. IF MULTIPLE UNITS ARE INSTALLED AT THE SAME SITE, A MINIMUM SEPARATION OF 10FT (3M) BETWEEN THE SIDES OF THE MACHINES IS REQUIRED TO MAINTAIN PROPER INFLOW.
2. FACTORY WIRING IS IN ACCORDANCE WITH UL 1995 STANDARDS. FIELD MODIFICATIONS OR REWIRING FOR MAIN FIELD SUPPLY MUST BE RATED TSC MINIMUM USE COPPER FOR ALL UNITS.
3. TEMPERATURE RELIEF DEVICES ARE LOCATED ON LIQUID LINES, AND ECONOMIZER ASSEMBLIES AND HAVE 3/8" - 5/8" FLARE CONNECTION. DO NOT CAP OR OTHERWISE OBSTRUCT.
4. PRESSURE RELIEF DEVICES ARE LOCATED ON THE EVAPORATOR (3/4" NPT MALE CONNECTOR) AND ON EACH OIL SEPARATOR (3/8" FLARE CONNECTOR).
5. DIMENSIONS SHOWN ARE IN INCHES. DIMENSIONS IN () ARE IN MM.

CENTER OF GRAVITY												
UNIT	C&G				C&G				C&G			
	M&C		A/C		M&C		A/C		M&C		A/C	
	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM	INCH	MM
30XV-450 HIGH	216.2	5491	220.4	5599	227.4	5781	46.3	1175	36.3	922		
30XV-500 MID	216.2	5492	220.8	5607	227.6	5811	46.3	1175	36.2	919		

 SYMBOL DENOTES CG

STANDARD PASS EVAPORATOR
"-" AND "O" IN MODEL NUMBER POSITION 12)

ITC CLASSIFICATION	SHEET	DATE	SUPERCODES	REV
U.S. 5500-5-10000	1 OF 2	02/10/14	30XV 450 HIGH TIER, 500 MID TIER ATR COO FD CHITIER	30XV60002700

Fig. 21 — 30XV 450 High, 500 Mid Tier Air-Cooled Chiller

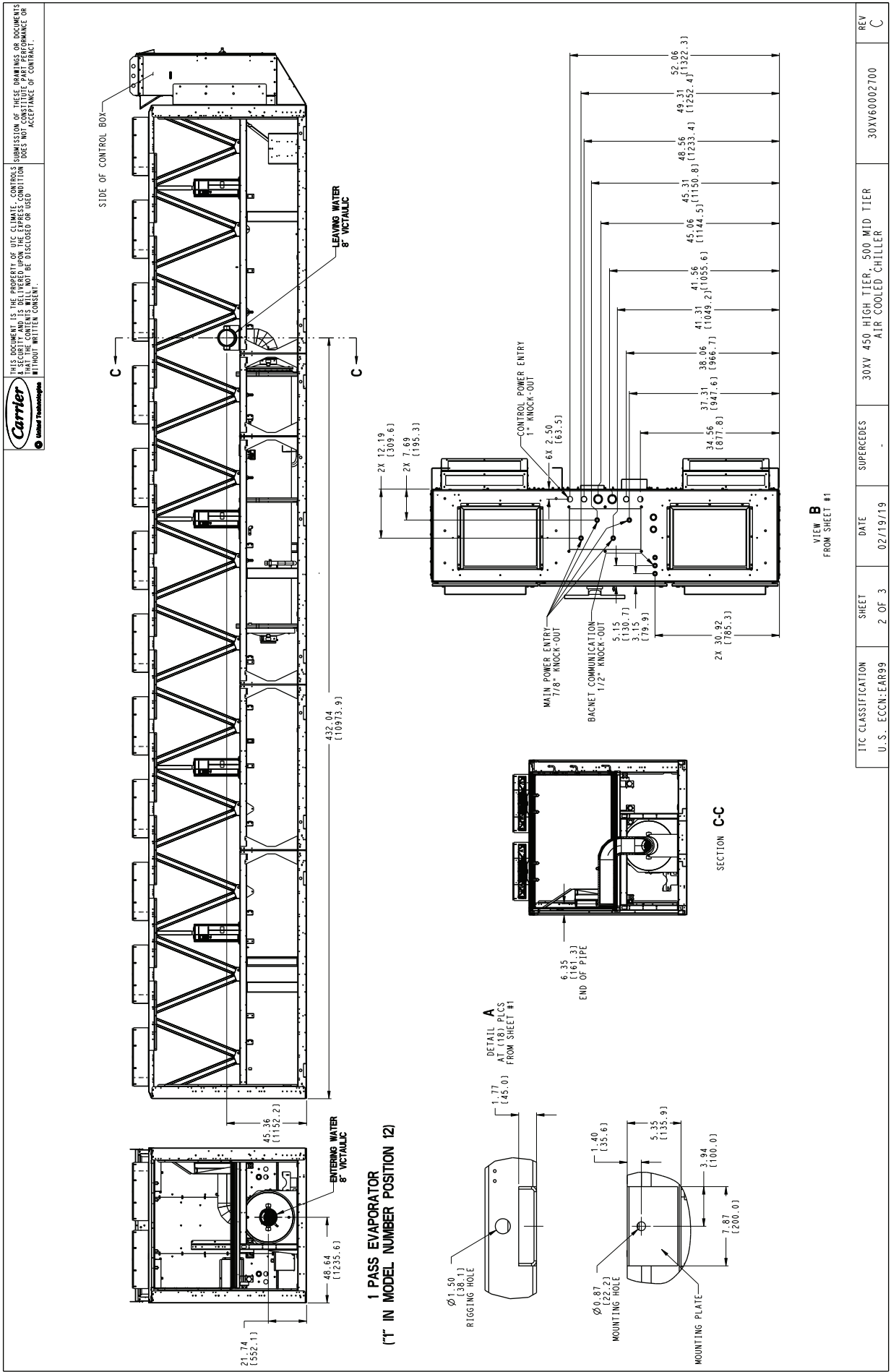


Fig. 21 — 30XV 450 High, 500 Mid Tier Air-Cooled Chiller (cont)

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	30XV 450 HIGH TIER, 500 MID TIER AIR COOLED CHILLER	REV
U.S. ECCN:EAR99	2 OF 3	02/19/19	-	30XV60002700	C

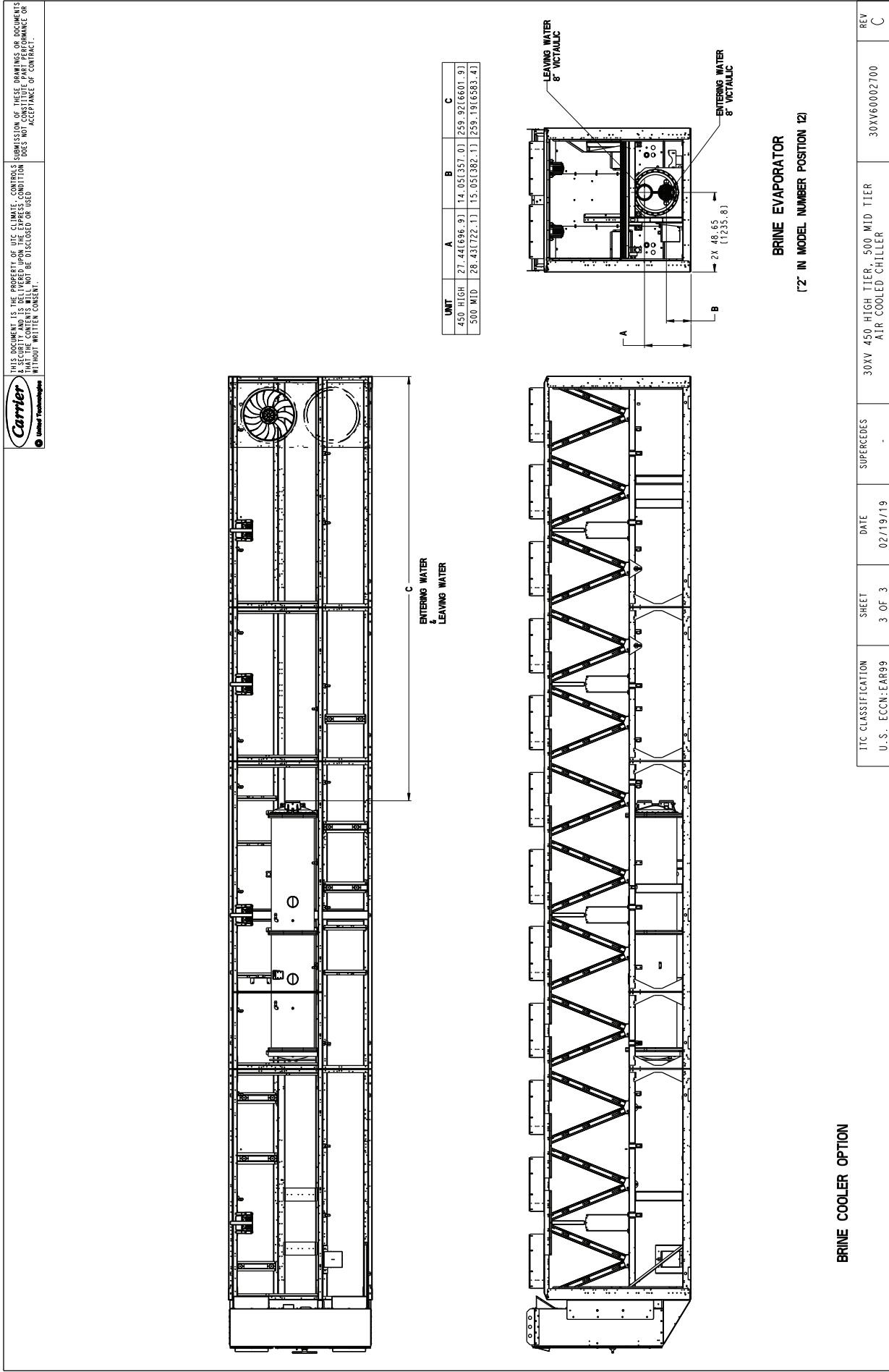


Fig. 21 — 30XV 450 High, 500 Mid Tier Air-Cooled Chiller (cont)

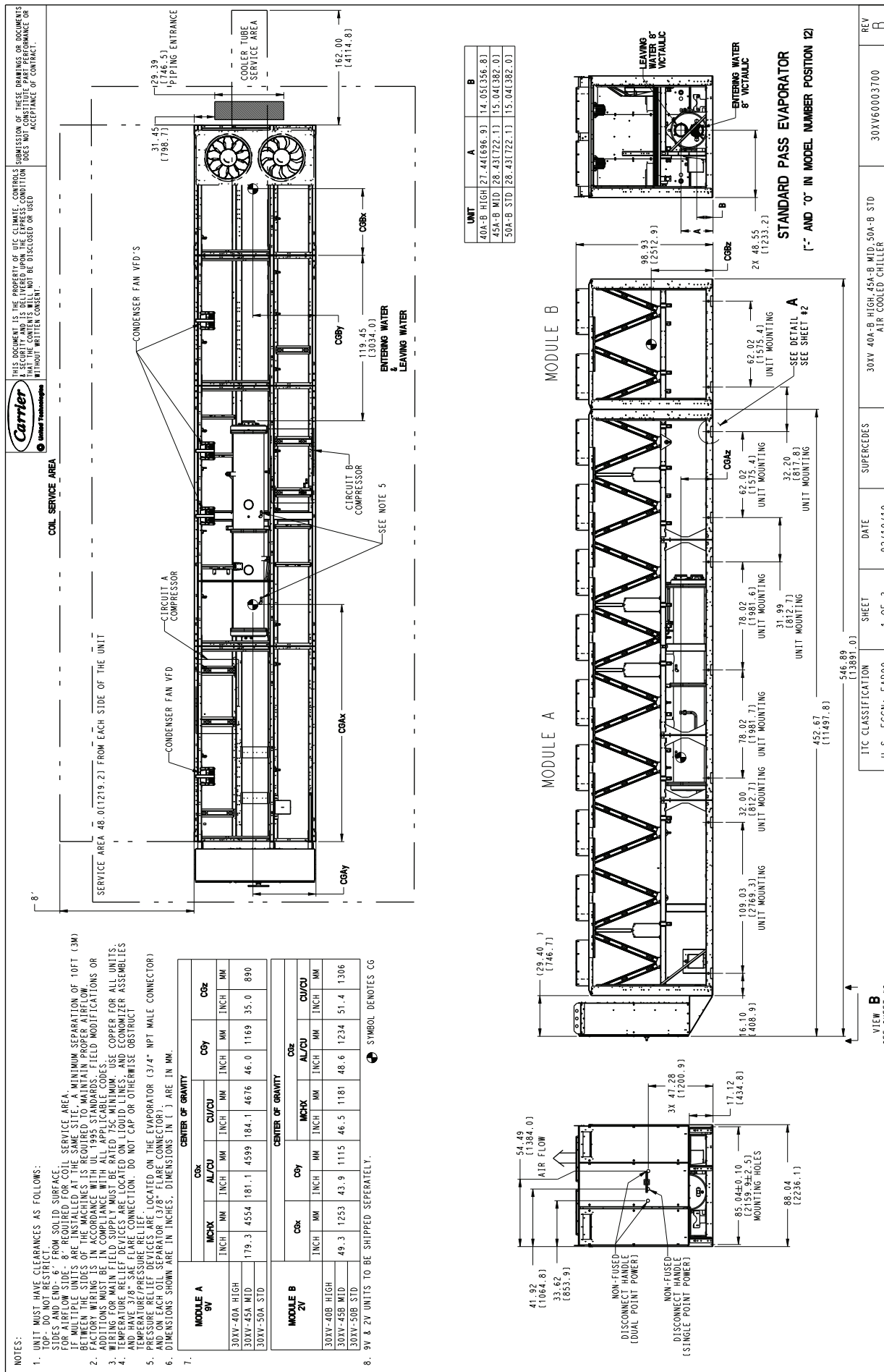
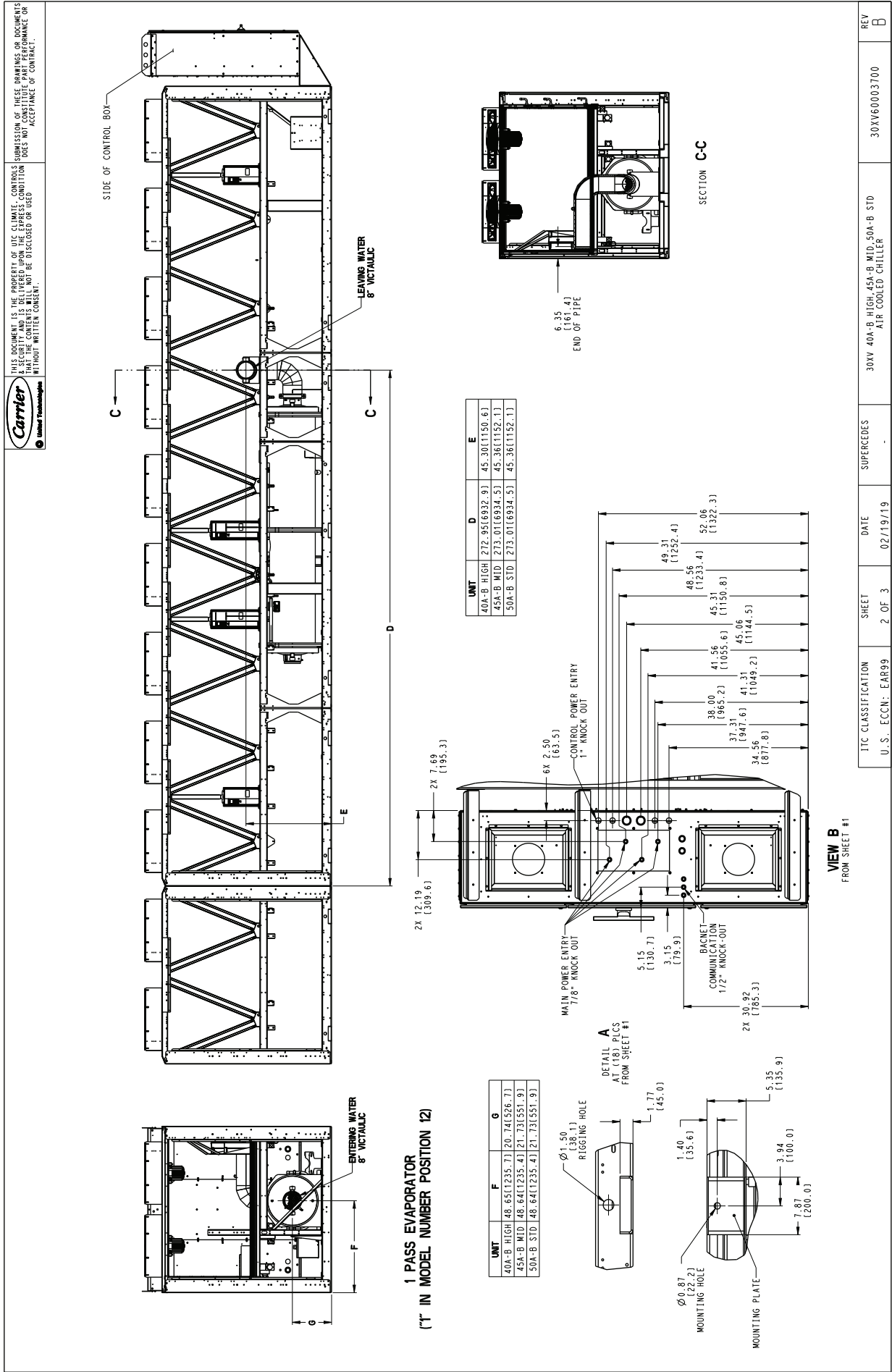


Fig. 22 — 30XV Split Unit 40A-B High, 45A-B Mid, 50A-B Standard Tier Air-Cooled Chiller



REV	SHEET	DATE	SUPERCEDES	30XV 40A-B HIGH, 45A-B MID, 50A-B STD AIR COOLED CHILLER	30XV60003700
B	2 OF 3	02/19/19	-		

Fig. 22 — 30XV Split Unit 40A-B High, 45A-B Mid, 50A-B Standard Tier Air-Cooled Chiller (cont)

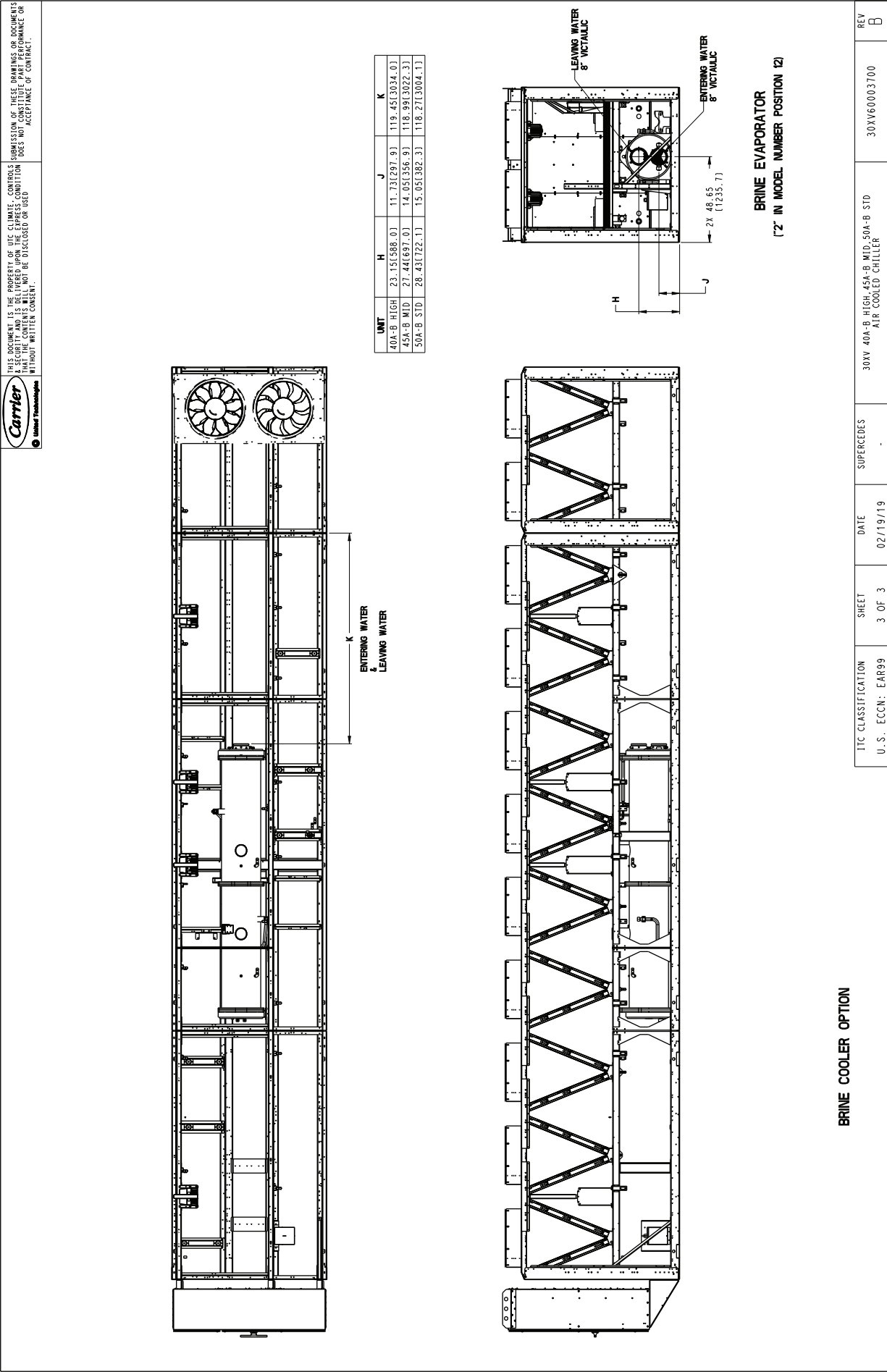
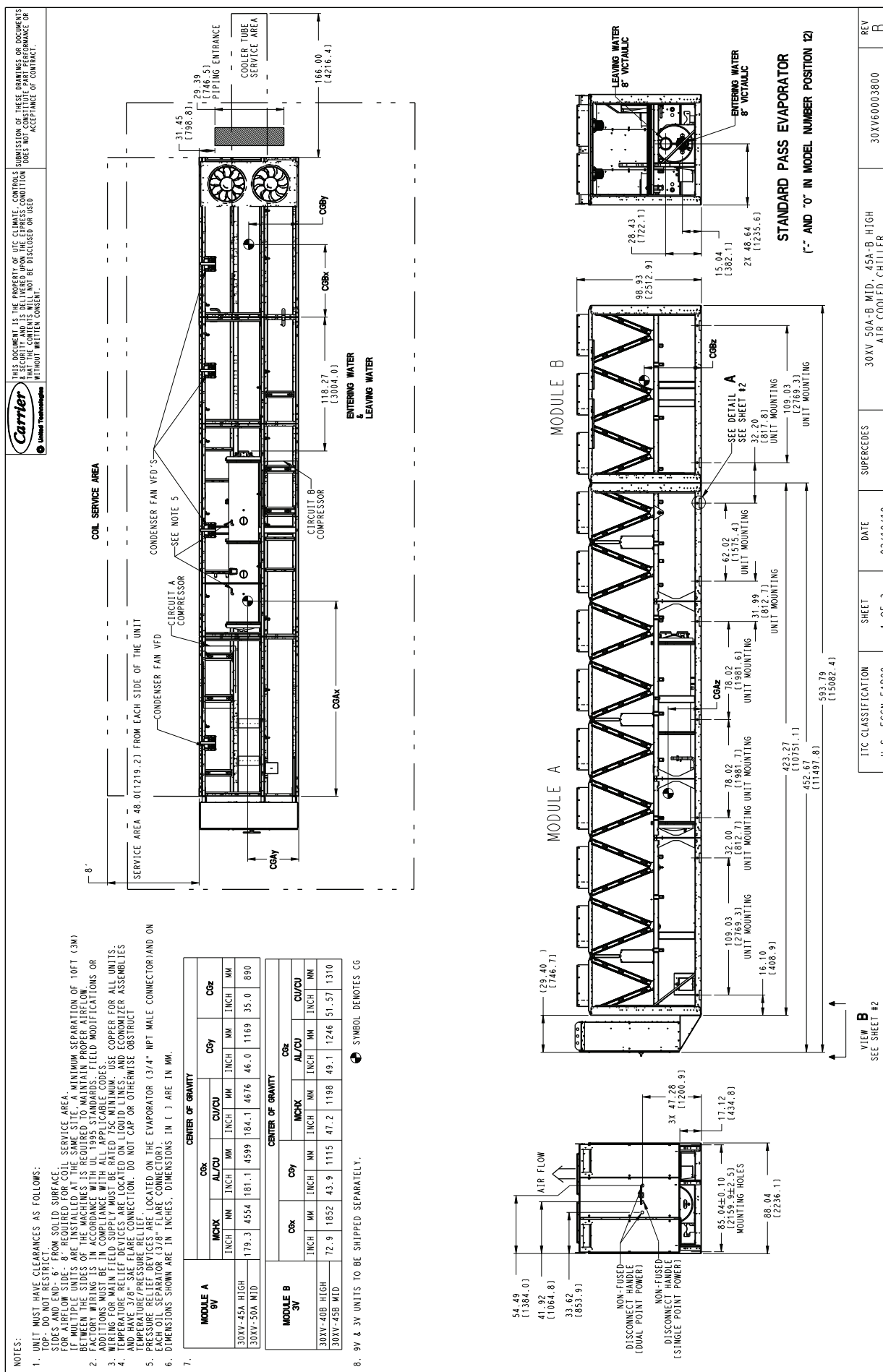


Fig. 22 — 30XV Split Unit 40A-B High, 45A-B Mid, 500A-B Standard Tier Air-Cooled Chiller (cont)



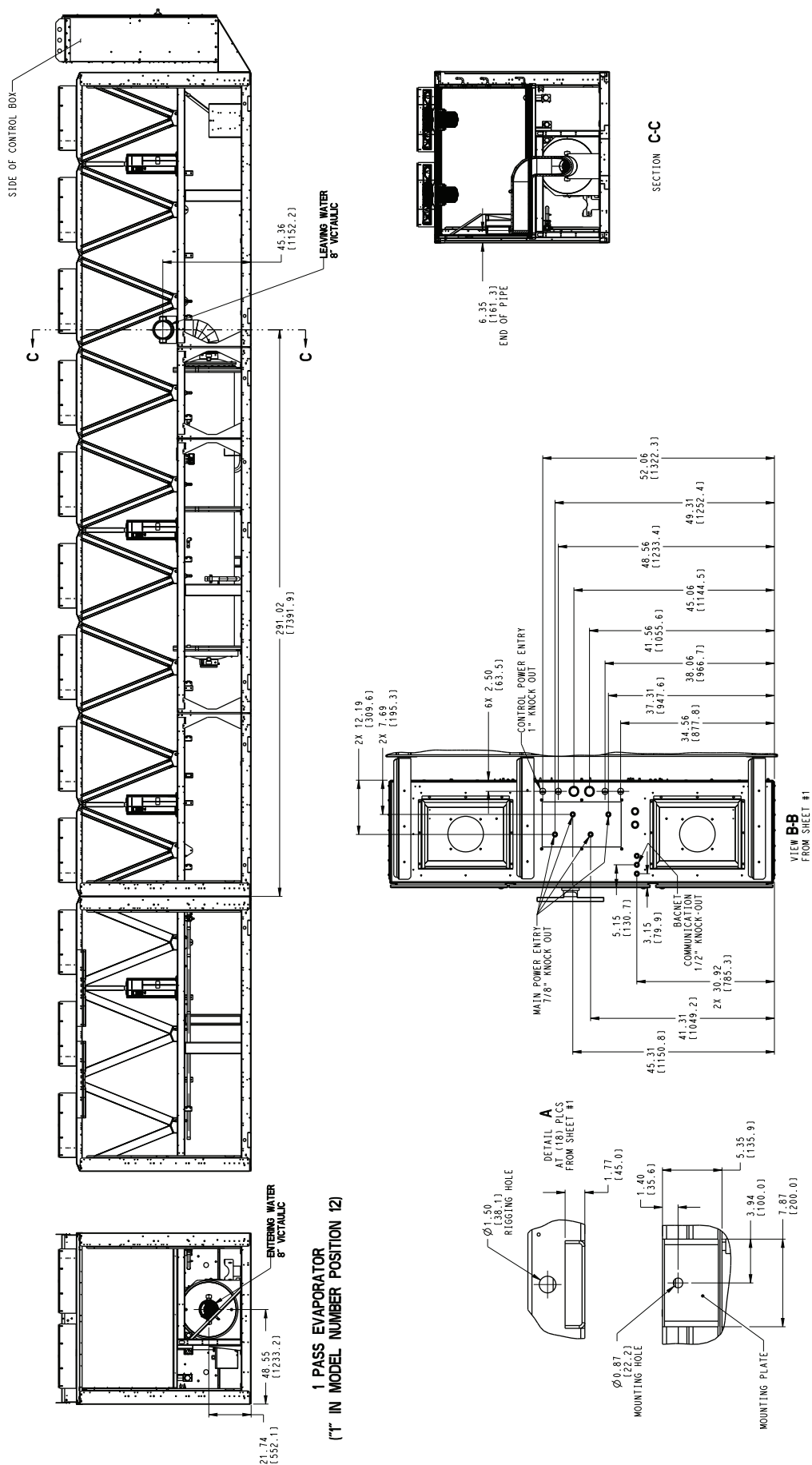


Fig. 23 — 30XV Split Unit 45A-B High, 50A-B Mid Tier Air-Cooled Chiller (cont)

ITC CLASSIFICATION	SHEET	DATE	SUPERCEDES	REV
			30XV 50A-B MID, 45A-B HIGH AIR COOLED CHILLER	30XV60003800 R

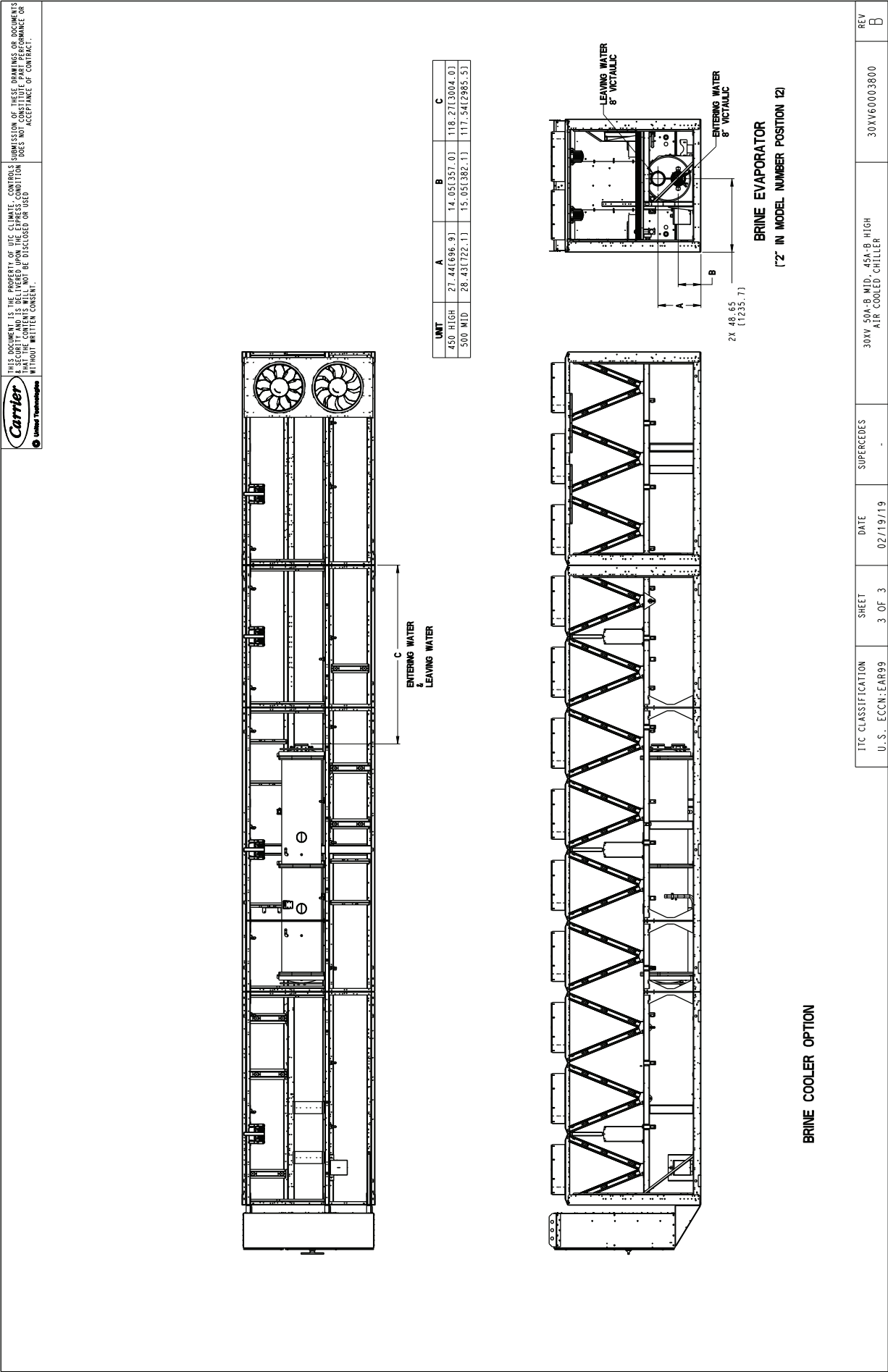


Fig. 23 — 30XV Split Unit 45A-B High, 50A-B Mid Tier Air-Cooled Chiller (cont)

Table 1 — Unit Mounting Weights
Units with MCHX Condenser Coils — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS										
		A	B	C	D	E	F	G	H	I	J	Total
140	S	1610	1130	2945	2871	1128	1425	—	—	—	—	11,110
	M	1610	1130	2961	2887	1144	1442	—	—	—	—	11,175
	H	1610	1130	2961	2887	1354	1651	232	232	—	—	12,058
160	S	1610	1130	2961	2887	1144	1442	—	—	—	—	11,175
	M	1610	1130	3008	2934	1400	1698	232	232	—	—	12,245
	H	1610	1130	3008	2934	1191	1488	416	416	459	459	13,112
180	S	1610	1130	3008	2934	1191	1488	—	—	—	—	11,362
	M	1610	1130	3026	2952	1418	1716	232	232	—	—	12,317
	H	1610	1130	3026	2952	1209	1506	416	416	459	459	13,184
200	S	1610	1130	3026	2952	1418	1716	232	232	—	—	12,317
	M	1610	1130	3083	3010	1266	1564	416	416	459	459	13,413
	H	1610	1130	3083	3010	1266	1564	613	613	657	657	14,202

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS												
		A	B	C	D	E	F	G	H	I	J	K	L	Total
225	S	1316	1007	707	541	3014	2767	1996	1835	—	—	—	—	13,185
	M	1316	1007	707	541	3024	2777	2216	2055	232	232	—	—	14,108
	H	1316	1007	707	541	3024	2777	2006	1845	416	416	459	459	14,975

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	1356	1039	752	576	2739	2750	2843	2811	296	254	—	—	—	—	—	—	15,415
	M	1356	1039	752	576	2806	2817	2910	2878	505	463	232	232	—	—	—	—	16,566
	H	1356	1039	752	576	2851	2862	2955	2923	296	254	416	416	459	459	—	—	17,614
275	S	1356	1039	752	576	2851	2862	2955	2923	296	254	—	—	—	—	—	—	15,864
	M	1356	1039	752	576	2820	2831	2925	2893	505	463	232	232	—	—	—	—	16,624
	H	1356	1039	752	576	2820	2831	2925	2893	296	254	416	416	459	459	—	—	17,492
300	S	1356	1039	752	576	2820	2831	2925	2893	505	463	232	232	—	—	—	—	16,624
	M	1356	1039	752	576	2838	2848	2942	2910	296	254	416	416	459	459	—	—	17,560
	H	1356	1039	752	576	2838	2848	2942	2910	296	254	626	626	670	670	—	—	18,401
325	S	1356	1039	752	576	2838	2848	2942	2910	296	254	416	416	459	459	—	—	17,560
	M	1356	1039	752	576	2857	2868	2961	2929	296	254	626	626	670	670	—	—	18,478
	H	1356	1039	752	576	2857	2868	2961	2929	296	254	572	572	572	572	615	615	19,407

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
350	S	3959	2356	2273	1353	719	596	2442	2827	1616	2128	186	217	—	—	—	—	20,672
	M	3959	2356	2273	1353	773	651	2704	3089	1679	2191	398	429	235	235	—	—	22,326
	H	3959	2356	2273	1353	773	651	2704	3089	1679	2191	186	217	397	397	440	440	23,104

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	3934	2357	2222	1331	892	772	2724	3500	1318	2041	786	784	550	549	—	—	—	—	23,760
	M	3934	2357	2222	1331	896	775	2747	3524	1328	2051	786	784	763	761	235	235	—	—	24,729
	H	3934	2357	2222	1331	896	775	2747	3524	1328	2051	786	784	550	549	397	397	440	440	25,507
450	S	3934	2357	2222	1331	896	775	2747	3524	1328	2051	786	784	763	761	235	235	—	—	24,729
	M	3934	2357	2222	1331	950	830	3032	3808	1413	2136	786	784	550	549	397	397	440	440	26,356
	H	3934	2357	2222	1331	950	830	3032	3808	1413	2136	786	784	550	549	613	613	657	657	27,221
500	S	3934	2357	2222	1331	950	830	3032	3808	1413	2136	786	784	550	549	397	397	440	440	26,356
	M	3934	2357	2222	1331	956	835	3068	3845	1429	2152	786	784	550	549	613	613	657	657	27,337

LEGEND

NOTE: See Fig. 24 for mounting weight reference points.

MCHX — Microchannel Heat Exchanger

**Table 1 — Unit Mounting Weights (cont)
Units with MCHX Condenser Coils — SI**

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	Total								
140	S	730	513	1336	1302	512	647	—	—	—	—	5039								
	M	730	513	1343	1310	519	654	—	—	—	—	5069								
	H	730	513	1343	1310	614	749	105	105	—	—	5469								
160	S	730	513	1343	1310	519	654	—	—	—	—	5069								
	M	730	513	1364	1331	635	770	105	105	—	—	5554								
	H	730	513	1364	1331	540	675	189	189	208	208	5948								
180	S	730	513	1364	1331	540	675	—	—	—	—	5154								
	M	730	513	1372	1339	643	778	105	105	—	—	5587								
	H	730	513	1372	1339	548	683	189	189	208	208	5980								
200	S	730	513	1372	1339	643	778	105	105	—	—	5587								
	M	730	513	1398	1365	574	709	189	189	208	208	6084								
	H	730	513	1398	1365	574	709	278	278	298	298	6442								
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	Total						
225	S	597	457	321	245	1367	1255	906	832	—	—	—	—	5981						
	M	597	457	321	245	1372	1260	1005	932	105	105	—	—	6399						
	H	597	457	321	245	1372	1260	910	837	189	189	208	208	6793						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
250	S	615	471	341	261	1242	1247	1290	1275	134	115	—	—	—	—	—	—	6992		
	M	615	471	341	261	1273	1278	1320	1306	229	210	105	105	—	—	—	—	7514		
	H	615	471	341	261	1293	1298	1340	1326	134	115	189	189	208	208	—	—	7989		
275	S	615	471	341	261	1293	1298	1340	1326	134	115	—	—	—	—	—	—	7196		
	M	615	471	341	261	1279	1284	1327	1312	229	210	105	105	—	—	—	—	7541		
	H	615	471	341	261	1279	1284	1327	1312	134	115	189	189	208	208	—	—	7934		
300	S	615	471	341	261	1279	1284	1327	1312	229	210	105	105	—	—	—	—	7541		
	M	615	471	341	261	1287	1292	1334	1320	134	115	189	189	208	208	—	—	7965		
	H	615	471	341	261	1287	1292	1334	1320	134	115	284	284	304	304	—	—	8346		
325	S	615	471	341	261	1287	1292	1334	1320	134	115	189	189	208	208	—	—	7965		
	M	615	471	341	261	1296	1301	1343	1329	134	115	284	284	304	304	—	—	8381		
	H	615	471	341	261	1296	1301	1343	1329	134	115	260	260	260	260	279	279	8803		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
350	S	1796	1069	1031	614	326	271	1108	1282	733	965	84	98	—	—	—	—	9377		
	M	1796	1069	1031	614	351	295	1227	1401	761	994	181	195	107	107	—	—	10 127		
	H	1796	1069	1031	614	351	295	1227	1401	761	994	84	98	180	180	200	200	10 480		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	1785	1069	1008	604	405	350	1236	1588	598	926	357	356	250	249	—	—	—	—	10 777
	M	1785	1069	1008	604	406	352	1246	1598	602	930	357	356	346	345	107	107	—	—	11 217
	H	1785	1069	1008	604	406	352	1246	1598	602	930	357	356	250	249	180	180	200	200	11 570
450	S	1785	1069	1008	604	406	352	1246	1598	602	930	357	356	346	345	107	107	—	—	11 217
	M	1785	1069	1008	604	431	376	1375	1727	641	969	357	356	250	249	180	180	200	200	11 955
	H	1785	1069	1008	604	431	376	1375	1727	641	969	357	356	250	249	278	278	298	298	12 347
500	S	1785	1069	1008	604	431	376	1375	1727	641	969	357	356	250	249	180	180	200	200	11 955
	M	1785	1069	1008	604	434	379	1392	1744	648	976	357	356	250	249	278	278	298	298	12 400

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with MCHX Condenser Coils and Pump Option — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	1610	1130	2997	2923	1775	1888	475	328	—	—	13,127						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1610	1130	3044	2970	1822	1935	475	328	—	—	13,315						
	H	1610	1130	3062	2988	1245	1542	1013	699	712	491	14,493						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1610	1130	3062	2988	1840	1953	475	328	—	—	13,386						
	H	1610	1130	3080	3006	1263	1560	1013	699	712	491	14,565						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1610	1130	3119	3046	1302	1600	1013	699	712	491	14,722						
	H	1610	1130	3137	3064	1320	1618	1300	897	1073	740	15,890						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	1316	1007	707	541	3078	2831	2060	1899	1013	699	712	491	16,356				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1356	1039	752	576	2905	2916	3009	2977	296	254	1013	699	712	491	—	—	18,995
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1356	1039	752	576	2874	2885	2979	2947	296	254	1013	699	712	491	—	—	18,873
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1356	1039	752	576	2892	2902	2996	2964	296	254	1013	699	712	491	—	—	18,941
	H	1356	1039	752	576	2892	2902	2996	2964	296	254	1300	897	1073	740	—	—	20,037
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1356	1039	752	576	2911	2922	3015	2983	296	254	1300	897	1073	740	—	—	20,114
	H	1356	1039	752	576	2911	2922	3015	2983	296	254	853	853	853	853	896	896	21,306

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with MCHX Condenser Coils and Pump Option — SI

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	730	513	1359	1326	805	857	215	149	—	—	5954						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	730	513	1381	1347	827	878	215	149	—	—	6040						
	H	730	513	1389	1355	565	700	459	317	323	223	6574						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	730	513	1389	1355	835	886	215	149	—	—	6072						
	H	730	513	1397	1364	573	708	459	317	323	223	6607						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	730	513	1415	1381	591	726	459	317	323	223	6678						
	H	730	513	1423	1390	599	724	590	407	487	336	7208						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	597	457	321	245	1396	1284	935	862	459	317	323	223	7419				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) MCHX CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	615	471	341	261	1318	1323	1365	1350	134	115	459	317	323	223	—	—	8616
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	615	471	341	261	1304	1309	1351	1337	134	115	459	317	323	223	—	—	8561
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	615	471	341	261	1312	1316	1359	1344	134	115	459	317	323	223	—	—	8592
	H	615	471	341	261	1312	1316	1359	1344	134	115	590	407	487	336	—	—	9089
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	615	471	341	261	1320	1325	1368	1353	134	115	590	407	487	336	—	—	9123
	H	615	471	341	261	1320	1325	1368	1353	134	115	387	387	387	387	406	406	9664

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Al/Cu Condenser Coils — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	Total								
140	S	1692	1212	3026	2953	1210	1507	—	—	—	—	11,599								
	M	1694	1215	3045	2972	1228	1526	—	—	—	—	11,680								
	H	1697	1218	3048	2975	1470	1767	271	271	—	—	12,718								
160	S	1697	1217	3048	2974	1231	1528	—	—	—	—	11,694								
	M	1701	1221	3098	3025	1520	1817	275	275	—	—	12,930								
	H	1701	1222	3099	3026	1282	1580	488	488	531	531	13,949								
180	S	1699	1219	3097	3023	1280	1577	—	—	—	—	11,896								
	M	1702	1222	3117	3044	1539	1836	261	261	—	—	12,982								
	H	1702	1223	3118	3045	1301	1599	504	504	547	547	14,090								
200	S	1702	1222	3117	3044	1539	1836	276	276	—	—	13,012								
	M	1702	1223	3175	3102	1359	1656	489	489	532	532	14,260								
	H	1706	1226	3179	3105	1362	1660	718	718	762	762	15,200								
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	Total						
225	S	1392	1083	783	617	3119	2872	2102	1940	—	—	—	—	13,910						
	M	1393	1084	784	618	3130	2883	2322	2189	280	280	—	—	14,965						
	H	1393	1084	784	618	3130	2883	2112	1951	493	493	536	536	16,013						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
250	S	1422	1105	818	642	2834	2845	2967	2935	333	291	—	—	—	—	—	—	16,191		
	M	1425	1108	821	646	2904	2915	3037	3005	574	532	273	273	—	—	—	—	17,514		
	H	1426	1109	822	647	2950	2961	3083	3051	337	295	486	486	530	530	—	—	18,712		
275	S	1424	1107	820	644	2948	2959	3081	3049	335	293	—	—	—	—	—	—	16,660		
	M	1426	1109	822	646	2919	2930	3052	3020	575	533	274	274	—	—	—	—	17,582		
	H	1427	1110	823	647	2920	2931	3053	3021	338	296	487	487	530	530	—	—	18,600		
300	S	1426	1109	822	646	2919	2930	3052	3020	575	533	274	274	—	—	—	—	17,582		
	M	1427	1111	824	648	2938	2949	3071	3039	339	297	487	487	531	531	—	—	18,679		
	H	1430	1113	826	651	2941	2951	3074	3042	341	299	729	729	773	773	—	—	19,670		
325	S	1427	1111	824	648	2938	2949	3071	3039	339	297	487	487	531	531	—	—	18,679		
	M	1431	1114	827	651	2960	2971	3094	3062	342	300	729	729	774	774	—	—	19,757		
	H	1431	1114	827	651	2960	2971	3093	3061	342	300	666	666	666	666	709	709	20,832		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
350	S	4058	2455	2372	1452	808	686	2532	2916	1734	2246	227	258	—	—	—	—	21,746		
	M	4061	2458	2375	1455	866	743	2797	3181	1800	2312	471	502	280	280	—	—	23,580		
	H	4061	2459	2376	1455	866	743	2797	3181	1800	2312	230	261	470	470	514	514	24,510		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	4036	2458	2324	1433	965	844	2854	3631	1390	2114	859	857	623	621	—	—	—	—	25,010
	M	4037	2459	2325	1434	989	868	2840	3617	1421	2144	860	858	665	664	280	280	—	—	26,140
	H	4037	2459	2325	1434	989	868	2840	3617	1421	2144	860	858	624	623	471	471	514	514	27,069
450	S	4037	2459	2325	1434	989	868	2840	3617	1421	2144	860	858	665	664	280	280	—	—	26,140
	M	4038	2461	2326	1435	1045	924	3126	3902	1507	2231	861	859	625	624	472	472	515	515	27,938
	H	4040	2463	2328	1437	1047	926	3128	3904	1509	2233	863	861	656	655	718	718	763	763	29,012
500	S	4038	2461	2326	1435	1045	924	3126	3902	1507	2231	861	859	625	624	472	472	515	515	27,938
	M	4047	2469	2334	1444	1059	938	3171	3948	1532	2255	870	868	663	661	725	725	769	769	29,247

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

**Table 1 — Unit Mounting Weights (cont)
Units with Al/Cu Condenser Coils — SI**

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	Total								
140	S	767	550	1373	1339	549	683	—	—	—	—	5261								
	M	769	551	1381	1348	557	692	—	—	—	—	5298								
	H	770	552	1383	1349	667	802	123	123	—	—	5769								
160	S	770	552	1382	1349	558	693	—	—	—	—	5304								
	M	771	554	1405	1372	689	824	125	125	—	—	5865								
	H	772	554	1406	1372	582	717	221	221	241	241	6327								
180	S	771	553	1405	1371	581	716	—	—	—	—	5396								
	M	772	554	1414	1381	698	833	118	118	—	—	5889								
	H	772	555	1414	1381	590	725	229	229	248	248	6391								
200	S	772	554	1414	1381	698	833	125	125	—	—	5902								
	M	772	555	1440	1407	616	751	222	222	241	241	6468								
	H	774	556	1442	1409	618	753	326	326	346	346	6894								
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	Total						
225	S	632	491	355	280	1415	1303	953	880	—	—	—	—	6310						
	M	632	492	356	280	1420	1308	1053	993	127	127	—	—	6788						
	H	632	492	356	280	1420	1308	958	885	223	223	243	243	7263						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
250	S	645	501	371	291	1285	1290	1346	1331	151	132	—	—	—	—	—	—	7344		
	M	646	503	373	293	1317	1322	1378	1363	261	242	124	124	—	—	—	—	7944		
	H	647	503	373	293	1338	1343	1398	1384	153	134	220	220	240	240	—	—	8488		
275	S	646	502	372	292	1337	1342	1397	1383	152	133	—	—	—	—	—	—	7557		
	M	647	503	373	293	1324	1329	1385	1370	261	242	124	124	—	—	—	—	7975		
	H	647	503	373	294	1325	1329	1385	1370	153	134	221	221	241	241	—	—	8437		
300	S	647	503	373	293	1324	1329	1385	1370	261	242	124	124	—	—	—	—	7975		
	M	647	504	374	294	1333	1338	1393	1378	154	135	221	221	241	241	—	—	8473		
	H	649	505	375	295	1334	1339	1394	1380	155	136	330	330	351	351	—	—	8922		
325	S	647	504	374	294	1333	1338	1393	1378	154	135	221	221	241	241	—	—	8473		
	M	649	505	375	295	1343	1348	1403	1389	155	136	331	331	351	351	—	—	8962		
	H	649	505	375	295	1343	1348	1403	1389	155	136	302	302	302	302	322	322	9449		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
350	S	1841	1114	1076	659	367	311	1148	1323	787	1019	103	117	—	—	—	—	9864		
	M	1842	1115	1077	660	393	337	1269	1443	816	1049	214	228	127	127	—	—	10 696		
	H	1842	1115	1078	660	393	337	1269	1443	816	1049	105	119	213	213	233	233	11 117		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	1831	1115	1054	650	438	383	1295	1647	631	959	390	389	283	282	—	—	—	—	11 344
	M	1831	1116	1054	650	449	394	1288	1640	644	973	390	389	393	392	127	127	—	—	11 857
	H	1831	1116	1054	650	449	394	1288	1641	644	973	390	389	283	282	213	213	233	233	12 278
450	S	1831	1116	1054	650	449	394	1288	1640	644	973	390	389	393	392	127	127	—	—	11 857
	M	1832	1116	1055	651	474	419	1418	1770	684	1012	391	390	284	283	214	214	234	234	12 672
	H	1833	1117	1056	652	475	420	1419	1771	685	1013	392	390	298	297	326	326	346	346	13 159
500	S	1832	1116	1055	651	474	419	1418	1770	684	1012	391	390	284	283	214	214	234	234	12 672
	M	1836	1120	1059	655	480	426	1438	1791	695	1023	395	394	301	300	329	329	349	349	13 266

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Al/Cu Condenser Coils and Pump Option — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	1697	1218	3084	3011	1892	2004	514	367	—	—	13,788						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1701	1221	3134	3061	1942	2054	517	370	—	—	14,000						
	H	1701	1222	3153	3080	1336	1634	1085	771	784	564	15,330						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1702	1222	3153	3080	1961	2074	504	357	—	—	14,052						
	H	1702	1223	3172	3099	1355	1653	1101	787	800	580	15,471						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1702	1223	3229	3156	1413	1710	1086	772	785	565	15,641						
	H	1706	1226	3233	3159	1416	1714	1406	1003	1178	846	16,887						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	1393	1084	784	618	3184	2937	2166	2005	1090	776	789	568	17,394				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1426	1109	822	647	3004	3015	3137	3105	337	295	1083	769	782	562	—	—	20,093
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1427	1110	823	647	2974	2985	3107	3075	338	296	1084	770	783	562	—	—	19,981
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1427	1111	824	648	2992	3003	3125	3093	339	297	1084	771	784	563	—	—	20,060
	H	1430	1113	826	651	2995	3005	3128	3096	341	299	1403	1000	1176	844	—	—	21,306
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1431	1114	827	651	3014	3025	3148	3116	342	300	1404	1001	1176	844	—	—	21,393
	H	1431	1114	827	651	3014	3025	3147	3115	342	300	947	947	947	947	989	989	22,732

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Al/Cu Condenser Coils and Pump Option — SI

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	770	552	1399	1366	858	909	233	167	—	—	6254						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	771	554	1422	1388	881	932	235	168	—	—	6350						
	H	772	554	1430	1397	606	741	492	350	356	256	6954						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	772	554	1430	1397	889	941	228	162	—	—	6374						
	H	772	555	1439	1405	615	750	499	357	363	263	7018						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	772	555	1465	1431	641	776	493	350	356	256	7095						
	H	774	556	1466	1433	642	777	638	455	534	384	7660						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	632	492	356	280	1444	1332	983	909	494	352	358	258	7890				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Al/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	647	503	373	293	1363	1367	1423	1408	153	134	491	349	355	255	—	—	9114
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	647	503	373	294	1349	1354	1409	1395	153	134	492	349	355	255	—	—	9063
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	647	504	374	294	1357	1362	1417	1403	154	135	492	350	355	255	—	—	9099
	H	649	505	375	295	1358	1363	1419	1404	155	136	637	454	533	383	—	—	9664
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	649	505	375	295	1367	1372	1428	1413	155	136	637	454	534	383	—	—	9704
	H	649	505	375	295	1367	1372	1428	1413	155	136	429	429	429	429	429	429	10 311

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Cu/Cu Condenser Coils — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	Total								
140	S	1879	1399	3214	3140	1397	1694	—	—	—	—	12,724								
	M	1882	1402	3233	3159	1416	1713	—	—	—	—	12,805								
	H	1885	1405	3236	3162	1727	2025	342	342	—	—	14,124								
160	S	1884	1404	3235	3161	1418	1716	—	—	—	—	12,819								
	M	1888	1408	3286	3212	1777	2075	345	345	—	—	14,336								
	H	1889	1409	3287	3213	1470	1767	628	628	672	672	15,636								
180	S	1887	1407	3284	3211	1468	1765	—	—	—	—	13,021								
	M	1889	1410	3305	3231	1797	2094	346	346	—	—	14,418								
	H	1890	1410	3306	3232	1489	1786	629	629	673	673	15,717								
200	S	1889	1410	3305	3231	1797	2094	362	346	—	—	14,433								
	M	1890	1410	3363	3289	1546	1843	629	629	673	673	15,947								
	H	1893	1414	3366	3293	1550	1847	929	929	973	973	17,167								
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	Total						
225	S	1533	1224	924	758	3330	3083	2312	2151	—	—	—	—	15,316						
	M	1534	1225	925	759	3341	3094	2632	2470	351	351			16,681						
	H	1533	1225	925	759	3341	3094	2422	2261	633	633	677	677	18,179						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
250	S	1562	1246	959	783	3045	3055	3248	3216	403	361	—	—	—	—	—	—	17,878		
	M	1566	1249	962	786	3115	3126	3318	3286	715	673	343	343	—	—	—	—	19,482		
	H	1567	1250	963	787	3161	3172	3364	3332	408	365	627	627	670	670	—	—	20,961		
275	S	1564	1248	961	785	3159	3170	3362	3330	405	363	—	—	—	—	—	—	18,347		
	M	1567	1250	963	787	3130	3141	3334	3302	716	674	344	344	—	—	—	—	19,550		
	H	1567	1250	964	788	3131	3142	3334	3302	408	366	627	627	671	671	—	—	20,849		
300	S	1567	1250	963	787	3130	3141	3334	3302	716	674	344	344	—	—	—	—	19,550		
	M	1568	1251	964	789	3149	3160	3352	3320	409	367	628	628	672	672	—	—	20,928		
	H	1571	1254	967	791	3151	3162	3355	3323	412	369	939	939	984	984	—	—	22,201		
325	S	1568	1251	964	789	3149	3160	3352	3320	409	367	628	628	672	672	—	—	20,928		
	M	1571	1254	968	792	3171	3182	3375	3343	412	370	940	940	984	984	—	—	22,288		
	H	1571	1254	967	792	3171	3182	3374	3342	412	370	854	854	854	854	896	896	23,644		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total		
350	S	4269	2666	2583	1663	996	873	2719	3103	1992	2504	298	328	—	—	—	—	23,995		
	M	4271	2669	2586	1666	1053	931	2984	3368	2057	2569	612	643	350	350			26,111		
	H	4272	2670	2586	1666	1053	931	2985	3369	2058	2570	301	332	611	611	654	654	27,321		
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	4247	2669	2534	1643	1106	985	3135	3912	1531	2254	1000	997	764	762	—	—	—	—	27,540
	M	4248	2670	2535	1644	1176	1056	3028	3804	1608	2332	1001	998	1076	1075	351	351	—	—	28,951
	H	4248	2670	2536	1645	1177	1056	3028	3804	1608	2332	1001	998	765	763	611	611	655	655	30,162
450	S	4248	2670	2535	1644	1176	1056	3028	3804	1608	2332	1001	998	1076	1075	351	351	—	—	28,951
	M	4249	2671	2537	1646	1232	1111	3313	4090	1695	2418	1002	999	766	764	612	612	656	656	31,030
	H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	S	4249	2671	2537	1646	1232	1111	3313	4090	1695	2418	1002	999	766	764	612	612	656	656	31,030
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

**Table 1 — Unit Mounting Weights (cont)
Units with Cu/Cu Condenser Coils — SI**

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS										
		A	B	C	D	E	F	G	H	I	J	Total
140	S	852	635	1458	1424	634	769	—	—	—	—	5771
	M	854	636	1466	1433	642	777	—	—	—	—	5808
	H	855	637	1468	1434	784	918	155	155	—	—	6406
160	S	855	637	1467	1434	643	778	—	—	—	—	5814
	M	856	639	1490	1457	806	941	156	156	—	—	6503
	H	857	639	1491	1457	667	802	285	285	305	305	7092
180	S	856	638	1490	1456	666	801	—	—	—	—	5906
	M	857	639	1499	1466	815	950	157	157	—	—	6540
	H	857	640	1499	1466	675	810	286	286	305	305	7129
200	S	857	639	1499	1466	815	950	164	157	—	—	6547
	M	857	640	1525	1492	701	836	286	286	305	305	7233
	H	859	641	1527	1494	703	838	421	421	441	441	7787

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS												
		A	B	C	D	E	F	G	H	I	J	K	L	Total
225	S	695	555	419	344	1511	1399	1049	976	—	—	—	—	6947
	M	696	556	419	344	1516	1403	1194	1121	159	159	—	—	7566
	H	696	555	419	344	1515	1403	1099	1026	287	287	307	307	8246

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	709	565	435	355	1381	1386	1473	1459	183	164	—	—	—	—	—	—	8109
	M	710	566	436	357	1413	1418	1505	1491	324	305	156	156	—	—	—	—	8837
	H	711	567	437	357	1434	1439	1526	1511	185	166	284	284	304	304	—	—	9508
275	S	710	566	436	356	1433	1438	1525	1510	184	165	—	—	—	—	—	—	8322
	M	711	567	437	357	1420	1425	1512	1498	325	306	156	156	—	—	—	—	8868
	H	711	567	437	357	1420	1425	1512	1498	185	166	285	285	304	304	—	—	9457
300	S	711	567	437	357	1420	1425	1512	1498	325	306	156	156	—	—	—	—	8868
	M	711	568	437	358	1428	1433	1521	1506	186	166	285	285	305	305	—	—	9493
	H	712	569	439	359	1429	1434	1522	1507	187	168	426	426	446	446	—	—	10 070
325	S	711	568	437	358	1428	1433	1521	1506	186	166	285	285	305	305	—	—	9493
	M	713	569	439	359	1438	1443	1531	1516	187	168	426	426	447	447	—	—	10 109
	H	713	569	439	359	1438	1443	1531	1516	187	168	387	387	387	387	407	407	10 725

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
350	S	1936	1209	1172	754	452	396	1233	1408	903	1136	135	149	—	—	—	—	10 884
	M	1937	1211	1173	756	478	422	1354	1528	933	1165	278	292	159	159	—	—	11 844
	H	1938	1211	1173	756	478	422	1354	1528	933	1166	136	150	277	277	297	297	12 393

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																		
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	Total
400	S	1926	1211	1150	745	502	447	1422	1774	694	1023	453	452	346	346	—	—	—	—	12 492
	M	1927	1211	1150	746	534	479	1373	1725	729	1058	454	453	488	487	159	159	—	—	13 132
	H	1927	1211	1150	746	534	479	1373	1726	730	1058	454	453	347	346	277	277	297	297	13 681
450	S	1927	1211	1150	746	534	479	1373	1725	729	1058	454	453	488	487	159	159	—	—	13 132
	M	1927	1212	1151	746	559	504	1503	1855	769	1097	454	453	347	347	278	278	297	297	14 075
	H	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	S	1927	1212	1151	746	559	504	1503	1855	769	1097	454	453	347	347	278	278	297	297	14 075
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Cu/Cu Condenser Coils and Pump Option — English

30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	1885	1405	3272	3198	2149	2262	585	437	—	—	15,193						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1888	1408	3322	3248	2199	2312	588	441	—	—	15,406						
	H	1889	1409	3341	3267	1524	1821	1225	912	925	704	17,017						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1889	1410	3341	3267	2218	2331	589	442	—	—	15,487						
	H	1890	1410	3360	3286	1543	1840	1226	913	926	705	17,098						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	1890	1410	3399	3325	1582	1879	1226	913	926	705	17,256						
	H	1893	1414	3420	3347	1604	1901	1617	1214	1389	1057	18,855						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	1533	1225	925	759	3395	3148	2476	2315	1230	916	929	709	19,560				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (lb) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1567	1250	963	787	3215	3226	3418	3386	408	365	1224	910	923	702	—	—	22,342
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	1567	1250	964	788	3185	3196	3388	3356	408	366	1224	910	924	703	—	—	22,230
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1568	1251	964	789	3203	3214	3406	3374	409	367	1225	911	924	704	—	—	22,309
	H	1571	1254	967	791	3205	3216	3409	3377	412	369	1614	1211	1387	1054	—	—	23,837
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	1571	1254	968	792	3225	3236	3429	3397	412	370	1615	1212	1387	1055	—	—	23,924
	H	1571	1254	967	792	3225	3236	3428	3396	412	370	1134	1134	1134	1134	1177	1177	25,543

LEGEND

MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

Table 1 — Unit Mounting Weights (cont)
Units with Cu/Cu Condenser Coils and Pump Option — SI

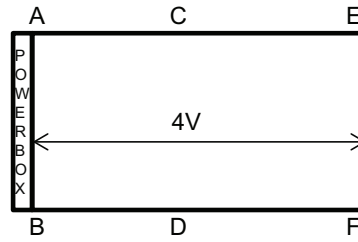
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	Total						
140	S	—	—	—	—	—	—	—	—	—	—	—						
	M	—	—	—	—	—	—	—	—	—	—	—						
	H	855	637	1484	1451	975	1026	265	198	—	—	6892						
160	S	—	—	—	—	—	—	—	—	—	—	—						
	M	856	639	1507	1473	998	1049	267	200	—	—	6988						
	H	857	639	1515	1482	691	826	556	414	419	319	7719						
180	S	—	—	—	—	—	—	—	—	—	—	—						
	M	857	639	1515	1482	1006	1057	267	200	—	—	7025						
	H	857	640	1524	1490	700	835	556	414	420	320	7756						
200	S	—	—	—	—	—	—	—	—	—	—	—						
	M	857	640	1542	1508	718	852	556	414	420	320	7827						
	H	859	641	1552	1518	727	862	733	551	630	479	8553						
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	Total				
225	S	—	—	—	—	—	—	—	—	—	—	—	—	—				
	M	—	—	—	—	—	—	—	—	—	—	—	—	—				
	H	696	555	419	344	1540	1428	1123	1050	558	416	422	322	8872				
30XV UNIT SIZE	TIER (MODEL NO. POS. 10)	MOUNTING WEIGHT (kg) Cu/Cu CONDENSER COILS																
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Total
250	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	711	567	437	357	1458	1463	1550	1536	185	166	555	413	419	319	—	—	10 134
275	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	H	711	567	437	357	1445	1450	1537	1522	185	166	555	413	419	319	—	—	10 084
300	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	711	568	437	358	1453	1458	1545	1530	186	166	556	413	419	319	—	—	10 119
	H	712	569	439	359	1454	1459	1546	1532	187	168	732	549	629	478	—	—	10 812
325	S	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	M	713	569	439	359	1463	1468	1555	1541	187	168	733	550	629	478	—	—	10 852
	H	713	569	439	359	1463	1468	1555	1541	187	168	515	515	515	515	534	534	11 586

LEGEND

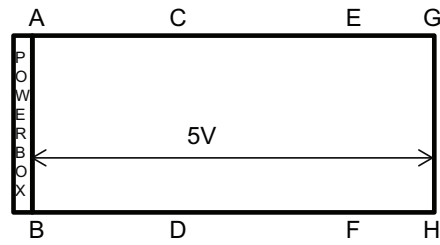
MCHX — Microchannel Heat Exchanger

NOTE: See Fig. 24 for mounting weight reference points.

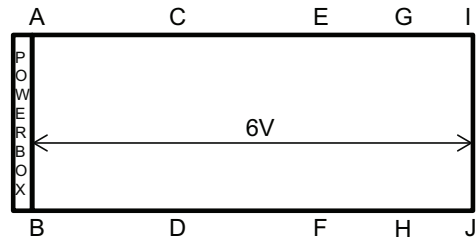
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
140	X	X	
160	X		
180	X		



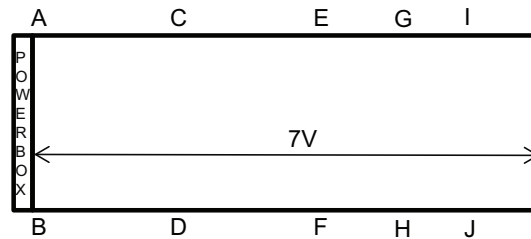
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
140			X
160		X	
180		X	
200	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
160			X
180			X
200		X	



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
200			X

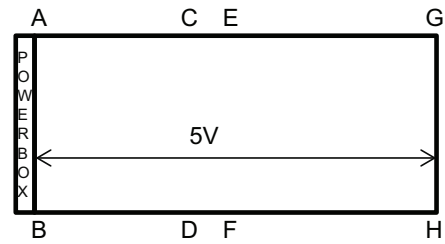


Letters indicate the general location of the mounting weight locations on the base of the unit.

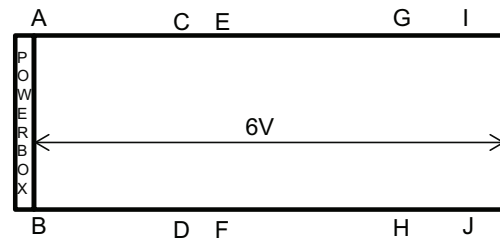
NOTE: See Table 1 for mounting weight at reference points.

Fig. 24 — Unit Mounting Weight Reference Points

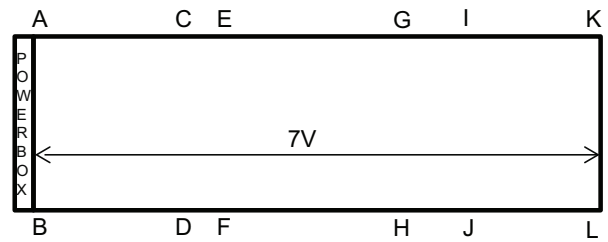
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
225	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
225		X	



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
225			X



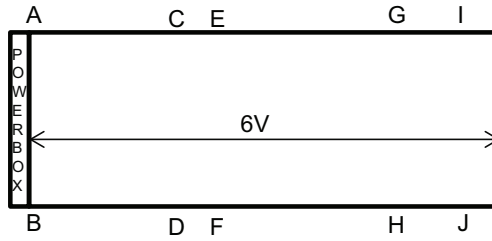
Letters indicate the general location of the mounting weight locations on the base of the unit.

NOTE: See Table 1 for mounting weight at reference points.

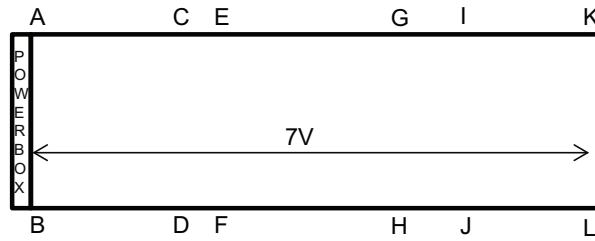
Fig. 24 — Unit Mounting Weight Reference Points (cont)

30XV250-325

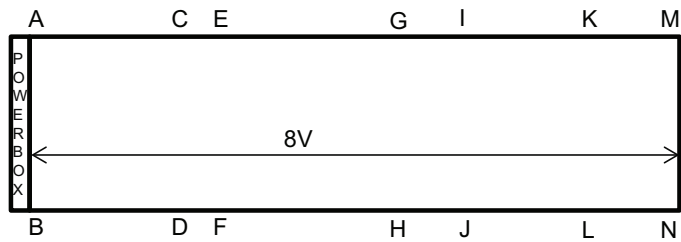
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
250	X		
275	X		



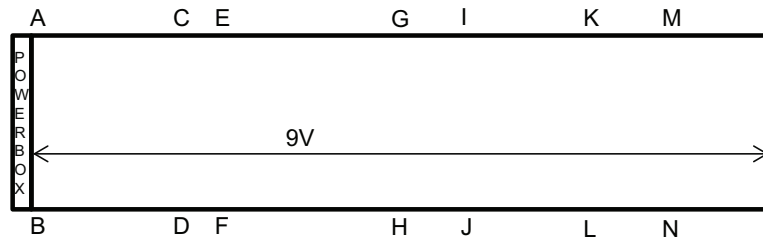
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
250		X	
275		X	
300	X		



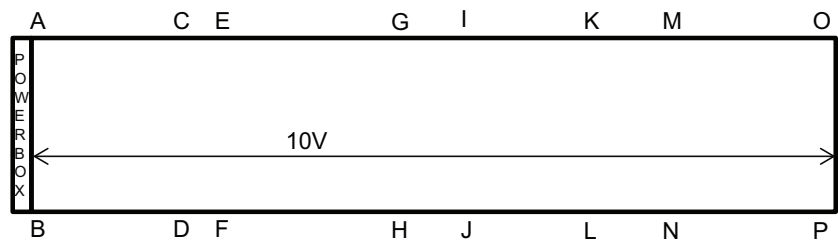
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
250			X
275			X
300		X	
325	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
300			X
325		X	



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
325			X



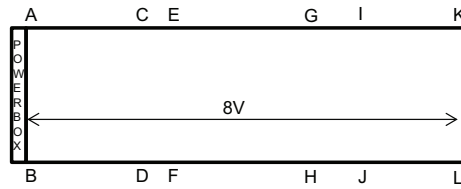
Letters indicate the general location of the mounting weight locations on the base of the unit.

NOTE: See Table 1 for mounting weight at reference points.

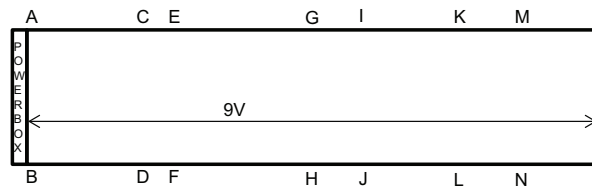
Fig. 24 — Unit Mounting Weight Reference Points (cont)

30XV350-500

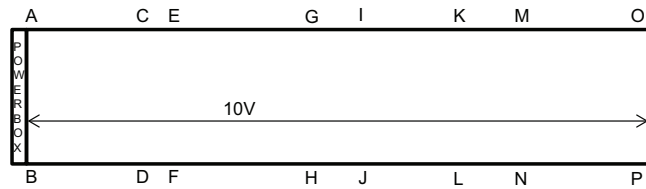
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
350	X		



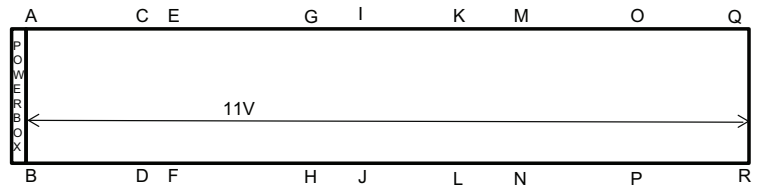
UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
350		X	
400	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
350			X
400		X	
450	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
400, 40A			X
450, 45A		X	
500, 50A	X		



UNIT 30XV SIZE	TIER (MODEL NO. POS. 10)		
	S	M	H
450, 45A			X
500, 50A		X	



Letters indicate the general location of the mounting weight locations on the base of the unit.

NOTE: See Table 1 for mounting weight at reference points.

Fig. 24 — Unit Mounting Weight Reference Points (cont)

Table 2 — Physical Data — English
30XV 140T-180T

UNIT 30XV WITH FLOODED EVAPORATOR	140			160			180		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (in.) (Note 1)									
Length	207.6	207.6	254.6	207.6	254.6	301.6	207.6	254.6	301.6
Width					88.0				
Height					98.9				
OPERATING WEIGHT (lb) (Note 2)									
Al-Cu Condenser Coil	11,599	11,680	12,718	11,694	12,930	13,949	11,896	12,982	14,090
Cu-Cu Condenser Coil	12,724	12,805	14,124	12,819	14,336	15,636	13,021	14,418	15,717
MCHX Condenser Coil	11,110	11,175	12,058	11,175	12,245	13,112	11,362	12,317	13,184
Al-Cu Condenser Coil with Pump Option	—	—	13,788	—	14,000	15,330	—	14,052	15,471
Cu-Cu Condenser Coil with Pump Option	—	—	15,193	—	15,406	17,017	—	15,487	17,098
MCHX Condenser Coil with Pump Option	—	—	13,127	—	13,315	14,493	—	13,386	14,565
SHIPPING WEIGHT (lb) (Note 3)									
Al-Cu Condenser Coil	11,426	11,492	12,530	11,506	12,720	13,739	11,686	12,755	13,864
Cu-Cu Condenser Coil	12,551	12,617	13,936	12,631	14,126	15,425	12,811	14,191	15,490
MCHX Condenser Coil	10,937	10,987	11,870	10,987	12,035	12,902	11,152	12,090	12,957
Al-Cu Condenser Coil with Pump Option	—	—	13,456	—	13,646	14,904	—	13,681	15,029
Cu-Cu Condenser Coil with Pump Option	—	—	14,862	—	15,052	16,591	—	15,117	16,656
MCHX Condenser Coil with Pump Option	—	—	12,796	—	12,961	14,067	—	13,016	14,122
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	152/157	160/165	180/185	162/177	190/200	208/218	172/182	195/205	213/223
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	100/105	110/115	115/120	110/125	125/135	130/140	120/130	130/140	135/145
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	167/172	177/182	195/200	187/197	205/215	223/233	192/202	210/220	228/238
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	115/120	125/130	130/135	135/145	140/150	145/155	140/150	145/155	150/160
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (gal) Ckt A/Ckt B	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5	5.5/5.5
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (gal.)	21	23	23	23	25	25	25	27	27
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220
Maximum Water-Side Pressure (psig)	300	300	300	300	300	300	300	300	300
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-Pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	5/—	5/—	5/—	5/—	5/—	5/—	5/—	5/—	5/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	4/4	4/4	4/4	4/4	5/4	5/4	5/4	5/4	5/4
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	5/5	5/5	5/5	5/5	5/5	5/5	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Fans (Ckt A/ Ckt B)	4/4	4/4	5/5	4/4	5/5	6/6	4/4	5/5	6/6
Total Airflow (cfm) RTPF Coil	105,120	105,120	131,400	105,120	131,400	157,680	105,120	131,400	157,680
Total Airflow (cfm) MCHX Coil	116,000	116,000	145,000	116,000	145,000	174,000	116,000	145,000	174,000
CONDENSER COILS									
No. Coils (Ckt A/ Ckt B)	4/4	4/4	5/5	4/4	5/5	6/6	4/4	5/5	6/6

LEGEND

Cu	—	Copper
Al	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 840 rpm.

Table 2 — Physical Data — English (cont)
30XV 200T-250T

UNIT 30XV WITH FLOODED EVAPORATOR	200			225			250		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (in.) (Note 1)									
Length	254.6	301.6	348.6	251.7	298.7	345.7	298.7	345.7	392.7
Width	88.0								
Height	98.9								
OPERATING WEIGHT (lb) (Note 2)									
Al-Cu Condenser Coil	13,012	14,260	15,200	13,910	14,965	16,013	16,191	17,514	18,712
Cu-Cu Condenser Coil	14,433	15,947	17,167	15,316	16,681	18,179	17,878	19,482	20,961
MCHX Condenser Coil	12,317	13,413	14,202	13,185	14,108	14,975	15,415	16,566	17,614
Al-Cu Condenser Coil with Pump Option	—	15,641	16,887	—	—	17,394	—	—	20,093
Cu-Cu Condenser Coil with Pump Option	—	17,256	18,855	—	—	19,560	—	—	22,342
MCHX Condenser Coil with Pump Option	—	14,722	15,890	—	—	16,356	—	—	18,995
SHIPPING WEIGHT (lb) (Note 3)									
Al-Cu Condenser Coil	12,785	14,004	14,943	13,627	14,667	15,715	15,893	17,117	18,316
Cu-Cu Condenser Coil	14,207	15,690	16,911	15,033	16,383	17,881	17,580	19,085	20,565
MCHX Condenser Coil	12,090	13,157	13,946	12,902	13,810	14,677	15,117	16,170	17,217
Al-Cu Condenser Coil with Pump Option	—	15,169	16,415	—	—	16,880	—	—	19,481
Cu-Cu Condenser Coil with Pump Option	—	16,856	18,383	—	—	19,046	—	—	21,730
MCHX Condenser Coil with Pump Option	—	14,322	15,418	—	—	15,842	—	—	18,382
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	195/205	213/223	231/241	253/187	276/210	294/228	238/248	266/276	284/294
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	130/140	135/145	140/150	175/135	185/145	190/150	160/170	175/185	180/190
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	215/225	233/243	251/261	273/207	296/230	314/248	258/268	276/286	294/304
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	150/160	155/165	160/170	195/155	205/165	210/170	180/190	185/195	190/200
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	60/40	60/40	60/40	50/50	50/50	50/50
Oil Charge (gal) Ckt A/Ckt B	5.5/5.5	5.5/5.5	5.5/5.5	6.0/5.5	6.0/5.5	6.0/5.5	6.0/6.0	6.0/6.0	6.0/6.0
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (gal.)	27	31	31	34	36	36	36	48	48
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220
Maximum Water-Side Pressure (psig)	300	300	300	300	300	300	300	300	300
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-Pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	6/6	6/6	6/6	6/6	6/6	6/6	8/8	8/8
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	5/—	8/6	8/—	8/—	8/—	8/—	8/—	8/8	8/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	5/5	5/5	6/6	6/6	6/6	6/6	8/6	8/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Fans (Ckt A/ Ckt B)	5/5	6/6	7/7	6/4	7/5	8/6	6/6	7/7	8/8
Total Airflow (cfm) RTPF Coil	131,400	157,680	183,960	131,400	157,680	183,960	157,680	183,960	210,240
Total Airflow (cfm) MCHX Coil	145,000	174,000	203,000	145,000	174,000	203,000	174,000	203,000	232,000
CONDENSER COILS									
No. Coils (Ckt A/ Ckt B)	5/5	6/6	7/7	6/4	7/5	8/6	6/6	7/7	8/8

LEGEND

Cu	—	Copper
Al	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 840 rpm.

Table 2 — Physical Data — English (cont)
30XV 275T-325T

UNIT 30XV WITH FLOODED EVAPORATOR	275			300			325		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (in.) (Note 1)									
Length	298.7	345.7	392.7	345.7	392.7	439.7	392.7	439.7	486.7
Width					88.0				
Height					98.9				
OPERATING WEIGHT (lb) (Note 2)									
AI-Cu Condenser Coil	16,660	17,582	18,600	17,582	18,679	19,670	18,679	19,757	20,832
Cu-Cu Condenser Coil	18,347	19,550	20,849	19,550	20,928	22,201	20,928	22,288	23,644
MCHX Condenser Coil	15,864	16,624	17,492	16,624	17,560	18,401	17,560	18,478	19,407
AI-Cu Condenser Coil with Pump Option	—	—	19,981	—	20,060	21,306	—	21,393	22,732
Cu-Cu Condenser Coil with Pump Option	—	—	22,230	—	22,309	23,837	—	23,924	25,543
MCHX Condenser Coil with Pump Option	—	—	18,873	—	18,941	20,037	—	20,114	21,306
SHIPPING WEIGHT (lb) (Note 3)									
AI-Cu Condenser Coil	16,263	17,164	18,183	17,164	18,237	19,228	18,237	19,287	20,362
Cu-Cu Condenser Coil	17,950	19,132	20,432	19,132	20,486	21,759	20,486	21,818	23,174
MCHX Condenser Coil	15,467	16,207	17,074	16,207	17,118	17,959	17,118	18,008	18,937
AI-Cu Condenser Coil with Pump Option	—	—	19,348	—	19,402	20,648	—	20,707	22,046
Cu-Cu Condenser Coil with Pump Option	—	—	21,597	—	21,651	23,179	—	23,238	24,857
MCHX Condenser Coil with Pump Option	—	—	18,239	—	18,283	19,379	—	19,428	20,620
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	248/258	271/281	289/299	271/281	294/304	312/322	294/304	317/327	335/340
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	170/180	180/190	185/195	180/190	190/200	195/205	190/200	200/210	205/210
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	258/268	281/291	299/309	291/301	314/324	332/342	314/324	337/347	355/360
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	180/190	190/200	195/205	200/210	210/220	215/225	210/220	220/230	225/230
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (gal), Ckt A / Ckt B	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0	6.0/6.0
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (gal.)	48	50	50	50	53	53	53	56	56
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220
Maximum Water-Side Pressure (psig)	300	300	300	300	300	300	300	300	300
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-Pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	8/—	8/—	8/—	8/—	8/8	8/—	8/—	8/—	8/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	8/8	8/8	8/8	6/6	6/6	6/6	6/6	8/6	8/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Fans (Ckt A / Ckt B)	6/6	7/7	8/8	7/7	8/8	9/9	8/8	9/9	10/10
Total Maximum Airflow (cfm) RTPF Coil	157,680	183,960	210,240	183,960	210,240	236,520	210,240	236,520	262,800
Total Maximum Airflow (cfm) MCHX Coil	174,000	203,000	232,000	203,000	232,000	261,000	232,000	261,000	290,000
CONDENSER COILS									
No. Coils (Ckt A / Ckt B)	6/6	7/7	8/8	7/7	8/8	9/9	8/8	9/9	10/10

LEGEND

Cu	—	Copper
AI	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 840 rpm.

Table 2 — Physical Data — English (cont)
30XV 350T-500T

UNIT 30XV WITH FLOODED EVAPORATOR	350			400			450			500	
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H	S	M
CHASSIS DIMENSIONS (in.) (Note 1)											
Length	405.7	452.7	499.7	452.7	499.7	546.6	499.7	546.6	593.7	546.6	593.7
Width	88.0										
Height	98.9										
OPERATING WEIGHT (lb) (Note 2)											
Al-Cu Condenser Coil	21,746	23,580	24,510	25,010	26,140	27,069	26,140	27,938	29,012	27,938	29,247
Cu-Cu Condenser Coil	23,995	26,111	27,321	27,540	28,951	30,162	28,951	31,030	—	31,030	—
MCHX Condenser Coil	20,672	22,326	23,104	23,760	24,729	25,507	24,729	26,356	27,221	26,356	27,337
SHIPPING WEIGHT (lb) (Note 3)											
Al-Cu Condenser Coil	21,232	23,034	23,963	24,463	25,567	26,496	25,567	27,241	28,315	27,241	28,510
Cu-Cu Condenser Coil	23,481	25,564	26,774	26,993	28,379	29,589	28,379	30,334	—	30,334	—
MCHX Condenser Coil	20,158	21,779	22,557	23,213	24,156	24,935	24,156	25,660	26,525	25,660	26,600
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System										
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	367/286	405/329	423/347	382/382	405/405	423/423	405/405	438/438	456/456	438/438	481/481
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	250/195	275/225	280/230	265/265	275/275	280/280	275/275	295/295	300/300	295/295	325/325
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System										
Refrigerant Charge (lb) Ckt A/ Ckt B (RTPF)	387/326	405/344	423/362	392/392	410/410	428/428	425/425	443/443	461/461	458/458	476/476
Refrigerant Charge (lb) Ckt A/ Ckt B (MCHX)	270/235	275/240	280/245	275/275	280/280	285/285	295/295	300/300	305/305	315/315	320/320
COMPRESSOR	Semi-Hermetic Twin Rotary Screw										
Quantity	2	2	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	60/40	60/40	60/40	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (gal), Ckt A / Ckt B	7.5/6.0	7.5/6.0	7.5/6.0	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5	7.5/7.5
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR											
Net Fluid Volume (gal.)	62	66	66	66	69	69	69	83	83	83	88
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220	220	220
Maximum Water-Side Pressure (psig)	300	300	300	300	300	300	300	300	300	300	300
WATER CONNECTIONS											
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-pass), Inlet and Outlet, Victaulic (in.)	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8
Fresh Water/Comfort Brine											
1 Pass, Inlet and Outlet, Victaulic (in.)	8/—	8/—	8/—	8/—	8/8	8/—	8/—	8/—	8/—	8/—	8/8
Fresh Water/Process Brine											
3 Pass, Inlet and Outlet, Victaulic (in.)	8/6	6/6	6/6	6/8	6/8	6/8	6/6	6/6	6/6	6/6	6/6
Fresh Water/Comfort Brine											
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge										
Maximum Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Fans (Ckt A / Ckt B)	9/7	10/8	11/9	9/9	10/10	11/11	10/10	11/11	12/12	11/11	12/12
Total Maximum Airflow (cfm) RTPF Coil	210,240	236,520	262,800	236,520	262,800	289,080	262,800	289,080	315,360	289,080	315,360
Total Maximum Airflow (cfm) MCHX Coil	232,000	261,000	290,000	261,000	290,000	319,000	290,000	319,000	348,000	319,000	348,000
CONDENSER COILS											
No. Coils (Ckt A / Ckt B)	9/7	10/8	11/9	9/9	10/10	11/11	10/10	11/11	12/12	11/11	12/12

LEGEND

Cu	—	Copper
Al	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.
- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.

4. The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.

5. The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.

6. Standard-tier models without the variable speed condenser fan option have a maximum speed of 840 rpm.

Table 3 — Physical Data — SI
30XV 140T-180T

UNIT 30XV WITH FLOODED EVAPORATOR	140			160			180		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (mm) (Note 1)									
Length	5273	5273	6467	5273	6467	7661	5273	6467	7661
Width	2236								
Height	2513								
OPERATING WEIGHT (kg) (Note 2)									
Al-Cu Condenser Coil	5261	5298	5769	5304	5865	6327	5396	5889	6391
Cu-Cu Condenser Coil	5771	5808	6406	5814	6503	7092	5906	6540	7129
MCHX Condenser Coil	5039	5069	5469	5069	5554	5948	5154	5587	5980
Al-Cu Condenser Coil with Pump Option	—	—	6254	—	6350	6954	—	6374	7018
Cu-Cu Condenser Coil with Pump Option	—	—	6892	—	6988	7719	—	7025	7756
MCHX Condenser Coil with Pump Option	—	—	5954	—	6040	6574	—	6072	6607
SHIPPING WEIGHT (kg) (Note 3)									
Al-Cu Condenser Coil	5183	5213	5684	5219	5770	6232	5301	5786	6288
Cu-Cu Condenser Coil	5693	5723	6321	5729	6407	6997	5811	6437	7026
MCHX Condenser Coil	4961	4984	5384	4984	5459	5852	5058	5484	5877
Al-Cu Condenser Coil with Pump Option	—	—	6104	—	6190	6760	—	6206	6817
Cu-Cu Condenser Coil with Pump Option	—	—	6741	—	6827	7525	—	6857	7555
MCHX Condenser Coil with Pump Option	—	—	5804	—	5879	6381	—	5904	6406
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	69/71	73/75	82/84	73/80	86/91	94/99	78/83	88/93	97/101
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	45/48	50/52	52/54	50/57	57/61	59/64	54/59	59/64	61/66
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	76/78	80/83	88/91	85/89	93/98	101/106	87/92	95/100	103/108
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	52/54	57/59	59/61	61/66	64/68	66/70	64/68	66/70	68/73
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (L), Ckt A / Ckt B	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8	20.8/20.8
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (L)	78	85	85	85	95	95	95	103	103
Maximum Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517
Maximum Water-Side Pressure (kPa)	2068	2068	2068	2068	2068	2068	2068	2068	2068
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-Pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5	5/5
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	5/—	5/—	5/—	5/—	5/6	5/—	5/—	5/—	5/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	4/4	4/4	4/4	4/4	5/4	5/4	5/4	5/4	5/4
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	5/5	5/5	5/5	5/5	5/5	5/5	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (r/s)	19	19	19	19	19	19	19	19	19
No. Fans (Ckt A/ Ckt B)	4/4	4/4	5/5	4/4	5/5	6/6	4/4	5/5	6/6
Total Airflow (L/s) RTPF Coil	49 406	49 406	61 758	49 406	61 758	74 110	49 406	61 758	74 110
Total Airflow (L/s) MCHX Coil	54 520	54 520	68 150	54 520	68 150	81 780	54 520	68 150	81 780
CONDENSER COILS									
No. Coils (Ckt A/ Ckt B)	4/4	4/4	5/5	4/4	5/5	6/6	4/4	5/5	6/6

LEGEND	
Cu	— Copper
Al	— Aluminum
EXV	— Electronic Expansion Valve
MCHX	— Microchannel Heat Exchanger
RTPF	— Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 14 r/s.

Table 3 — Physical Data — SI (cont)
30XV 200T-250T

UNIT 30XV WITH FLOODED EVAPORATOR	200			225			250		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (mm) (Note 1)									
Length	6467	7661	8855	6392	7586	8780	7586	8780	9974
Width					2236				
Height					2513				
OPERATING WEIGHT (kg) (Note 2)									
Al-Cu Condenser Coil	5902	6468	6894	6310	6788	7263	7344	7944	8488
Cu-Cu Condenser Coil	6547	7233	7787	6947	7566	8246	8109	8837	9508
MCHX Condenser Coil	5587	6084	6442	5981	6399	6793	6992	7514	7989
Al-Cu Condenser Coil with Pump Option	—	—	7660	—	—	7890	—	—	9114
Cu-Cu Condenser Coil with Pump Option	—	—	8553	—	—	8872	—	—	10134
MCHX Condenser Coil with Pump Option	—	—	7208	—	—	7419	—	—	8616
SHIPPING WEIGHT (kg) (Note 3)									
Al-Cu Condenser Coil	5799	6352	6778	6181	6653	7128	7209	7764	8308
Cu-Cu Condenser Coil	6444	7117	7671	6819	7431	8110	7974	8657	9328
MCHX Condenser Coil	5484	5968	6326	5852	6264	6657	6857	7334	7810
Al-Cu Condenser Coil with Pump Option	—	—	7446	—	—	7656	—	—	8836
Cu-Cu Condenser Coil with Pump Option	—	—	8339	—	—	8639	—	—	9856
MCHX Condenser Coil with Pump Option	—	—	6993	—	—	7186	—	—	8338
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	89/93	97/101	105/109	115/85	125/95	133/103	108/112	121/125	129/133
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	59/64	61/66	64/68	79/61	84/61	86/68	73/77	79/84	82/86
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	98/102	106/110	114/118	124/94	134/104	142/112	117/122	125/130	133/138
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	68/73	70/75	73/77	88/70	93/75	95/77	82/86	84/88	86/91
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	60/40	60/40	60/40	50/50	50/50	50/50
Oil Charge (L) Ckt A / Ckt B	20.8/20.8	20.8/20.8	20.8/20.8	22.7/20.8	22.7/20.8	22.7/20.8	22.7/22.7	22.7/22.7	22.7/22.7
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (L)	103	116	116	128	135	135	135	180	180
Maximum Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517
Maximum Water-Side Pressure (kPa)	2068	2068	2068	2068	2068	2068	2068	2068	2068
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	6/6	6/6	6/6	6/6	6/6	6/6	8/8	8/8
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	5/—	8/6	8/—	8/—	8/—	8/—	8/—	8/8	8/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	5/5	5/5	5/5	6/6	6/6	6/6	6/6	8/6	8/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (r/s)	19	19	19	19	19	19	19	19	19
No. Fans (Ckt A/ Ckt B)	5/5	6/6	7/7	6/4	7/5	8/6	6/6	7/7	8/8
Total Airflow (L/s) RTPF Coil	61 758	74 110	86 461	61 758	74 110	86 461	74 110	86 461	98 813
Total Airflow (L/s) MCHX Coil	68 150	81 780	95 410	68 150	81 780	95 410	81 780	95 410	109 040
CONDENSER COILS									
No. Coils (Ckt A/ Ckt B)	5/5	6/6	7/7	6/4	7/5	8/6	6/6	7/7	8/8

LEGEND	
Cu	— Copper
Al	— Aluminum
EXV	— Electronic Expansion Valve
MCHX	— Microchannel Heat Exchanger
RTPF	— Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 14 r/s.

Table 3 — Physical Data — SI (cont)
30XV 275T-325T

UNIT 30XV WITH FLOODED EVAPORATOR	275			300			325		
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H
CHASSIS DIMENSIONS (mm) (Note 1)									
Length	7586	8780	9974	8780	9974	11,168	9974	11,168	12,362
Width	2236								
Height	2513								
OPERATING WEIGHT (kg) (Note 2)									
Al-Cu Condenser Coil	7557	7975	8437	7975	8473	8922	8473	8962	9449
Cu-Cu Condenser Coil	8322	8868	9457	8868	9493	10 070	9493	10 109	10 725
MCHX Condenser Coil	7196	7541	7934	7541	7965	8346	7965	8381	8803
Al-Cu Condenser Coil with Pump Option	—	—	9063	—	9099	9664	—	9704	10 311
Cu-Cu Condenser Coil with Pump Option	—	—	10 084	—	10 119	10 812	—	10 852	11 586
MCHX Condenser Coil with Pump Option	—	—	8561	—	8592	9089	—	9123	9664
SHIPPING WEIGHT (kg) (Note 3)									
Al-Cu Condenser Coil	7377	7786	8248	7786	8272	8722	8272	8749	9236
Cu-Cu Condenser Coil	8142	8678	9268	8678	9292	9870	9292	9896	10 511
MCHX Condenser Coil	7016	7351	7745	7351	7765	8146	7765	8168	8590
Al-Cu Condenser Coil with Pump Option	—	—	8776	—	8800	9366	—	9393	10 000
Cu-Cu Condenser Coil with Pump Option	—	—	9796	—	9821	10 514	—	10 540	11 275
MCHX Condenser Coil with Pump Option	—	—	8273	—	8293	8790	—	8812	9353
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A / Ckt B (RTPF)	112/117	123/127	131/136	123/127	133/138	142/146	133/138	144/148	152/154
Refrigerant Charge (kg) Ckt A / Ckt B (MCHX)	77/82	82/86	84/88	82/86	86/91	88/93	86/91	91/95	93/95
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System								
Refrigerant Charge (kg) Ckt A / Ckt B (RTPF)	117/122	127/132	136/140	132/137	142/147	151/155	142/147	153/157	161/163
Refrigerant Charge (kg) Ckt A / Ckt B (MCHX)	82/86	86/91	88/93	91/95	95/100	98/102	95/100	100/104	102/104
COMPRESSOR	Semi-Hermetic Twin Rotary Screw								
Quantity	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (Liters), Ckt A / Ckt B	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7	22.7/22.7
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR									
Net Fluid Volume (L)	180	189	189	189	201	201	201	213	213
Maximum Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517
Maximum Water-Side Pressure (kPa)	2068	2068	2068	2068	2068	2068	2068	2068	2068
WATER CONNECTIONS									
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-pass), Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8
1 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Process Brine	8/—	8/—	8/—	8/—	8/8	8/—	8/—	8/—	8/—
3 Pass, Inlet and Outlet, Victaulic (in.) Fresh Water/Comfort Brine	8/8	8/8	8/8	6/6	6/6	6/6	6/6	8/6	8/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Fresh Water	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
Std (2-Pass) & 3-Pass w/Pump, Inlet and Outlet, Victaulic (in.) Comfort Brine	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge								
Maximum Fan Speed (r/s)	19	19	19	19	19	19	19	19	19
No. Fans (Ckt A / Ckt B)	6/6	7/7	8/8	7/7	8/8	9/9	8/8	9/9	10/10
Total Airflow (L/s) RTPF COIL	74 110	86 461	98 813	86 461	98 813	111 164	98 813	111 164	123 516
Total Airflow (L/s) MCHX COIL	81 780	95 410	109 040	95 410	109 040	122 670	109 040	122 670	136 300
CONDENSER COILS									
No. Coils (Ckt A / Ckt B)	6/6	7/7	8/8	7/7	8/8	9/9	8/8	9/9	10/10

LEGEND

Cu	—	Copper
Al	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 14 r/s.

Table 3 — Physical Data — SI (cont)
30XV 350T-500T

UNIT 30XV WITH FLOODED EVAPORATOR	350			400			450			500	
TIER (MODEL NO. POS. 10)	S	M	H	S	M	H	S	M	H	S	M
CHASSIS DIMENSIONS (mm) (Note 1)											
Length	10 304	11 498	12 692	11 498	12 692	13 883	12 692	13 883	15 080	13 883	15 080
Width						2236					
Height						2513					
OPERATING WEIGHT (kg) (Note 2)											
Al-Cu Condenser Coil	9864	10 696	11 117	11 344	11 857	12 278	11 857	12 672	13 159	12 672	13 266
Cu-Cu Condenser Coil	10 884	11 844	12 393	12 492	13 132	13 681	13 132	14 075	—	14 075	—
MCHX Condenser Coil	9377	10 127	10 480	10 777	11 217	11 570	11 217	11 955	12 347	11 955	12 400
SHIPPING WEIGHT (kg) (Note 3)											
Al-Cu Condenser Coil	9631	10 448	10 869	11 096	11 597	12 019	11 597	12 357	12 844	12 357	12 932
Cu-Cu Condenser Coil	10 651	11 596	12 145	12 244	12 872	13 421	12 872	13 759	—	13 759	—
MCHX Condenser Coil	9144	9879	10 232	10 529	10 957	11 310	10 957	11 639	12 032	11 639	12 066
REFRIGERANT TYPE (Standard Evaporator)	R-134a EXV Controlled System										
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	166/130	184/149	192/157	173/173	184/184	192/192	184/184	199/199	207/207	199/199	218/218
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	113/88	125/102	127/104	120/120	125/125	127/127	125/125	134/134	136/136	134/134	147/147
REFRIGERANT TYPE (Brine Evaporator)	R-134a EXV Controlled System										
Refrigerant Charge (kg) Ckt A/ Ckt B (RTPF)	176/148	184/156	192/164	178/178	186/186	194/194	193/193	201/201	209/209	208/208	216/216
Refrigerant Charge (kg) Ckt A/ Ckt B (MCHX)	122/107	125/109	127/111	125/125	127/127	129/129	134/134	136/136	138/138	143/143	145/145
COMPRESSOR	Semi-Hermetic Twin Rotary Screw										
Quantity	2	2	2	2	2	2	2	2	2	2	2
Full Load Capacity Split Ckt A / Ckt B (Note 4)	60/40	60/40	60/40	50/50	50/50	50/50	50/50	50/50	50/50	50/50	50/50
Oil Charge (L), Ckt A / Ckt B	28.4/22.7	28.4/22.7	28.4/22.7	28.4/28.4	28.4/28.4	28.4/28.4	28.4/28.4	28.4/28.4	28.4/28.4	28.4/28.4	28.4/28.4
Minimum Capacity (%) (Note 5)	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15
EVAPORATOR											
Net Fluid Volume (L)	233	248	248	248	260	260	260	316	316	316	334
Maximum Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517
Maximum Water-Side Pressure (kPa)	2068	2068	2068	2068	2068	2068	2068	2068	2068	2068	2068
WATER CONNECTIONS											
Drain (NPT, in.)	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8	3/8
Standard (2-pass), Inlet and Outlet, Victaulic (in.)	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8	8/8
Fresh Water/Comfort Brine 1 Pass, Inlet and Outlet, Victaulic (in.)	8/—	8/—	8/—	8/—	8/8	8/—	8/—	8/—	8/—	8/—	8/8
Fresh Water/Process Brine 3 Pass, Inlet and Outlet, Victaulic (in.)	8/6	6/6	6/6	6/8	6/8	6/8	6/6	6/6	6/6	6/6	6/6
CONDENSER FANS (Note 6)	Shrouded Axial Type, Vertical Discharge										
Maximum Fan Speed (r/s)	19	19	19	19	19	19	19	19	19	19	19
No. Fans (Ckt A / Ckt B)	9/7	10/8	11/9	9/9	10/10	11/11	10/10	11/11	12/12	11/11	12/12
Total Airflow (L/s) RTPF COIL	98 813	111 164	123 516	111 164	123 516	135 868	123 516	135 868	148 219	135 868	148 219
Total Airflow (L/s) MCHX COIL	109 040	122 670	136 300	122 670	136 300	149 930	136 300	149 930	163 560	149 930	163 560
CONDENSER COILS											
No. Coils (Ckt A / Ckt B)	9/7	10/8	11/9	9/9	10/10	11/11	10/10	11/11	12/12	11/11	12/12

LEGEND

Cu	—	Copper
Al	—	Aluminum
EXV	—	Electronic Expansion Valve
MCHX	—	Microchannel Heat Exchanger
RTPF	—	Round Tube/Plate Fin

NOTES:

- More precise dimensions are available on the certified prints.
- Unit operating weight includes the base unit plus coil trim panels, but no other options or accessories are included. Selected options and accessories will slightly alter the unit weight. See Fig. 24 for the mounting weight detail.

- Unit shipping weight includes the base unit plus coil trim panels, but no other options or accessories are included. The shipping weight is equal to the operating weight (indicated above) minus the weight of the water in the evaporator.
- The capacity split is indicative of both compressors operating at a full load condition. The actual capacity split at most operating conditions will not match these values.
- The minimum capacity is less than 15% for units sized at full capacity. Please use the chiller selection program to determine actual minimum capacity values.
- Standard-tier models without the variable speed condenser fan option have a maximum speed of 14 r/s.

EXPORT SHIPPING RAILS

Units with the export packaging option will include steel shipping rails. These should be removed prior to mounting the unit. There are mounting bolts on the outside of the base frame and in the lower top section of the frame. If sound enclosure is included, the top cover may need to be removed to access all of the bolts. The bag retainer rail is used to secure the bag for shipping. These may be removed before or after mounting the unit. See Fig. 25.

RIGGING UNIT (SEE FIG. 26-29)

The 30XV units with Greenspeed® intelligence are designed for overhead rigging and it is important that this method be used. Holes are provided in frame base channels, marked for rigging (see rigging label on unit). Field-supplied shackles are required to facilitate lifting. Secure the shackles to the base rails at the points noted on the rigging label.

Do not use a forklift truck to move the units.

Use spreader bars to keep cables or chains clear of unit sides. As further protection, plywood sheets may be placed against sides of unit, behind cables or chains. Run cables or chains to a

central suspension point so that angle from horizontal is not less than 45 degrees. Raise and set unit down carefully. See Fig. 26-29 for rigging centers of gravity.

For shipping, some domestic units and all export units are mounted on steel skids under entire base of unit. Skid can be removed before unit is moved to installation site. Lift the unit from above to remove skid. See Fig. 26-29 for rigging centers of gravity. If the unit was shipped with a shipping bag, the bag must be removed to gain access to the rigging holes in the base rail.

If overhead rigging is not available, the unit can be moved on rollers or dragged. When unit is moved on rollers, the unit skid, if equipped, must be removed. To lift the unit, use jacks at the rigging points. Use a minimum number of rollers to distribute the load such that the rollers are no more than 6 ft (1.8 m) apart. If the unit is to be dragged, lift the unit as described above, and place unit on a pad. Apply moving force to the pad, and not the unit. When in its final location, raise the unit and remove the pad. If the unit was shipped with protection, it must be removed before start-up. The shipping bag for export units must be removed before start-up.

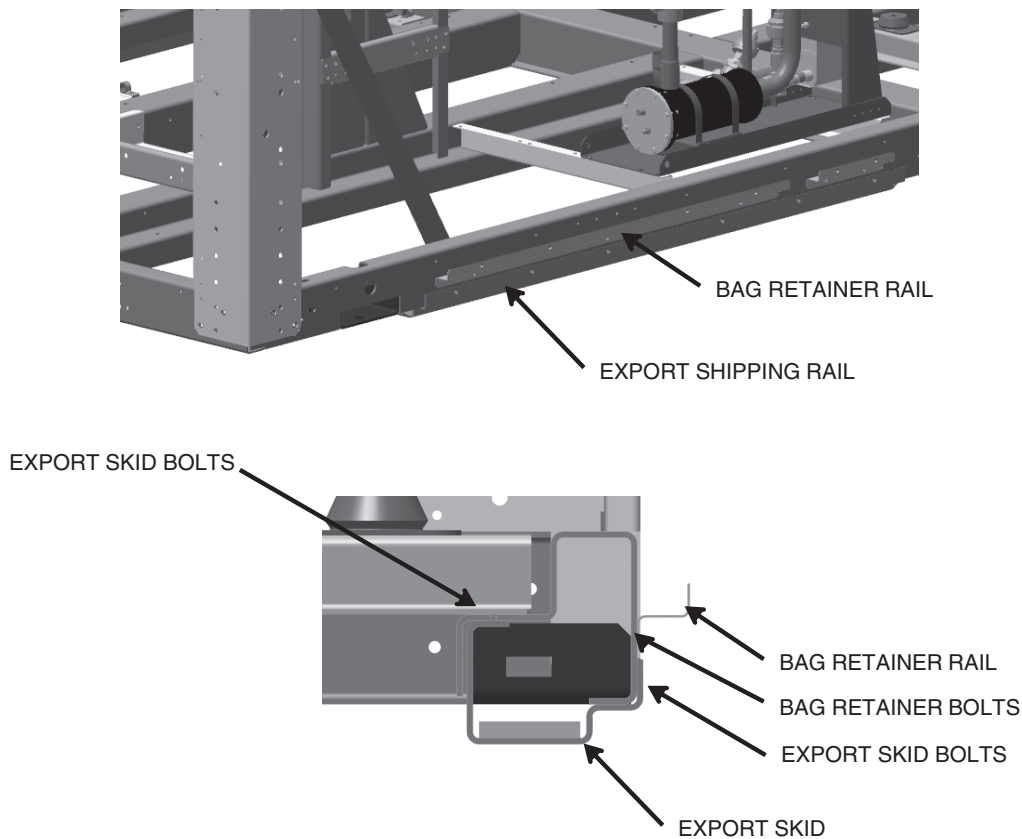


Fig. 25 — Export Shipping Rails

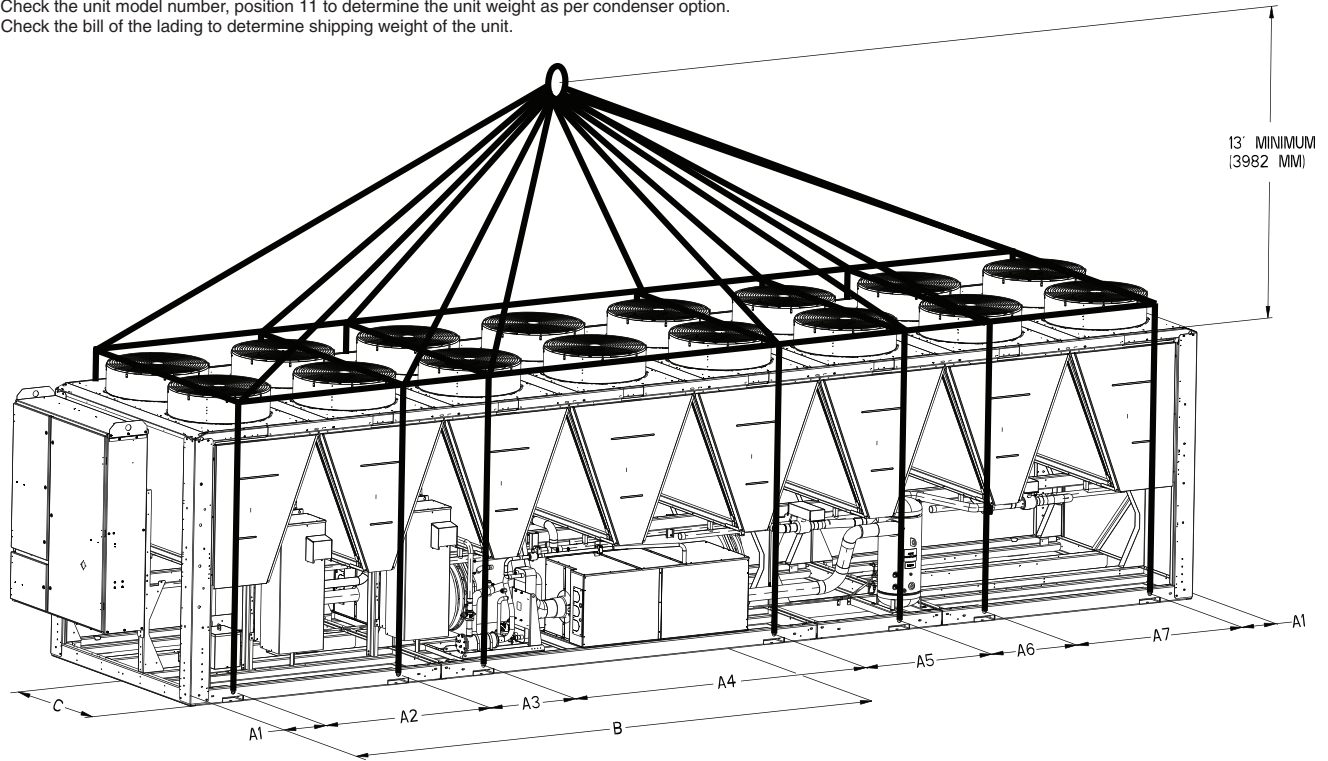


CAUTION - NOTICE TO RIGGERS:

ALL PANELS MUST BE IN PLACE WHEN RIGGING. DO NOT FORK THESE UNITS IF NO SKID IS SUPPLIED.

NOTE:

1. 1.50 dia (38.1mm) lifting holes provided for field-supplied clevis.
2. Rig with a minimum of 25 ft (7620mm) length chain or cables.
3. If central lifting point is used, it must be a minimum of 13 ft (3962mm) above the top of the unit.
4. Spreader bars made from steel or double nailed, and notched 2x6s approximately 8 ft (2438mm) long, must be placed just above the top of the unit and coils.
5. If overhead rigging is not available, the unit can be moved on roller or dragged. When unit is moved on roller, the unit steel skid, if equipped, must be removed. To lift the unit, use jacks at rigging points. Use a minimum of one roller every 6 ft (1829mm) to distribute the load. If the unit is to be dragged, lift the unit as described above, and place unit on a pad. Apply moving force to the pad, not the unit. When in its final location, raise the unit and remove the pad.
6. Check the unit model number, position 11 to determine the unit weight as per condenser option.
7. Check the bill of the lading to determine shipping weight of the unit.



Model Number	Model Number Position 10	Max Shipping Wt						Lifting Holes												Center of Gravity					
		w/o Packaging		with Packaging		w/o Packaging		with Packaging		w/o Packaging		with Packaging		w/o Packaging		with Packaging		w/o Packaging		B		C			
		Model number position 11= 4,5		Model number position 11= 4,5		Model number position 11= 1,2		Model number position 11= 1,2		Model number position 11= 0,3		Model number position 11= 0,3		Model number position 11= 0,3		Model number position 11= 0,3		Model number position 11= 0,3		MCHX*		ALICU**		CUCU***	
		lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	in	mm	in	mm	in	mm
30XV140	S	10937	4961	12161	5516									16.1	409	78.0	1982	78.0	1982	92.5	2349	92.5	2350	92.7	2354
	M	10987	4984	12211	5539	11492	5213	12717	5768	12617	5723	13905	6307	16.1	409	78.0	1982	78.0	1982	92.5	2350	92.6	2352	92.7	2355
	H	11870	5384	13217	5995	12530	5684	13878	6295	13936	6321	15347	6962	16.1	409	78.0	1982	78.0	1982	103.0	2616	103.8	2636	106.2	2673
30XV160	S	10987	4984	12211	5539	11506	5219	12731	5775	12631	5729	13919	6314	16.1	409	78.0	1982	78.0	1982	91.9	2335	92.0	2337	92.2	2342
	M	12035	5459	13382	6070	12720	5770	14068	6381	14126	6407	15537	7048	16.1	409	78.0	1982	78.0	1982	102.4	2602	103.3	2623	104.7	2660
	H	12902	5852	14356	6512	13739	6232	15193	6891	15425	6997	16943	7685	16.1	409	78.0	1982	78.0	1982	115.2	2927	116.8	2968	119.6	3037
30XV180	S	11152	5059	12376	5614	11696	5301	12911	5856	12811	5811	14099	6395	16.1	409	78.0	1982	78.0	1982	92.4	2348	92.5	2350	92.7	2353
	M	12090	5484	13437	6095	12755	5786	14103	6397	14191	6437	15602	7077	16.1	409	78.0	1982	78.0	1982	103.4	2627	104.2	2647	106.6	2682
	H	12957	5877	14411	6537	13864	6289	15318	6948	15490	7026	17006	7715	16.1	409	78.0	1982	78.0	1982	115.4	2932	117.1	2973	119.8	3042
30XV200	S	12090	5484	13437	6095	12785	5799	14133	6411	14207	6444	15618	7084	16.1	409	78.0	1982	78.0	1982	102.7	2609	103.6	2630	105.0	2667
	M	13157	5968	14611	6628	14004	6352	15458	7012	15690	7117	17208	7806	16.1	409	78.0	1982	78.0	1982	115.4	2932	117.0	2972	119.7	3040
	H	13946	6326	15557	7057	14943	6778	16555	7509	16911	7671	18587	8431	16.1	409	78.0	1982	78.0	1982	128.6	3267	131.1	3330	135.1	3431
30XV225	S	12902	5852	14356	6593	13627	6181	15261	6922	15033	6819	16794	7618	16.1	409	62.0	1575	32.0	813	124.7	3166	124.3	3157	123.6	3140
	M	13810	6264	15568	7062	14667	6653	16426	7451	16383	7431	18269	8287	16.1	409	62.0	1575	32.0	813	134.4	3414	134.8	3424	135.5	3441
	H	14677	6657	16541	7503	15715	7128	17578	7974	17881	8111	19872	9014	16.1	409	62.0	1575	32.0	813	145.8	3704	147.0	3733	149.0	3784
30XV250	S	15117	6857	16979	7702	15893	7209	17756	8054	17580	7974	19571	8877	16.1	409	62.0	1575	32.0	813	137.7	3497	137.9	3502	138.2	3510
	M	16170	7335	18156	8235	17117	7764	19103	8665	19085	8657	21263	9645	16.1	409	62.0	1575	32.0	813	148.8	3779	149.9	3809	151.3	3843
	H	17217	7810	19309	8758	18316	8308	20408	9257	20565	9328	22849	10364	16.1	409	62.0	1575	32.0	813	160.8	4083	162.6	4130	165.5	4203
30XV275	S	15467	7016	17329	7861	16263	7377	18126	8222	17950	8142	19941	9045	16.1	409	62.0	1575	32.0	813	138.7	3522	139.2	3535	139.0	3531
	M	16207	7351	18193	8252	17164	7786	19150	8687	19132	8678	21246	9637	16.1	409	62.0	1575	32.0	813	148.7	3778	149.9	3808	151.3	3842
	H	17074	7745	19166	8694	18183	8248	20275	9197	20432	9268	22716	10304	16.1	409	62.0	1575	32.0	813	160.7	4081	162.5	4128	165.4	4201
30XV300	S	16207	7351	18193	8252	17164	7786	19150	8687	19132	8678	21246	9637	16.1	409	62.0	1575	32.0	813	148.9	3783	150.1	3812	151.4	3846
	M	17118	7765	19210	8714	18237	8272	20329	9221	20486	9292	22770	10328	16.1	409	62.0	1575	32.0	813	161.3	4098	163.2	4144	165.9	4215
	H	17959	8146	20208	9166	19228	8722	21478	9742	21759	9870	24200	10977	16.1	409	62.0	1575	32.0	813	174.3	4426	176.8	4491	181.1	4599
30XV325	S	17118	7765	19210	8714	18237	8272	20329	9221	20486	9292	22770	10328	16.1	409	62.0	1575	32.0	813	160.4	4075	162.3	4123	165.2	4196
	M	18008	8168	20257	9199	19287	8749	21537	9769	21818	9896	24259	11004	16.1	409	62.0	1575	32.0	813	174.4	4429	176.9	4494	181.2	4601
	H	18937	8590	21315	9668	20362	9236	22740	10315	23174	10512	25744	11677	16.1	409	62.0	1575	32.0	813	188.4	4786	191.7	4869	197.3	5012

NOTE:

Unit sizes 30XV140-325 with pump option: see Fig. 27.

Fig. 26 — Unit Rigging Label Detail 30XV140-325

Model Number	Model Number Position 10	Max Shipping Wt w/o Packaging	Max Shipping Wt with Packaging	Max Shipping Wt w/o Packaging	Max Shipping Wt with Packaging	Max Shipping Wt w/o Packaging	Max Shipping Wt with Packaging	Lifting Holes																		Center of Gravity											
		Model number position 11=4,5 12=4 thru P	Model number position 11=4,5 12=4 thru P	Model number position 11=1,2 12=4 thru P	Model number position 11=1,2 12=4 thru P	Model number position 11=0,3 12=4 thru P	Model number position 11=0,3 12=4 thru P																			B						C					
		MCHX*		MCHX*		Al/CU**		Al/CU**		CU/CU***		CU/CU***		A1	A2	A3	A4	A5	A6	A7	A8	A9	MCHX*		Al/CU**		CU/CU***										
		lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm				
30XVA140	H	12796	5804	14143	6415	13456	6104	14804	6715	14862	6741	16273	7381	16.1	409	78.0	1982	78.0	1982	47.0	1194																
30XVA160	M	12961	5879	14308	6490	13646	6190	14994	6801	15052	6827	16463	7468	16.1	409	78.0	1982	78.0	1982																		
	H	14067	6381	15521	7040	14904	6760	16358	7420	16591	7525	18109	8214	16.1	409	78.0	1982	78.0	1982	47.0	1194																
30XVA180	M	13016	5904	14363	6515	13681	6206	15029	6817	15117	6857	16528	7497	16.1	409	78.0	1982	78.0	1982	47.0	1194																
	H	14122	6406	15576	7065	15029	6817	16483	7477	16656	7555	18174	8243	16.1	409	78.0	1982	78.0	1982	32.0	813	62.0	1575														
30XVA200	M	14322	6497	15776	7156	15169	6880	16623	7540	16856	7646	18374	8334	16.1	409	78.0	1982	78.0	1982	47.0	1194																
	H	15418	6993	17029	7724	16415	7446	18027	8177	18383	8339	20059	9099	16.1	409	78.0	1982	78.0	1982	32.0	813	62.0	1575														
30XVA225	H	15842	7186	17706	8031	16880	7657	18743	8502	19046	8639	21038	9543	16.1	409	62.0	1575	32.0	813	109.0	2769	32.0	813	62.0	1575												
30XVA250	H	18382	8338	20474	9287	19461	8836	21573	9785	21730	9857	24014	10893	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194	32.0	813	62.0	1575										
30XVA275	H	18239	8273	20331	9222	19348	8776	21440	9725	21597	9796	23881	10832	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194		813	62.0	1575										
30XVA300	M	18283	8293	20375	9242	19402	8801	21494	9749	21651	9821	23935	10857	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194	32.0	813	62.0	1575										
	H	19379	8790	21628	9810	20648	9366	22898	10386	23179	10514	25620	11621	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194	32.0	813	109.0	2769										
30XVA325	M	19428	8812	21677	9833	20707	9393	22957	10413	23238	10540	25679	11648	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194	32.0	813	109.0	2769										
	H	20620	9353	22998	10432	22046	10000	24423	11078	24857	11275	27427	12441	16.1	409	62.0	1575	32.0	813	109.0	2769	47.0	1194	32.0	813	78.0	1982	78.0	1982								

- * Condenser coil (MCHX): Microchannel (MCHX) Design
 ** Condenser coil (Al/CU): Aluminum fins/Copper Tubing
 *** Condenser coil (CU/CU): Copper fins/Copper Tubing

**Fig. 27 — Unit Rigging Label Supplement
30XV140-325 with Pump Option**

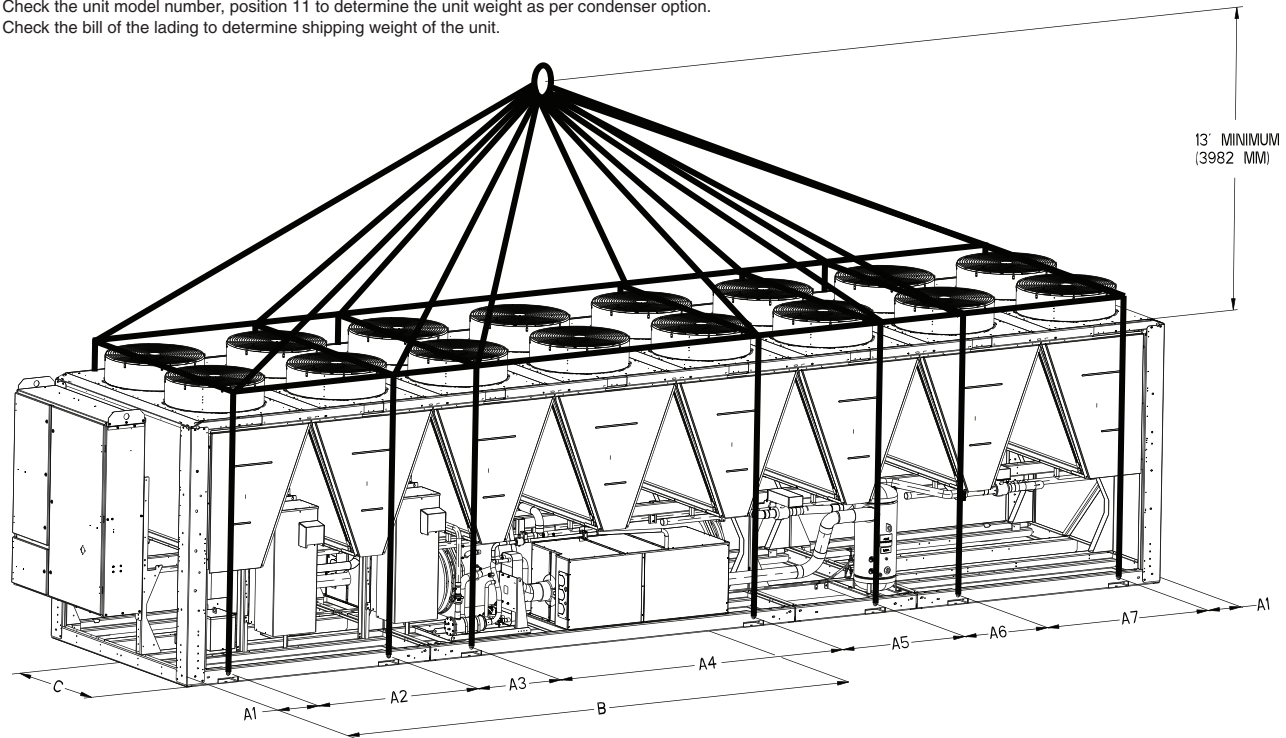


CAUTION - NOTICE TO RIGGERS:

ALL PANELS MUST BE IN PLACE WHEN RIGGING. DO NOT FORK THESE UNITS IF NO SKID IS SUPPLIED.

NOTE:

1. 1.50 dia (38.1mm) lifting holes provided for field-supplied clevis.
2. Rig with a minimum of 25 ft (7620mm) length chain or cables.
3. If central lifting point is used, it must be a minimum of 13 ft (3962mm) above the top of the unit.
4. Spreader bars made from steel or double nailed, and notched 2x6s approximately 8 ft (2438mm) long, must be placed just above the top of the unit and coils.
5. If overhead rigging is not available, the unit can be moved on roller or dragged. When unit is moved on roller, the unit steel skid, if equipped, must be removed.
To lift the unit, use jacks at rigging points. Use a minimum of one roller every 6 ft (1829mm) to distribute the load. If the unit is to be dragged, lift the unit as described above, and place unit on a pad. Apply moving force to the pad, not the unit. When in its final location, raise the unit and remove the pad.
6. Check the unit model number, position 11 to determine the unit weight as per condenser option.
7. Check the bill of the lading to determine shipping weight of the unit.

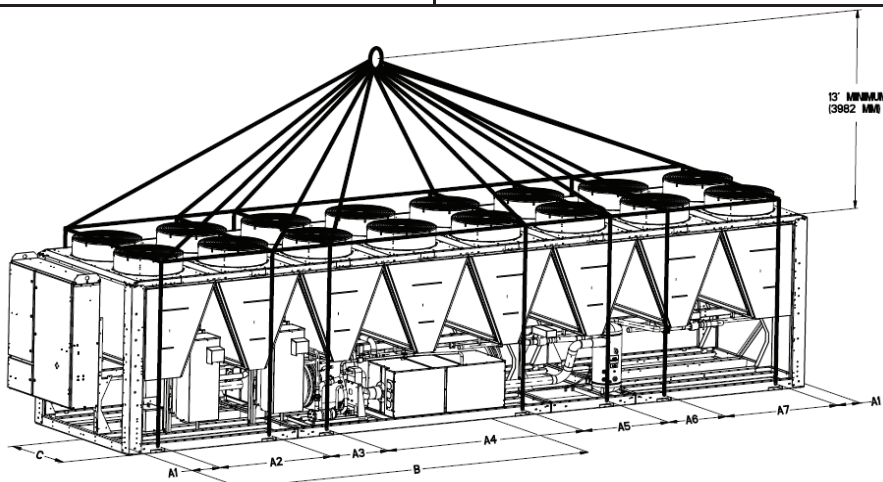


Model Number	Model Number Position 10	Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Center of Gravity																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																									
		Model number position 11= 4, 5		Model number position 11= 4, 5		Model number position 11= - , 1, 2		Model number position 11= - , 1, 2		Model number position 11= 0, 3		Model number position 11= 0, 3																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
		MCHX*		MCHX*		AI/CU**		AI/CU**		CU/CU***		CU/CU***																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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REMARQUE:

1. 1.50 dia (38.1mm) lifting holes provided for field supplied clevis.
2. Rig with a minimum of 25 ft (7620mm) length chain or cables.
3. If central lifting point is used, it must be minimum of 13 ft. (3962mm) above the top of the unit.
4. Spreader bars made from steel or double nailed, and notched 2x6's approximately 8 ft.(2438mm) long, must be placed just above the top of the unit and coils.
5. If overhead rigging is not available, the unit can be moved on roller or dragged. When unit is moved on roller, the unit steel skid, if equipped, must be removed. To lift the unit, use jacks at rigging points. Use a minimum of one roller every 6 ft. (1829mm) to distribute the load. If the unit is to be dragged, lift the unit as described above, and place unit on a pad. Apply moving force to the pad, not the unit. When in its final location, raise the unit and remove the pad.
6. Check the unit model number, position 11 to determine the unit weight as per condenser option.
7. Check the bill of the lading to determine shipping weight of the unit.



Model Number	Model Number Position 10	Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Max Shipping Wt w/o Packaging		Max Shipping Wt with Packaging		Lifting Holes														Center of Gravity								
		Model number position 11=4, 5		Model number position 11=4, 5		Model number position 11= -, 1,2		Model number position 11= -, 1,2		Model number position 11= 0,3		Model number position 11= 0,3																B								
		MCHX*		MCHX*		AL/CU**		AL/CU**		CU/CU***		CU/CU***		A1		A2		A3		A4		A5		A6		A7										
		lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	lbs	Kgs	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	in	mm	
		30XVA40A	H	23132	10493	24902	11296	24433	11083	26203	11886	27185	12331	29212	13250	16.1	409	109.0	2769	32.0	813	78.0	1982	78.0	1982	32.0	813	62.0	1575	179.3	4554	181.1	4599	184.1	4676	46.0
30XVA45A	M	23987	10821	25627	11625	25178	11421	26948	12224	27930	12669	29957	13588	16.1	409	109.0	2769	32.0	813	78.0	1982	78.0	1982	32.0	813	62.0	1575	179.3	4554	181.1	4599	184.1	4676	46.0	1169	
30XVA45A	H	23987	10840	25668	11643	25266	11461	27037	12264	28270	12823	30297	13743	16.1	409	109.0	2769	32.0	813	78.0	1982	78.0	1982	32.0	813	62.0	1575	179.3	4554	181.1	4599	184.1	4676	46.0	1169	
30XVA50A	S	23987	10821	25627	11625	25178	11421	26948	12224	27930	12669	29957	13588	16.1	409	109.0	2769	32.0	813	78.0	1982	78.0	1982	32.0	813	62.0	1575	179.3	4554	181.1	4599	184.1	4676	46.0	1169	
30XVA50A	M	23972	10874	25743	11677	25461	11549	27232	12352	28465	12912	30492	13831	16.1	409	109.0	2769	32.0	813	78.0	1982	78.0	1982	32.0	813	62.0	1575	179.3	4554	181.1	4599	184.1	4676	46.0	1169	
30XVA40B	H	1803	818	2057	933	2064	936	2318	1051	2404	1090	2658	1206	16.1	409	62.0	1575												49.3	1253	49.3	1253	49.3	1253	43.9	1115
30XVA45B	M	1803	818	2057	933	2064	936	2318	1051	2404	1090	2658	1206	16.1	409	62.0	1575												49.3	1253	49.3	1253	49.3	1253	43.9	1115
30XVA45B	H	2628	1192	3040	1379	3049	1383	3461	1570	3559	1615	3971	1801	16.1	409	109.0	2769												72.9	1852	72.9	1852	72.9	1852	43.9	1115
30XVA50B	S	1803	818	2057	933	2064	936	2318	1051	2404	1090	2658	1206	16.1	409	62.0	1575												49.3	1253	49.3	1253	49.3	1253	43.9	1115
30XVA50B	M	2628	1192	3040	1379	3049	1383	3461	1570	3559	1615	412	186.7	16.1	409	109.0	2769												72.9	1852	72.9	1852	72.9	1852	43.9	1115

***Condenser coil (CU/CU): Copper fins/Copper Tubing

Fig. 29 — Unit Rigging Detail 30XV400-500 Split Units

Step 3 — Make Refrigerant, Evaporator Fluid and Drain Piping Connections

⚠ CAUTION

Units are designed for Victaulic-type water-side connections. If chilled water piping is to be welded to the water nozzles, remove the chilled water flow switch, entering and leaving water thermistors before welding connecting piping. Reinstall flow switch and thermistors after welding is complete. Failure to remove these devices may cause unit damage.

⚠ CAUTION

Factory-supplied insulation is not flammable but can be damaged by welding sparks and open flame. Protect insulation with a wet canvas cover. Failure to protect insulation may cause unit damage.

SPLIT UNIT ASSEMBLY

The 30XV 400H, 450M, 450H, 500S, and 500M units are offered as two separate modules from the factory as an option. This allows the units to fit in containers for export shipping. Table 4 shows the module designation.

Table 4 — Split Unit Sizes

UNIT SIZE	MODULE A	MODULE B
400	40A	40B
450	45A	45B
500	50A	50B

These modules must be assembled in the field including brazing and wiring. A split unit installation kit is provided for this process. The kit is located in the control box of module A. Steps for this assembly are below.

Module Placement

Place the modules in the final installation location in the orientation shown in Fig. 30. The ball valves, open on one end, should be facing each other. There may be a 0 to 2.0-in. (0 to 50.8 mm) gap between the units.

Brazing

⚠ CAUTION

The ball valves on the liquid and discharge line must remain closed prior to brazing the mating tubes and pulling a vacuum on this area for both liquid and discharge side. Do not open the valves until indicated in the brazing instructions below. Failure to follow the steps below could result in a release of refrigerant or air and moisture in the system. Work should be performed by a skilled HVAC technician.

The gas and liquid lines must be brazed together using standard refrigeration practices. The interconnecting tubes are in the control panel in a box. Be sure plastic caps are removed from ball valves on unit and connecting tubes. Figure 31 shows the orientation of the tubes. If the joint is inaccessible by reaching from under the braces, remove the rails. The tube with the male connection may need to be trimmed to fit. Make sure the ball valves remain closed until the brazing and vac process is complete. Ball valves should be protected from heat by using a wet rag. Schrader cores and fusible plugs should also be removed from the interconnecting tubes supplied in the kit prior to brazing. Nitrogen purge must be applied during brazing. Schrader taps on ball valves can be used for a connection.

After brazing is complete:

- Leak check.
- Pull vacuum on the connection tube to at least 500 microns.
- Hold vacuum for 5 minutes to confirm braze integrity.
- Open all 4 ball valves to complete the connection process.

NOTE: A nitrogen purge can be applied to this section. Connections are at each ball valve.

Ball Valve Wiring

The 450H and 500M units have an automated discharge ball valve on the B module. See Fig. 32. A cable is tied on the end of the A module. Route the cable to the ball valve and connect to the actuator using the plugs. Secure the cable using wire ties, making sure the cable is not against tubes or sharp edges.

Units may be ordered with manual ball valves instead of the automated valve option. For this case, there is no wiring required for the valves.

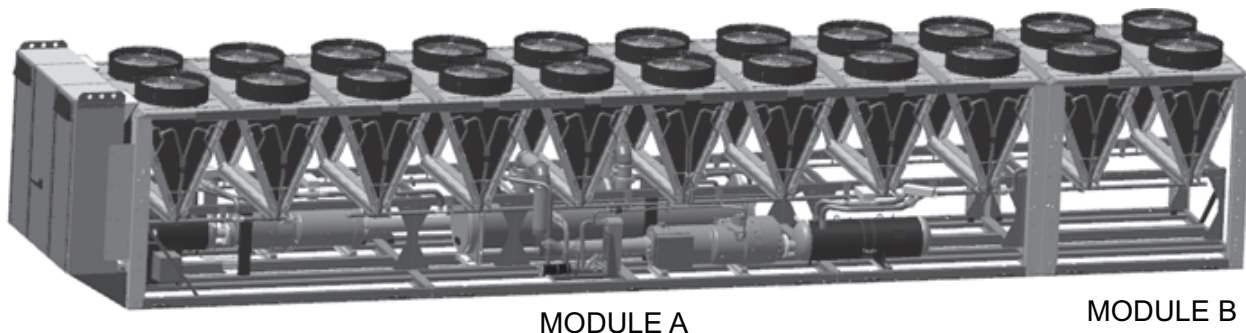


Fig. 30 — Split Unit Module Placement

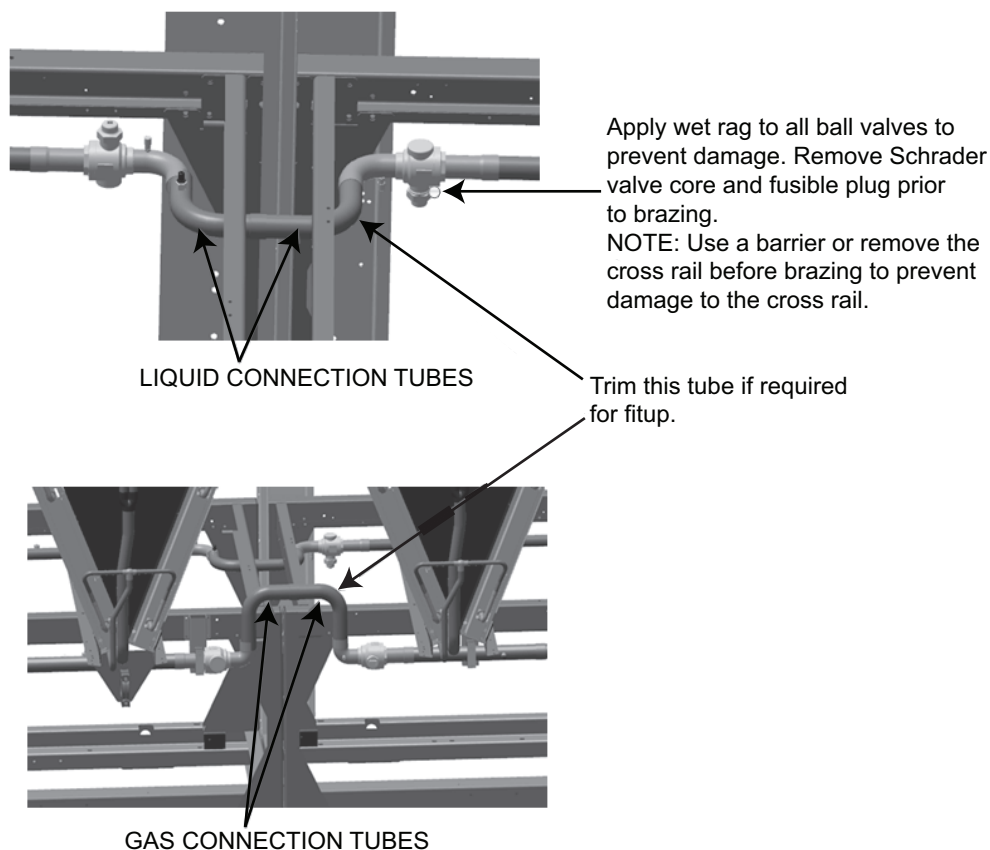


Fig. 31 — Brazing Gas and Liquid Lines

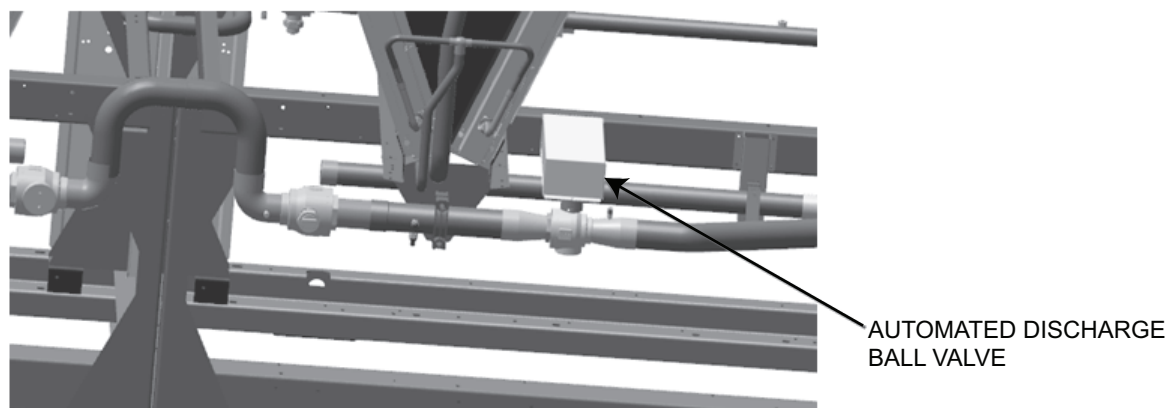


Fig. 32 — Automated Discharge Ball Valve

Fan VFD Wiring, 400H, 450M, and 500S (with Fan VFD Option)

The fan cable for fan motors on module B is tied at end of module A. Route the cable through the wiring rail similar to existing fan cables on module A. To get around the corner posts, bring the cables out of the rail, around the corner posts, and back into the rail. Use conduit included in the installation kit, 30XV70001001, to cover the section of the wiring outside of the rail. The kit is located in the control panel of module A unit. The cables will be routed through the bottom of the B2 fan drive using the existing strain relief. See Fig. 33. Terminate wires on the motor wiring terminal board inside drive. The terminal board is color-coded to match fan motor wires. Torque lugs to 16 in.-lbs. The drive cover is removed with a T20 bit.

Fan VFD Wiring, 450H, 500M

To connect power to fan drive B2, use the conduit tied to the end of the A module. Route this conduit to drive B2. See Fig. 34. Connect to bottom of drive and route wires to terminal block. Connect wires to L1, L2, L3, and ground. Torque lugs to 16 in.-lbs. The drive cover is removed with a T20 bit.

Fan Cable Wiring, 500S (without Fan VFD Option)

The fan cable for fan motors on module B is tied at end of the module A unit. Route through the wiring rail similar to existing fan cables on module A. To get around the corner posts, bring the cables out of the rail, around the corner posts, and back into the rail. Use the conduit included in the split unit installation kit to cover the section of wiring outside of the rail. The cables will be routed to the fan wiring box. Route cables into fan wiring box. See Fig. 35. Plug fan cables to matching plugs in box. The plugs are labeled for identification.

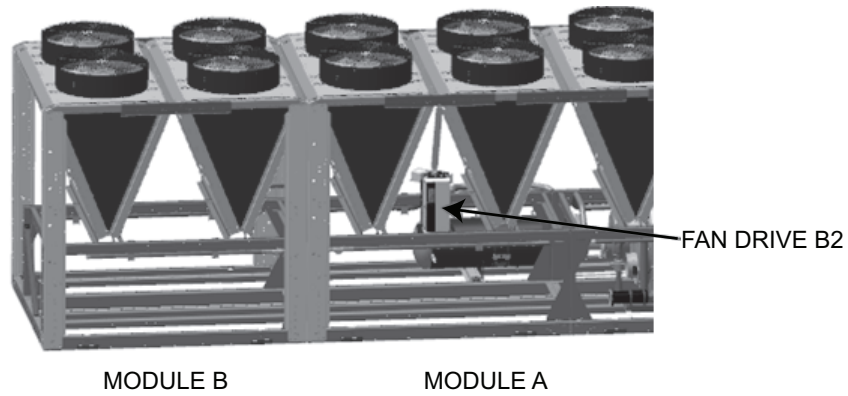


Fig. 33 — Fan VFD Wiring, 400H, 450M, and 500S

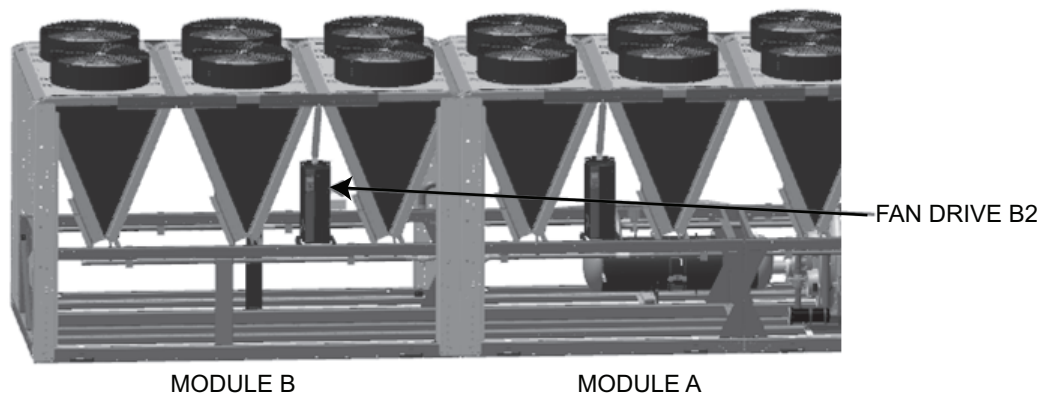
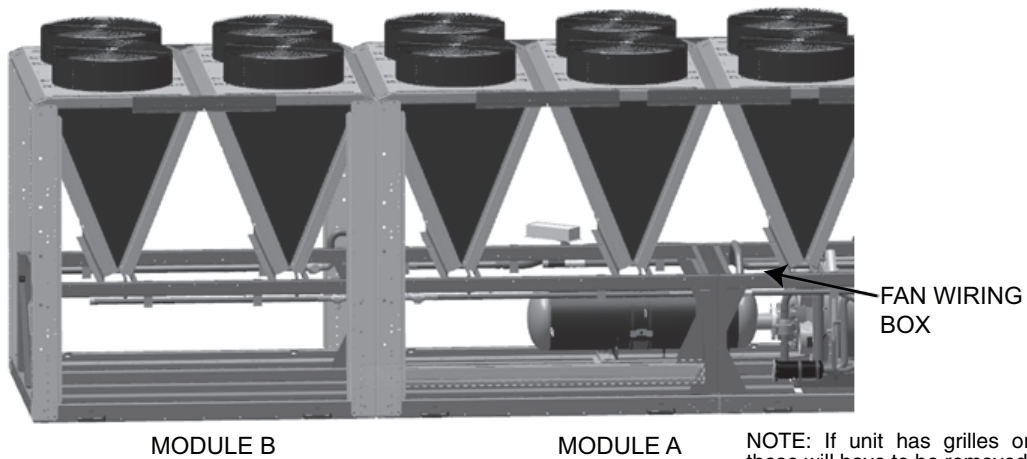


Fig. 34 — Fan VFD Wiring, 450H and 500M



NOTE: If unit has grilles or louvered panels these will have to be removed in order to access the fan wiring box.

Fig. 35 — Fan Cable Wiring, 500S

GENERAL

See Fig. 3-23 and Fig. 36 for typical piping and wiring. The Victaulic connections allow clamp-on connection of water lines to the evaporators in all 30XV units. See Table 5 for 30XV unit operating range and Tables 6 and 7 for minimum and maximum water flow. A flow sensor is factory-installed in the side of the entering fluid nozzle. See Fig. 37.

Minimum Loop Volume

The preferred minimum loop volume is dependent on the type of application. In order to obtain leaving water temperature stability for comfort cooling applications, a minimum of 3 gallons per ton (3.25 liters per kW) is required on all unit sizes. For process cooling applications, applications where high stability is critical, or operation at ambient temperatures below 32°F (0°C) is expected, the loop volume should be increased to 6 to 10 gallons per ton (6.46 to 10.76 liters per kW) of cooling. In order to achieve this volume, it may be necessary to add a water storage tank to the water loop. If a storage tank is added to the system, it should be

properly vented so that the tank can be completely filled and all air eliminated. Failure to do so could cause lack of pump stability and poor system operation. Any storage tank that is placed in the water loop should have internal baffles to allow thorough mixing of the fluid. See Fig. 38.

System Piping

Proper system design and installation procedures should be followed closely. The system must be constructed with pressure tight components and thoroughly tested for installation leaks.

Installation of water systems should follow sound engineering practice as well as applicable local and industry standards. Improperly designed or installed systems may cause unsatisfactory operation and/or system failure. Consult a water treatment specialist or appropriate literature for information regarding filtration, water treatment, and control devices. Figures 39 and 40 show a typical installation and components.

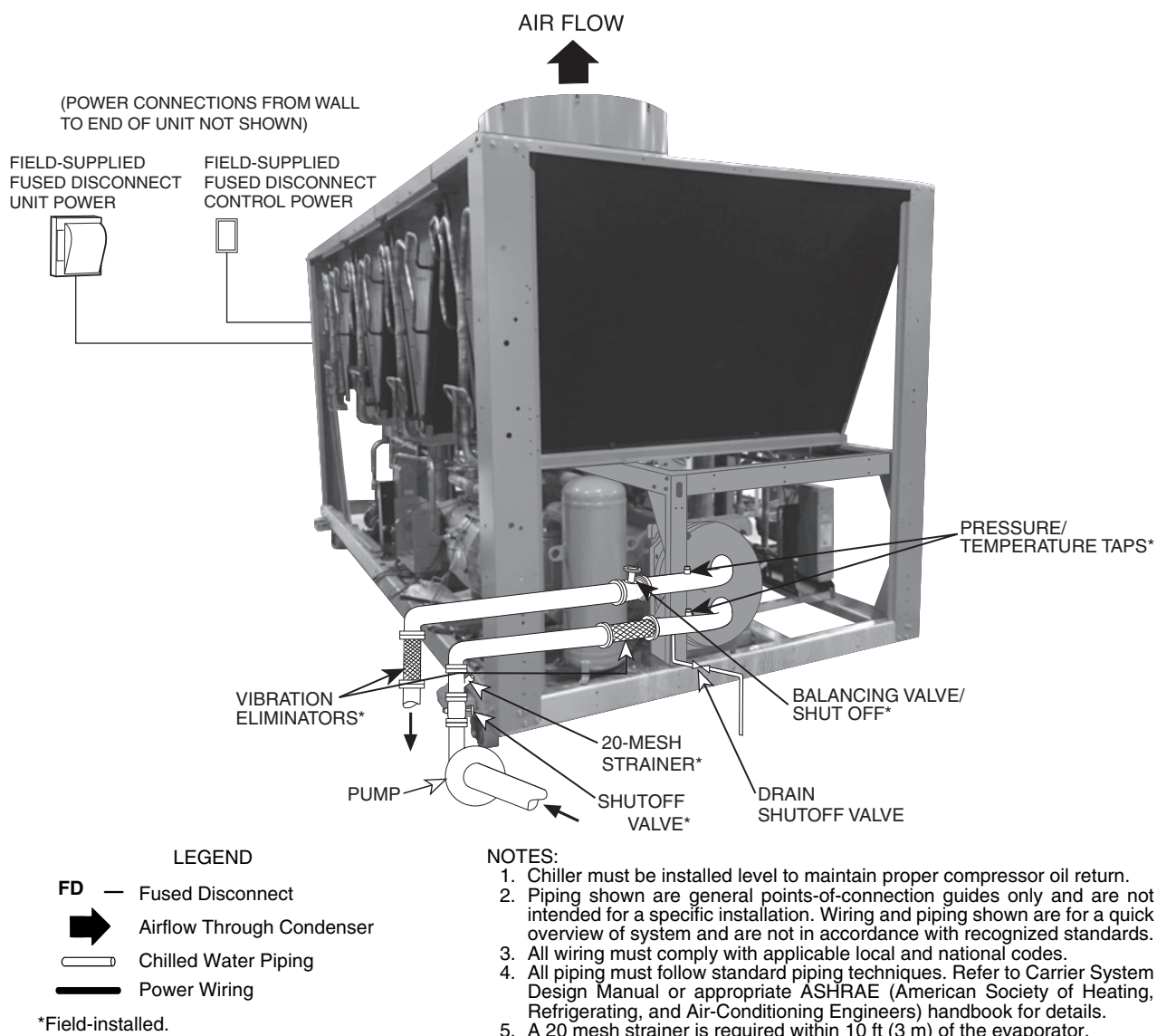


Fig. 36 — 30XV Typical Piping and Wiring

Table 5 — Operating Temperature Limits Applicable to All Sizes

TEMPERATURE	F	C
Maximum Ambient Temperature	125	51.7
Minimum Ambient Temperature*	32	0.0
Maximum Evaporator EWT†	95	35.0
Maximum Evaporator LWT	60	15.6
Minimum Evaporator LWT	38**	3.3**
Maximum Evaporator Glycol EWT†	95	35.0
Minimum Evaporator Glycol LWT — Comfort Cooling Evaporator	30	16.7
Minimum Evaporator Glycol LWT — Process Cooling Evaporator	14	-9.4

LEGEND

EWT — Entering Fluid (Water) Temperature
LWT — Leaving Fluid (Water) Temperature

* Lowest allowable ambient temperature for the standard unit to start and operate is 32°F (0°C). With the inclusion of wind baffles and variable speed fans (field fabricated and installed), the unit is capable to start as low as 0°F (-17.8°C) and to operate as low as -20°F (-29°C) ambient temperature.

†For sustained operation, EWT should not exceed 70°F (21.1°C).

**Unit requires brine fluid for operation below this temperature.

Table 6 — Min/Max Water Flow — Standard (2-Pass) Evaporator

30XV	TIERS	MINIMUM FLOW RATE		MAXIMUM FLOW RATE	
		(gpm)	(L/s)	(gpm)	(L/s)
140	All	170.4	10.8	681.6	43.0
160	All	193.2	12.2	772.8	48.8
180	All	204.0	12.9	816.0	51.5
200	All	236.4	14.9	945.6	59.7
225	All	266.4	16.8	1065.6	67.2
250	All	308.4	19.5	1233.6	77.8
275	All	327.6	20.7	1310.4	82.7
300	All	349.2	22.0	1396.8	88.1
325	All	379.2	23.9	1516.8	95.7
350	All	419.0	26.4	1676.0	105.7
400	All	483.0	30.5	1932.0	121.9
450	All	543.5	34.3	2174.0	137.2
500	All	600.0	37.9	2400.0	151.4

Table 7 — Min/Max Water Flow — 1-Pass Evaporator

30XV	TIERS	MINIMUM FLOW RATE		MAXIMUM FLOW RATE	
		(gpm)	(L/s)	(gpm)	(L/s)
140	All	340.8	21.6	1363.2	86.0
160	All	386.4	24.4	1545.6	97.6
180	All	408.0	25.8	1632.0	103.0
200	All	472.8	29.8	1891.2	119.4
225	All	532.8	33.6	2131.2	134.4
250	All	616.8	39.0	2467.2	155.6
275	All	655.2	41.4	2620.8	165.4
300	All	698.4	44.0	2793.6	176.2
325	All	758.4	47.8	3033.6	191.4
350	All	838.0	52.8	3352.0	211.4
400	All	966.0	61.0	3864.0	243.8
450	All	1087.0	68.6	4348.0	274.4
500	All	1200.0	75.8	4800.0	302.8

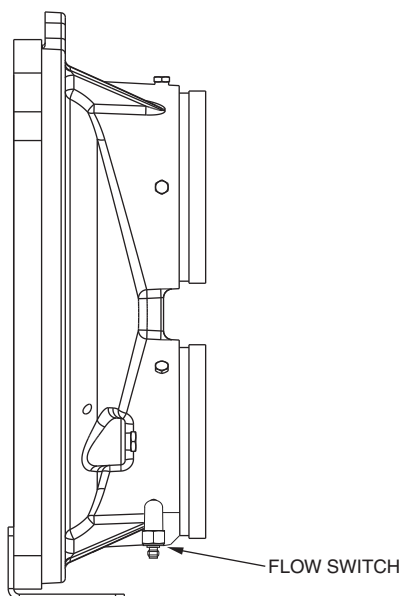


Fig. 37 — Flow Switch Location

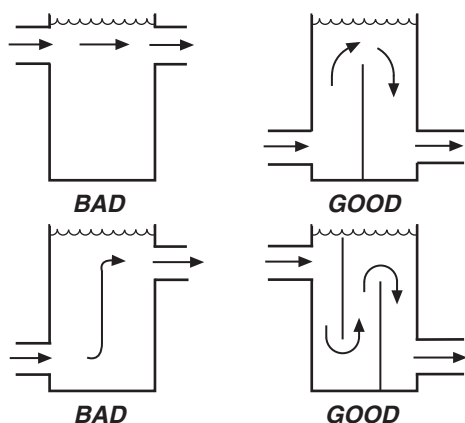


Fig. 38 — Tank Baffling

Air Separation

For proper system operation, it is essential that water loops be installed with proper means to manage air in the system. Free air in the system can cause noise, reduce terminal output, stop flow, or even cause pump failure due to pump cavitation. For closed systems, equipment should be provided to eliminate all air from the system.

The amount of air that water can hold in solution depends on the pressure and temperature of the water/air mixture. Air is less soluble at higher temperatures and at lower pressures. Therefore, separation can best be done at the point of highest water temperature and lowest pressure. Typically, this point would be on the suction side of the pump as the water is returning from the system or terminals. This is generally the optimal place to install an air separator, if possible.

1. Install automatic air vents at all high points in the system. (If the 30XV unit is located at the high point of the system, a vent can be installed on the piping leaving the heat exchanger on the 1/4 in. NPT female port.)

2. Install an air separator in the water loop, at the place where the water is at higher temperatures and lower pressures — usually in the chilled water return piping. On a primary-secondary system, the highest temperature water is normally in the secondary loop, close to the decoupler. Preference should be given to that point on the system (see Fig. 39). In-line or centrifugal air separators are readily available in the field.

If it is not possible to install air separators at the place of the highest temperature and lowest pressure, preference should be given to the points of highest temperature. It is important that the pipe be sized correctly so that free air can be moved to the point of separation. Generally, a water velocity of at least 2 feet per second (0.6 m per second) will keep free air entrained and prevent it from forming air pockets.

Automatic vents should be installed at all physically elevated points in the system so that air can be eliminated during system operation. Provisions should also be made for manual venting during the water loop fill.

Units Field Piping

When facing the evaporator side of the unit, the inlet (return) water connection is on the bottom. It is required that a field-supplied strainer with a minimum size of 20 mesh be installed within 10 ft (3.05 m) of the evaporator inlet to prevent debris from damaging internal tubes of the evaporator.

NOTE: Units supplied with factory installed pumps include a strainer. An additional strainer is not required.

The outlet (supply) water connection is on the top. When single pass evaporator is selected, it will have nozzles on either end of the evaporator. The nozzle opposite the control box side is entering water. The evaporator has water-side Victaulic-type connections (follow connection directions as provided by the coupling manufacturer). Provide proper support for the piping. If accessory security grilles have been added, holes must be cut in the grilles for field piping and insulation. See Fig. 40 for a typical piping diagram of a 30XV unit with Greenspeed® intelligence. A drain connection is located at the leaving water (supply) end of evaporator. See Fig. 3-23 for connection location. Insulate the drain piping (in the same manner as the chilled water piping) for at least 12 in. (305 mm) from the unit.

Dual Chiller Control

The Carrier Controller allows 2 chillers (piped in parallel or series) to operate as a single chilled water plant with standard control functions coordinated through the master chiller controller. This standard Carrier Controller feature requires a communication link between the 2 chillers on the CCN bus.

Dual Chiller Leaving Water Sensor

If the dual chiller algorithm is used, and the machines are installed in parallel, a dual chilled water sensor must be installed for each module. Install the well in the common leaving water header. See Fig. 41. The connection size for the thermowell is 1/4 in. npt. A dual chiller accessory kit (P/N 00EFN900044000A) is available.

Parallel Dual Chiller Operation

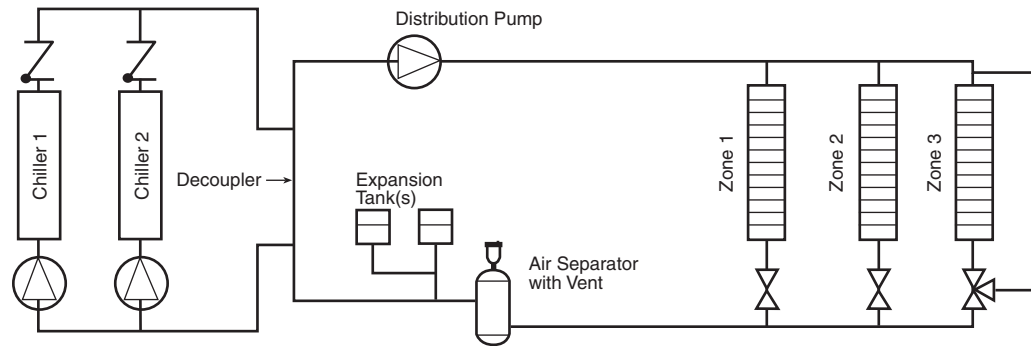
Parallel chiller operation is the recommended option for dual chiller control. In this case, each chiller must control its own dedicated pump or isolation valve. Balancing valves are recommended to ensure proper flow in each chiller. Two field-supplied and installed dual chiller leaving water temperature sensors are required, one for each module, for this function to operate properly.

Consider adding additional isolation valves to isolate each chiller to allow for service on a machine, and still allow for partial capacity from the other chiller. See Fig 41.

Series Dual Chiller Operation

Series chiller operation is an alternate control method supported by the Carrier Controller control system. Certain applications might require that the two chillers be connected in series.

Consider adding additional piping and isolation valves to isolate each chiller to allow for service on a machine, and still allow for partial capacity from the other chiller. See Fig. 42.



NOTE: Expansion tanks for 30XV hydronic kits must be installed for chillers piped in parallel in the primary water loop.

Fig. 39 — Typical Air Separator and Expansion Tank Location on Primary-Secondary Systems

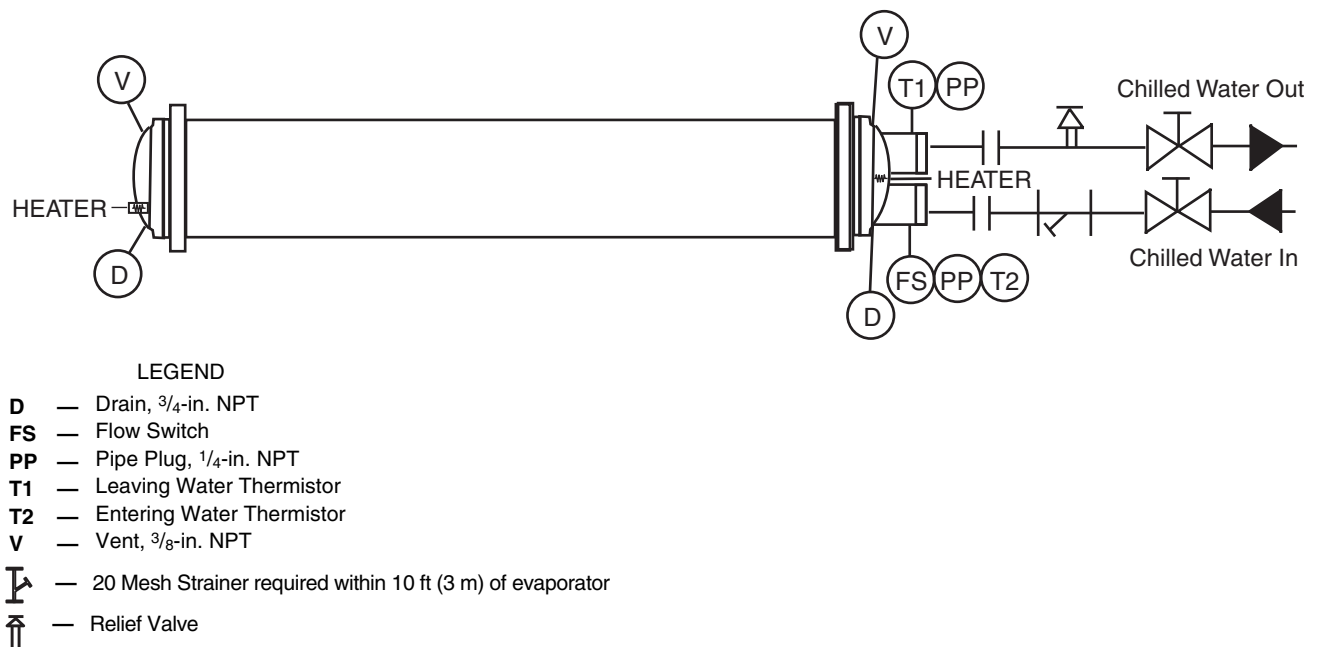
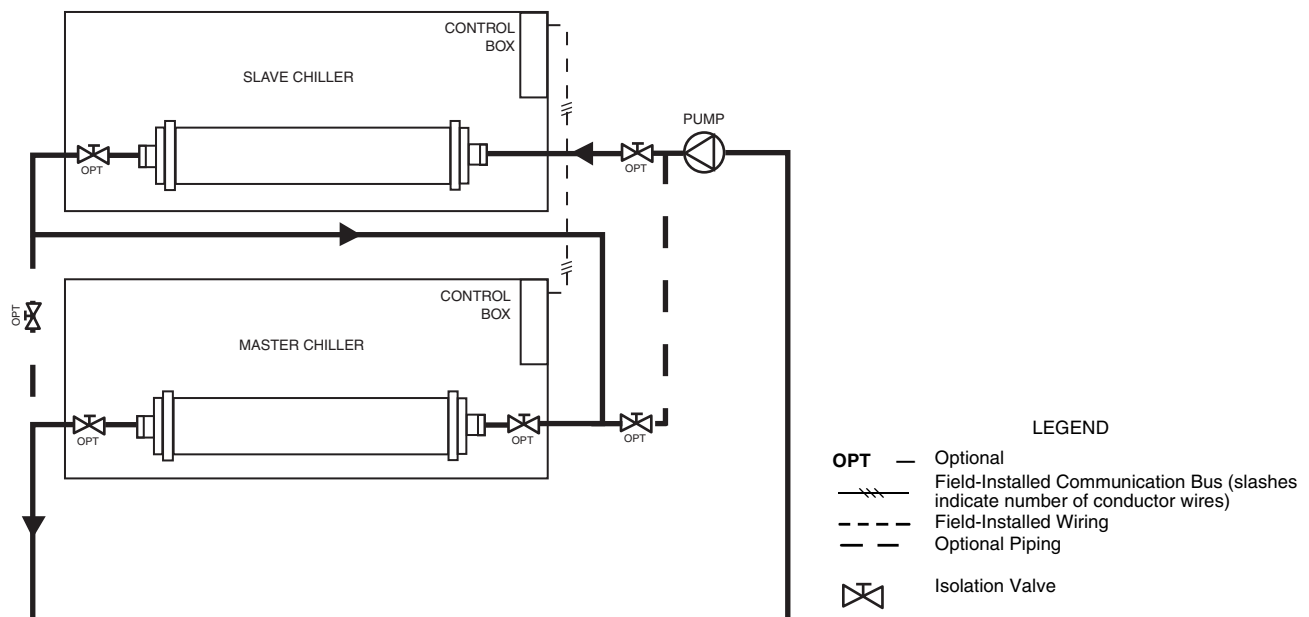
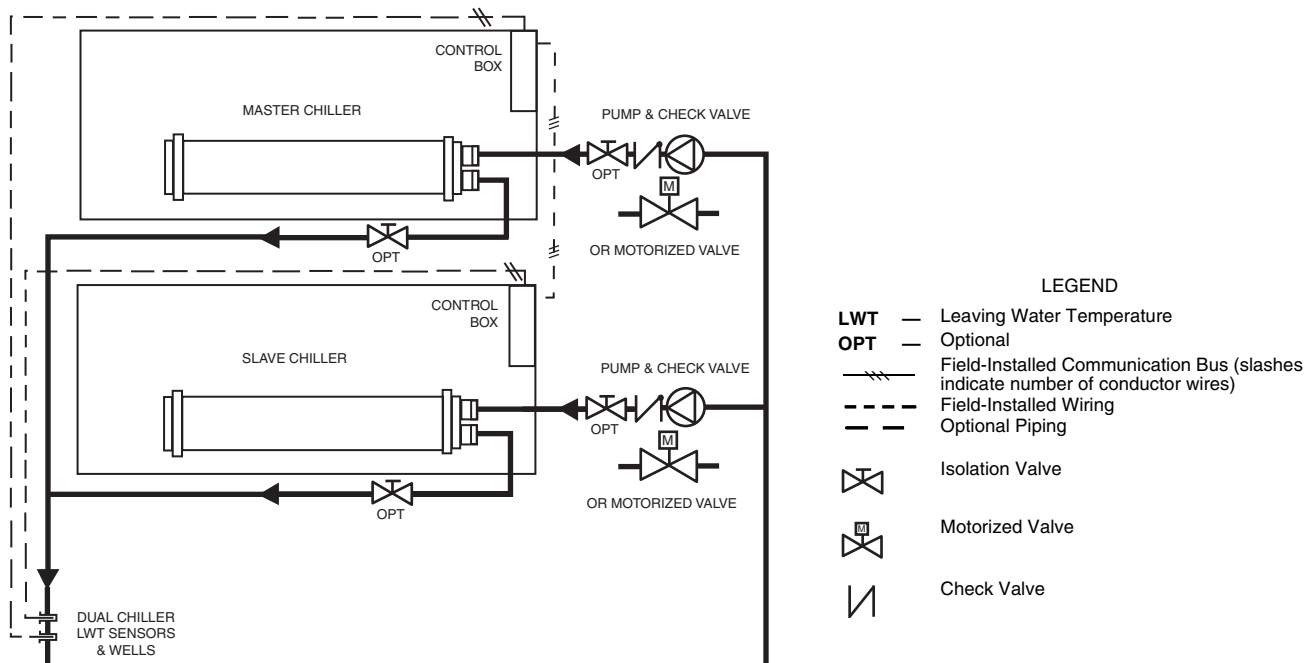


Fig. 40 — Typical Piping Diagram for 30XV Units with Greenspeed® Intelligence

*Teflon is a registered trademark of Dupont.



IMPORTANT: Automatic vents should be located in accessible locations for maintenance purposes and should be protected from freezing.

EVAPORATOR PUMP CONTROL

It is required that evaporator pump control be utilized on all chillers unless the chilled water pump runs continuously or the chilled water system contains a suitable antifreeze solution.

⚠ CAUTION

Applications that utilize fresh water as the circulated fluid require that the circulating pump be controlled directly by the chiller. Operation with fresh water is not fail-safe should there be a loss of power to the chiller or to the circulating pump. Freeze damage due to power loss or disabling chiller pump control in fresh water systems will impair or otherwise negatively affect the warranty.

Refer to the control and power wiring schematic beginning on page 110 for proper connection of the evaporator pump (PMP1 and PMP2). The evaporator pump output will remain energized for 30 seconds after all compressors stop due to an OFF command. In the event a freeze protection alarm is generated, the evaporator pump output will be energized regardless of the evaporator pump control software configuration. The evaporator pump output is also energized when certain alarms are generated. A thermal flow sensor is factory installed in the entering fluid nozzle to prevent operation without flow through the evaporator. See Fig. 43. The flow sensor is factory wired.

Proper software configuration of the evaporator pump control parameters is required to prevent possible evaporator freeze-up. Refer to the Controls, Start-Up, Operation, Service and Troubleshooting guide for more information.

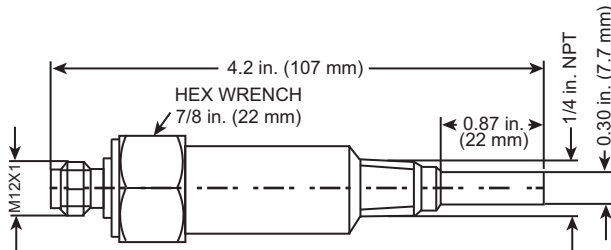


Fig. 43 — Thermal Flow Sensor

If evaporator pump control is not utilized, it is required that the chiller be electrically interlocked with the chilled water pump starter. The interlock should be wired to terminals TB5-27 and TB5-28. It is also recommended that the evaporator pump output be used as an override to the chilled water pump control circuit to provide additional freeze protection. See the Field Control and Power Wiring figure beginning on page 110. For units with factory supplied pumps, the pump design points and minimum flow must be set up for the site design conditions for proper operation. Refer to the Controls, Start-Up, Operation, Service, and Troubleshooting guide for more information.

PREPARATION FOR YEAR-ROUND OPERATION

In areas where the piping or unit is exposed to 32°F (0°C) or lower ambient temperatures, freeze-up protection is required using inhibited glycol or other suitable corrosion-resistant anti-freeze solution and electric heater tapes. Heater tapes on piping should have a rating for area ambient temperatures and be covered with a suitable thickness of closed-cell insulation. Route power for the heater tapes from a separately fused disconnect. Mount the disconnect within sight from the unit per local or NEC (National Electric Code) codes. Identify disconnect at heater tape power source with a warning that power must not be turned off except when servicing unit.

IMPORTANT: Adding antifreeze solution is the only certain means of protecting the unit from freeze-up if heater fails or electrical power is interrupted or lost while temperatures are below 32°F (0°C).

A drain connection is located at the bottom of the evaporator head. See Fig. 40 for connection location. Install shut-off valves to the drain line before filling the system with fluid.

Low Ambient Temperature Head Pressure Control

For units intended to operate in low ambient conditions, field-fabricated and field-installed wind baffle is required if the wind velocity is anticipated to be greater than 5 mph (8 km/h). Wind baffle should be constructed with minimum 18-gage galvanized sheet metal or other suitable corrosion-resistant material with cross breaks for strength. See Fig. 44. Use field-supplied screws to attach baffle to the corner posts of the machine. Be sure to hem or turn a flange on all edges to eliminate sharp edges on the baffles.

⚠ WARNING

Disconnect all power to the unit before performing maintenance or service. Electrical shock and personal injury could result.

⚠ CAUTION

To avoid damage to the refrigerant coils and electrical components, use extreme care when drilling screw holes and screwing in fasteners.

Mount baffle opposite control box end. It is recommended that the upper notches be used for mounting the baffle. This reduces the risk of damaging the coil while drilling a mounting hole. Loosen the upper corner post bolts and slide the baffle under the bolt and washer. Tighten the bolt. Drill holes in the bottom of the flange of the baffle and mount with two screws to secure the bottom of the baffle to the corner post.

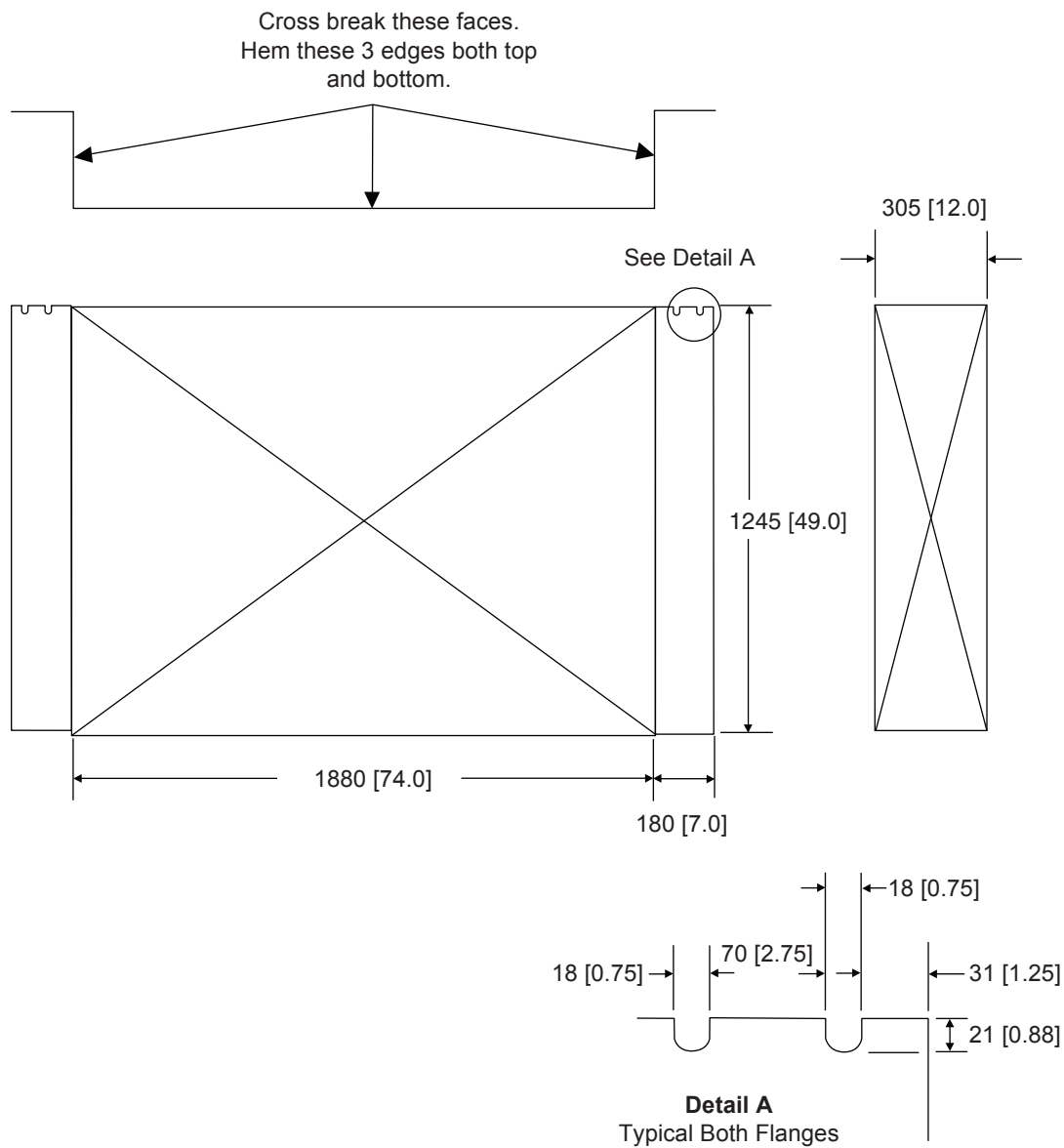


Fig. 44 — Field-Fabricated and Field-Installed Wind Baffle

Step 4 — Fill the Chilled Water Loop

IMPORTANT: Before starting unit, be sure all of the air has been purged from the system.

⚠ CAUTION

In low ambient (below 32°F [0°C]) and/or low leaving fluid temperature applications (below 40°F [4.4°C]), a suitable antifreeze solution of the proper concentration for the specific operating conditions must be used as the fluid circulated through the evaporator to prevent freezing and damage to the system. Failure to operate the system with an antifreeze solution of the proper concentration will impair or otherwise negatively affect the warranty should damage result from freezing.

The maximum evaporator water side pressure is 300 psig (2068 kPa). Check the pressure rating for all of the chilled water devices installed. Do not exceed the lowest pressure rated device.

BRINE EVAPORATOR OPTION

Add sufficient inhibited glycol or other suitable corrosion-resistant antifreeze solution to prevent evaporator freeze-up.

WATER SYSTEM CLEANING

Proper water system cleaning is of vital importance. Excessive particulates in the water system can cause excessive pump seal wear, reduce or stop flow, and cause damage of other components. Ideally, the chilled water loop will be cleaned before the unit is connected.

1. Install a temporary bypass around the chiller to avoid circulating dirty water and particulates into the chiller during the flush. Use a temporary circulating pump during the cleaning process. Also, be sure that there is capability to fully drain the system after cleaning. See Fig. 45.
2. Be sure to use a cleaning agent that is compatible with all system materials. Be especially careful if the system contains any galvanized or aluminum components. Both detergent-dispersant and alkaline-dispersant cleaning agents are available.
3. It is recommended to fill the system through a water meter. This provides a reference point for the future for loop volume readings, and it also establishes the correct quantity of cleaner needed in order to reach the required concentration.
4. Use a feeder/transfer pump to mix the solution and fill the system. Circulate the cleaning system for the length of time recommended by the cleaning agent manufacturer.
 - a. After cleaning, drain the cleaning fluid and flush the system with fresh water.
 - b. A slight amount of cleaning residue in the system can help keep the desired, slightly alkaline, water pH of 8 to 9. Avoid a pH greater than 10, since this will adversely affect pump seal components.
 - c. A side stream filter is recommended (see Fig. 46) during the cleaning process. Filter side flow rate should be enough to filter the entire water volume every 3 to 4 hours. Change filters as often as necessary during the cleaning process.
 - d. Remove temporary bypass when cleaning is complete.

WATER TREATMENT

Fill the fluid loop with water (or brine) and a corrosion-resistant inhibitor suitable for the water of the area. Consult the local water treatment specialist for characteristics of system water and a recommended inhibitor for the evaporator fluid loop.

Untreated or improperly treated water may result in corrosion, scaling, erosion, or algae. The services of a qualified water treatment specialist should be obtained to develop and monitor a treatment program.

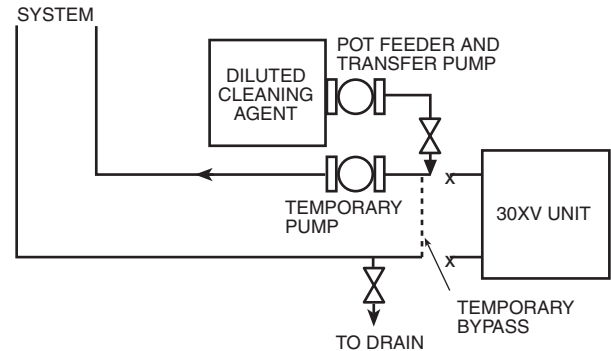


Fig. 45 — Typical Set Up for Cleaning Process

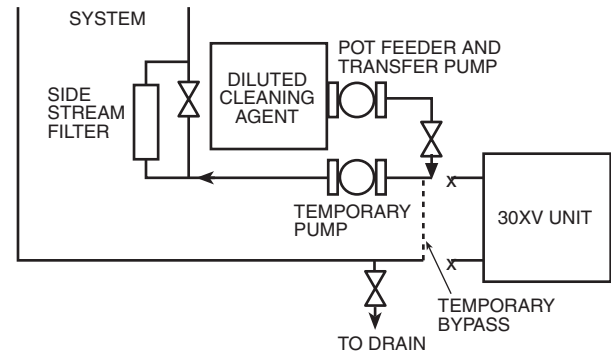


Fig. 46 — Cleaning Using a Side Stream Filter

⚠ CAUTION

Water must be within design flow limits, clean, and treated to ensure proper chiller performance and reduce the potential of tube damage due to corrosion, scaling, erosion, and algae. Carrier assumes no responsibility for chiller damage resulting from untreated or improperly treated water.

NOTE: Do not use automobile anti-freeze, or any other fluid that is not approved for heat exchanger duty. Only use appropriately inhibited glycols, concentrated to provide adequate protection for the temperature considered.

SYSTEM PRESSURIZATION

A proper initial cold fill pressure must be established before filling of the unit. The initial cold fill pressure is the pressure applied at the filling point to fill a system to its highest point, plus a minimum pressure at the top of the system (4 psig minimum [27.6 kPa]) to operate air vents and positively pressurize the system. The expansion tank is very important to system pressurization. The expansion tank serves several purposes:

1. Provides NPSHR (Net Positive Suction Head Required) for the pump to operate satisfactorily.
2. Sets system pressure.
3. Accommodates expansion/contraction of water due to temperature changes.
4. Acts as a pressure reference for the pump.

The expansion tank pressure must be set **BEFORE** the system is filled. Follow the manufacturer's recommendation for instructions on setting the pressure in the expansion tank.

Once the system is pressurized, the pressure at the connection point of the expansion tank to water piping will not change unless the water loop volume changes (either due to addition/

subtraction of water or temperature expansion/contraction). The pressure at this point remains the same regardless of whether or not the pump is running.

Since the expansion tank acts as a reference point for the pump, there cannot be two reference points (two expansion tanks) in a system, unless manifolded together as seen in Fig. 39. It is permissible to install the expansion tank(s) in a portion of the return water line that is common to all pumps, providing that the tank is properly sized for combined system volume.

If the application involves two or more chillers in a primary-secondary system, a common place for mounting the expansion tank is in the chilled water return line, just before the decoupler. See Fig. 39 for placement of expansion tank in primary-secondary systems.

If a diaphragm expansion tank is utilized (a flexible diaphragm physically separates the water/air interface) it is not recommended to have any air in the water loop. See the section on air separation on page 102 for instructions on providing air separation equipment.

FILLING THE SYSTEM

The initial fill of the chilled water system must accomplish three goals:

1. The entire piping system must be filled with water.
2. The pressure at the top of the system must be high enough to vent air from the system (usually 4 psig [27.6 kPa] is adequate for most vents).
3. The pressure at all points in the system must be high enough to prevent flashing in the piping or cavitation in the pump.

The pressure created by an operating pump affects system pressure at all points except one — the connection of the expansion tank to the system. This is the only location in the system where pump operation will not give erroneous pressure indications during the fill. Therefore, the best location to install the fill connection is close to the expansion tank. An air vent should be installed close by to help eliminate air that enters during the fill procedure. When filling the system, ensure the following:

1. Remove temporary bypass piping and cleaning/flushing equipment.
2. Check to make sure all drain plugs are installed.

Normally, a closed system needs to be filled only once. The actual filling process is a fairly simple procedure. All air should be purged or vented from the system. Thorough venting at high points and circulation at room temperature for several hours is highly recommended.

NOTE: Local codes concerning backflow devices and other protection of the city water system should be consulted and followed to prevent contamination of the public water supply. This is critical when antifreeze is used in the system.

SET WATER FLOW RATE

Once the system is cleaned, pressurized, and filled, the flow rate through the chiller needs to be established. Follow the manufacturer's recommendations for setting the balancing valve. Local codes may prohibit restricting the amount of water using the balancing valve for a given motor horsepower.

NOTE: Carrier recommends a differential pressure gage when measuring pressures across the pumps or balancing valves. This provides for greater accuracy and reduces error build-up that often occurs when subtracting pressures made by different gages.

A rough estimate of water flow can also be obtained from the pressure gages across the 30XV heat exchanger.

For units with the factory installed pumps, the water flow rate will be set with the pump speed control. See Troubleshooting Guide for pump operation.

The Controls, Start-Up Operation, Service, and Troubleshooting guide includes graphs that show the relationship between

gpm and heat exchanger pressure drop. It should be noted that these curves are for fresh water and "clean" heat exchangers; they do not apply to heat exchangers with fouling.

FREEZE PROTECTION

The 30XV units with Greenspeed® intelligence are provided with a flow switch to protect against freezing situations that occur from no water flow. While the flow switch is helpful in preventing freezing during no-flow situations, it does not protect the chiller in case of power failure during sub-freezing ambient temperatures, or in other cases where water temperature falls below the freezing mark. Appropriate concentrations of inhibited propylene or ethylene glycol or other suitable inhibited antifreeze solution should be considered for chiller protection where ambient temperatures are expected to fall below 32°F (0°C). Consult a local water treatment specialist on characteristics of the system water and add a recommended inhibitor to the chilled water. The Carrier warranty does not cover damage due to freezing.

NOTE: Do not use automobile anti-freeze, or any other fluid that is not approved for heat exchanger duty. Only use appropriately inhibited glycols, concentrated to provide adequate protection for the temperature considered.

Use electric heater tape for the external piping, if unit will be exposed to freezing temperatures and is not protected with a suitable antifreeze solution.

For units equipped with evaporator heaters, ensure that power is available to the chiller at all times, even during the off-season, so that the evaporator heaters have power. Also make sure that the piping heater tape has power.

Units with evaporator heaters are protected from freezing down to 0°F (–18°C) through the evaporator heaters and control algorithms. If the unit controls the chilled water pump and valves, allowing flow through the evaporator, the unit is protected from freezing down to –20°F (–29°C). The Carrier warranty does not cover damage due to freezing.

PREPARATION FOR WINTER SHUTDOWN

If the unit is not operational during the winter months, at the end of cooling season complete the following steps.

CAUTION

Failure to remove power before draining heater equipped evaporator and factory supplied pump system will result in heater failure.

1. If the evaporator will not be drained, do not shut off power disconnect during off-season shutdown. If evaporator is to be drained, first open the circuit breaker for the heater, CB-7, or shut off power during off-season shutdown.
2. Draining the fluid from the system is highly recommended. Units have a drain plug mounted on the bottom of the evaporator head at each end of the evaporator.
3. Isolate the evaporator from the rest of the system with water shutoff valves.
4. Replace the drain plug and completely fill the evaporator with a mixture of water and a suitable corrosion-inhibited anti-freeze solution such as propylene glycol. The concentration should be adequate to provide freeze protection to 15°F (8.3°C) below the expected low ambient temperature conditions. Antifreeze can be added through the vent on top of the evaporator head.
5. Leave the evaporator filled with the antifreeze solution for the winter. Be sure to deenergize heaters (if installed) as explained in Step 1 to prevent damage if the evaporator is drained. Use an approved method of disposal when removing antifreeze solution.

At the beginning of the next cooling season, be sure that there is refrigerant pressure on each circuit before refilling evaporator, add recommended inhibitor, and reset the CB-7 (circuit breaker for the heater) (if opened) or restore power.

If system does not have charge at this time, find and repair the leak. Always assure water is flowing in the evaporator before charging or evacuating the unit.

Step 5 — Make Electrical Connections

WARNING

Electrical shock can cause personal injury and death. Shut off all power to this equipment during installation. There may be more than one disconnect switch. Tag all disconnect locations to alert others not to restore power until work is completed.

POWER SUPPLY

The electrical characteristics of the available power supply must agree with the unit nameplate rating. Supply voltage must be within the limits shown. See Table 8 for power entry option. See Tables 9-18 for electrical and configuration data.

FIELD POWER CONNECTIONS (SEE FIG. 47)

All power wiring must comply with applicable local and national codes. Install field-supplied, branch circuit fused disconnect(s) of a type that can be locked off or open. Disconnect(s) must be located within sight and readily accessible from the unit in compliance with NEC Article 440-14 (U.S.A.). See Tables 9-18 for unit electrical data.

IMPORTANT: The 30XV units with Greenspeed® intelligence have a factory-installed option available for a non-fused disconnect for unit power supply. If the unit is equipped with this option, all field power wiring should be made to the non-fused disconnect since no terminal blocks are supplied.

Maximum wire sizes that the unit terminal block or non-fused disconnect are listed in Table 8.

POWER WIRING

All power wiring must comply with applicable local and national codes. Install field-supplied branch circuit fused disconnect per NEC of a type that can be locked OFF or OPEN. Disconnect must be within sight and readily accessible from the unit in compliance with NEC Article 440-14. In the power box, 7/8 in. knockouts are provided for power entry. The holes will need to

be enlarged to accept the appropriate conduit. NEC also requires all conduits from a conditioned space to the power box(es) be sealed to prevent airflow and moisture into the control box.

The 30XV units with Greenspeed intelligence require 1 or 2 power supplies, depending on the unit and power option selected. See Tables 9-18 for chiller electrical data. Evaporator heaters, if factory-installed, are wired in the control circuit. Heaters on chillers with the optional control transformer will be capable of operation only when the main power supply to the chiller is on. On chillers with separate control power, the heaters are capable of operation whenever the control power is supplied.

IMPORTANT: The 30XV units with Greenspeed® intelligence rated 400V, 415V and 440V will have compressors rated at 380V. The compressor VFD will have proper configuration to accept 400V, 415V or 440V line power as applicable and output 380V to the compressor.

IMPORTANT: The 30XV units with Greenspeed® intelligence rated 575V will have compressors rated at 460V. The compressor VFD will have proper configuration to accept 575V line power and output 460V to the compressor.

UNITS WITH PUMP OPTION

For units with the factory installed pump option, pump heaters use the same control output as the evaporator heaters. Ensure that the heaters cannot be energized without water in the pump manifolds.

FIELD CONTROL POWER CONNECTIONS (SEE FIG. 47)

All units require 115-1-60 control circuit power, unless the control transformer option is installed.

A field-supplied remote on-off switch or control relay can be wired into TB5-9 and TB5-10. Contacts must be rated for dry-circuit applications capable of handling a 24-vac at 50 mA load.

CAUTION

Do not use interlocks or other safety device contacts connected between TB5-9 and TB5-10 as remote on-off. Connection of safeties or other interlocks between these 2 terminals will result in an electrical bypass if the ENABLE-OFF-REMOTE contact switch is in the ENABLE position. If remote on-off unit control is required, a field-supplied relay must be installed in the unit control box and wired as shown in Fig. 47. Failure to wire the remote on-off as recommended may result in tube freeze damage.

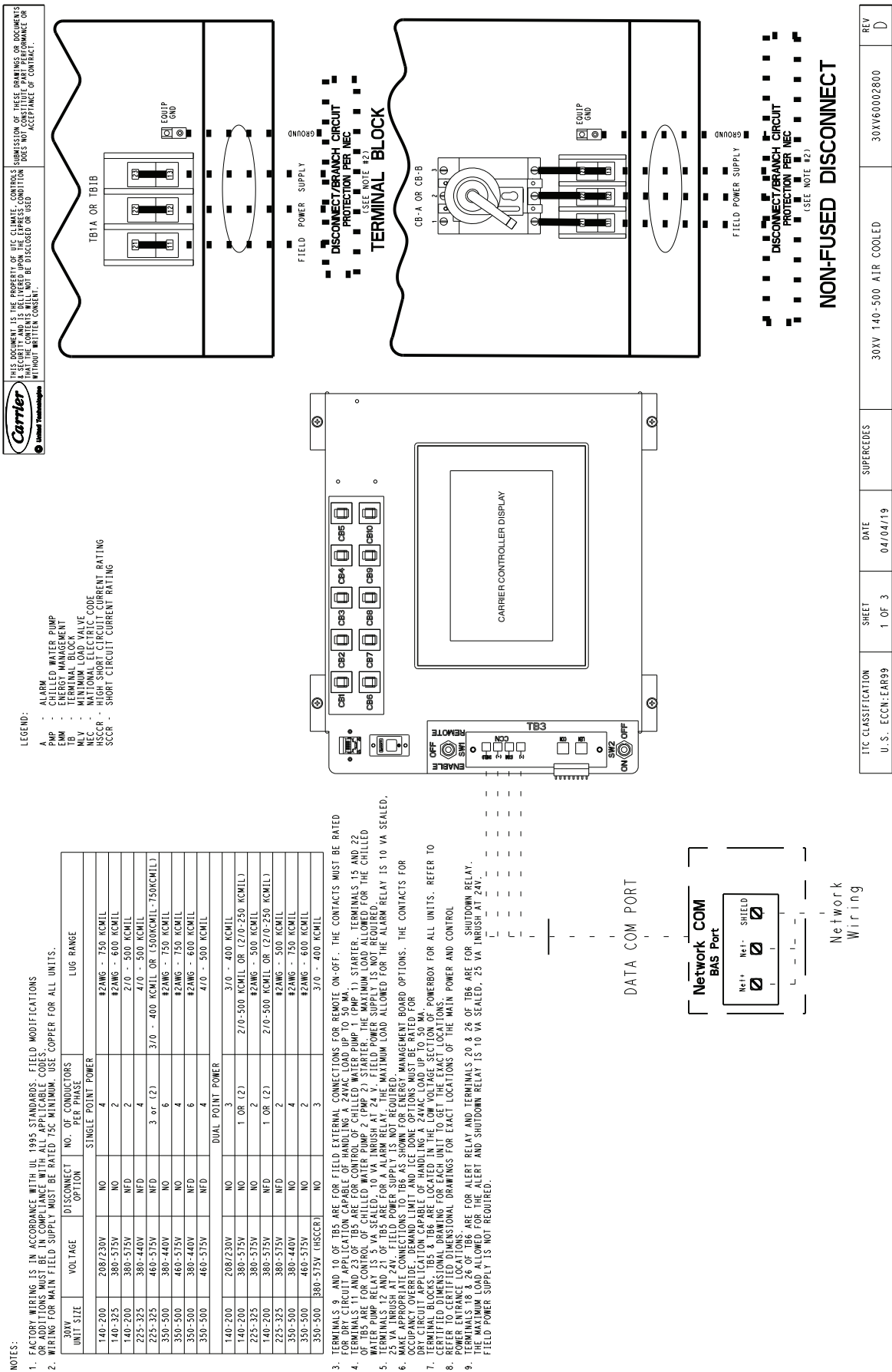


Fig. 47 — Field Control and Power Wiring

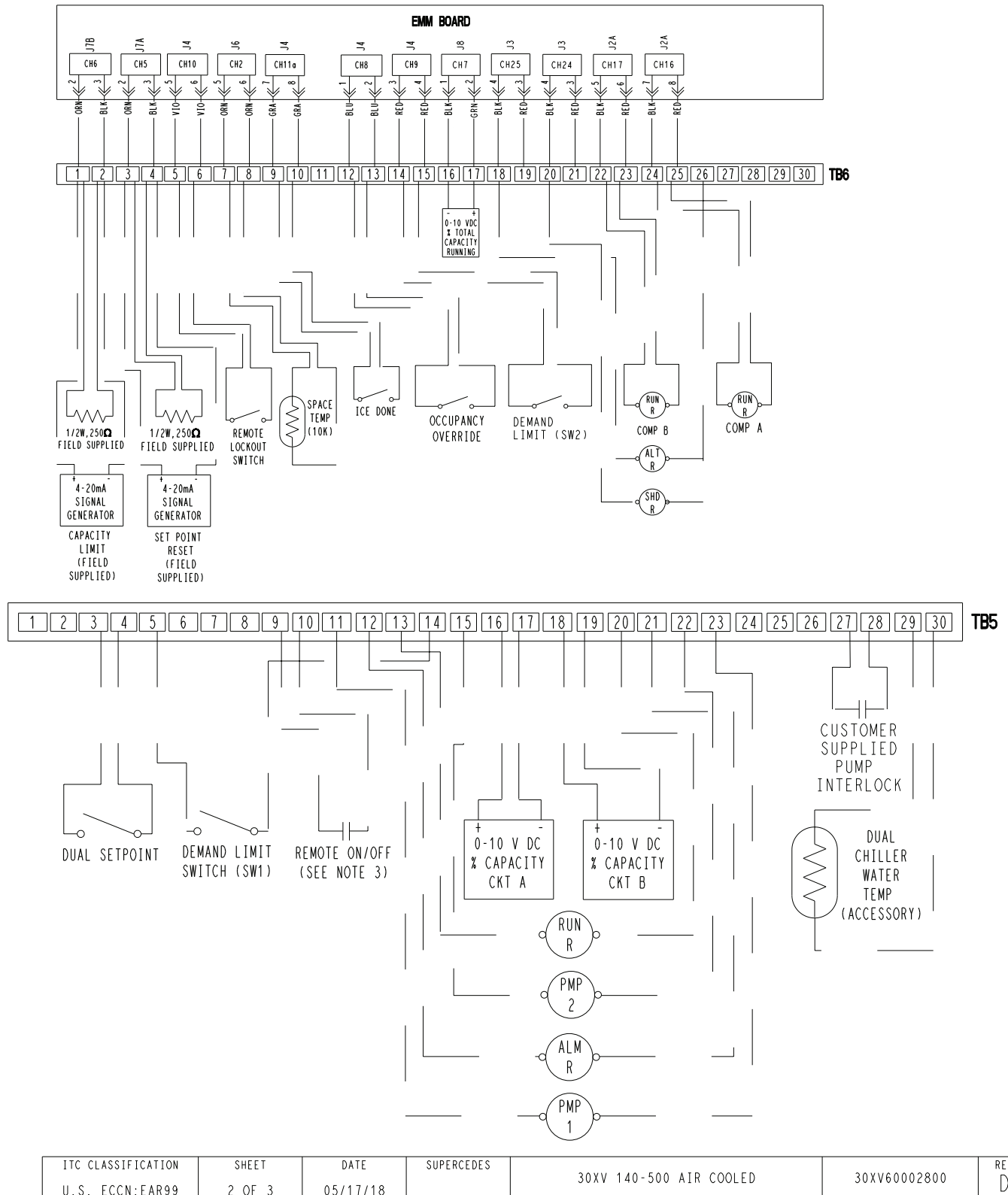
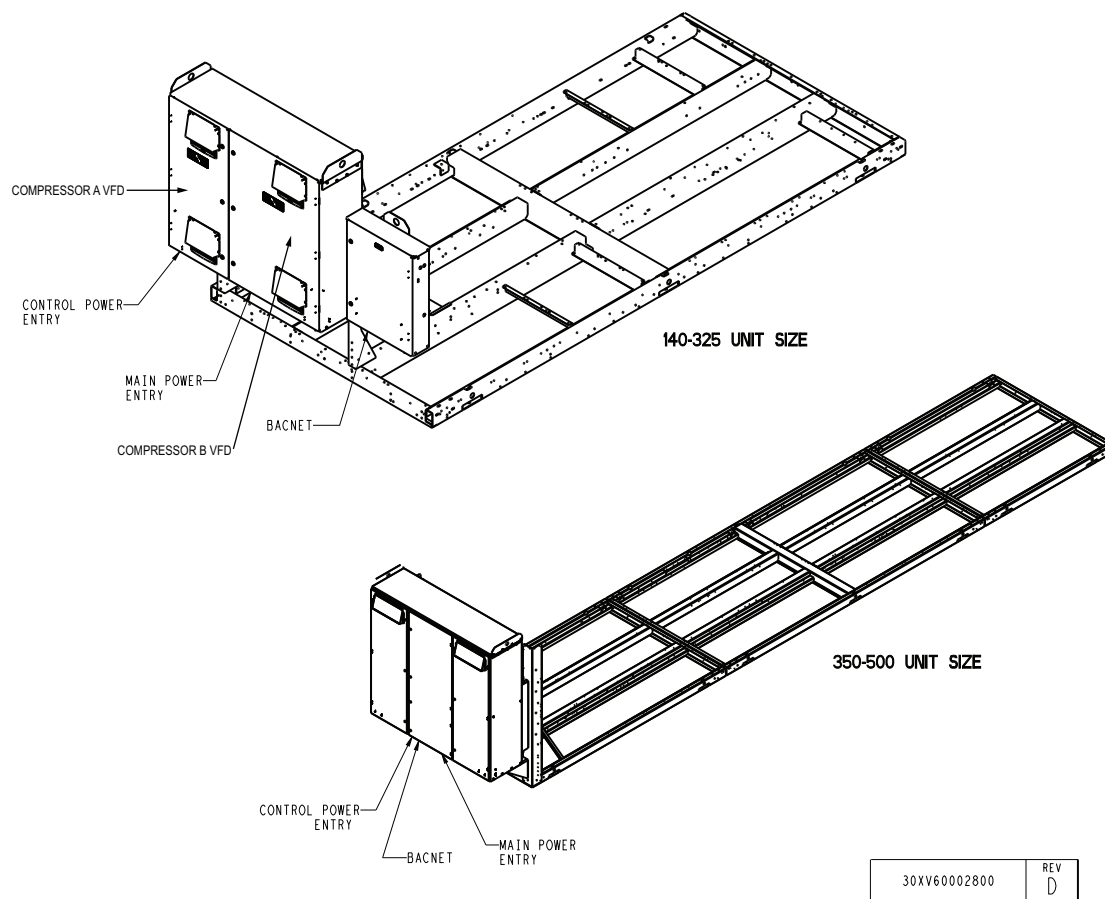


Fig. 47 — Field Control and Power Wiring (cont)



30XV60002800	REV D
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Fig. 47 — Field Control and Power Wiring (cont)

Table 8 — Power Entry Options

POWER ENTRY OPTION	30XV UNIT SIZE	VOLTAGE	DISCONNECT OPTION	NO. OF CONDUCTORS PER PHASE	LUG RANGE
SINGLE POINT POWER	140-200	208/230V	NO	4	#2AWG - 750 KCMIL
		380-575V	NFD	2	2/0 - 500 KCMIL
	140-325	380-575V	NO	2	#2AWG - 600 KCMIL
	225-325	380-440V	NFD	4	4/0 - 500 KCMIL
		460-575V	NFD	3 (or 2)	3/0 - 400 KCMIL or (500 KCMIL - 750 KCMIL)
	350-500	380-440V	NO	6	#2AWG - 750 KCMIL
		460-575V	NO	4	#2AWG - 750 KCMIL
		380-440V	NFD	6	#2AWG - 600 KCMIL
		460-575V	NFD	4	4/0 - 500 KCMIL
DUAL POINT POWER	140-200	208/230V	NO	3	3/0 - 400 KCMIL
		380-575V	NO	1 or (2)	2/0-500 KCMIL or (2/0-250 KCMIL)
		380-575V	NFD	1 or (2)	2/0-500 KCMIL or (2/0-250 KCMIL)
	225-325	380-575V	NO	2	#2AWG - 500 KCMIL
		380-575V	NFD	2	#2AWG - 500 KCMIL
	350-500	380V	NO	4	#2AWG - 750 KCMIL
		460-575V	NO	2	#2AWG - 600 KCMIL
		380-575V (HSCCR)	NO	3	3/0 - 400 KCMIL

LEGEND

AWG — American Wire Gage
HSCCR — High Short Circuit Current Rating
NFD — Non-fused Disconnect
NO — None

Table 9 — Single Point Power, Standard Tier, Fixed Speed Fans (See note 1)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	NO HYDRONIC PACKAGE			CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			MCA	MOCP	REC FUSE SIZE	Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max						
140	208/230	60	187	253	8	578.7	800	700	115	60
	380	60	342	418	8	317.1	400	350	115	60
	400	60	360	440	8	302.4	400	350	115	60
	460	60	414	506	8	261.6	350	300	115	60
	575	60	518	633	8	210.6	250	250	115	60
160	208/230	60	187	253	8	679.9	800	800	115	60
	380	60	342	418	8	371.1	500	450	115	60
	400	60	360	440	8	354.1	450	400	115	60
	460	60	414	506	8	306.6	400	350	115	60
	575	60	518	633	8	246.6	300	300	115	60
180	208/230	60	187	253	8	781.2	1000	1000	115	60
	380	60	342	418	8	427.3	600	500	115	60
	400	60	360	440	8	408.1	500	450	115	60
	460	60	414	506	8	353.1	450	400	115	60
	575	60	518	633	8	282.6	350	350	115	60
200	208/230	60	187	253	10	810.1	1000	1000	115	60
	380	60	342	418	10	443.5	600	500	115	60
	400	60	360	440	10	421.8	500	500	115	60
	460	60	414	506	10	366.3	500	450	115	60
	575	60	518	633	10	294.2	400	350	115	60
225	380	60	342	418	10	517.8	700	600	115	60
	400	60	360	440	10	492.1	700	600	115	60
	460	60	414	506	10	426.9	600	500	115	60
	575	60	518	633	10	342.4	500	400	115	60
250	380	60	342	418	12	581.3	800	700	115	60
	400	60	360	440	12	552.5	700	700	115	60
	460	60	414	506	12	478.9	600	600	115	60
	575	60	518	633	12	383.7	500	450	115	60
275	380	60	342	418	12	624.0	800	700	115	60
	400	60	360	440	12	593.0	800	700	115	60
	460	60	414	506	12	514.6	700	600	115	60
	575	60	518	633	12	413.0	500	500	115	60
300	380	60	342	418	14	640.2	800	800	115	60
	400	60	360	440	14	608.9	800	700	115	60
	460	60	414	506	14	528.3	700	600	115	60
	575	60	518	633	14	424.5	500	500	115	60
325	380	60	342	418	16	701.4	800	800	115	60
	400	60	360	440	16	667.5	800	800	115	60
	460	60	414	506	16	579.3	800	700	115	60
	575	60	518	633	16	465.3	600	600	115	60
350	380	60	342	418	16	831.3	1200	1000	115	60
	400	60	360	440	16	789.9	1000	1000	115	60
	460	60	414	506	16	685.8	1000	800	115	60
	575	60	518	633	16	550.0	800	700	115	60
400	380	60	342	418	18	893.8	1200	1000	115	60
	400	60	360	440	18	850.6	1000	1000	115	60
	460	60	414	506	18	737.5	1000	1000	115	60
	575	60	518	633	18	592.0	800	700	115	60
450	380	60	342	418	20	1033.7	1200	1200	115	60
	400	60	360	440	20	983.5	1200	1200	115	60
	460	60	414	506	20	853.7	1200	1000	115	60
	575	60	518	633	20	684.6	800	800	115	60
500	380	60	342	418	22	1123.5	1200	1200	115	60
	400	60	360	440	22	1068.3	1200	1200	115	60
	460	60	414	506	22	926.8	1200	1200	115	60
	575	60	518	633	22	741.5	1000	1000	115	60

LEGEND

- MCA** — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 10 — Single Point Power, Standard Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS			CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max									
160	208/230	60	187	253	8	680.7	800	800	691.0	800	800	115	60
	380	60	342	418	8	372.7	500	450	383.0	500	450	115	60
	400	60	360	440	8	354.8	450	400	364.9	500	400	115	60
	460	60	414	506	8	307.5	400	350	316.3	400	350	115	60
	575	60	518	633	8	248.2	300	300	255.1	350	300	115	60
	380	50	342	418	8	380.3	500	450	390.8	500	450	—	—
	400	50	360	440	8	362.4	500	400	372.4	500	450	—	—
	415	50	374	457	8	349.7	450	400	359.4	450	400	—	—
	440	50	396	484	8	329.5	450	400	338.6	450	400	—	—
	208/230	60	187	253	8	781.9	1000	1000	792.3	1000	1000	115	60
180	380	60	342	418	8	428.9	500	500	439.3	600	500	115	60
	400	60	360	440	8	406.6	500	450	416.6	500	500	115	60
	460	60	414	506	8	353.2	450	400	362.0	500	400	115	60
	575	60	518	633	8	284.2	350	350	291.1	400	350	115	60
	380	50	342	418	8	438.8	600	500	449.3	600	500	—	—
	400	50	360	440	8	418.6	500	500	428.7	500	500	—	—
	415	50	374	457	8	403.7	500	450	413.4	500	500	—	—
	440	50	396	484	8	381.2	500	450	390.3	500	450	—	—
	208/230	60	187	253	10	812.2	1000	1000	825.1	1000	1000	115	60
	380	60	342	418	10	446.1	600	500	459.0	600	600	115	60
200	400	60	360	440	10	423.2	500	500	435.8	500	500	115	60
	460	60	414	506	10	367.0	500	450	378.0	500	450	115	60
	575	60	518	633	10	295.6	400	350	304.2	400	350	115	60
	380	50	342	418	10	456.1	600	600	469.3	600	600	—	—
	400	50	360	440	10	435.5	600	500	448.0	600	500	—	—
	415	50	374	457	10	420.2	500	500	432.2	500	500	—	—
	440	50	396	484	10	394.9	500	450	406.3	500	450	—	—
	380	60	342	418	10	513.1	700	600	526.1	700	600	115	60
	400	60	360	440	10	488.5	700	600	501.1	700	600	115	60
	460	60	414	506	10	423.3	600	500	434.3	600	500	115	60
225	575	60	518	633	10	339.1	450	400	347.7	500	400	115	60
	380	50	342	418	10	524.4	700	600	537.6	700	600	—	—
	400	50	360	440	10	499.8	700	600	512.3	700	600	—	—
	415	50	374	457	10	482.0	700	600	494.0	700	600	—	—
	440	50	396	484	10	454.9	600	600	466.3	600	600	—	—
	380	60	342	418	12	591.6	800	700	607.1	800	700	115	60
	400	60	360	440	12	561.4	700	700	576.5	700	700	115	60
	460	60	414	506	12	487.0	600	600	500.2	600	600	115	60
	575	60	518	633	12	391.7	500	450	402.0	500	450	115	60
	380	50	342	418	12	604.1	800	700	619.9	800	700	—	—
250	400	50	360	440	12	576.1	800	700	591.2	800	700	—	—
	415	50	374	457	12	555.9	700	700	570.4	700	700	—	—
	440	50	396	484	12	523.4	700	600	537.1	700	600	—	—
	380	60	342	418	12	611.8	800	700	627.3	800	700	115	60
	400	60	360	440	12	581.7	800	700	596.7	800	700	115	60
	460	60	414	506	12	504.6	700	600	517.8	700	600	115	60
	575	60	518	633	12	405.2	500	450	415.5	500	500	115	60
	380	50	342	418	12	624.3	800	700	640.1	800	800	—	—
	400	50	360	440	12	594.1	800	700	609.2	800	700	—	—
	415	50	374	457	12	573.9	700	700	588.4	800	700	—	—
275	440	50	396	484	12	541.4	700	600	555.1	700	700	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.

- Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 10 — Single Point Power, Standard Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS			CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max									
300	380	60	342	418	14	651.5	800	800	669.6	800	800	115	60
	400	60	360	440	14	620.8	800	700	638.4	800	700	115	60
	460	60	414	506	14	537.9	700	600	553.3	700	700	115	60
	575	60	518	633	14	432.3	600	500	444.4	600	500	115	60
	380	50	342	418	14	666.4	800	800	684.9	800	800	—	—
	400	50	360	440	14	635.7	800	700	653.3	800	800	—	—
	415	50	374	457	14	612.9	800	700	629.8	800	700	—	—
	440	50	396	484	14	577.5	800	700	593.5	800	700	—	—
325	380	60	342	418	16	718.1	800	800	738.8	1000	1000	115	60
	400	60	360	440	16	682.5	800	800	702.5	800	800	115	60
	460	60	414	506	16	592.2	800	700	609.8	800	700	115	60
	575	60	518	633	16	475.2	600	600	489.0	600	600	115	60
	380	50	342	418	16	733.3	1000	1000	754.4	1000	1000	—	—
	400	50	360	440	16	697.5	800	800	717.6	800	800	—	—
	415	50	374	457	16	674.4	800	800	693.7	800	800	—	—
	440	50	396	484	16	636.2	800	700	654.5	800	800	—	—
350	380	60	342	418	16	836.9	1200	1000	857.6	1200	1000	115	60
	400	60	360	440	16	796.0	1000	1000	816.0	1000	1000	115	60
	460	60	414	506	16	690.7	1000	800	708.3	1000	800	115	60
	575	60	518	633	16	553.5	800	700	567.2	800	700	115	60
	380	50	342	418	16	854.5	1200	1000	875.7	1200	1000	—	—
	400	50	360	440	16	813.5	1000	1000	833.6	1000	1000	—	—
	415	50	374	457	16	784.4	1000	1000	803.7	1000	1000	—	—
	440	50	396	484	16	740.0	1000	1000	758.2	1000	1000	—	—
400	380	60	342	418	18	886.7	1200	1000	910.0	1200	1000	115	60
	400	60	360	440	18	843.7	1000	1000	866.3	1000	1000	115	60
	460	60	414	506	18	731.4	1000	1000	751.2	1000	1000	115	60
	575	60	518	633	18	586.0	800	700	601.5	800	700	115	60
	380	50	342	418	18	904.3	1200	1000	928.1	1200	1200	—	—
	400	50	360	440	18	861.3	1000	1000	883.8	1200	1000	—	—
	415	50	374	457	18	831.0	1000	1000	852.7	1000	1000	—	—
	440	50	396	484	18	783.3	1000	1000	803.8	1000	1000	—	—
450	380	60	342	418	20	1054.6	1200	1200	1080.5	1200	1200	115	60
	400	60	360	440	20	1002.1	1200	1200	1027.2	1200	1200	115	60
	460	60	414	506	20	870.9	1200	1000	892.9	1200	1000	115	60
	575	60	518	633	20	698.6	800	800	715.8	800	800	115	60
	380	50	342	418	20	1076.9	1200	1200	1103.3	1200	1200	—	—
	400	50	360	440	20	1024.3	1200	1200	1049.4	1200	1200	—	—
	415	50	374	457	20	987.0	1200	1200	1011.1	1200	1200	—	—
	440	50	396	484	20	931.9	1200	1200	954.7	1200	1200	—	—
500	380	60	342	418	22	1137.0	1200	1200	1165.5	1600	1600	115	60
	400	60	360	440	22	1079.5	1200	1200	1107.1	1200	1200	115	60
	460	60	414	506	22	938.3	1200	1200	962.5	1200	1200	115	60
	575	60	518	633	22	752.8	1000	1000	771.7	1000	1000	115	60
	380	50	342	418	22	1159.5	1600	1600	1188.6	1600	1600	—	—
	400	50	360	440	22	1104.2	1200	1200	1131.8	1200	1200	—	—
	415	50	374	457	22	1064.2	1200	1200	1090.8	1200	1200	—	—
	440	50	396	484	22	1004.1	1200	1200	1029.2	1200	1200	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			10 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	8	586.2	800	700	—	—	—	—	—	—	115	60
	380	60	342	418	8	320.9	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	8	305.3	400	350	—	—	—	—	—	—	115	60
	460	60	414	506	8	265.0	350	300	—	—	—	—	—	—	115	60
	575	60	518	633	8	212.2	250	250	—	—	—	—	—	—	115	60
	380	50	342	418	8	328.5	450	400	—	—	—	—	—	—	—	—
	400	50	360	440	8	312.9	400	350	—	—	—	—	—	—	—	—
	415	50	374	457	8	305.3	400	350	—	—	—	—	—	—	—	—
160	440	50	396	484	8	286.7	350	350	—	—	—	—	—	—	—	—
	208/230	60	187	253	10	643.5	800	800	704.8	800	800	—	—	—	115	60
	380	60	342	418	10	351.6	450	400	—	—	—	—	—	—	115	60
	400	60	360	440	10	335.5	450	400	—	—	—	—	—	—	115	60
	460	60	414	506	10	290.0	350	350	318.7	400	350	—	—	—	115	60
	575	60	518	633	10	232.6	300	300	255.5	300	300	—	—	—	115	60
	380	50	342	418	10	359.4	450	400	—	—	—	—	—	—	—	—
	400	50	360	440	10	343.2	450	400	—	—	—	—	—	—	—	—
180	415	50	374	457	10	335.5	450	400	—	—	—	—	—	—	—	—
	440	50	396	484	10	311.6	400	350	—	—	—	—	—	—	—	—
	208/230	60	187	253	10	726.7	1000	800	788.1	1000	1000	—	—	—	115	60
	380	60	342	418	10	398.8	500	450	—	—	—	—	—	—	115	60
	400	60	360	440	10	378.2	500	450	—	—	—	—	—	—	115	60
	460	60	414	506	10	327.8	450	400	356.5	450	400	—	—	—	115	60
	575	60	518	633	10	264.1	350	300	287.0	350	350	—	—	—	115	60
	380	50	342	418	10	408.9	500	450	—	—	—	—	—	—	—	—
200	400	50	360	440	10	390.5	500	450	—	—	—	—	—	—	—	—
	415	50	374	457	10	375.2	500	450	—	—	—	—	—	—	—	—
	440	50	396	484	10	354.4	450	400	—	—	—	—	—	—	—	—
	208/230	60	187	253	12	812.9	1000	1000	—	—	—	924.3	1200	1200	115	60
	380	60	342	418	12	445.3	600	500	—	—	—	—	—	—	115	60
	400	60	360	440	12	424.2	500	500	—	—	—	—	—	—	115	60
	460	60	414	506	12	366.7	500	450	—	—	—	424.0	500	500	115	60
	575	60	518	633	12	295.0	400	350	—	—	—	340.8	450	400	115	60
225	380	50	342	418	12	455.6	600	600	—	—	—	—	—	—	—	—
	400	50	360	440	12	434.4	500	500	—	—	—	—	—	—	—	—
	415	50	374	457	12	418.7	500	500	—	—	—	—	—	—	—	—
	440	50	396	484	12	395.1	500	450	—	—	—	—	—	—	—	—
	380	60	342	418	12	499.3	700	600	—	—	—	—	—	—	115	60
	400	60	360	440	12	474.4	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	12	411.1	500	500	—	—	—	—	—	—	115	60
	575	60	518	633	12	329.7	450	400	—	—	—	—	—	—	115	60
250	380	50	342	418	12	509.8	700	600	—	—	—	—	—	—	—	—
	400	50	360	440	12	485.9	700	600	—	—	—	—	—	—	—	—
	415	50	374	457	12	468.7	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	12	442.4	600	500	—	—	—	—	—	—	—	—
	380	60	342	418	14	563.7	700	700	—	—	—	—	—	—	115	60
	400	60	360	440	14	537.6	700	600	—	—	—	—	—	—	115	60
	460	60	414	506	14	465.3	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	14	373.8	500	450	—	—	—	—	—	—	115	60
250	380	50	342	418	14	576.4	700	700	—	—	—	—	—	—	—	—
	400	50	360	440	14	550.2	700	700	—	—	—	—	—	—	—	—
	415	50	374	457	14	529.7	700	600	—	—	—	—	—	—	—	—
	440	50	396	484	14	501.0	600	600	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

- MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
- Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
- For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 - Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 - On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			10 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	14	604.2	800	700	—	—	—	—	—	—	115	60
	400	60	360	440	14	573.6	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	14	498.1	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	14	398.6	500	450	—	—	—	—	—	—	115	60
	380	50	342	418	14	616.9	800	700	—	—	—	—	—	—	—	—
	400	50	360	440	14	588.5	800	700	—	—	—	—	—	—	—	—
	415	50	374	457	14	567.9	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	14	534.8	700	600	—	—	—	—	—	—	—	—
300	380	60	342	418	16	630.4	800	700	—	—	—	—	—	—	115	60
	400	60	360	440	16	599.2	800	700	—	—	—	—	—	—	115	60
	460	60	414	506	16	519.3	700	600	—	—	—	576.6	700	700	115	60
	575	60	518	633	16	416.7	500	500	—	—	—	462.6	600	600	115	60
	380	50	342	418	16	643.3	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	16	612.0	800	700	—	—	—	—	—	—	—	—
	415	50	374	457	16	591.1	800	700	—	—	—	—	—	—	—	—
	440	50	396	484	16	557.5	700	700	—	—	—	—	—	—	—	—
325	380	60	342	418	18	685.8	800	800	—	—	—	—	—	—	115	60
	400	60	360	440	18	651.8	800	800	—	—	—	—	—	—	115	60
	460	60	414	506	18	566.2	700	700	—	—	—	623.5	800	700	115	60
	575	60	518	633	18	455.1	600	500	—	—	—	500.9	600	600	115	60
	380	50	342	418	18	701.2	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	18	667.1	800	800	—	—	—	—	—	—	—	—
	415	50	374	457	18	643.6	800	800	—	—	—	—	—	—	—	—
	440	50	396	484	18	607.1	800	700	—	—	—	—	—	—	—	—
350	380	60	342	418	18	776.3	1000	1000	—	—	—	—	—	—	115	60
	400	60	360	440	18	738.3	1000	1000	—	—	—	—	—	—	115	60
	460	60	414	506	18	639.9	800	800	—	—	—	—	—	—	115	60
	575	60	518	633	18	512.3	700	600	—	—	—	—	—	—	115	60
	380	50	342	418	18	791.9	1000	1000	—	—	—	—	—	—	—	—
	400	50	360	440	18	753.9	1000	1000	—	—	—	—	—	—	—	—
	415	50	374	457	18	726.6	1000	1000	—	—	—	—	—	—	—	—
	440	50	396	484	18	686.1	800	800	—	—	—	—	—	—	—	—
400	380	60	342	418	20	879.1	1200	1000	—	—	—	—	—	—	115	60
	400	60	360	440	20	835.6	1000	1000	—	—	—	—	—	—	115	60
	460	60	414	506	20	724.9	1000	800	—	—	—	—	—	—	115	60
	575	60	518	633	20	581.6	800	700	—	—	—	—	—	—	115	60
	380	50	342	418	20	896.9	1200	1000	—	—	—	—	—	—	—	—
	400	50	360	440	20	853.3	1000	1000	—	—	—	—	—	—	—	—
	415	50	374	457	20	822.7	1000	1000	—	—	—	—	—	—	—	—
	440	50	396	484	20	776.7	1000	1000	—	—	—	—	—	—	—	—
450	380	60	342	418	22	1049.2	1200	1200	—	—	—	—	—	—	115	60
	400	60	360	440	22	996.3	1200	1200	—	—	—	—	—	—	115	60
	460	60	414	506	22	864.9	1200	1000	—	—	—	—	—	—	115	60
	575	60	518	633	22	692.0	800	800	—	—	—	—	—	—	115	60
	380	50	342	418	22	1071.8	1200	1200	—	—	—	—	—	—	—	—
	400	50	360	440	22	1018.7	1200	1200	—	—	—	—	—	—	—	—
	415	50	374	457	22	983.2	1200	1200	—	—	—	—	—	—	—	—
	440	50	396	484	22	927.6	1200	1200	—	—	—	—	—	—	—	—
500	380	60	342	418	24	1104.6	1200	1200	—	—	—	—	—	—	115	60
	400	60	360	440	24	1051.2	1200	1200	—	—	—	—	—	—	115	60
	460	60	414	506	24	912.0	1200	1200	—	—	—	—	—	—	115	60
	575	60	518	633	24	730.4	1000	1000	—	—	—	—	—	—	115	60
	380	50	342	418	24	1127.4	1200	1200	—	—	—	—	—	—	—	—
	400	50	360	440	24	1071.5	1200	1200	—	—	—	—	—	—	—	—
	415	50	374	457	24	1033.4	1200	1200	—	—	—	—	—	—	—	—
	440	50	396	484	24	975.0	1200	1200	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required.

Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			10 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	8	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	8	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	8	—	—	—	—	—	—	—	—	—	—	—	—
160	208/230	60	187	253	10	718.8	800	800	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	328.7	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	10	263.5	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	10	802.1	1000	1000	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	366.5	450	400	—	—	—	—	—	—	115	60
	575	60	518	633	10	295.0	350	350	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	12	924.3	1200	1200	—	—	—	960.3	1200	1200	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	424.0	500	500	—	—	—	442.6	500	500	115	60
	575	60	518	633	12	340.8	450	400	—	—	—	355.7	450	400	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			10 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	595.2	700	700	—	—	—	595.2	700	700	115	60
	575	60	518	633	16	477.4	600	600	—	—	—	477.4	600	600	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	642.1	800	700	—	—	—	642.1	800	700	115	60
	575	60	518	633	18	515.8	600	600	—	—	—	515.8	600	600	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	18	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	22	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	24	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT		
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, High Static			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP	
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE			
140	208/230	60	187	253	8	—	—	—	596.5	800	700	—	—	—	115	60	
	380	60	342	418	8	—	—	—	331.3	450	400	—	—	—	115	60	
	400	60	360	440	8	—	—	—	315.4	400	350	—	—	—	115	60	
	460	60	414	506	8	—	—	—	273.8	350	300	—	—	—	115	60	
	575	60	518	633	8	—	—	—	219.1	250	250	—	—	—	115	60	
	380	50	342	418	8	—	—	—	339.1	450	400	—	—	—	—	—	
	400	50	360	440	8	—	—	—	322.9	400	400	—	—	—	—	—	
	415	50	374	457	8	—	—	—	312.1	400	350	—	—	—	—	—	
	440	50	396	484	8	—	—	—	295.8	400	350	—	—	—	—	—	
	160	208/230	60	187	253	10	—	—	—	656.4	800	800	717.7	800	800	115	60
380		60	342	418	10	—	—	—	364.5	450	400	—	—	—	115	60	
400		60	360	440	10	—	—	—	348.0	450	400	—	—	—	115	60	
460		60	414	506	10	—	—	—	301.0	400	350	329.7	400	350	115	60	
575		60	518	633	10	—	—	—	241.2	300	300	264.1	350	300	115	60	
380		50	342	418	10	—	—	—	372.6	500	450	—	—	—	—	—	
400		50	360	440	10	—	—	—	355.8	450	400	—	—	—	—	—	
415		50	374	457	10	—	—	—	342.2	450	400	—	—	—	—	—	
440		50	396	484	10	—	—	—	323.0	400	400	—	—	—	—	—	
180		208/230	60	187	253	10	—	—	—	739.6	1000	1000	801.0	1000	1000	115	60
	380	60	342	418	10	—	—	—	411.8	500	450	—	—	—	115	60	
	400	60	360	440	10	—	—	—	390.8	500	450	—	—	—	115	60	
	460	60	414	506	10	—	—	—	338.8	450	400	367.5	450	400	115	60	
	575	60	518	633	10	—	—	—	272.7	350	300	295.6	350	350	115	60	
	380	50	342	418	10	—	—	—	422.1	500	500	—	—	—	—	—	
	400	50	360	440	10	—	—	—	403.0	500	450	—	—	—	—	—	
	415	50	374	457	10	—	—	—	387.2	500	450	—	—	—	—	—	
	440	50	396	484	10	—	—	—	365.8	450	400	—	—	—	—	—	
	200	208/230	60	187	253	12	960.3	1200	1200	828.4	1000	1000	—	—	—	115	60
380		60	342	418	12	—	—	—	460.8	600	600	—	—	—	115	60	
400		60	360	440	12	—	—	—	439.2	500	500	—	—	—	115	60	
460		60	414	506	12	442.6	500	500	379.9	500	450	—	—	—	115	60	
575		60	518	633	12	355.7	450	400	305.3	400	350	—	—	—	115	60	
380		50	342	418	12	—	—	—	471.4	600	600	—	—	—	—	—	
400		50	360	440	12	—	—	—	449.4	600	500	—	—	—	—	—	
415		50	374	457	12	—	—	—	433.2	500	500	—	—	—	—	—	
440		50	396	484	12	—	—	—	408.8	500	450	—	—	—	—	—	
225		380	60	342	418	12	—	—	—	514.8	700	600	—	—	—	115	60
	400	60	360	440	12	—	—	—	489.5	700	600	—	—	—	115	60	
	460	60	414	506	12	—	—	—	424.3	600	500	—	—	—	115	60	
	575	60	518	633	12	—	—	—	340.0	450	400	—	—	—	115	60	
	380	50	342	418	12	—	—	—	525.6	700	600	—	—	—	—	—	
	400	50	360	440	12	—	—	—	500.9	700	600	—	—	—	—	—	
	415	50	374	457	12	—	—	—	483.2	600	600	—	—	—	—	—	
	440	50	396	484	12	—	—	—	456.1	600	600	—	—	—	—	—	
	250	380	60	342	418	14	—	—	—	581.8	700	700	—	—	—	115	60
		400	60	360	440	14	—	—	—	555.1	700	700	—	—	—	115	60
460		60	414	506	14	—	—	—	480.7	600	600	—	—	—	115	60	
575		60	518	633	14	—	—	—	385.9	500	450	—	—	—	115	60	
380		50	342	418	14	—	—	—	594.9	700	700	—	—	—	—	—	
400		50	360	440	14	—	—	—	567.8	700	700	—	—	—	—	—	
415		50	374	457	14	—	—	—	546.6	700	600	—	—	—	—	—	
440		50	396	484	14	—	—	—	517.0	600	600	—	—	—	—	—	

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, High Static			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	14	—	—	—	622.3	800	700	—	—	—	115	60
	400	60	360	440	14	—	—	—	591.1	800	700	—	—	—	115	60
	460	60	414	506	14	—	—	—	513.5	700	600	—	—	—	115	60
	575	60	518	633	14	—	—	—	410.6	500	450	—	—	—	115	60
	380	50	342	418	14	—	—	—	635.4	800	700	—	—	—	—	—
	400	50	360	440	14	—	—	—	606.0	800	700	—	—	—	—	—
	415	50	374	457	14	—	—	—	584.8	800	700	—	—	—	—	—
	440	50	396	484	14	—	—	—	550.8	700	700	—	—	—	—	—
300	380	60	342	418	16	—	—	—	651.1	800	800	—	—	—	115	60
	400	60	360	440	16	—	—	—	619.3	800	700	—	—	—	115	60
	460	60	414	506	16	—	—	—	536.9	700	600	—	—	—	115	60
	575	60	518	633	16	—	—	—	430.5	500	500	—	—	—	115	60
	380	50	342	418	16	—	—	—	664.4	800	800	—	—	—	—	—
	400	50	360	440	16	—	—	—	632.1	800	700	—	—	—	—	—
	415	50	374	457	16	—	—	—	610.5	800	700	—	—	—	—	—
	440	50	396	484	16	—	—	—	575.7	700	700	—	—	—	—	—
325	380	60	342	418	18	—	—	—	709.1	800	800	—	—	—	115	60
	400	60	360	440	18	—	—	—	674.4	800	800	—	—	—	115	60
	460	60	414	506	18	—	—	—	586.0	700	700	—	—	—	115	60
	575	60	518	633	18	—	—	—	470.6	600	500	—	—	—	115	60
	380	50	342	418	18	—	—	—	724.9	800	800	—	—	—	—	—
	400	50	360	440	18	—	—	—	689.7	800	800	—	—	—	—	—
	415	50	374	457	18	—	—	—	665.4	800	800	—	—	—	—	—
	440	50	396	484	18	—	—	—	627.7	800	700	—	—	—	—	—
350	380	60	342	418	18	—	—	—	799.6	1000	1000	—	—	—	115	60
	400	60	360	440	18	—	—	—	760.9	1000	1000	—	—	—	115	60
	460	60	414	506	18	—	—	—	659.7	800	800	—	—	—	115	60
	575	60	518	633	18	—	—	—	527.8	700	600	—	—	—	115	60
	380	50	342	418	18	—	—	—	815.7	1000	1000	—	—	—	—	—
	400	50	360	440	18	—	—	—	776.5	1000	1000	—	—	—	—	—
	415	50	374	457	18	—	—	—	748.4	1000	1000	—	—	—	—	—
	440	50	396	484	18	—	—	—	706.7	1000	800	—	—	—	—	—
400	380	60	342	418	20	—	—	—	905.0	1200	1000	—	—	—	115	60
	400	60	360	440	20	—	—	—	860.7	1000	1000	—	—	—	115	60
	460	60	414	506	20	—	—	—	746.9	1000	1000	—	—	—	115	60
	575	60	518	633	20	—	—	—	598.8	800	700	—	—	—	115	60
	380	50	342	418	20	—	—	—	923.3	1200	1200	—	—	—	—	—
	400	50	360	440	20	—	—	—	878.4	1200	1000	—	—	—	—	—
	415	50	374	457	20	—	—	—	846.9	1000	1000	—	—	—	—	—
	440	50	396	484	20	—	—	—	799.5	1000	1000	—	—	—	—	—
450	380	60	342	418	22	—	—	—	1077.7	1200	1200	—	—	—	115	60
	400	60	360	440	22	—	—	—	1023.9	1200	1200	—	—	—	115	60
	460	60	414	506	22	—	—	—	889.1	1200	1000	—	—	—	115	60
	575	60	518	633	22	—	—	—	710.9	800	800	—	—	—	115	60
	380	50	342	418	22	—	—	—	1100.8	1200	1200	—	—	—	—	—
	400	50	360	440	22	—	—	—	1046.3	1200	1200	—	—	—	—	—
	415	50	374	457	22	—	—	—	1009.8	1200	1200	—	—	—	—	—
	440	50	396	484	22	—	—	—	952.7	1200	1200	—	—	—	—	—
500	380	60	342	418	24	—	—	—	1135.7	1200	1200	—	—	—	115	60
	400	60	360	440	24	—	—	—	1081.3	1200	1200	—	—	—	115	60
	460	60	414	506	24	—	—	—	938.4	1200	1200	—	—	—	115	60
	575	60	518	633	24	—	—	—	751.0	1000	1000	—	—	—	115	60
	380	50	342	418	24	—	—	—	1159.1	1200	1200	—	—	—	—	—
	400	50	360	440	24	—	—	—	1101.6	1200	1200	—	—	—	—	—
	415	50	374	457	24	—	—	—	1062.4	1200	1200	—	—	—	—	—
	440	50	396	484	24	—	—	—	1002.4	1200	1200	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

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	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, Low Static			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	8	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	8	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	8	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	10	—	—	—	731.7	800	800	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	339.7	400	400	—	—	—	115	60
	575	60	518	633	10	—	—	—	272.1	350	300	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	10	—	—	—	815.0	1000	1000	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	377.5	500	450	—	—	—	115	60
	575	60	518	633	10	—	—	—	303.6	400	350	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	12	939.8	1200	1200	939.8	1200	1200	—	—	—	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	437.2	500	500	437.2	500	500	—	—	—	115	60
	575	60	518	633	12	351.1	450	400	351.1	450	400	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
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	460	60	414	506	12	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—

LEGEND

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			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	594.2	700	700	612.8	800	700	—	—	—	115	60
	575	60	518	633	16	476.3	600	600	491.2	600	600	—	—	—	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	643.3	800	700	661.9	800	700	—	—	—	115	60
	575	60	518	633	18	516.4	600	600	531.3	700	600	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	18	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	22	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	24	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller name-plate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, Low Static			10 HP Pump, N+1, High Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	8	—	—	—	—	—	—	115	60
	380	60	342	418	8	—	—	—	—	—	—	115	60
	400	60	360	440	8	—	—	—	—	—	—	115	60
	460	60	414	506	8	—	—	—	—	—	—	115	60
	575	60	518	633	8	—	—	—	—	—	—	115	60
	380	50	342	418	8	—	—	—	—	—	—	—	—
	400	50	360	440	8	—	—	—	—	—	—	—	—
	415	50	374	457	8	—	—	—	—	—	—	—	—
160	208/230	60	187	253	10	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	—	—	—	115	60
	575	60	518	633	10	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—
180	208/230	60	187	253	10	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	—	—	—	115	60
	575	60	518	633	10	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—
200	208/230	60	187	253	12	975.8	1200	1200	975.8	1200	1200	115	60
	380	60	342	418	12	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	115	60
	460	60	414	506	12	455.8	500	500	455.8	500	500	115	60
	575	60	518	633	12	366.0	450	400	366.0	450	400	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—
225	208/230	60	187	253	12	—	—	—	—	—	—	115	60
	380	60	342	418	12	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	—	—	—	115	60
	575	60	518	633	12	—	—	—	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—
250	208/230	60	187	253	14	—	—	—	—	—	—	115	60
	380	60	342	418	14	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

- MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
- Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
- For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
- Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
- On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 11 — Single Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, Low Static			10 HP Pump, N+1, High Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	14	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	115	60
	460	60	414	506	14	—	—	—	—	—	—	115	60
	575	60	518	633	14	—	—	—	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—
300	380	60	342	418	16	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	115	60
	460	60	414	506	16	612.8	800	700	—	—	—	115	60
	575	60	518	633	16	491.2	600	600	—	—	—	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—
325	380	60	342	418	18	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	115	60
	460	60	414	506	18	661.9	800	700	—	—	—	115	60
	575	60	518	633	18	491.2	600	600	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—
350	380	60	342	418	18	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	115	60
	460	60	414	506	18	—	—	—	—	—	—	115	60
	575	60	518	633	18	—	—	—	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—
400	380	60	342	418	20	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—
450	380	60	342	418	22	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—
500	380	60	342	418	24	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.
 For MCA between 381-760 amps, 6 conductors are required.
 For MCA between 761-1140 amps, 9 conductors are required.
 For MCA between 1141-1520 amps, 12 conductors are required.

- Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			10 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	10	560.2	700	700	621.6	800	700	—	—	—	115	60
	380	60	342	418	10	306.6	400	350	—	—	—	—	—	—	115	60
	400	60	360	440	10	292.7	350	350	—	—	—	—	—	—	115	60
	460	60	414	506	10	252.9	300	300	281.6	350	350	—	—	—	115	60
	575	60	518	633	10	203.3	250	225	226.3	250	250	—	—	—	115	60
	380	50	342	418	10	314.4	400	350	—	—	—	—	—	—	—	—
	400	50	360	440	10	300.5	400	350	—	—	—	—	—	—	—	—
	415	50	374	457	10	289.7	350	350	—	—	—	—	—	—	—	—
440	50	396	484	10	273.4	350	300	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	12	646.7	800	800	708.1	800	800	—	—	—	115	60
	380	60	342	418	12	355.3	450	400	—	—	—	—	—	—	115	60
	400	60	360	440	12	336.4	450	400	—	—	—	—	—	—	115	60
	460	60	414	506	12	291.9	350	350	320.6	400	350	—	—	—	115	60
	575	60	518	633	12	234.9	300	300	257.9	300	300	—	—	—	115	60
	380	50	342	418	12	363.2	450	400	—	—	—	—	—	—	—	—
	400	50	360	440	12	346.6	450	400	—	—	—	—	—	—	—	—
	415	50	374	457	12	335.4	450	400	—	—	—	—	—	—	—	—
440	50	396	484	12	316.3	400	350	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	12	853.7	1000	1000	915.1	1200	1000	—	—	—	115	60
	380	60	342	418	12	467.8	600	600	—	—	—	—	—	—	115	60
	400	60	360	440	12	381.4	500	450	—	—	—	—	—	—	115	60
	460	60	414	506	12	330.1	450	400	358.8	450	400	—	—	—	115	60
	575	60	518	633	12	264.2	350	300	287.2	350	350	—	—	—	115	60
	380	50	342	418	12	478.0	600	600	—	—	—	—	—	—	—	—
	400	50	360	440	12	454.6	600	500	—	—	—	—	—	—	—	—
	415	50	374	457	12	438.9	600	500	—	—	—	—	—	—	—	—
440	50	396	484	12	415.3	500	500	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	14	802.7	1000	1000	—	—	—	914.1	1200	1000	115	60
	380	60	342	418	14	440.0	500	500	—	—	—	—	—	—	115	60
	400	60	360	440	14	418.3	500	500	—	—	—	—	—	—	115	60
	460	60	414	506	14	362.2	450	400	—	—	—	419.5	500	500	115	60
	575	60	518	633	14	290.6	350	350	—	—	—	336.4	400	400	115	60
	380	50	342	418	14	450.4	600	500	—	—	—	—	—	—	—	—
	400	50	360	440	14	428.7	500	500	—	—	—	—	—	—	—	—
	415	50	374	457	14	414.9	500	500	—	—	—	—	—	—	—	—
440	50	396	484	14	390.8	500	450	—	—	—	—	—	—	—	—	
225	380	60	342	418	14	492.5	700	600	—	—	—	—	—	—	115	60
	400	60	360	440	14	469.3	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	14	406.5	500	500	—	—	—	463.8	600	600	115	60
	575	60	518	633	14	326.3	450	400	—	—	—	372.2	500	450	115	60
	380	50	342	418	14	503.2	700	600	—	—	—	—	—	—	—	—
	400	50	360	440	14	478.7	600	600	—	—	—	—	—	—	—	—
	415	50	374	457	14	463.4	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	14	436.5	600	500	—	—	—	—	—	—	—	—
250	380	60	342	418	16	558.4	700	700	—	—	—	—	—	—	115	60
	400	60	360	440	16	531.7	700	600	—	—	—	—	—	—	115	60
	460	60	414	506	16	460.6	600	600	—	—	—	517.9	600	600	115	60
	575	60	518	633	16	369.5	500	450	—	—	—	415.3	500	450	115	60
	380	50	342	418	16	571.3	700	700	—	—	—	—	—	—	—	—
	400	50	360	440	16	544.5	700	600	—	—	—	—	—	—	—	—
	415	50	374	457	16	525.9	700	600	—	—	—	—	—	—	—	—
	440	50	396	484	16	496.7	600	600	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			10 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	16	594.4	800	700	—	—	—	—	—	—	115	60
	400	60	360	440	16	565.5	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	16	490.5	600	600	—	—	—	547.8	700	600	115	60
	575	60	518	633	16	394.2	500	450	—	—	—	440.1	500	500	115	60
	380	50	342	418	16	607.3	800	700	—	—	—	—	—	—	—	—
	400	50	360	440	16	578.3	700	700	—	—	—	—	—	—	—	—
	415	50	374	457	16	557.4	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	16	526.0	700	600	—	—	—	—	—	—	—	—
300	380	60	342	418	18	625.0	800	700	—	—	—	—	—	—	115	60
	400	60	360	440	18	593.3	800	700	—	—	—	—	—	—	115	60
	460	60	414	506	18	514.6	700	600	—	—	—	572.0	700	700	115	60
	575	60	518	633	18	412.3	500	500	—	—	—	458.2	600	500	115	60
	380	50	342	418	18	638.2	800	700	—	—	—	—	—	—	—	—
	400	50	360	440	18	608.6	800	700	—	—	—	—	—	—	—	—
	415	50	374	457	18	587.3	800	700	—	—	—	—	—	—	—	—
	440	50	396	484	18	553.1	700	700	—	—	—	—	—	—	—	—
325	380	60	342	418	20	684.9	800	800	—	—	—	—	—	—	115	60
	400	60	360	440	20	652.7	800	800	—	—	—	—	—	—	115	60
	460	60	414	506	20	565.5	700	700	—	—	—	622.9	800	700	115	60
	575	60	518	633	20	453.0	600	500	—	—	—	498.8	600	600	115	60
	380	50	342	418	20	700.5	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	20	666.0	800	800	—	—	—	—	—	—	—	—
	415	50	374	457	20	644.3	800	800	—	—	—	—	—	—	—	—
	440	50	396	484	20	607.3	800	700	—	—	—	—	—	—	—	—
350	380	60	342	418	20	782.2	1000	1000	—	—	—	—	—	—	115	60
	400	60	360	440	20	742.5	1000	1000	—	—	—	—	—	—	115	60
	460	60	414	506	20	645.0	800	800	—	—	—	—	—	—	115	60
	575	60	518	633	20	517.2	700	600	—	—	—	—	—	—	115	60
	380	50	342	418	20	798.0	1000	1000	—	—	—	—	—	—	—	—
	400	50	360	440	20	759.5	1000	1000	—	—	—	—	—	—	—	—
	415	50	374	457	20	732.8	1000	1000	—	—	—	—	—	—	—	—
	440	50	396	484	20	691.5	800	800	—	—	—	—	—	—	—	—
400	380	60	342	418	22	889.5	1200	1000	—	—	—	—	—	—	115	60
	400	60	360	440	22	845.5	1000	1000	—	—	—	—	—	—	115	60
	460	60	414	506	22	734.2	1000	1000	—	—	—	—	—	—	115	60
	575	60	518	633	22	588.5	800	700	—	—	—	—	—	—	115	60
	380	50	342	418	22	907.5	1200	1000	—	—	—	—	—	—	—	—
	400	50	360	440	22	863.4	1000	1000	—	—	—	—	—	—	—	—
	415	50	374	457	22	832.4	1000	1000	—	—	—	—	—	—	—	—
	440	50	396	484	22	785.8	1000	1000	—	—	—	—	—	—	—	—
450	380	60	342	418	24	962.9	1200	1200	—	—	—	—	—	—	115	60
	400	60	360	440	24	916.2	1200	1200	—	—	—	—	—	—	115	60
	460	60	414	506	24	795.4	1000	1000	—	—	—	—	—	—	115	60
	575	60	518	633	24	638.1	800	700	—	—	—	—	—	—	115	60
	380	50	342	418	24	983.4	1200	1200	—	—	—	—	—	—	—	—
	400	50	360	440	24	936.5	1200	1200	—	—	—	—	—	—	—	—
	415	50	374	457	24	902.9	1200	1000	—	—	—	—	—	—	—	—
	440	50	396	484	24	851.3	1000	1000	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			10 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	10	635.6	800	700	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	291.6	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	10	234.3	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—
160	208/230	60	187	253	12	722.1	800	800	737.1	800	800	—	—	—	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	330.6	400	400	334.2	400	400	—	—	—	115	60
	575	60	518	633	12	265.9	300	300	268.8	350	300	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
180	208/230	60	187	253	12	929.1	1200	1200	944.1	1200	1200	—	—	—	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	368.8	450	400	372.4	450	450	—	—	—	115	60
	575	60	518	633	12	295.2	350	350	298.0	350	350	—	—	—	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—
200	208/230	60	187	253	14	914.1	1200	1000	—	—	—	950.1	1200	1200	115	60
	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	419.5	500	500	—	—	—	438.1	500	500	115	60
	575	60	518	633	14	336.4	400	400	—	—	—	351.3	450	400	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
225	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	463.8	600	600	—	—	—	482.4	600	600	115	60
	575	60	518	633	14	372.2	500	450	—	—	—	387.1	500	450	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	517.9	600	600	—	—	—	536.5	700	600	115	60
	575	60	518	633	16	415.3	500	450	—	—	—	430.2	500	500	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			10 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	566.4	700	700	—	—	—	566.4	700	700	115	60
	575	60	518	633	16	454.9	600	500	—	—	—	454.9	600	500	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	590.6	700	700	—	—	—	590.6	700	700	115	60
	575	60	518	633	18	473.1	600	600	—	—	—	473.1	600	600	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	641.5	800	700	—	—	—	641.5	800	700	115	60
	575	60	518	633	20	513.7	600	600	—	—	—	513.7	600	600	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	22	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	24	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

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5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
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Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT		
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, High Static			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP	
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE			
140	208/230	60	187	253	10	—	—	—	573.1	700	700	634.5	800	700	115	60	
	380	60	342	418	10	—	—	—	319.5	400	350	—	—	—	115	60	
	400	60	360	440	10	—	—	—	305.3	400	350	—	—	—	115	60	
	460	60	414	506	10	—	—	—	263.9	350	300	292.6	350	350	115	60	
	575	60	518	633	10	—	—	—	211.9	250	250	234.9	300	300	115	60	
	380	50	342	418	10	—	—	—	327.6	400	400	—	—	—	—	—	
	400	50	360	440	10	—	—	—	313.0	400	350	—	—	—	—	—	
	415	50	374	457	10	—	—	—	300.5	400	350	—	—	—	—	—	
	440	50	396	484	10	—	—	—	282.4	350	350	—	—	—	—	—	
	160	208/230	60	187	253	12	758.1	800	800	662.2	800	800	723.6	800	800	115	60
380		60	342	418	12	—	—	—	370.8	450	450	—	—	—	115	60	
400		60	360	440	12	—	—	—	351.4	450	400	—	—	—	115	60	
460		60	414	506	12	349.2	450	400	305.1	400	350	333.8	400	400	115	60	
575		60	518	633	12	280.8	350	350	245.3	300	300	268.2	350	300	115	60	
380		50	342	418	12	—	—	—	379.1	500	450	—	—	—	—	—	
400		50	360	440	12	—	—	—	361.6	450	400	—	—	—	—	—	
415		50	374	457	12	—	—	—	348.7	450	400	—	—	—	—	—	
440		50	396	484	12	—	—	—	327.6	400	400	—	—	—	—	—	
180		208/230	60	187	253	12	965.1	1200	1200	869.2	1000	1000	930.6	1200	1200	115	60
	380	60	342	418	12	—	—	—	483.3	600	600	—	—	—	115	60	
	400	60	360	440	12	—	—	—	396.4	500	450	—	—	—	115	60	
	460	60	414	506	12	387.4	500	450	343.3	450	400	372.0	450	450	115	60	
	575	60	518	633	12	310.0	400	350	274.5	350	300	297.5	350	350	115	60	
	380	50	342	418	12	—	—	—	493.8	600	600	—	—	—	—	—	
	400	50	360	440	12	—	—	—	469.6	600	600	—	—	—	—	—	
	415	50	374	457	12	—	—	—	453.4	600	500	—	—	—	—	—	
	440	50	396	484	12	—	—	—	429.0	500	500	—	—	—	—	—	
	200	208/230	60	187	253	14	950.1	1200	1200	820.8	1000	1000	—	—	—	115	60
380		60	342	418	14	—	—	—	458.1	600	500	—	—	—	115	60	
400		60	360	440	14	—	—	—	435.9	500	500	—	—	—	115	60	
460		60	414	506	14	438.1	500	500	377.6	500	450	—	—	—	115	60	
575		60	518	633	14	351.3	450	400	302.6	400	350	—	—	—	115	60	
380		50	342	418	14	—	—	—	468.9	600	600	—	—	—	—	—	
400		50	360	440	14	—	—	—	446.3	600	500	—	—	—	—	—	
415		50	374	457	14	—	—	—	431.8	500	500	—	—	—	—	—	
440		50	396	484	14	—	—	—	406.8	500	450	—	—	—	—	—	
225		380	60	342	418	14	—	—	—	510.6	700	600	—	—	—	115	60
	400	60	360	440	14	—	—	—	486.9	600	600	—	—	—	115	60	
	460	60	414	506	14	482.4	600	600	421.9	600	500	—	—	—	115	60	
	575	60	518	633	14	387.1	500	450	338.4	450	400	—	—	—	115	60	
	380	50	342	418	14	—	—	—	521.7	700	600	—	—	—	—	—	
	400	50	360	440	14	—	—	—	496.3	700	600	—	—	—	—	—	
	415	50	374	457	14	—	—	—	480.3	600	600	—	—	—	—	—	
	440	50	396	484	14	—	—	—	452.5	600	600	—	—	—	—	—	
	250	380	60	342	418	16	—	—	—	579.1	700	700	—	—	—	115	60
		400	60	360	440	16	—	—	—	551.8	700	700	—	—	—	115	60
460		60	414	506	16	536.5	700	600	478.2	600	600	—	—	—	115	60	
575		60	518	633	16	430.2	500	500	383.2	500	450	—	—	—	115	60	
380		50	342	418	16	—	—	—	592.4	800	700	—	—	—	—	—	
400		50	360	440	16	—	—	—	564.6	700	700	—	—	—	—	—	
415		50	374	457	16	—	—	—	545.2	700	600	—	—	—	—	—	
440		50	396	484	16	—	—	—	515.0	600	600	—	—	—	—	—	

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

- MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
- Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
- For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 - Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 - On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	STANDARD CONDENSER FANS			HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, High Static			NO HYDRONIC PACKAGE			7.5 HP Pump, N+0, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	16	—	—	—	615.1	800	700	—	—	—	115	60
	400	60	360	440	16	—	—	—	585.5	700	700	—	—	—	115	60
	460	60	414	506	16	—	—	—	508.1	600	600	—	—	—	115	60
	575	60	518	633	16	—	—	—	408.0	500	450	—	—	—	115	60
	380	50	342	418	16	—	—	—	628.4	800	700	—	—	—	—	—
	400	50	360	440	16	—	—	—	598.4	800	700	—	—	—	—	—
	415	50	374	457	16	—	—	—	576.7	700	700	—	—	—	—	—
	440	50	396	484	16	—	—	—	544.2	700	600	—	—	—	—	—
300	380	60	342	418	18	—	—	—	648.3	800	800	—	—	—	115	60
	400	60	360	440	18	—	—	—	615.9	800	700	—	—	—	115	60
	460	60	414	506	18	—	—	—	534.4	700	600	—	—	—	115	60
	575	60	518	633	18	—	—	—	427.8	500	500	—	—	—	115	60
	380	50	342	418	18	—	—	—	661.9	800	800	—	—	—	—	—
	400	50	360	440	18	—	—	—	631.2	800	700	—	—	—	—	—
	415	50	374	457	18	—	—	—	609.1	800	700	—	—	—	—	—
	440	50	396	484	18	—	—	—	573.7	700	700	—	—	—	—	—
325	380	60	342	418	20	—	—	—	710.8	800	800	—	—	—	115	60
	400	60	360	440	20	—	—	—	677.8	800	800	—	—	—	115	60
	460	60	414	506	20	—	—	—	587.5	700	700	—	—	—	115	60
	575	60	518	633	20	—	—	—	470.2	600	600	—	—	—	115	60
	380	50	342	418	20	—	—	—	726.9	800	800	—	—	—	—	—
	400	50	360	440	20	—	—	—	691.1	800	800	—	—	—	—	—
	415	50	374	457	20	—	—	—	668.5	800	800	—	—	—	—	—
	440	50	396	484	20	—	—	—	630.1	800	700	—	—	—	—	—
350	380	60	342	418	20	—	—	—	808.1	1000	1000	—	—	—	115	60
	400	60	360	440	20	—	—	—	767.6	1000	1000	—	—	—	115	60
	460	60	414	506	20	—	—	—	667.0	800	800	—	—	—	115	60
	575	60	518	633	20	—	—	—	534.4	700	600	—	—	—	115	60
	380	50	342	418	20	—	—	—	824.4	1000	1000	—	—	—	—	—
	400	50	360	440	20	—	—	—	784.6	1000	1000	—	—	—	—	—
	415	50	374	457	20	—	—	—	757.0	1000	1000	—	—	—	—	—
	440	50	396	484	20	—	—	—	714.4	1000	800	—	—	—	—	—
400	380	60	342	418	22	—	—	—	918.0	1200	1200	—	—	—	115	60
	400	60	360	440	22	—	—	—	873.1	1000	1000	—	—	—	115	60
	460	60	414	506	22	—	—	—	758.4	1000	1000	—	—	—	115	60
	575	60	518	633	22	—	—	—	607.4	800	700	—	—	—	115	60
	380	50	342	418	22	—	—	—	936.6	1200	1200	—	—	—	—	—
	400	50	360	440	22	—	—	—	891.0	1200	1000	—	—	—	—	—
	415	50	374	457	22	—	—	—	859.0	1000	1000	—	—	—	—	—
	440	50	396	484	22	—	—	—	810.9	1000	1000	—	—	—	—	—
450	380	60	342	418	24	—	—	—	994.0	1200	1200	—	—	—	115	60
	400	60	360	440	24	—	—	—	946.3	1200	1200	—	—	—	115	60
	460	60	414	506	24	—	—	—	821.8	1000	1000	—	—	—	115	60
	575	60	518	633	24	—	—	—	658.8	800	800	—	—	—	115	60
	380	50	342	418	24	—	—	—	1015.1	1200	1200	—	—	—	—	—
	400	50	360	440	24	—	—	—	966.6	1200	1200	—	—	—	—	—
	415	50	374	457	24	—	—	—	931.9	1200	1200	—	—	—	—	—
	440	50	396	484	24	—	—	—	878.6	1200	1000	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, Low Static			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	10	—	—	—	648.5	800	700	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	302.6	350	350	—	—	—	115	60
	575	60	518	633	10	—	—	—	242.9	300	300	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	10	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	12	—	—	—	737.6	800	800	752.6	800	800	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	343.8	400	400	347.4	450	400	115	60
	575	60	518	633	12	—	—	—	276.2	350	300	279.1	350	350	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	12	—	—	—	944.6	1200	1200	959.6	1200	1200	115	60
	380	60	342	418	12	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	382.0	500	450	385.6	500	450	115	60
	575	60	518	633	12	—	—	—	305.5	400	350	308.4	400	350	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	12	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	14	932.1	1200	1200	932.1	1200	1200	—	—	—	115	60
	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	434.9	500	500	434.9	500	500	—	—	—	115	60
	575	60	518	633	14	348.5	450	400	348.5	450	400	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	14	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	14	479.2	600	600	479.2	600	600	—	—	—	115	60
	575	60	518	633	14	384.2	500	450	384.2	500	450	—	—	—	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	14	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	535.5	700	600	535.5	700	600	—	—	—	115	60
	575	60	518	633	16	429.1	500	500	429.1	500	500	—	—	—	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS									CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+0, Low Static			10 HP Pump, N+0, High Static			7.5 HP Pump, N+1, Low Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	16	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	16	565.4	700	700	584.0	700	700	—	—	—	115	60
	575	60	518	633	16	453.8	600	500	468.7	600	600	—	—	—	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	18	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	18	591.8	700	700	610.4	800	700	—	—	—	115	60
	575	60	518	633	18	473.7	600	600	488.6	600	600	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	644.9	800	700	663.5	800	800	—	—	—	115	60
	575	60	518	633	20	516.0	600	600	530.9	600	600	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	20	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	22	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	24	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, Low Static			10 HP Pump, N+1, High Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
140	208/230	60	187	253	10	—	—	—	—	—	—	115	60
	380	60	342	418	10	—	—	—	—	—	—	115	60
	400	60	360	440	10	—	—	—	—	—	—	115	60
	460	60	414	506	10	—	—	—	—	—	—	115	60
	575	60	518	633	10	—	—	—	—	—	—	115	60
	380	50	342	418	10	—	—	—	—	—	—	—	—
	400	50	360	440	10	—	—	—	—	—	—	—	—
	415	50	374	457	10	—	—	—	—	—	—	—	—
160	208/230	60	187	253	12	—	—	—	773.6	1000	1000	115	60
	380	60	342	418	12	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	362.4	450	400	115	60
	575	60	518	633	12	—	—	—	291.1	350	350	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—
180	208/230	60	187	253	12	—	—	—	980.6	1200	1200	115	60
	380	60	342	418	12	—	—	—	—	—	—	115	60
	400	60	360	440	12	—	—	—	—	—	—	115	60
	460	60	414	506	12	—	—	—	400.6	500	450	115	60
	575	60	518	633	12	—	—	—	320.4	400	350	115	60
	380	50	342	418	12	—	—	—	—	—	—	—	—
	400	50	360	440	12	—	—	—	—	—	—	—	—
	415	50	374	457	12	—	—	—	—	—	—	—	—
200	208/230	60	187	253	14	968.1	1200	1200	968.1	1200	1200	115	60
	380	60	342	418	14	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	115	60
	460	60	414	506	14	453.5	500	500	453.5	500	500	115	60
	575	60	518	633	14	363.4	450	400	363.4	450	400	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—
225	208/230	60	187	253	14	—	—	—	—	—	—	—	—
	380	60	342	418	14	—	—	—	—	—	—	115	60
	400	60	360	440	14	—	—	—	—	—	—	115	60
	460	60	414	506	14	497.8	600	600	497.8	600	600	115	60
	575	60	518	633	14	399.1	500	450	399.1	500	450	115	60
	380	50	342	418	14	—	—	—	—	—	—	—	—
	400	50	360	440	14	—	—	—	—	—	—	—	—
	415	50	374	457	14	—	—	—	—	—	—	—	—
250	208/230	60	187	253	16	—	—	—	—	—	—	—	—
	380	60	342	418	16	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	115	60
	460	60	414	506	16	554.1	700	600	554.1	700	600	115	60
	575	60	518	633	16	444.0	500	500	444.0	500	500	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 12 — Single Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS	HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied			10 HP Pump, N+1, Low Static			10 HP Pump, N+1, High Static			Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max		MCA	MOCP	REC FUSE SIZE	MCA	MOCP	REC FUSE SIZE		
275	380	60	342	418	16	—	—	—	—	—	—	115	60
	400	60	360	440	16	—	—	—	—	—	—	115	60
	460	60	414	506	16	584.0	700	700	—	—	—	115	60
	575	60	518	633	16	468.7	600	600	—	—	—	115	60
	380	50	342	418	16	—	—	—	—	—	—	—	—
	400	50	360	440	16	—	—	—	—	—	—	—	—
	415	50	374	457	16	—	—	—	—	—	—	—	—
	440	50	396	484	16	—	—	—	—	—	—	—	—
300	380	60	342	418	18	—	—	—	—	—	—	115	60
	400	60	360	440	18	—	—	—	—	—	—	115	60
	460	60	414	506	18	610.4	800	700	—	—	—	115	60
	575	60	518	633	18	488.6	600	600	—	—	—	115	60
	380	50	342	418	18	—	—	—	—	—	—	—	—
	400	50	360	440	18	—	—	—	—	—	—	—	—
	415	50	374	457	18	—	—	—	—	—	—	—	—
	440	50	396	484	18	—	—	—	—	—	—	—	—
325	380	60	342	418	20	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	115	60
	460	60	414	506	20	663.5	800	800	—	—	—	115	60
	575	60	518	633	20	530.9	600	600	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—
350	380	60	342	418	20	—	—	—	—	—	—	115	60
	400	60	360	440	20	—	—	—	—	—	—	115	60
	460	60	414	506	20	—	—	—	—	—	—	115	60
	575	60	518	633	20	—	—	—	—	—	—	115	60
	380	50	342	418	20	—	—	—	—	—	—	—	—
	400	50	360	440	20	—	—	—	—	—	—	—	—
	415	50	374	457	20	—	—	—	—	—	—	—	—
	440	50	396	484	20	—	—	—	—	—	—	—	—
400	380	60	342	418	22	—	—	—	—	—	—	115	60
	400	60	360	440	22	—	—	—	—	—	—	115	60
	460	60	414	506	22	—	—	—	—	—	—	115	60
	575	60	518	633	22	—	—	—	—	—	—	115	60
	380	50	342	418	22	—	—	—	—	—	—	—	—
	400	50	360	440	22	—	—	—	—	—	—	—	—
	415	50	374	457	22	—	—	—	—	—	—	—	—
	440	50	396	484	22	—	—	—	—	—	—	—	—
450	380	60	342	418	24	—	—	—	—	—	—	115	60
	400	60	360	440	24	—	—	—	—	—	—	115	60
	460	60	414	506	24	—	—	—	—	—	—	115	60
	575	60	518	633	24	—	—	—	—	—	—	115	60
	380	50	342	418	24	—	—	—	—	—	—	—	—
	400	50	360	440	24	—	—	—	—	—	—	—	—
	415	50	374	457	24	—	—	—	—	—	—	—	—
	440	50	396	484	24	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required.

- For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 13 — Dual Point Power, Standard Tier, Fixed Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		MCA		MOCP		REC FUSE SIZE		CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied										Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2		
140	208/230	60	187	253	4	4	324.3	311.4	500	500	400	400	115	60
	380	60	342	418	4	4	177.7	170.7	300	250	225	225	115	60
	400	60	360	440	4	4	169.6	162.6	250	250	200	200	115	60
	460	60	414	506	4	4	146.6	140.8	225	225	175	175	115	60
	575	60	518	633	4	4	118.0	113.4	200	175	150	150	115	60
160	208/230	60	187	253	4	4	380.5	367.7	600	600	450	450	115	60
	380	60	342	418	4	4	207.7	200.7	350	300	250	250	115	60
	400	60	360	440	4	4	198.3	191.3	300	300	250	250	115	60
	460	60	414	506	4	4	171.6	165.8	250	250	225	200	115	60
	575	60	518	633	4	4	138.0	133.4	225	225	175	175	115	60
180	208/230	60	187	253	4	4	436.8	423.9	700	700	600	600	115	60
	380	60	342	418	4	4	238.9	231.9	400	400	300	300	115	60
	400	60	360	440	4	4	228.3	221.3	350	350	300	300	115	60
	460	60	414	506	4	4	197.4	191.6	300	300	250	250	115	60
	575	60	518	633	4	4	158.0	153.4	250	250	200	200	115	60
200	208/230	60	187	253	5	5	452.1	439.3	700	700	600	600	115	60
	380	60	342	418	5	5	247.5	240.5	400	400	300	300	115	60
	400	60	360	440	5	5	235.5	228.5	400	350	300	300	115	60
	460	60	414	506	5	5	204.4	198.6	350	300	250	250	115	60
	575	60	518	633	5	5	164.2	159.5	250	250	200	200	115	60
225	380	60	342	418	6	4	343.4	214.4	500	350	450	300	115	60
	400	60	360	440	6	4	326.3	203.8	500	350	400	250	115	60
	460	60	414	506	6	4	283.2	176.6	450	300	350	225	115	60
	575	60	518	633	6	4	226.8	142.1	350	225	300	175	115	60
250	380	60	342	418	6	6	324.7	315.4	500	500	400	400	115	60
	400	60	360	440	6	6	308.8	299.5	500	500	400	400	115	60
	460	60	414	506	6	6	267.5	259.8	450	450	350	350	115	60
	575	60	518	633	6	6	214.3	208.2	350	350	300	250	115	60
275	380	60	342	418	6	6	348.4	339.1	600	500	450	450	115	60
	400	60	360	440	6	6	331.3	322.0	500	500	400	400	115	60
	460	60	414	506	6	6	287.3	279.6	450	450	350	350	115	60
	575	60	518	633	6	6	230.6	224.4	350	350	300	300	115	60
300	380	60	342	418	7	7	357.0	347.7	600	600	450	450	115	60
	400	60	360	440	7	7	339.7	330.4	500	500	450	400	115	60
	460	60	414	506	7	7	294.6	286.9	500	450	350	350	115	60
	575	60	518	633	7	7	236.7	230.6	400	400	300	300	115	60
325	380	60	342	418	8	8	390.6	381.3	600	600	500	500	115	60
	400	60	360	440	8	8	371.9	362.6	600	600	450	450	115	60
	460	60	414	506	8	8	322.6	314.9	500	500	400	400	115	60
	575	60	518	633	8	8	259.1	253.0	400	400	350	300	115	60
350	380	60	342	418	9	7	526.1	375.2	800	600	700	450	115	60
	400	60	360	440	9	7	499.8	356.7	800	600	600	450	115	60
	460	60	414	506	9	7	433.9	309.6	700	500	600	400	115	60
	575	60	518	633	9	7	348.2	248.1	600	400	450	300	115	60
400	380	60	342	418	9	9	497.4	487.4	800	800	600	600	115	60
	400	60	360	440	9	9	473.5	463.6	800	800	600	600	115	60
	460	60	414	506	9	9	410.4	402.1	700	700	500	500	115	60
	575	60	518	633	9	9	329.4	322.9	500	500	400	400	115	60
450	380	60	342	418	10	10	574.7	564.8	800	800	700	700	115	60
	400	60	360	440	10	10	547.0	537.0	800	800	700	700	115	60
	460	60	414	506	10	10	474.6	466.4	800	800	600	600	115	60
	575	60	518	633	10	10	380.6	374.0	600	600	500	450	115	60
500	380	60	342	418	11	11	604.6	594.6	1000	1000	800	800	115	60
	400	60	360	440	11	11	575.4	565.5	800	800	700	700	115	60
	460	60	414	506	11	11	499.0	490.8	800	800	600	600	115	60
	575	60	518	633	11	11	399.2	392.7	600	600	500	500	115	60

LEGEND

- MCA** — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
 For MCA between 761-1140 amps, 9 conductors are required.
 For MCA between 1141-1520 amps, 12 conductors are required.
 Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 14 — Dual Point Power, Standard Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS						HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2		
160	208/230	60	187	253	4	4	379.6	366.8	600	600	450	450	384.8	372.0	600	600	500	450	115	60
	380	60	342	418	4	4	207.9	200.8	350	300	250	250	213.0	206.0	350	350	250	250	115	60
	400	60	360	440	4	4	198.1	191.0	300	300	250	250	203.1	196.1	300	300	250	250	115	60
	460	60	414	506	4	4	171.5	165.7	250	250	225	200	175.9	170.1	250	250	225	200	115	60
	575	60	518	633	4	4	138.4	133.8	225	225	175	175	141.9	137.2	225	225	175	175	115	60
	380	50	342	418	4	4	212.0	205.0	350	350	250	250	217.3	210.3	350	350	300	250	—	—
	400	50	360	440	4	4	202.2	195.2	300	300	250	250	207.2	200.2	300	300	250	250	—	—
	415	50	374	457	4	4	195.2	188.2	300	300	250	225	200.1	193.0	300	300	250	250	—	—
440	50	396	484	4	4	184.1	177.1	300	300	225	225	188.7	181.7	300	300	225	225	—	—	
180	208/230	60	187	253	4	4	435.9	423.0	700	700	600	600	441.1	428.2	700	700	600	600	115	60
	380	60	342	418	4	4	239.1	232.1	400	400	300	300	244.3	237.3	400	400	300	300	115	60
	400	60	360	440	4	4	226.8	219.8	350	350	300	300	231.8	224.8	350	350	300	300	115	60
	460	60	414	506	4	4	196.9	191.1	300	300	250	250	201.3	195.5	300	300	250	250	115	60
	575	60	518	633	4	4	158.4	153.8	250	250	200	200	161.9	157.2	250	250	200	200	115	60
	380	50	342	418	4	4	244.5	237.5	400	400	300	300	249.8	242.8	400	400	300	300	—	—
	400	50	360	440	4	4	233.5	226.4	350	350	300	300	238.5	231.4	400	350	300	300	—	—
	415	50	374	457	4	4	225.2	218.2	350	350	300	300	230.1	223.0	350	350	300	300	—	—
440	50	396	484	4	4	212.9	205.8	350	350	300	250	217.4	210.4	350	350	300	250	—	—	
200	208/230	60	187	253	5	5	451.7	438.8	700	700	600	600	458.1	445.3	700	700	600	600	115	60
	380	60	342	418	5	5	248.1	241.0	400	400	300	300	254.5	247.5	400	400	300	300	115	60
	400	60	360	440	5	5	235.5	228.5	350	350	300	300	241.8	234.8	400	350	300	300	115	60
	460	60	414	506	5	5	204.1	198.3	300	300	250	250	209.6	203.8	350	300	250	250	115	60
	575	60	518	633	5	5	164.4	159.7	250	250	200	200	168.7	164.0	250	250	200	200	115	60
	380	50	342	418	5	5	253.6	246.5	400	400	300	300	260.2	253.2	400	400	350	300	—	—
	400	50	360	440	5	5	242.3	235.2	400	400	300	300	248.5	241.5	400	400	300	300	—	—
	415	50	374	457	5	5	233.8	226.8	350	350	300	300	239.9	232.9	400	350	300	300	—	—
440	50	396	484	5	5	220.0	212.9	350	350	300	300	225.7	218.6	350	350	300	300	—	—	
225	380	60	342	418	6	4	339.3	321.2	500	350	400	300	347.1	337.3	500	350	450	300	115	60
	400	60	360	440	6	4	322.8	302.3	500	300	400	250	330.3	307.3	500	350	400	250	115	60
	460	60	414	506	6	4	280.0	274.8	450	300	350	225	286.6	279.2	450	300	350	225	115	60
	575	60	518	633	6	4	224.3	210.0	350	225	300	175	229.5	214.5	350	225	300	175	115	60
	380	50	342	418	6	4	346.2	321.5	500	350	450	300	354.1	322.8	500	350	450	300	—	—
	400	50	360	440	6	4	329.6	307.7	500	350	400	250	337.1	312.7	500	350	400	300	—	—
	415	50	374	457	6	4	318.5	299.4	500	300	400	250	325.8	304.3	500	300	400	250	—	—
	440	50	396	484	6	4	300.6	288.3	500	300	400	225	307.4	292.9	500	300	400	250	—	—
250	380	60	342	418	6	6	329.3	320.0	500	500	400	400	337.1	327.8	500	500	400	400	115	60
	400	60	360	440	6	6	312.8	303.4	500	500	400	400	320.3	311.0	500	500	400	400	115	60
	460	60	414	506	6	6	271.1	263.4	450	450	350	350	277.7	270.0	450	450	350	350	115	60
	575	60	518	633	6	6	218.1	211.9	350	350	300	300	223.2	217.1	350	350	300	300	115	60
	380	50	342	418	6	6	336.2	326.9	500	500	400	400	344.1	334.8	500	500	450	400	—	—
	400	50	360	440	6	6	320.9	311.5	500	500	400	400	328.4	319.0	500	500	400	400	—	—
	415	50	374	457	6	6	309.8	300.4	500	500	400	400	317.0	307.7	500	500	400	400	—	—
	440	50	396	484	6	6	291.9	282.5	450	450	350	350	298.7	289.4	500	450	350	350	—	—
275	380	60	342	418	6	6	340.6	331.2	500	500	450	400	348.3	339.0	500	500	450	400	115	60
	400	60	360	440	6	6	324.0	314.7	500	500	400	400	331.5	322.2	500	500	400	400	115	60
	460	60	414	506	6	6	280.9	273.2	450	450	350	350	287.5	279.8	450	450	350	350	115	60
	575	60	518	633	6	6	225.6	219.4	350	350	300	300	230.7	224.6	350	350	300	300	115	60
	380	50	342	418	6	6	347.4	338.1	500	500	450	400	355.4	346.0	600	500	450	450	—	—
	400	50	360	440	6	6	330.9	321.5	500	500	400	400	338.4	329.0	500	500	400	400	—	—
	415	50	374	457	6	6	319.8	310.4	500	500	400	400	327.0	317.7	500	500	400	400	—	—
	440	50	396	484	6	6	301.9	292.5	500	500	400	350	308.7	299.4	500	500	400	400	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

- For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 14 — Dual Point Power, Standard Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS						HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2		
300	380	60	342	418	7	7	362.0	352.7	600	600	450	450	371.1	361.8	600	600	450	450	115	60
	400	60	360	440	7	7	345.2	335.9	500	500	450	400	354.0	344.7	500	500	450	450	115	60
	460	60	414	506	7	7	298.9	291.2	500	500	400	350	306.6	298.9	500	500	400	400	115	60
	575	60	518	633	7	7	240.3	234.1	400	400	300	300	246.3	240.1	400	400	300	300	115	60
	380	50	342	418	7	7	370.3	360.9	600	600	450	450	379.5	370.2	600	600	450	450	—	—
	400	50	360	440	7	7	353.4	344.1	600	500	450	450	362.2	352.8	600	500	450	450	—	—
	415	50	374	457	7	7	340.9	331.5	500	500	450	400	349.3	340.0	500	500	450	400	—	—
	440	50	396	484	7	7	321.4	312.1	500	500	400	400	329.4	320.1	500	500	400	400	—	—
325	380	60	342	418	8	8	398.5	389.1	600	600	500	500	408.8	399.5	600	600	500	500	115	60
	400	60	360	440	8	8	378.9	369.6	600	600	450	450	388.9	379.6	600	600	500	450	115	60
	460	60	414	506	8	8	328.6	320.9	500	500	400	400	337.4	329.7	500	500	400	400	115	60
	575	60	518	633	8	8	263.7	257.5	400	400	350	350	270.6	264.4	450	400	350	350	115	60
	380	50	342	418	8	8	406.8	397.5	600	600	500	500	417.4	408.0	700	600	500	500	—	—
	400	50	360	440	8	8	387.2	377.9	600	600	500	450	397.2	387.9	600	600	500	500	—	—
	415	50	374	457	8	8	374.5	365.1	600	600	450	450	384.2	374.8	600	600	450	450	—	—
	440	50	396	484	8	8	353.5	344.2	500	500	450	450	362.6	353.3	600	500	450	450	—	—
350	380	60	342	418	9	7	527.4	377.7	800	600	700	450	539.1	386.8	800	600	700	500	115	60
	400	60	360	440	9	7	501.3	359.6	800	600	600	450	512.6	368.4	800	600	700	450	115	60
	460	60	414	506	9	7	435.3	311.7	700	500	600	400	445.2	319.4	700	500	600	400	115	60
	575	60	518	633	9	7	348.4	250.3	500	400	450	300	356.1	256.4	600	400	450	350	115	60
	380	50	342	418	9	7	538.4	385.9	800	600	700	500	550.3	395.2	800	600	700	500	—	—
	400	50	360	440	9	7	512.2	367.8	800	600	700	450	523.5	376.6	800	600	700	450	—	—
	415	50	374	457	9	7	494.3	354.0	800	600	600	450	505.2	362.5	800	600	600	450	—	—
	440	50	396	484	9	7	466.9	333.3	700	500	600	400	477.1	341.3	800	500	600	450	—	—
400	380	60	342	418	9	9	491.8	481.8	800	800	600	600	503.5	493.5	800	800	600	600	115	60
	400	60	360	440	9	9	468.2	458.3	700	700	600	600	479.5	469.6	800	800	600	600	115	60
	460	60	414	506	9	9	405.7	397.5	600	600	500	500	415.6	407.4	700	600	500	500	115	60
	575	60	518	633	9	9	325.0	318.5	500	500	400	400	332.8	326.2	500	500	400	400	115	60
	380	50	342	418	9	9	501.5	491.5	800	800	600	600	513.4	503.4	800	800	700	600	—	—
	400	50	360	440	9	9	477.9	467.9	800	800	600	600	489.2	479.2	800	800	600	600	—	—
	415	50	374	457	9	9	461.2	451.3	700	700	600	600	472.1	462.1	700	700	600	600	—	—
	440	50	396	484	9	9	435.0	425.0	700	700	600	600	445.3	435.3	700	700	600	600	—	—
450	380	60	342	418	10	10	584.5	574.6	1000	800	700	700	597.5	587.5	1000	1000	800	700	115	60
	400	60	360	440	10	10	555.7	545.7	800	800	700	700	568.2	558.3	800	800	700	700	115	60
	460	60	414	506	10	10	482.7	474.5	800	800	600	600	493.7	485.5	800	800	600	600	115	60
	575	60	518	633	10	10	387.2	380.7	600	600	500	450	395.8	389.3	600	600	500	500	115	60
	380	50	342	418	10	10	596.8	586.8	1000	1000	800	700	610.0	600.1	1000	1000	800	800	—	—
	400	50	360	440	10	10	567.9	557.9	800	800	700	700	580.5	570.5	800	800	700	700	—	—
	415	50	374	457	10	10	547.3	537.4	800	800	700	700	559.4	549.5	800	800	700	700	—	—
	440	50	396	484	10	10	517.1	507.1	800	800	700	600	528.5	518.5	800	800	700	700	—	—
500	380	60	342	418	11	11	629.7	619.8	1000	1000	800	800	644.0	634.0	1000	1000	800	800	115	60
	400	60	360	440	11	11	598.1	588.1	1000	1000	800	700	611.9	602.0	1000	1000	800	800	115	60
	460	60	414	506	11	11	519.7	511.4	800	800	700	700	531.8	523.5	800	800	700	700	115	60
	575	60	518	633	11	11	416.9	410.3	700	700	500	500	426.4	419.8	700	700	600	500	115	60
	380	50	342	418	11	11	642.1	632.2	1000	1000	800	800	656.7	646.7	1000	1000	800	800	—	—
	400	50	360	440	11	11	611.7	601.7	1000	1000	800	800	625.5	615.5	1000	1000	800	800	—	—
	415	50	374	457	11	11	589.7	579.7	1000	1000	700	700	603.0	593.0	1000	1000	800	700	—	—
	440	50	396	484	11	11	556.7	546.7	800	800	700	700	569.2	559.2	800	800	700	700	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

- MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
- Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
- For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required.

Calculation of conductors required is based on 75°C copper wire.

- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
- Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
- On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				NO HYDRONIC PACKAGE						7.5 HP Pump, N+0, Low Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
140	208/230	60	187	253	4	4	327.1	314.3	500	500	400	400	—	—	—	—	—	—	115	60
	380	60	342	418	4	4	179.1	172.1	300	250	225	225	—	—	—	—	—	—	115	60
	400	60	360	440	4	4	170.6	163.5	250	250	200	200	—	—	—	—	—	—	115	60
	460	60	414	506	4	4	147.9	142.1	225	225	175	175	—	—	—	—	—	—	115	60
	575	60	518	633	4	4	118.4	113.8	175	175	150	150	—	—	—	—	—	—	115	60
	380	50	342	418	4	4	183.3	176.2	300	300	225	225	—	—	—	—	—	—	—	—
	400	50	360	440	4	4	174.7	167.7	250	250	225	200	—	—	—	—	—	—	—	—
	415	50	374	457	4	4	169.0	161.9	250	250	200	200	—	—	—	—	—	—	—	—
440	50	396	484	4	4	160.4	153.3	250	250	200	200	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	5	5	357.9	345.0	500	500	450	450	390.3	374.0	600	600	450	450	115	60
	380	60	342	418	5	5	195.6	188.5	300	300	250	225	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	186.8	179.7	300	300	225	225	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	161.3	155.5	250	250	200	200	176.4	169.1	250	250	225	200	115	60
	575	60	518	633	5	5	129.4	124.7	200	200	175	150	143.3	135.6	225	200	175	175	115	60
	380	50	342	418	5	5	199.8	192.8	300	300	250	250	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	191.0	184.0	300	300	225	225	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	183.8	176.8	300	250	225	225	—	—	—	—	—	—	—	—
440	50	396	484	5	5	173.7	166.7	250	250	225	200	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	5	5	404.2	391.3	600	600	500	500	436.5	420.3	700	600	600	500	115	60
	380	60	342	418	5	5	221.8	214.8	350	350	300	300	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	210.5	203.5	350	300	250	250	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	182.3	176.5	300	300	225	225	197.4	190.1	300	300	250	225	115	60
	575	60	518	633	5	5	146.9	142.2	225	225	175	175	158.9	153.1	250	250	200	200	115	60
	380	50	342	418	5	5	227.3	220.3	350	350	300	300	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	217.3	210.2	350	350	300	250	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	208.8	201.8	350	300	250	250	—	—	—	—	—	—	—	—
440	50	396	484	5	5	197.5	190.4	300	300	250	225	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	6	6	452.9	435.8	700	700	600	600	—	—	—	—	—	—	115	60
	380	60	342	418	6	6	248.1	238.7	400	400	300	300	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	236.5	227.2	350	350	300	300	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	204.3	196.6	300	300	250	250	—	—	—	—	—	—	115	60
	575	60	518	633	6	6	164.3	158.1	250	250	200	200	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	253.7	244.4	400	400	300	300	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	242.1	232.8	400	350	300	300	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	233.5	224.2	350	350	300	300	—	—	—	—	—	—	—	—
440	50	396	484	6	6	220.6	211.3	350	350	300	250	—	—	—	—	—	—	—	—	
225	380	60	342	418	7	5	328.3	207.3	500	350	400	250	—	—	—	—	—	—	115	60
	400	60	360	440	7	5	312.7	196.0	500	300	400	250	—	—	—	—	—	—	115	60
	460	60	414	506	7	5	270.6	170.3	450	250	350	225	—	—	—	—	—	—	115	60
	575	60	518	633	7	5	216.5	137.2	350	225	300	175	—	—	—	—	—	—	115	60
	380	50	342	418	7	5	335.3	211.5	500	350	400	250	—	—	—	—	—	—	—	—
	400	50	360	440	7	5	319.6	201.5	500	300	400	250	—	—	—	—	—	—	—	—
	415	50	374	457	7	5	308.4	194.3	500	300	400	250	—	—	—	—	—	—	—	—
	440	50	396	484	7	5	291.4	182.9	450	300	350	225	—	—	—	—	—	—	—	—
250	380	60	342	418	7	7	313.3	303.9	500	500	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	299.0	289.6	500	450	350	350	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	258.6	250.9	400	400	350	300	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	207.8	201.6	300	300	250	250	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	320.3	310.9	500	500	400	400	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	305.9	296.6	500	500	400	350	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	294.6	285.3	450	450	350	350	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	278.9	269.6	450	450	350	350	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				NO HYDRONIC PACKAGE						7.5 HP Pump, N+0, Low Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	335.8	326.4	500	500	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	319.0	309.6	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	276.8	269.1	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	221.5	215.3	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	342.8	333.4	500	500	450	400	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	327.1	317.8	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	315.9	306.5	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	297.7	288.3	500	450	350	350	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	349.7	340.4	500	500	450	450	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	332.6	323.3	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	288.1	280.4	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	231.2	225.0	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	356.8	347.5	600	500	450	450	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	339.7	330.4	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	328.2	318.9	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	309.8	300.4	500	500	400	400	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	379.9	370.6	600	600	450	450	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	361.3	352.0	600	500	450	450	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	313.7	306.0	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	252.1	246.0	400	400	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	9	9	388.4	379.0	600	600	500	450	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	369.7	360.4	600	600	450	450	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	356.8	347.5	500	500	450	450	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	336.9	327.5	500	500	400	400	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	487.6	350.4	800	500	600	450	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	463.8	333.3	700	500	600	400	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	402.0	288.8	600	450	500	350	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	321.8	231.3	500	350	400	300	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	497.4	357.5	800	600	600	450	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	473.5	340.4	800	500	600	450	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	456.7	327.6	700	500	600	400	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	431.4	309.2	700	500	600	400	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	487.0	477.1	800	800	600	600	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	463.2	453.2	700	700	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	401.6	393.4	600	600	500	500	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	322.2	315.7	500	500	400	400	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	496.8	486.8	800	800	600	600	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	472.9	462.9	800	700	600	600	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	456.1	446.1	700	700	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	430.8	420.9	700	700	600	500	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	581.0	571.0	800	800	700	700	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	551.9	541.9	800	800	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	478.9	470.7	800	800	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	383.2	376.6	600	600	500	450	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	593.4	583.4	1000	1000	700	700	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	564.2	554.2	800	800	700	700	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	544.7	534.7	800	800	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	514.2	504.2	800	800	700	600	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	611.2	601.2	1000	1000	800	800	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	581.8	571.8	800	800	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	504.6	496.4	800	800	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	404.1	397.5	600	600	500	500	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	623.7	613.7	1000	1000	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	593.0	583.0	1000	1000	700	700	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	572.1	562.1	800	800	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	540.0	530.0	800	800	700	700	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT				
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static										
			Min	Max	CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP			
140	208/230	60	187	253	4	4	—	—	—	—	—	—	—	—	—	—	—	—			115	60	
	380	60	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	575	60	518	633	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	380	50	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	400	50	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	415	50	374	457	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
440	50	396	484	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
160	208/230	60	187	253	5	5	—	—	—	—	—	—	397.3	381.0	600	600	500	450	115	60			
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	5	5	—	—	—	—	—	—	181.4	174.1	250	250	225	225	115	60			
	575	60	518	633	5	5	—	—	—	—	—	—	147.3	139.6	225	225	175	175	115	60			
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—			
180	208/230	60	187	253	5	5	—	—	—	—	—	—	443.5	427.3	700	700	600	500	115	60			
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	5	5	—	—	—	—	—	—	202.4	195.1	300	300	250	250	115	60			
	575	60	518	633	5	5	—	—	—	—	—	—	162.9	157.1	250	250	200	200	115	60			
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
200	208/230	60	187	253	6	6	492.2	507.8	700	800	600	600	492.2	507.8	700	800	600	600	115	60			
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	6	6	224.4	233.8	350	350	300	300	224.4	233.8	350	350	300	300	115	60			
	575	60	518	633	6	6	180.4	187.9	250	250	225	225	180.4	187.9	250	250	200	200	115	60			
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	575	60	518	633	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	380	50	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60			
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

- For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	308.2	317.6	500	500	400	400	326.8	317.6	500	500	400	400	115	60
	575	60	518	633	8	8	247.3	254.8	400	400	300	300	262.2	254.8	400	400	350	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	333.8	343.2	500	500	400	400	352.4	343.2	500	500	450	400	115	60
	575	60	518	633	9	9	268.2	275.7	400	400	350	350	283.1	275.7	450	400	350	350	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static							
					MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP		
			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2				
140	208/230	60	187	253	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	6	6	528.2	507.8	800	800	700	600	528.2	507.8	800	800	700	600	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	243.0	233.8	350	350	300	300	243.0	233.8	350	350	300	300	115	60
	575	60	518	633	6	6	195.3	187.9	300	250	225	225	195.3	187.9	300	250	225	225	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

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4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	326.8	317.6	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	262.2	254.8	400	400	350	300	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	352.4	343.2	500	500	450	400	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	283.1	275.7	450	400	350	350	—	—	—	—	—	—	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT			
							NO HYDRONIC PACKAGE				7.5 HP Pump, N+0, Low Static											
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE					
	V(3 Ph)	Hz	Supplied		CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP		
140	208/230	60	187	253	4	4	332.3	319.5	500	500	400	400	—	—	—	—	—	—	115	60		
	380	60	342	418	4	4	184.3	177.3	300	250	225	225	—	—	—	—	—	—	115	60		
	400	60	360	440	4	4	175.6	168.6	250	250	225	200	—	—	—	—	—	—	115	60		
	460	60	414	506	4	4	152.3	146.5	250	225	200	175	—	—	—	—	—	—	115	60		
	575	60	518	633	4	4	121.9	117.2	200	175	150	150	—	—	—	—	—	—	115	60		
	380	50	342	418	4	4	188.6	181.5	300	300	225	225	—	—	—	—	—	—	—	—		
	400	50	360	440	4	4	179.7	172.7	250	250	225	225	—	—	—	—	—	—	—	—		
	415	50	374	457	4	4	173.8	166.8	250	250	225	200	—	—	—	—	—	—	—	—		
440	50	396	484	4	4	164.9	157.9	250	250	200	200	—	—	—	—	—	—	—	—			
160	208/230	60	187	253	5	5	364.4	351.5	600	500	450	450	396.7	380.5	600	600	500	450	115	60		
	380	60	342	418	5	5	202.0	195.0	300	300	250	250	—	—	—	—	—	—	115	60		
	400	60	360	440	5	5	193.0	186.0	300	300	225	225	—	—	—	—	—	—	115	60		
	460	60	414	506	5	5	166.8	161.0	250	250	200	200	181.9	174.6	250	250	225	225	115	60		
	575	60	518	633	5	5	133.7	129.0	200	200	175	175	145.7	139.9	225	225	175	175	115	60		
	380	50	342	418	5	5	206.4	199.4	300	300	250	250	—	—	—	—	—	—	—	—		
	400	50	360	440	5	5	197.3	190.2	300	300	250	225	—	—	—	—	—	—	—	—		
	415	50	374	457	5	5	189.9	182.9	300	300	225	225	—	—	—	—	—	—	—	—		
440	50	396	484	5	5	179.4	172.4	250	250	225	225	—	—	—	—	—	—	—	—			
180	208/230	60	187	253	5	5	410.6	397.8	600	600	500	500	443.0	426.8	700	700	600	500	115	60		
	380	60	342	418	5	5	228.3	221.3	350	350	300	300	—	—	—	—	—	—	115	60		
	400	60	360	440	5	5	216.8	209.8	350	350	300	250	—	—	—	—	—	—	115	60		
	460	60	414	506	5	5	187.8	182.0	300	300	225	225	202.9	195.6	300	300	250	250	115	60		
	575	60	518	633	5	5	151.2	146.5	250	225	200	175	163.2	157.4	250	250	200	200	115	60		
	380	50	342	418	5	5	233.9	226.9	350	350	300	300	—	—	—	—	—	—	—	—		
	400	50	360	440	5	5	223.5	216.5	350	350	300	300	—	—	—	—	—	—	—	—		
	415	50	374	457	5	5	214.9	207.9	350	300	300	250	—	—	—	—	—	—	—	—		
440	50	396	484	5	5	203.2	196.1	300	300	250	250	—	—	—	—	—	—	—	—			
200	208/230	60	187	253	6	6	460.6	443.6	700	700	600	600	—	—	—	—	—	—	115	60		
	380	60	342	418	6	6	255.8	246.5	400	400	300	300	—	—	—	—	—	—	115	60		
	400	60	360	440	6	6	244.0	234.7	400	350	300	300	—	—	—	—	—	—	115	60		
	460	60	414	506	6	6	210.9	203.2	300	300	250	250	—	—	—	—	—	—	115	60		
	575	60	518	633	6	6	169.5	163.3	250	250	200	200	—	—	—	—	—	—	115	60		
	380	50	342	418	6	6	261.6	252.3	400	400	300	300	—	—	—	—	—	—	—	—		
	400	50	360	440	6	6	249.6	240.3	400	400	300	300	—	—	—	—	—	—	—	—		
	415	50	374	457	6	6	240.8	231.4	350	350	300	300	—	—	—	—	—	—	—	—		
440	50	396	484	6	6	227.4	218.1	350	350	300	300	—	—	—	—	—	—	—	—			
225	380	60	342	418	7	5	337.3	213.8	500	350	400	300	—	—	—	—	—	—	115	60		
	400	60	360	440	7	5	321.5	202.3	500	300	400	250	—	—	—	—	—	—	115	60		
	460	60	414	506	7	5	278.3	175.8	450	250	350	225	—	—	—	—	—	—	115	60		
	575	60	518	633	7	5	222.5	141.5	350	225	300	175	—	—	—	—	—	—	115	60		
	380	50	342	418	7	5	344.5	218.2	500	350	450	300	—	—	—	—	—	—	—	—		
250	400	50	360	440	7	5	328.4	207.7	500	300	400	250	—	—	—	—	—	—	—	—		
	415	50	374	457	7	5	316.8	200.4	500	300	400	250	—	—	—	—	—	—	—	—		
	440	50	396	484	7	5	299.4	188.6	450	300	350	225	—	—	—	—	—	—	—	—		
	380	60	342	418	7	7	322.3	313.0	500	500	400	400	—	—	—	—	—	—	115	60		
	400	60	360	440	7	7	307.7	298.4	500	500	400	350	—	—	—	—	—	—	115	60		
250	460	60	414	506	7	7	266.3	258.6	400	400	350	350	—	—	—	—	—	—	115	60		
	575	60	518	633	7	7	213.8	207.6	350	300	250	250	—	—	—	—	—	—	115	60		
	380	50	342	418	7	7	329.5	320.2	500	500	400	400	—	—	—	—	—	—	—	—		
	400	50	360	440	7	7	314.7	305.3	500	500	400	400	—	—	—	—	—	—	—	—		
	415	50	374	457	7	7	303.1	293.7	500	450	400	350	—	—	—	—	—	—	—	—		
440	50	396	484	7	7	286.9	277.6	450	450	350	350	—	—	—	—	—	—	—	—			

LEGEND

- MCA** — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				NO HYDRONIC PACKAGE						7.5 HP Pump, N+0, Low Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	344.8	335.5	500	500	450	400	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	327.7	318.4	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	284.5	276.8	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	227.5	221.4	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	352.0	342.7	500	500	450	450	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	335.9	326.6	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	324.3	315.0	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	305.7	296.3	500	500	400	350	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	360.1	350.8	500	500	450	450	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	342.7	333.4	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	296.9	289.2	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	238.1	231.9	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	367.4	358.0	600	600	450	450	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	349.7	340.4	500	500	450	400	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	337.9	328.6	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	318.9	309.6	500	500	400	400	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	391.6	382.3	600	600	500	450	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	372.6	363.3	600	600	450	450	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	323.6	315.9	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	259.9	253.7	400	400	350	300	—	—	—	—	—	—	115	60
	380	50	342	418	9	9	400.3	390.9	600	600	500	500	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	381.0	371.7	600	600	450	450	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	367.7	358.4	600	600	450	450	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	347.1	337.8	500	500	450	400	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	500.6	360.8	800	600	600	450	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	476.3	343.4	800	500	600	450	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	413.0	297.6	600	500	500	350	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	330.4	238.2	500	400	400	300	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	510.6	368.0	800	600	600	450	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	486.1	350.4	800	500	600	450	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	468.8	337.3	700	500	600	400	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	442.8	318.3	700	500	600	400	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	500.0	490.0	800	800	600	600	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	475.7	465.8	700	700	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	412.6	404.4	600	600	500	500	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	330.8	324.3	500	500	400	400	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	510.0	500.1	800	800	600	600	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	485.5	475.5	800	800	600	600	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	468.2	458.2	700	700	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	442.2	432.3	700	700	600	600	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	595.2	585.3	1000	800	700	700	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	565.7	555.7	800	800	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	491.0	482.8	800	800	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	392.6	386.1	600	600	500	500	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	607.9	597.9	1000	1000	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	578.0	568.0	800	800	700	700	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	558.0	548.0	800	800	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	526.7	516.7	800	800	700	700	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	626.7	616.8	1000	1000	800	800	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	596.9	586.9	1000	800	700	700	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	517.8	509.6	800	800	700	600	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	414.4	407.9	600	600	500	500	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	639.5	629.6	1000	1000	800	800	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	608.1	598.1	1000	1000	800	800	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	586.6	576.6	800	800	700	700	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	553.7	543.7	800	800	700	700	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS														CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static									
			Min	Max	CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP		
140	208/230	60	187	253	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	380	60	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	575	60	518	633	4	4	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	380	50	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
440	50	396	484	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
160	208/230	60	187	253	5	5	—	—	—	—	—	—	403.7	387.5	600	600	500	450	115	60		
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	5	5	—	—	—	—	—	—	186.9	179.6	250	250	225	225	115	60		
	575	60	518	633	5	5	—	—	—	—	—	—	149.7	143.9	225	225	175	175	115	60		
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
180	208/230	60	187	253	5	5	—	—	—	—	—	—	450.0	433.8	700	700	600	600	115	60		
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	5	5	—	—	—	—	—	—	207.9	200.6	300	300	250	250	115	60		
	575	60	518	633	5	5	—	—	—	—	—	—	167.2	161.4	250	250	200	200	115	60		
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
200	208/230	60	187	253	6	6	500.0	515.6	800	800	600	600	500.0	515.6	800	800	600	600	115	60		
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	6	6	231.0	240.4	350	350	300	300	231.0	240.4	350	350	300	300	115	60		
	575	60	518	633	6	6	185.6	193.1	250	300	225	225	185.6	193.1	250	300	225	225	115	60		
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
225	380	60	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	575	60	518	633	7	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	380	50	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	440	50	396	484	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
250	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60		
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—		
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—		

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	317.0	326.4	500	500	400	400	335.6	326.4	500	500	400	400	115	60
	575	60	518	633	8	8	254.2	261.7	400	400	300	350	269.0	261.7	400	400	350	350	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	343.7	353.1	500	500	400	450	362.3	353.1	500	500	450	450	115	60
	575	60	518	633	9	9	276.0	283.5	400	450	350	350	290.8	283.5	450	450	350	350	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT		
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static								
			Min	Max	CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP	
140	208/230	60	187	253	4	4	—	—	—	—	—	—	—	—	—	—	—	—			—
	380	60	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
160	415	50	374	457	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	4	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
180	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
200	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	536.0	515.6	800	800	700	600	536.0	515.6	800	800	700	600	115	60	
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	249.6	240.4	350	350	300	300	249.6	240.4	350	350	300	300	115	60	
	575	60	518	633	6	6	200.4	193.1	300	300	250	225	200.4	193.1	300	300	250	225	115	60	
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
250	380	50	342	418	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	115	60

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381—760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required.

Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 15 — Dual Point Power, Mid Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	335.6	326.4	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	269.0	261.7	400	400	350	350	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	362.3	353.1	500	500	450	450	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	290.8	283.5	450	450	350	350	—	—	—	—	—	—	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
500	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				NO HYDRONIC PACKAGE						7.5 HP Pump, N+0, Low Static							
					MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP		
			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2				
140	208/230	60	187	253	5	5	311.7	298.8	500	450	400	350	344.0	327.8	500	500	400	400	115	60
	380	60	342	418	5	5	170.6	163.5	250	250	200	200	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	163.0	156.0	250	250	200	200	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	140.7	134.9	225	225	175	175	155.8	148.5	225	225	200	175	115	60
	575	60	518	633	5	5	113.1	108.5	175	175	150	150	125.2	119.3	175	175	150	150	115	60
	380	50	342	418	5	5	174.8	167.8	250	250	225	200	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	167.3	160.2	250	250	200	200	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	161.3	154.3	250	250	200	200	—	—	—	—	—	—	—	—
440	50	396	484	5	5	152.5	145.4	250	225	200	175	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	6	6	358.7	345.8	500	500	450	450	391.0	374.8	600	600	450	450	115	60
	380	60	342	418	6	6	197.0	190.0	300	300	250	225	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	186.7	179.7	300	250	225	225	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	161.9	156.1	250	250	200	200	177.0	169.7	250	250	225	200	115	60
	575	60	518	633	6	6	130.3	125.6	200	200	175	150	142.4	136.5	225	200	175	175	115	60
	380	50	342	418	6	6	201.4	194.4	300	300	250	250	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	192.3	185.3	300	300	225	225	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	186.2	179.2	300	250	225	225	—	—	—	—	—	—	—	—
440	50	396	484	6	6	175.8	168.8	250	250	225	200	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	6	6	473.7	460.8	700	700	600	600	506.0	489.8	800	800	600	600	115	60
	380	60	342	418	6	6	259.5	252.5	400	400	350	300	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	211.7	204.7	350	300	250	250	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	183.1	177.3	300	250	225	225	198.2	190.9	300	300	250	225	115	60
	575	60	518	633	6	6	146.5	141.9	225	225	175	175	158.6	152.8	250	225	200	200	115	60
	380	50	342	418	6	6	265.1	258.1	400	400	350	350	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	252.3	245.3	400	400	300	300	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	243.7	236.7	400	400	300	300	—	—	—	—	—	—	—	—
440	50	396	484	6	6	230.8	223.8	350	350	300	300	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	7	7	446.1	429.1	700	700	600	600	—	—	—	—	—	—	115	60
	380	60	342	418	7	7	244.5	235.2	400	350	300	300	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	232.7	223.4	350	350	300	300	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	201.3	193.6	300	300	250	250	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	161.5	155.3	250	250	200	200	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	250.3	240.9	400	400	300	300	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	238.4	229.1	350	350	300	300	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	230.9	221.5	350	350	300	300	—	—	—	—	—	—	—	—
440	50	396	484	7	7	217.7	208.3	350	300	300	250	—	—	—	—	—	—	—	—	
225	380	60	342	418	8	6	322.2	205.0	500	300	400	250	—	—	—	—	—	—	115	60
	400	60	360	440	8	6	307.6	194.7	500	300	400	250	—	—	—	—	—	—	115	60
	460	60	414	506	8	6	266.1	169.1	400	250	350	200	—	—	—	—	—	—	115	60
	575	60	518	633	8	6	213.7	135.6	350	225	250	175	—	—	—	—	—	—	115	60
	380	50	342	418	8	6	329.3	209.4	500	350	400	250	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	313.4	199.0	500	300	400	250	—	—	—	—	—	—	—	—
	415	50	374	457	8	6	303.2	192.9	500	300	400	250	—	—	—	—	—	—	—	—
	440	50	396	484	8	6	286.0	181.3	450	300	350	225	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	309.7	300.4	500	500	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	295.1	285.8	450	450	350	350	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	255.5	247.8	400	400	300	300	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	204.9	198.8	300	300	250	250	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	316.8	307.5	500	500	400	400	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	302.2	292.9	500	450	400	350	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	292.0	282.6	450	450	350	350	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	276.0	266.7	450	450	350	350	—	—	—	—	—	—	—	—

LEGEND

- MCA** — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

- MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
- Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
- Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
- For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
- Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
- On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				NO HYDRONIC PACKAGE						7.5 HP Pump, N+0, Low Static							
					MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE					
					Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2
275	380	60	342	418	8	8	329.7	320.4	500	500	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	313.9	304.6	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	272.1	264.4	450	400	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	218.7	212.5	350	350	300	250	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	336.8	327.5	500	500	400	400	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	320.9	311.6	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	309.5	300.1	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	292.3	282.9	450	450	350	350	—	—	—	—	—	—	—	—
300	380	60	342	418	9	9	346.2	336.8	500	500	450	400	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	328.8	319.5	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	285.0	277.3	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	228.4	222.2	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	9	9	353.4	344.0	500	500	450	450	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	337.2	327.9	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	325.6	316.3	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	306.9	297.5	500	500	400	350	—	—	—	—	—	—	—	—
325	380	60	342	418	10	10	378.9	369.6	600	600	450	450	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	361.3	352.0	600	500	450	450	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	312.8	305.1	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	250.6	244.4	400	400	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	387.4	378.1	600	600	500	450	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	368.5	359.2	600	600	450	450	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	356.7	347.4	500	500	450	450	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	336.4	327.1	500	500	400	400	—	—	—	—	—	—	—	—
350	380	60	342	418	11	9	500.3	340.6	800	500	600	400	—	—	—	—	—	—	115	60
	400	60	360	440	11	9	475.0	323.3	800	500	600	400	—	—	—	—	—	—	115	60
	460	60	414	506	11	9	412.5	281.0	600	450	500	350	—	—	—	—	—	—	115	60
	575	60	518	633	11	9	330.3	226.0	500	350	400	300	—	—	—	—	—	—	115	60
	380	50	342	418	11	9	510.2	347.8	800	500	600	450	—	—	—	—	—	—	—	—
	400	50	360	440	11	9	486.1	330.4	800	500	600	400	—	—	—	—	—	—	—	—
	415	50	374	457	11	9	469.1	318.8	700	500	600	400	—	—	—	—	—	—	—	—
	440	50	396	484	11	9	442.3	301.3	700	500	600	400	—	—	—	—	—	—	—	—
400	380	60	342	418	11	11	492.2	482.3	800	800	600	600	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	468.1	458.1	700	700	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	406.3	398.1	600	600	500	500	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	325.7	319.1	500	500	400	400	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	502.1	492.2	800	800	600	600	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	478.0	468.0	800	700	600	600	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	460.9	451.0	700	700	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	435.4	425.4	700	700	600	600	—	—	—	—	—	—	—	—
450	380	60	342	418	12	12	532.4	522.5	800	800	700	700	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	506.8	496.8	800	800	600	600	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	439.8	431.6	700	700	600	600	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	352.9	346.3	500	500	450	450	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	543.7	533.7	800	800	700	700	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	518.0	508.0	800	800	700	600	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	499.6	489.6	800	800	600	600	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	471.2	461.3	700	700	600	600	—	—	—	—	—	—	—	—
275	380	60	342	418	8	8	329.7	320.4	500	500	400	400	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	313.9	304.6	500	500	400	400	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	272.1	264.4	450	400	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	218.7	212.5	350	350	300	250	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	336.8	327.5	500	500	400	400	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	320.9	311.6	500	500	400	400	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	309.5	300.1	500	500	400	400	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	292.3	282.9	450	450	350	350	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
							10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static							
	V(3 Ph)	Hz	Supplied				CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE	
			Min	Max	CKT 1	CKT 2			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2
140	208/230	60	187	253	5	5	—	—	—	—	—	—	351.0	334.8	500	500	450	400	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	160.8	153.5	250	225	200	200	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	129.2	123.3	200	175	150	150	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	6	6	—	—	—	—	—	—	398.0	381.8	600	600	500	450	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	—	—	—	—	—	—	182.0	174.7	250	250	225	225	115	60
	575	60	518	633	6	6	—	—	—	—	—	—	146.4	140.5	225	200	175	175	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	6	6	—	—	—	—	—	—	513.0	496.8	800	800	600	600	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	—	—	—	—	—	—	203.2	195.9	300	300	250	250	115	60
	575	60	518	633	6	6	—	—	—	—	—	—	162.6	156.8	250	250	200	200	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	7	7	485.5	501.1	700	700	600	600	485.5	501.1	700	700	600	600	115	60
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	221.4	230.8	350	350	300	300	221.4	230.8	350	350	300	300	115	60
	575	60	518	633	7	7	177.6	185.1	250	250	225	225	177.6	185.1	250	250	225	225	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	6	286.2	206.3	450	300	350	250	286.2	206.3	450	300	350	250	115	60
	575	60	518	633	8	6	229.8	165.4	350	250	300	200	229.8	165.4	350	250	300	200	115	60
	380	50	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	275.6	285.0	400	450	350	350	275.6	285.0	400	450	350	350	115	60
	575	60	518	633	8	8	221.0	228.5	350	350	300	300	221.0	228.5	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

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- For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required.

Calculation of conductors required is based on 75°C copper wire.

- Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
- Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
- On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, Low Static						10 HP Pump, N+0, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	8	292.2	301.6	450	450	350	350	310.8	301.6	450	450	400	350	115	60
	575	60	518	633	8	8	234.8	242.3	350	350	300	300	249.7	242.3	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	305.2	314.5	450	500	400	400	323.8	314.5	500	500	400	400	115	60
	575	60	518	633	9	9	244.5	252.0	350	400	300	300	259.4	252.0	400	400	300	300	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	333.0	342.3	500	500	400	400	351.6	342.3	500	500	450	400	115	60
	575	60	518	633	10	10	266.7	274.2	400	400	350	350	281.5	274.2	400	400	350	350	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

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4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
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Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
							7.5 HP Pump, N+1, Low Static						10 HP Pump, N+1, Low Static							
	V(3 Ph)	Hz	Supplied				CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP			
			Min	Max	CKT 1	CKT 2			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2
140	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	6	6	391.0	403.8	600	600	450	500	—	—	—	—	—	—	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	177.0	183.3	250	250	225	225	—	—	—	—	—	—	115	60
	575	60	518	633	6	6	142.4	147.4	225	225	175	175	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	6	6	506.0	518.8	800	800	600	600	—	—	—	—	—	—	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	198.2	204.5	300	300	250	250	—	—	—	—	—	—	115	60
	575	60	518	633	6	6	158.6	163.7	250	250	200	200	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	7	7	—	—	—	—	—	—	521.5	501.1	800	700	600	600	115	60
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	240.0	230.8	350	350	300	300	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	192.5	185.1	250	250	225	225	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	6	—	—	—	—	—	—	304.8	206.3	450	300	350	250	115	60
	575	60	518	633	8	6	—	—	—	—	—	—	244.7	165.4	350	250	300	200	115	60
	380	50	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	294.2	285.0	450	450	350	350	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	235.9	228.5	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
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Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS												CONTROL CIRCUIT	
	7.5 HP Pump, N+1, Low Static						10 HP Pump, N+1, Low Static													
	V(3 Ph)	Hz	Supplied				MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2		
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	—	—	310.8	301.6	450	450	400	350
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	249.7	242.3	350	350	300	300
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	—	—	—	—	—	—	—	—	323.8	314.5	500	500	400	400
	575	60	518	633	9	9	—	—	—	—	—	—	—	—	259.4	252.0	400	400	300	300
325	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
350	460	60	414	506	10	10	—	—	—	—	—	—	—	—	351.6	342.3	500	500	450	400
	575	60	518	633	10	10	—	—	—	—	—	—	—	—	281.5	274.2	400	400	350	350
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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400	380	60	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
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	400	50	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	415	50	374	457	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
275	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
275	460	60	414	506	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS						HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, High Static						NO HYDRONIC PACKAGE							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
140	208/230	60	187	253	5	5	—	—	—	—	—	—	318.1	305.3	500	500	400	400	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	177.0	170.0	250	250	225	200	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	169.3	162.3	250	250	200	200	115	60
	460	60	414	506	5	5	—	—	—	—	—	—	146.2	140.4	225	225	175	175	115	60
	575	60	518	633	5	5	—	—	—	—	—	—	117.4	112.8	175	175	150	150	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	181.4	174.4	250	250	225	225	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	173.5	166.5	250	250	225	200	—	—
	415	50	374	457	5	5	—	—	—	—	—	—	167.4	160.4	250	250	200	200	—	—
440	50	396	484	5	5	—	—	—	—	—	—	158.2	151.1	250	225	200	200	—	—	
160	208/230	60	187	253	6	6	398.0	417.8	600	600	500	500	366.4	353.6	500	500	450	450	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	204.8	197.8	300	300	250	250	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	194.2	187.2	300	300	225	225	115	60
	460	60	414	506	6	6	182.0	193.3	250	250	225	225	168.5	162.7	250	250	200	200	115	60
	575	60	518	633	6	6	146.4	155.4	225	225	175	200	135.5	130.8	200	200	175	175	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	209.3	202.3	300	300	250	250	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	199.8	192.8	300	300	250	225	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	193.5	186.4	300	300	225	225	—	—
440	50	396	484	6	6	—	—	—	—	—	—	182.6	175.6	250	250	225	225	—	—	
180	208/230	60	187	253	6	6	513.0	532.8	800	800	600	700	481.4	468.6	800	800	600	600	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	267.3	260.3	400	400	350	350	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	219.2	212.2	350	350	300	250	115	60
	460	60	414	506	6	6	203.2	214.5	300	300	250	250	189.7	183.9	300	300	225	225	115	60
	575	60	518	633	6	6	162.6	171.7	250	250	200	200	151.7	147.1	225	225	200	175	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	273.1	266.0	450	400	350	350	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	259.8	252.8	400	400	350	300	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	251.0	243.9	400	400	300	300	—	—
440	50	396	484	6	6	—	—	—	—	—	—	237.6	230.6	350	350	300	300	—	—	
200	208/230	60	187	253	7	7	521.5	501.1	800	700	600	600	455.2	438.1	700	700	600	600	115	60
	380	60	342	418	7	7	—	—	—	—	—	—	253.6	244.3	400	400	300	300	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	241.5	232.2	350	350	300	300	115	60
	460	60	414	506	7	7	240.0	230.8	350	350	300	300	209.0	201.3	300	300	250	250	115	60
	575	60	518	633	7	7	192.5	185.1	250	250	225	225	167.5	161.4	250	250	200	200	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	259.5	250.2	400	400	350	300	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	247.2	237.8	400	350	300	300	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	239.3	230.0	350	350	300	300	—	—
440	50	396	484	7	7	—	—	—	—	—	—	225.7	216.3	350	350	300	300	—	—	
225	380	60	342	418	8	6	—	—	—	—	—	—	332.6	312.8	500	350	400	250	115	60
	400	60	360	440	8	6	—	—	—	—	—	—	317.7	302.2	500	300	400	250	115	60
	460	60	414	506	8	6	304.8	206.3	450	300	350	250	274.9	175.7	450	250	350	225	115	60
	575	60	518	633	8	6	244.7	165.4	350	250	300	200	220.6	140.8	350	225	300	175	115	60
	380	50	342	418	8	6	—	—	—	—	—	—	339.9	317.3	500	350	400	300	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	323.5	306.5	500	300	400	250	—	—
	415	50	374	457	8	6	—	—	—	—	—	—	312.9	300.2	500	300	400	250	—	—
	440	50	396	484	8	6	—	—	—	—	—	—	295.1	288.1	450	300	350	225	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	320.1	310.8	500	500	400	400	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	305.2	295.9	500	450	400	350	115	60
	460	60	414	506	8	8	294.2	285.0	450	450	350	350	264.3	256.6	400	400	350	300	115	60
	575	60	518	633	8	8	235.9	228.5	350	350	300	300	211.8	205.7	300	300	250	250	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	327.4	318.0	500	500	400	400	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	312.2	302.9	500	500	400	400	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	301.7	292.3	450	450	400	350	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	285.1	275.8	450	450	350	350	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

- For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
 6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
 7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		STANDARD CONDENSER FANS						HIGH STATIC CONDENSER FANS						CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, High Static						NO HYDRONIC PACKAGE							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	8	8	—	—	—	—	—	—	340.1	330.8	500	500	400	400	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	323.9	314.6	500	500	400	400	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	280.9	273.2	450	450	350	350	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	225.6	219.4	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	347.4	338.0	500	500	450	400	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	331.0	321.6	500	500	400	400	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	319.2	309.8	500	500	400	400	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	301.4	292.1	450	450	400	350	—	—
300	380	60	342	418	9	9	—	—	—	—	—	—	357.8	348.5	500	500	450	450	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	340.1	330.8	500	500	400	400	115	60
	460	60	414	506	9	9	—	—	—	—	—	—	294.9	287.2	450	450	350	350	115	60
	575	60	518	633	9	9	—	—	—	—	—	—	236.1	230.0	350	350	300	300	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	365.3	355.9	600	500	450	450	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	348.5	339.2	500	500	450	400	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	336.5	327.1	500	500	400	400	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	317.1	307.8	500	500	400	400	—	—
325	380	60	342	418	10	10	—	—	—	—	—	—	391.8	382.5	600	600	500	450	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	373.8	364.5	600	600	450	450	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	323.8	316.1	500	500	400	400	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	259.2	253.0	400	400	350	300	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	400.6	391.3	600	600	500	500	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	381.1	371.7	600	600	450	450	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	368.8	359.5	600	500	450	450	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	347.8	338.5	500	500	450	400	—	—
350	380	60	342	418	11	9	—	—	—	—	—	—	514.6	352.3	800	500	700	450	115	60
	400	60	360	440	11	9	—	—	—	—	—	—	488.8	334.6	800	500	600	400	115	60
	460	60	414	506	11	9	—	—	—	—	—	—	424.6	290.9	700	450	500	350	115	60
	575	60	518	633	11	9	—	—	—	—	—	—	339.7	233.7	500	350	400	300	115	60
	380	50	342	418	11	9	—	—	—	—	—	—	524.8	359.7	800	500	700	450	—	—
	400	50	360	440	11	9	—	—	—	—	—	—	499.9	341.7	800	500	600	400	—	—
	415	50	374	457	11	9	—	—	—	—	—	—	482.4	329.6	800	500	600	400	—	—
	440	50	396	484	11	9	—	—	—	—	—	—	454.8	311.5	700	500	600	400	—	—
400	380	60	342	418	11	11	—	—	—	—	—	—	506.5	496.5	800	800	600	600	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	481.9	472.0	800	700	600	600	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	418.4	410.2	600	600	500	500	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	335.1	328.6	500	500	400	400	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	516.7	506.7	800	800	700	600	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	491.8	481.8	800	800	600	600	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	474.3	464.3	700	700	600	600	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	448.0	438.0	700	700	600	600	—	—
450	380	60	342	418	12	12	—	—	—	—	—	—	548.0	538.0	800	800	700	700	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	521.9	511.9	800	800	700	600	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	453.0	444.8	700	700	600	600	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	363.2	356.6	600	600	450	450	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	559.5	549.6	800	800	700	700	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	533.1	523.1	800	800	700	700	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	514.1	504.1	800	800	700	600	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	484.9	475.0	800	700	600	600	—	—
275	380	60	342	418	8	8	—	—	—	—	—	—	340.1	330.8	500	500	400	400	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	323.9	314.6	500	500	400	400	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	280.9	273.2	450	450	350	350	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	225.6	219.4	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	347.4	338.0	500	500	450	400	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	331.0	321.6	500	500	400	400	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	319.2	309.8	500	500	400	400	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	301.4	292.1	450	450	400	350	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
							7.5 HP Pump, N+0, Low Static						10 HP Pump, N+0, Low Static							
	V(3 Ph)	Hz	Supplied				CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP			
			Min	Max	CKT 1	CKT 2			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2
140	208/230	60	187	253	5	5	350.5	334.3	500	500	450	400	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	161.3	154.0	250	225	200	200	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	129.5	123.6	200	175	150	150	—	—	—	—	—	—	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	6	6	398.8	382.6	600	600	500	450	—	—	—	—	—	—	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	183.6	176.3	250	250	225	225	—	—	—	—	—	—	115	60
	575	60	518	633	6	6	147.5	141.7	225	225	175	175	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	6	6	513.8	497.6	800	800	600	600	—	—	—	—	—	—	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	204.8	197.5	300	300	250	250	—	—	—	—	—	—	115	60
	575	60	518	633	6	6	163.8	157.9	250	250	200	200	—	—	—	—	—	—	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	7	7	—	—	—	—	—	—	494.5	510.1	700	800	600	600	115	60
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	—	—	—	—	—	—	229.1	238.5	350	350	300	300	115	60
	575	60	518	633	7	7	—	—	—	—	—	—	183.6	191.1	250	250	225	225	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	6	—	—	—	—	—	—	295.0	212.9	450	300	350	250	115	60
	575	60	518	633	8	6	—	—	—	—	—	—	236.7	170.6	350	250	300	200	115	60
	380	50	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	284.4	293.8	450	450	350	350	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	227.9	235.4	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.
4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

For MCA between 381-760 amps, 6 conductors are required.
For MCA between 761-1140 amps, 9 conductors are required.
For MCA between 1141-1520 amps, 12 conductors are required.
Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				7.5 HP Pump, N+0, Low Static						10 HP Pump, N+0, Low Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	8	—	—	—	—	—	—	301.0	310.4	450	450	350	400	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	241.7	249.2	350	350	300	300	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	—	—	—	—	—	—	315.1	324.4	500	500	400	400	115	60
	575	60	518	633	9	9	—	—	—	—	—	—	252.2	259.7	400	400	300	300	115	60
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
325	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	10	10	—	—	—	—	—	—	344.0	353.3	500	500	400	450	115	60
	575	60	518	633	10	10	—	—	—	—	—	—	275.3	282.8	400	450	350	350	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
350	380	60	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
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3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
							10 HP Pump, N+0, High Static						7.5 HP Pump, N+1, Low Static							
	V(3 Ph)	Hz	Supplied				CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP			
			Min	Max	CKT 1	CKT 2			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2
140	208/230	60	187	253	5	5	357.5	341.3	500	500	450	400	—	—	—	—	—	—	115	60
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	5	5	166.3	159.0	250	225	200	200	—	—	—	—	—	—	115	60
	575	60	518	633	5	5	133.5	127.6	200	200	175	150	—	—	—	—	—	—	115	60
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—
160	208/230	60	187	253	6	6	405.8	389.6	600	600	500	450	398.8	411.6	600	600	500	500	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	188.6	181.3	250	250	225	225	183.6	189.9	250	250	225	225	115	60
	575	60	518	633	6	6	151.5	145.7	225	225	175	175	147.5	152.6	225	225	175	175	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
180	208/230	60	187	253	6	6	520.8	504.6	800	800	700	600	513.8	526.6	800	800	600	700	115	60
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	6	6	209.8	202.5	300	300	250	250	204.8	211.1	300	300	250	250	115	60
	575	60	518	633	6	6	167.8	161.9	250	250	200	200	163.8	168.8	250	250	200	200	115	60
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
200	208/230	60	187	253	7	7	494.5	510.1	700	800	600	600	—	—	—	—	—	—	115	60
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	7	7	229.1	238.5	350	350	300	300	—	—	—	—	—	—	115	60
	575	60	518	633	7	7	183.6	191.1	250	250	225	225	—	—	—	—	—	—	115	60
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—
225	380	60	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	6	295.0	212.9	450	300	350	250	—	—	—	—	—	—	115	60
	575	60	518	633	8	6	236.7	170.6	350	250	300	200	—	—	—	—	—	—	115	60
	380	50	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	284.4	293.8	450	450	350	350	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	227.9	235.4	350	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

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4. For MCA that is less than or equal to 380 amps, 3 conductors are required.

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Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+0, High Static						7.5 HP Pump, N+1, Low Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	8	319.6	310.4	500	450	400	400	—	—	—	—	—	115	60	
	575	60	518	633	8	8	256.5	249.2	400	350	300	300	—	—	—	—	—	115	60	
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
300	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	9	9	333.7	324.4	500	500	400	400	—	—	—	—	—	115	60	
	575	60	518	633	9	9	267.1	259.7	400	400	350	300	—	—	—	—	—	115	60	
	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
325	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	10	10	362.6	353.3	500	500	450	450	—	—	—	—	—	115	60	
	575	60	518	633	10	10	290.1	282.8	450	450	350	350	—	—	—	—	—	115	60	
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	
350	380	60	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	11	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	575	60	518	633	11	9	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	50	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	
400	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	115	60	
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	50	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	11	11	—	—	—	—	—	—	—	—	—	—	—	—	—	
450	380	60	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	12	12	—	—	—	—	—	—	—	—	—	—	—	115	60	
	575	60	518	633	12	12	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT		
							10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static								
	V(3 Ph)	Hz	Supplied		CKT 1	CKT 2	MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE		Voltage 1 PH, 60 Hz	MCA and MOCP	
			Min	Max			CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2			CKT 1
140	208/230	60	187	253	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	60	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	575	60	518	633	5	5	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	380	50	342	418	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	400	50	360	440	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	415	50	374	457	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
440	50	396	484	5	5	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
160	208/230	60	187	253	6	6	—	—	—	—	—	—	405.8	425.6	600	600	500	500	115	60	
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	6	6	—	—	—	—	—	—	188.6	199.9	250	300	225	250	115	60	
	575	60	518	633	6	6	—	—	—	—	—	—	151.5	160.6	225	225	175	200	115	60	
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
180	208/230	60	187	253	6	6	—	—	—	—	—	—	520.8	540.6	800	800	700	700	115	60	
	380	60	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	6	6	—	—	—	—	—	—	209.8	221.1	300	300	250	300	115	60	
	575	60	518	633	6	6	—	—	—	—	—	—	167.8	176.8	250	250	200	225	115	60	
	380	50	342	418	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	6	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
200	208/230	60	187	253	7	7	530.5	510.1	800	800	700	600	530.5	510.1	800	800	700	600	115	60	
	380	60	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	7	7	247.7	238.5	350	350	300	300	247.7	238.5	350	350	300	300	115	60	
	575	60	518	633	7	7	198.5	191.1	300	250	225	225	198.5	191.1	300	250	225	225	115	60	
	380	50	342	418	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
440	50	396	484	7	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
225	380	60	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	6	313.6	212.9	450	300	400	250	313.6	212.9	450	300	400	250	115	60	
	575	60	518	633	8	6	251.5	170.6	350	250	300	200	251.5	170.6	350	250	300	200	115	60	
	380	50	342	418	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	6	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
250	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60	
	460	60	414	506	8	8	303.0	293.8	450	450	350	350	303.0	293.8	450	450	350	350	115	60	
	575	60	518	633	8	8	242.8	235.4	350	350	300	300	242.8	235.4	350	350	300	300	115	60	
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
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For MCA between 381-760 amps, 6 conductors are required.

For MCA between 761-1140 amps, 9 conductors are required.

For MCA between 1141-1520 amps, 12 conductors are required.

Calculation of conductors required is based on 75°C copper wire.

5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 16 — Dual Point Power, High Tier, Variable Speed Fans (cont)

UNIT 30XV	UNIT VOLTAGE				NUMBER OF COND FANS		HIGH STATIC CONDENSER FANS												CONTROL CIRCUIT	
	V(3 Ph)	Hz	Supplied				10 HP Pump, N+1, Low Static						10 HP Pump, N+1, High Static							
							MCA		MOCP		REC FUSE SIZE		MCA		MOCP		REC FUSE SIZE			
			Min	Max	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	CKT 1	CKT 2	Voltage 1 PH, 60 Hz	MCA and MOCP
275	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	8	8	319.6	310.4	500	450	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	256.5	249.2	400	350	300	300	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
300	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	9	9	333.7	324.4	500	500	400	400	—	—	—	—	—	—	115	60
	575	60	518	633	9	9	267.1	259.7	400	400	350	300	—	—	—	—	—	—	115	60
325	380	50	342	418	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	9	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	115	60
350	460	60	414	506	10	10	362.6	353.3	500	500	450	450	—	—	—	—	—	—	115	60
	575	60	518	633	10	10	290.1	282.8	450	450	350	350	—	—	—	—	—	—	115	60
	380	50	342	418	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	10	10	—	—	—	—	—	—	—	—	—	—	—	—	—	—
400	380	60	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	9	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
450	415	50	374	457	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	11	9	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	460	60	414	506	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	11	11	—	—	—	—	—	—	—	—	—	—	—	—	115	60
275	380	50	342	418	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	12	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	380	60	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	400	60	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
275	460	60	414	506	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	575	60	518	633	8	8	—	—	—	—	—	—	—	—	—	—	—	—	115	60
	380	50	342	418	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	400	50	360	440	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	415	50	374	457	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—
	440	50	396	484	8	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—

LEGEND

MCA — Minimum Circuit Amps
MOCP — Maximum Overcurrent Protection
VFD — Variable Frequency Drive

NOTES:

1. MCA and MOCP values shown are inclusive of control power transformer loads. Chillers are occasionally selected without a control power transformer. In such cases, be sure to use the Carrier chiller selection software to obtain the proper values of electrical data (those that will appear on the chiller nameplate). In some cases, the MOCP value may be lower when a control power transformer is not incorporated into the unit selection.
2. Units are suitable for use on electrical systems where voltage supplied to the unit terminals is not below or above the listed minimum and maximum limits. Maximum allowable phase imbalance is: voltage, 2%; amps 10%.
3. Evaporator heater (where applicable) is wired into the control circuit so it is always operable as long as the control power supply disconnect is on, even if any safety device is open.

4. For MCA that is less than or equal to 380 amps, 3 conductors are required. For MCA between 381-760 amps, 6 conductors are required. For MCA between 761-1140 amps, 9 conductors are required. For MCA between 1141-1520 amps, 12 conductors are required. Calculation of conductors required is based on 75°C copper wire.
5. Based on the operational characteristics of a VFD, the "inrush" current normally associated with a chiller is limited and will be lower than the MCA rating of the chiller.
6. Wiring for main field supply must be rated 75°C minimum. Use copper for all units. Refer to Power Entry Options table.
7. On 60 Hz units, some electrical values will be lower when a chiller is selected without a control power transformer. Refer to the chiller selection program.



Table 17 — Fan Electrical Data

UNIT 30XV	UNIT VOLTAGE		NUMBER OF COND FANS						STANDARD CONDENSER FANS FLA				HIGH STATIC CONDENSER FANS FLA			
	V(3 Ph)	Hz	SINGLE POINT			DUAL POINT			TIER				TIER			
			STD	MID	HIGH	STD	MID	HIGH	STD	MID	HIGH	STD+	MID	HIGH	STD+	
140	208/230	60	8	8	10	4/4	4/4	5/5	6.6	9.5	9.5	—	10.8	10.8	—	
	380	60	8	8	10	4/4	4/4	5/5	3.6	5.2	5.2	—	6.5	6.5	—	
	400	60	8	8	10	4/4	4/4	5/5	3.5	4.9	4.9	—	6.2	6.2	—	
	460	60	8	8	10	4/4	4/4	5/5	3.0	4.3	4.3	—	5.4	5.4	—	
	575	60	8	8	10	4/4	4/4	5/5	2.4	3.4	3.4	—	4.3	4.3	—	
	380	50	8	8	10	4/4	4/4	5/5	3.7	5.3	5.3	—	6.6	6.6	—	
	400	50	8	8	10	4/4	4/4	5/5	3.5	5.0	5.0	—	6.3	6.3	—	
	415	50	8	8	10	4/4	4/4	5/5	3.4	4.9	4.9	—	6.1	6.1	—	
	440	50	8	8	10	4/4	4/4	5/5	3.2	4.6	4.6	—	5.7	5.7	—	
	208/230	60	8	10	12	4/4	5/5	6/6	6.6	9.5	9.5	9.5	10.8	10.8	10.8	
160	380	60	8	10	12	4/4	5/5	6/6	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	8	10	12	4/4	5/5	6/6	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	8	10	12	4/4	5/5	6/6	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	8	10	12	4/4	5/5	6/6	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	8	10	12	4/4	5/5	6/6	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	8	10	12	4/4	5/5	6/6	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	8	10	12	4/4	5/5	6/6	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	8	10	12	4/4	5/5	6/6	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	208/230	60	8	10	12	4/4	5/5	6/6	6.6	9.5	9.5	9.5	10.8	10.8	10.8	
	380	60	8	10	12	4/4	5/5	6/6	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
180	400	60	8	10	12	4/4	5/5	6/6	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	8	10	12	4/4	5/5	6/6	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	8	10	12	4/4	5/5	6/6	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	8	10	12	4/4	5/5	6/6	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	8	10	12	4/4	5/5	6/6	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	8	10	12	4/4	5/5	6/6	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	8	10	12	4/4	5/5	6/6	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	208/230	60	10	12	14	5/5	6/6	7/7	6.6	9.5	9.5	9.5	10.8	10.8	10.8	
	380	60	10	12	14	5/5	6/6	7/7	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	10	12	14	5/5	6/6	7/7	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
200	460	60	10	12	14	5/5	6/6	7/7	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	10	12	14	5/5	6/6	7/7	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	10	12	14	5/5	6/6	7/7	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	10	12	14	5/5	6/6	7/7	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	10	12	14	5/5	6/6	7/7	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	10	12	14	5/5	6/6	7/7	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	380	60	10	12	14	6/4	7/5	8/6	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	10	12	14	6/4	7/5	8/6	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	10	12	14	6/4	7/5	8/6	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	10	12	14	6/4	7/5	8/6	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
225	380	50	10	12	14	6/4	7/5	8/6	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	10	12	14	6/4	7/5	8/6	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	10	12	14	6/4	7/5	8/6	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	10	12	14	6/4	7/5	8/6	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	380	60	12	14	16	6/6	7/7	8/8	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	12	14	16	6/6	7/7	8/8	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	12	14	16	6/6	7/7	8/8	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	12	14	16	6/6	7/7	8/8	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	12	14	16	6/6	7/7	8/8	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	12	14	16	6/6	7/7	8/8	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
250	415	50	12	14	16	6/6	7/7	8/8	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	12	14	16	6/6	7/7	8/8	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	380	60	12	14	16	6/6	7/7	8/8	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	12	14	16	6/6	7/7	8/8	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	12	14	16	6/6	7/7	8/8	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	12	14	16	6/6	7/7	8/8	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	12	14	16	6/6	7/7	8/8	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	12	14	16	6/6	7/7	8/8	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	12	14	16	6/6	7/7	8/8	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	12	14	16	6/6	7/7	8/8	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
275	380	60	12	14	16	6/6	7/7	8/8	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	12	14	16	6/6	7/7	8/8	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	12	14	16	6/6	7/7	8/8	3.0	4.3	4.3	4.3	5.4	5.4	5.4	
	575	60	12	14	16	6/6	7/7	8/8	2.4	3.4	3.4	3.4	4.3	4.3	4.3	
	380	50	12	14	16	6/6	7/7	8/8	3.7	5.3	5.3	5.3	6.6	6.6	6.6	
	400	50	12	14	16	6/6	7/7	8/8	3.5	5.0	5.0	5.0	6.3	6.3	6.3	
	415	50	12	14	16	6/6	7/7	8/8	3.4	4.9	4.9	4.9	6.1	6.1	6.1	
	440	50	12	14	16	6/6	7/7	8/8	3.2	4.6	4.6	4.6	5.7	5.7	5.7	
	380	60	12	14	16	6/6	7/7	8/8	3.6	5.2	5.2	5.2	6.5	6.5	6.5	
	400	60	12	14	16	6/6	7/7	8/8	3.5	4.9	4.9	4.9	6.2	6.2	6.2	
	460	60	12	14	16	6/6	7/7	8/8	3.0	4.3	4.3	4.3	5.4	5.4	5.4	

LEGEND

FLA — Full Load Amps
STD+ — Standard Tier unit with variable speed condenser fans

NOTES:

1. All variable-speed fan motors (which are used on all STD+, MID, and HIGH tier models) employ 6-pole motors, are rated at 3 hp, and have a maximum speed of 1140 rpm.
2. All fixed-speed fan motors (which are used on all STD tier models except the 500 STD tier) employ 8-pole motors, are rated at 1.3 hp, and have a maximum speed of 840 rpm.
3. The 500 STD tier model, which runs at fixed speed, employs the 6-pole fan motor described in Note 1.

Table 17 — Fan Electrical Data (cont)

UNIT 30XV	UNIT VOLTAGE		NUMBER OF COND FANS						STANDARD CONDENSER FANS FLA				HIGH STATIC CONDENSER FANS FLA		
	V(3 Ph)	Hz	SINGLE POINT			DUAL POINT			TIER				TIER		
			STD	MID	HIGH	STD	MID	HIGH	STD	MID	HIGH	STD+	MID	HIGH	STD+
300	380	60	14	16	18	7/7	8/8	9/9	3.6	5.2	5.2	5.2	6.5	6.5	6.5
	400	60	14	16	18	7/7	8/8	9/9	3.5	4.9	4.9	4.9	6.2	6.2	6.2
	460	60	14	16	18	7/7	8/8	9/9	3.0	4.3	4.3	4.3	5.4	5.4	5.4
	575	60	14	16	18	7/7	8/8	9/9	2.4	3.4	3.4	3.4	4.3	4.3	4.3
	380	50	14	16	18	7/7	8/8	9/9	3.7	5.3	5.3	5.3	6.6	6.6	6.6
	400	50	14	16	18	7/7	8/8	9/9	3.5	5.0	5.0	5.0	6.3	6.3	6.3
	415	50	14	16	18	7/7	8/8	9/9	3.4	4.9	4.9	4.9	6.1	6.1	6.1
	440	50	14	16	18	7/7	8/8	9/9	3.2	4.6	4.6	4.6	5.7	5.7	5.7
325	380	60	16	18	20	8/8	9/9	10/10	3.6	5.2	5.2	5.2	6.5	6.5	6.5
	400	60	16	18	20	8/8	9/9	10/10	3.5	4.9	4.9	4.9	6.2	6.2	6.2
	460	60	16	18	20	8/8	9/9	10/10	3.0	4.3	4.3	4.3	5.4	5.4	5.4
	575	60	16	18	20	8/8	9/9	10/10	2.4	3.4	3.4	3.4	4.3	4.3	4.3
	380	50	16	18	20	8/8	9/9	10/10	3.7	5.3	5.3	5.3	6.6	6.6	6.6
	400	50	16	18	20	8/8	9/9	10/10	3.5	5.0	5.0	5.0	6.3	6.3	6.3
	415	50	16	18	20	8/8	9/9	10/10	3.4	4.9	4.9	4.9	6.1	6.1	6.1
	440	50	16	18	20	8/8	9/9	10/10	3.2	4.6	4.6	4.6	5.7	5.7	5.7
350	380	60	16	18	20	9/7	10/8	11/9	3.7	5.3	5.3	5.3	6.5	6.5	6.5
	400	60	16	18	20	9/7	10/8	11/9	3.5	5.0	5.0	5.0	6.2	6.2	6.2
	460	60	16	18	20	9/7	10/8	11/9	3.4	4.9	4.9	4.9	5.4	5.4	5.4
	575	60	16	18	20	9/7	10/8	11/9	3.2	4.6	4.6	4.6	4.3	4.3	4.3
	380	50	16	18	20	9/7	10/8	11/9	3.6	5.2	5.2	5.2	6.6	6.6	6.6
	400	50	16	18	20	9/7	10/8	11/9	3.5	4.9	4.9	4.9	6.3	6.3	6.3
	415	50	16	18	20	9/7	10/8	11/9	3.0	4.3	4.3	4.3	6.1	6.1	6.1
	440	50	16	18	20	9/7	10/8	11/9	2.4	3.4	3.4	3.4	5.7	5.7	5.7
400	380	60	18	20	22	9/9	10/10	11/11	3.6	5.2	5.2	5.2	6.5	6.5	6.5
	400	60	18	20	22	9/9	10/10	11/11	3.5	4.9	4.9	4.9	6.2	6.2	6.2
	460	60	18	20	22	9/9	10/10	11/11	3.0	4.3	4.3	4.3	5.4	5.4	5.4
	575	60	18	20	22	9/9	10/10	11/11	2.4	3.4	3.4	3.4	4.3	4.3	4.3
	380	50	18	20	22	9/9	10/10	11/11	3.7	5.3	5.3	5.3	6.6	6.6	6.6
	400	50	18	20	22	9/9	10/10	11/11	3.5	5.0	5.0	5.0	6.3	6.3	6.3
	415	50	18	20	22	9/9	10/10	11/11	3.4	4.9	4.9	4.9	6.1	6.1	6.1
	440	50	18	20	22	9/9	10/10	11/11	3.2	4.6	4.6	4.6	5.7	5.7	5.7
450	380	60	20	22	24	10/10	11/11	12/12	3.6	5.2	5.2	5.2	6.5	6.5	6.5
	400	60	20	22	24	10/10	11/11	12/12	3.5	4.9	4.9	4.9	6.2	6.2	6.2
	460	60	20	22	24	10/10	11/11	12/12	3.0	4.3	4.3	4.3	5.4	5.4	5.4
	575	60	20	22	24	10/10	11/11	12/12	2.4	3.4	3.4	3.4	4.3	4.3	4.3
	380	50	20	22	24	10/10	11/11	12/12	3.7	5.3	5.3	5.3	6.6	6.6	6.6
	400	50	20	22	24	10/10	11/11	12/12	3.5	5.0	5.0	5.0	6.3	6.3	6.3
	415	50	20	22	24	10/10	11/11	12/12	3.4	4.9	4.9	4.9	6.1	6.1	6.1
	440	50	20	22	24	10/10	11/11	12/12	3.2	4.6	4.6	4.6	5.7	5.7	5.7
500	380	60	22	24	—	11/11	12/12	—	3.6	5.2	5.2	5.2	6.5	6.5	6.5
	400	60	22	24	—	11/11	12/12	—	3.5	4.9	4.9	4.9	6.2	6.2	6.2
	460	60	22	24	—	11/11	12/12	—	3.0	4.3	4.3	4.3	5.4	5.4	5.4
	575	60	22	24	—	11/11	12/12	—	2.4	3.4	3.4	3.4	4.3	4.3	4.3
	380	50	22	24	—	11/11	12/12	—	3.7	5.3	—	5.3	6.6	6.6	6.6
	400	50	22	24	—	11/11	12/12	—	3.5	5.0	—	5.0	6.3	6.3	6.3
	415	50	22	24	—	11/11	12/12	—	3.4	4.9	—	4.9	6.1	6.1	6.1
	440	50	22	24	—	11/11	12/12	—	3.2	4.6	—	4.6	5.7	5.7	5.7

LEGEND

FLA — Full Load Amps
STD+ — Standard Tier unit with variable speed condenser fans

NOTES:

1. All variable-speed fan motors (which are used on all STD+, MID, and HIGH tier models) employ 6-pole motors, are rated at 3 hp, and have a maximum speed of 1140 rpm.
2. All fixed-speed fan motors (which are used on all STD tier models except the 500 STD tier) employ 8-pole motors, are rated at 1.3 hp, and have a maximum speed of 840 rpm.
3. The 500 STD tier model, which runs at fixed speed, employs the 6-pole fan motor described in Note 1.

Table 18 — Compressor Electrical Data

UNIT 30XV	UNIT VOLTAGE		COMPRESSOR RLA							
	V(3 Ph)	Hz	A				B			
			STD	MID	HIGH	STD+	STD	MID	HIGH	STD+
140	208/230	60	228	221	201	—	228	221	201	—
	380	60	125	121	110	—	125	121	110	—
	400	60	119	115	105	—	119	115	105	—
	460	60	103	100	91	—	103	100	91	—
	575	60	83	80	73	—	83	80	73	—
	380	50	128	124	113	—	128	124	113	—
	400	50	122	118	108	—	122	118	108	—
	415	50	118	114	104	—	118	114	104	—
	440	50	111	108	98	—	111	108	98	—
	208/230	60	273	238	231	263	273	238	231	263
160	380	60	149	130	127	144	149	130	127	144
	400	60	142	124	120	137	142	124	120	137
	460	60	123	107	104	119	123	107	104	119
	575	60	99	86	84	96	99	86	84	96
	380	50	152	133	130	147	152	133	130	147
	400	50	145	127	124	140	145	127	124	140
	415	50	140	122	120	135	140	122	120	135
	440	50	132	115	113	127	132	115	113	127
	208/230	60	318	275	323	308	318	275	323	308
	380	60	174	151	177	169	174	151	177	169
180	400	60	166	143	140	160	166	143	140	160
	460	60	144	124	121	139	144	124	121	139
	575	60	115	100	97	112	115	100	97	112
	380	50	178	155	181	173	178	155	181	173
	400	50	170	148	172	165	170	148	172	165
	415	50	163	142	166	159	163	142	166	159
	440	50	154	134	157	150	154	134	157	150
	208/230	60	325	303	290	313	325	303	290	313
	380	60	178	166	159	172	178	166	159	172
	400	60	169	158	151	163	169	158	151	163
200	460	60	147	137	131	141	147	137	131	141
	575	60	118	110	105	114	118	110	105	114
	380	50	182	170	163	176	182	170	163	176
	400	50	173	162	155	168	173	162	155	168
	415	50	167	156	150	162	167	156	150	162
	440	50	158	147	141	152	158	147	141	152
	380	60	250	226	217	239	250	226	217	239
	400	60	237	215	207	227	237	215	207	227
	460	60	206	186	179	197	206	186	179	197
	575	60	165	149	144	158	165	149	144	158
225	380	50	255	231	222	244	255	231	222	244
	400	50	243	220	211	232	243	220	211	232
	415	50	234	212	204	224	234	212	204	224
	440	50	221	200	192	211	221	200	192	211
	380	60	235	214	207	231	235	214	207	231
	400	60	223	204	197	219	223	204	197	219
	460	60	193	177	171	190	193	177	171	190
	575	60	155	142	137	153	155	142	137	153
	380	50	240	219	212	236	240	219	212	236
	400	50	228	209	202	225	228	209	202	225
250	415	50	220	201	195	217	220	201	195	217
	440	50	208	190	184	204	208	190	184	204
	380	60	254	232	223	240	254	232	223	240
	400	60	241	220	212	228	241	220	212	228
	460	60	209	191	184	198	209	191	184	198
	575	60	168	153	148	159	168	153	148	159
	380	50	260	237	228	245	260	237	228	245
	400	50	247	226	217	233	247	226	217	233
	415	50	239	218	209	225	239	218	209	225
	440	50	225	205	197	212	225	205	197	212

LEGEND

RLA — Rated Load Amps

STD+ — Standard Tier unit with variable speed condenser fans

Table 18 — Compressor Electrical Data (cont)

UNIT 30XV	UNIT VOLTAGE		COMPRESSOR RLA							
	V(3 Ph)	Hz	A				B			
			STD	MID	HIGH	STD+	STD	MID	HIGH	STD+
300	380	60	258	239	232	253	258	239	232	253
	400	60	245	227	220	241	245	227	220	241
	460	60	213	197	191	209	213	197	191	209
	575	60	171	158	153	168	171	158	153	168
	380	50	264	244	237	259	264	244	237	259
	400	50	251	232	226	247	251	232	226	247
	415	50	242	224	218	238	242	224	218	238
	440	50	228	211	205	224	228	211	205	224
325	380	60	282	259	254	278	282	259	254	278
	400	60	268	246	242	264	268	246	242	264
	460	60	233	214	210	229	233	214	210	229
	575	60	187	172	168	184	187	172	168	184
	380	50	288	265	260	284	288	265	260	284
	400	50	274	252	247	270	274	252	247	270
	415	50	264	243	239	261	264	243	239	261
	440	50	249	229	225	246	249	229	225	246
350	380	60	387	341	324	377	280	247	235	273
	400	60	367	324	308	358	266	235	223	260
	460	60	319	281	268	311	231	204	194	225
	575	60	256	225	215	249	185	163	156	181
	380	50	395	348	331	385	286	252	240	279
	400	50	376	331	315	366	272	240	228	266
	415	50	362	319	304	353	262	231	220	256
	440	50	342	301	286	333	247	218	208	241
400	380	60	364	340	340	348	364	340	340	348
	400	60	346	323	323	331	346	323	323	331
	460	60	300	280	281	287	300	280	281	287
	575	60	241	225	225	230	241	225	225	230
	380	50	372	347	347	355	372	347	347	355
	400	50	354	330	330	338	354	330	330	338
	415	50	341	318	318	326	341	318	318	326
	440	50	322	300	300	307	322	300	300	307
450	380	60	423	411	368	418	423	411	368	418
	400	60	402	390	350	397	402	390	350	397
	460	60	349	339	304	345	349	339	304	345
	575	60	280	271	244	277	280	271	244	277
	380	50	432	420	376	427	432	420	376	427
	400	50	411	399	358	406	411	399	358	406
	415	50	396	385	345	391	396	385	345	391
	440	50	374	363	325	369	374	363	325	369
500	380	60	444	431	—	450	444	431	—	450
	400	60	422	410	—	427	422	410	—	427
	460	60	366	356	—	371	366	356	—	371
	575	60	293	285	—	298	293	285	—	298
	380	50	453	440	—	459	453	440	—	459
	400	50	431	418	—	437	431	418	—	437
	415	50	415	403	—	421	415	403	—	421
	440	50	392	380	—	397	392	380	—	397

LEGEND

RLA — Rated Load Amps
STD+ — Standard Tier unit with variable speed condenser fans

CARRIER COMFORT NETWORK® COMMUNICATION BUS WIRING (SEE FIG. 48)

The communication bus wiring is a shielded, 3-conductor cable with drain wire and is field supplied and installed in the field.

The system elements are connected to the communication bus in a daisy chain arrangement. The positive pin of each system element communication connector must be wired to the positive pins of the system elements on either side of it. This is also required for the negative and signal ground pins of each system element. Wiring connections for CCN (Carrier Comfort Network) should be made at TB (terminal block) 3. Consult the CCN Contractor's Manual for further information. See Fig. 48.

NOTE: Conductors and drain wire must be 20 AWG (American Wire Gage) minimum stranded, tinned copper. Individual conductors must be insulated with PVC, PVC/nylon, vinyl, Teflon®, or polyethylene. An aluminum/polyester 100% foil shield and an outer jacket of PVC, PVC/nylon, chrome vinyl, or Teflon with a minimum operating temperature range of -4°F (-20°C) to 140°F (60°C) is required. See Table 19 for a list of manufacturers that produce CCN bus wiring that meet these requirements.

It is important when connecting to a CCN communication bus that a color coding scheme be used for the entire network to simplify the installation. It is recommended that red be used for the signal positive, black for the signal negative, and white for the signal ground. Use a similar scheme for cables containing different colored wires. At each system element, the shields of its communication bus cables must be tied together. If the communication bus is entirely within one building, the resulting continuous shield must be connected to a ground at one point only. If the communication bus cable exits from one building and enters another, the shields must be connected to grounds at the lightning suppressor in each building where the cable enters or exits the building (one point per building only).

To connect the unit to the network:

1. Turn off power to the control box.
2. Cut the CCN wire and strip the ends of the red (+), white (ground), and black (-) conductors. Substitute appropriate colors for different colored cables.
3. Connect the red wire to (+) terminal on TB3 of the plug, the white wire to COM terminal, and the black wire to the (-) terminal.
4. The RJ14 CCN connector on TB3 can also be used, but is only intended for temporary connection (for example, a laptop computer running service tool).

Table 19 — CCN Communication Bus Wiring

MANUFACTURER	PART NUMBER	
	Regular Wiring	Plenum Wiring
Alpha	1895	—
American	A21451	A48301
Belden	8205	884421
Columbia	D6451	—
Manhattan	M13402	M64430
Quabik	6130	—

IMPORTANT: A shorted CCN bus cable will prevent some routines from running and may prevent the unit from starting. If abnormal conditions occur, disconnect the machine from the CCN. If conditions return to normal, check the CCN connector and cable. Run new cable if necessary. A short in one section of the bus can cause problems with all system elements on the bus.

BACNET IP OR ETHERNET COMMUNICATION

The 30XV units with Greenspeed® Intelligence come standard with BACnet IP and Ethernet communications. The cabling for this is standard CAT 5 (minimum) with RJ45 connector.

NON-CCN COMMUNICATION WIRING

The 30XV units with Greenspeed® intelligence offer several non-CCN translators. Refer to the separate installation instructions for additional wiring steps.

FIELD CONTROL OPTION WIRING

Install field control wiring options. Some options, such as 4 to 20 mA demand limit that requires the energy management module, may require that accessories be installed first (if not factory installed) for terminal connections.

DUAL CHILLER LEAVING WATER SENSOR

If the dual chiller algorithm is used and the machines are installed in parallel, an additional chilled water sensor must be installed for each chiller. Install the wells in the common leaving water header. See Fig 49. **DO NOT** relocate the chiller's leaving water thermistors. They must remain in place for the unit to operate properly.

The thermistor well is a 1/4 in. NPT fitting for securing the well in the piping. The piping must be drilled and tapped for the well. Select a location that will allow for removal of the thermistor without any restrictions.

Once the well is inserted, install the thermistors. Insert the thermistor into the well until the O-ring reaches the well body. Use the nut on the thermistor to secure the thermistor in place. Once the thermistor is in place, it is recommended that a thermistor wire loop be made and secured with a wire tie to the chilled water pipe. See Fig. 49.

For dual chiller control a CCN bus must be connected between the two modules (Fig. 48). See the Carrier Comfort Network Communication Bus Wiring section for additional information.

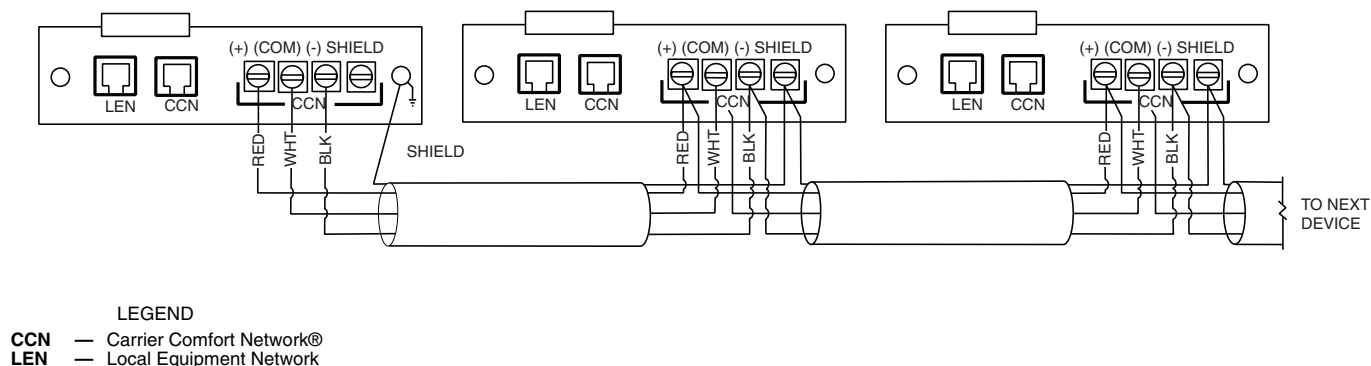


Fig. 48 — TB3 — CCN Wiring

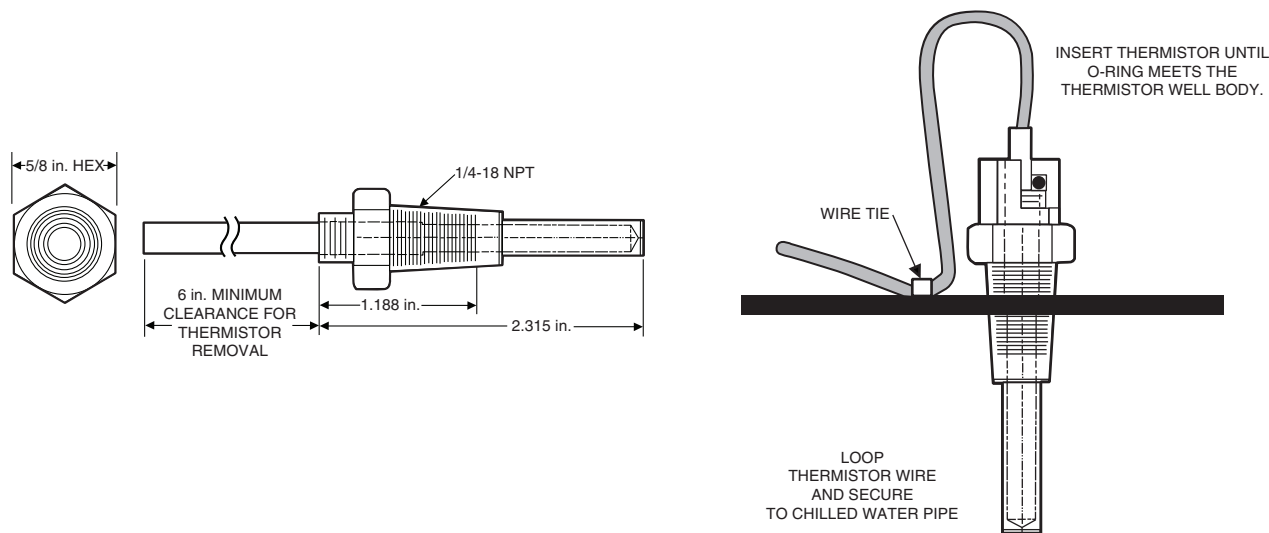


Fig. 49 — Dual Chiller Accessory Kit Leaving Water Thermistor and Well (Part No. 00EFN900044000A)

Step 6 — Install Accessories

A number of accessories are available to provide the following optional features (for details, refer to the Controls, Start-Up, Operation, Service and Troubleshooting guide shipped with the unit).

ENERGY MANAGEMENT MODULE

The energy management module (EMM) is used for any of the following types of temperature reset, demand limit and ice features:

- 4 to 20 mA inputs for cooling set point reset and capacity limit (requires field-supplied 4 to 20 mA generator)
- 0 to 10 v output for percentage total capacity running
- 24 v discrete outputs for shutdown and running relays
- 10k space temperature input

The EMM provides discrete inputs for occupancy override, demand limit switch 2 (step 1 demand limit is wired to the base board, requires field-supplied dry contacts), remote lockout switch, and ice done switch (requires field-supplied dry contacts).

UNIT SECURITY/PROTECTION ACCESSORIES

For applications with unique security and/or protection requirements, several options are available for unit protection. Security grilles and hail guards are available. Contact your local Carrier representative for more details. For installation details, refer to separate installation instructions supplied with the accessory package.

COMMUNICATION ACCESSORIES

A number of communication options are available to meet any requirement. Contact your local Carrier representative for more

details. For installation details, refer to separate installation instructions supplied with the accessory package.

SERVICE OPTIONS

A ground fault convenience outlet (GFI-CO) accessory is available to aid in servicing 30XV units with Greenspeed intelligence. The GFI-CO is a convenience outlet with a 5-amp GFI receptacle.

Contact your local Carrier representative for more details. For installation details, refer to separate installation instructions supplied with the accessory package.

Step 7 — Leak Test Unit

The 30XV chiller with Greenspeed® intelligence is shipped with a complete operating charge of R-134a and should be under sufficient pressure to conduct a leak test.

Perform a leak test to ensure that leaks have not developed during unit shipment. Dehydration of the system is not required unless the entire refrigerant charge has been lost. There are several O-ring face seal fittings utilized in the oil line piping. If a leak is detected at any of these fittings, open the system and inspect the O-ring surface for foreign matter or damage. Do not re-use O-rings. Repair any leak found following good refrigeration practices.

CAUTION

DO NOT OVERTIGHTEN THESE O-RING FACE SEAL FITTINGS. Over-tightening will result in O-ring damage and a potential refrigerant leak.

Refer to the Controls, Start-Up, Operation, Service and Troubleshooting manual for additional information.

DEHYDRATION

Refer to Carrier Standard Service Techniques Manual, Chapter 1, Refrigerants, Sections 6 and 7 for details. Do not use compressor to evacuate system.

REFRIGERANT CHARGE

The 30XV chiller with Greenspeed intelligence is shipped from the factory with a full charge of R-134a. The unit should not need to be charged at installation unless a leak was detected in Leak Test Unit section. If dehydration and recharging is necessary, use industry standard practices or refer to Carrier Standard Service Techniques Manual as required.

IMPORTANT: These units are designed for use with R-134a only. DO NOT USE ANY OTHER refrigerant in these units.

CAUTION

When evacuating or charging, circulate water through the evaporator at all times to prevent freezing and a potential refrigerant leak. Failure to follow this procedure will impact or otherwise negatively affect the warranty should damage result from freezing.

CAUTION

DO NOT OVERCHARGE system. Overcharging results in higher discharge pressure with higher power consumption and possible compressor damage.