



Installation Instructions

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SAFETY CONSIDERATIONS

Installing, starting up, and servicing this equipment can be hazardous due to system pressures, electrical components, and equipment location. Only trained, qualified installers and service mechanics should install, start up, and service this equipment.

When working on the equipment, observe precautions in the literature, and on tags, stickers, and labels attached to the equipment.

- Follow all safety codes.
- Wear safety glasses and work gloves.
- Use care in handling, rigging, and setting bulky equipment.

ELECTRIC SHOCK HAZARD

To avoid the possibility of electrical shock, open and tag all disconnects before installing this equipment.

INTRODUCTION

These instructions cover installation of 30GXN,R080-528 liquid chillers with electronic controls and units with factory-installed options (FIOPs).

IMPORTANT: This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with these instructions, this equipment may cause radio interference. The equipment has been tested and found to comply with the limits of a Class A computing device as defined by the FCC (Federal Communications Commission, U.S.A.) Regulations, Subpart J of Part 15, which are designed to provide reasonable protection against such interference when operated in a commercial environment.

INSTALLATION

Step 1 — Inspect Shipment — Inspect unit for damage upon arrival. If damage is found, immediately file a claim with the shipping company. When considering location for the unit, be sure to consult NEC (National Electrical Code, U.S.A.) and/or local code requirements. Allow sufficient space for air-flow, wiring, piping, and service as follows.

Front and Rear . . . 6 ft (1829 mm); from outer most edge*
 Top Do not restrict in any way
 Ends 5 ft (1524 mm); from outer most edge*
 *Outer most edge may include sound enclosure or hail guard.

See Fig. 1-25 for unit dimensions and Table 1 for duplex unit combinations. Ensure surface beneath unit is level and capable of supporting the operating weight of the unit. See Fig. 26-28 and Tables 2A-2D for unit mounting and operating weights. Unit operating ranges are listed in Tables 3A and 3B.

Step 2 — Rig and Place Unit — These units are designed for overhead rigging and *it is important that this method be used*. See Fig. 28 or rigging label on unit. Holes are provided in frame baserails; field-supplied 2-in. Schedule 40 pipes pass through these holes, extending beyond frame far enough to attach cables or chains on both sides.

As shown in Fig. 28, use the recommended length of chain or cable to facilitate lifting of the unit. Two options have been provided for the rigging of these units.

IMPORTANT: Rigging option 1 must be used for 30GXN,R204-350 and associated modular units. Sizes 080-178 and associated modular units may use either rigging option 1 or 2.

Rigging option 1 uses a central rigging point. The lifting point must be a minimum of 13 ft (3.9 m) above the top of the unit. For a more level lift, the chains or cables of the cooler/compressor side must be shortened by about 20 in. (508 mm). Use spreader bars to keep cables or chains clear of unit sides. As further protection for the coil faces, leave plywood sheets supplied for shipping in place against sides of unit, behind cables or chains. Option 1 must be used for 30GXN,R204-350, and applicable modular units.

Rigging option 2 (size 080-178 units) uses an offset lifting bar. The bar must be at least 8 ft (2.5 m) above the top of the unit to reduce the risk of damage to the unit. The lift point of this lifting bar must be over the center of gravity.

30GXN,R283-528 duplex chillers are shipped as two independent units (see Table 1 for duplex unit designations). The chiller is to be rigged and placed according to the rigging instructions for each individual module.

⚠ CAUTION

Do not use forklift trucks on these units if no skid is supplied. Damage to unit can result.

For shipping, some domestic units and all export units are mounted on a wooden skid under entire base of unit.

Skid can be removed before unit is moved to installation site. *Lift the unit from above to remove skid.* On export units, the top skid can be used as the spreader bars. Coil protection must be removed before unit start-up. If the unit is shipped with a shipping bag, it must be removed before start-up. On export units with a full crate, the crate sides must be removed to facilitate rigging.

Remove shipping bracket on header end of the unit before start-up.

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 of 1 roller every 3 ft (915 mm) 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.

Locate the unit so that the condenser airflow is unrestricted both above and on the sides of the unit. See Step 1 — Inspect Shipment, on page 1, for required clearances. The unit may be mounted on a level pad directly on the base rails. A raised perimeter rail can be used, but is not required. If the unit is mounted on a raised perimeter rail, fasten the unit to the rail using the mounting holes provided. Once installed, the unit must be level to within 1/8-in. per foot (1 cm per meter) along the long axis of the oil separator. This is required for oil return to the compressor(s).

Do not point load the base rail of the unit. If point loading is required (i.e., for spring isolators) the base rail must be supported with a 24 x 4 in. (610 x 102 mm) plate at each mounting location (see Fig. 27). Fasten the unit to the plates using the mounting holes that are available (see Fig. 27).

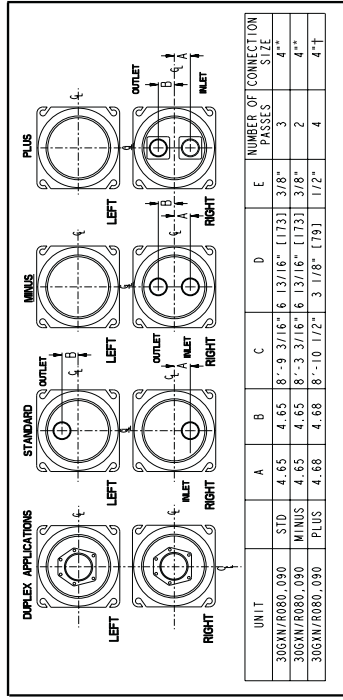
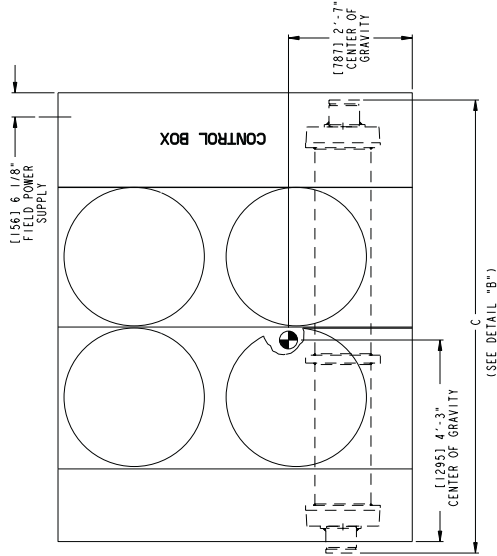
DUPLEX MODELS WITHOUT CONNECTING TRIM KIT — The A and B modules are to be piped in series with the return water piped into the A module and the leaving chilled water piped from the B module. A minimum of 3 feet is required between the two modules in order to provide the necessary interconnecting piping components.

DUPLEX MODELS WITH CONNECTING TRIM KIT — The A and B modules are to be piped in series with the return water piped into the A module and the leaving chilled water piped from the B module. The two modules must be aligned with no more than 1/8 in. difference in the distance from one side to the other. The exact spacing is given in the installation instructions for the trim kit.

Table 1 — 30GXN,GXR Duplex Combinations

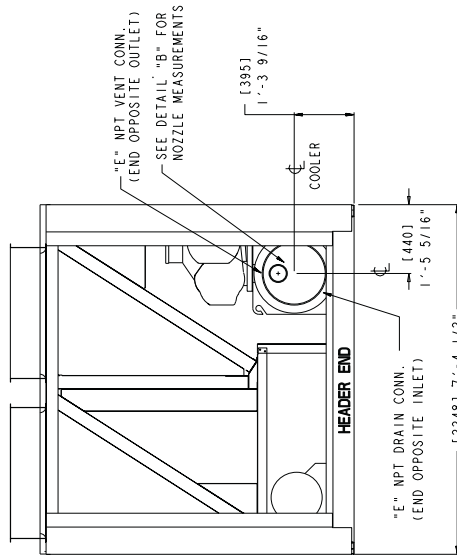
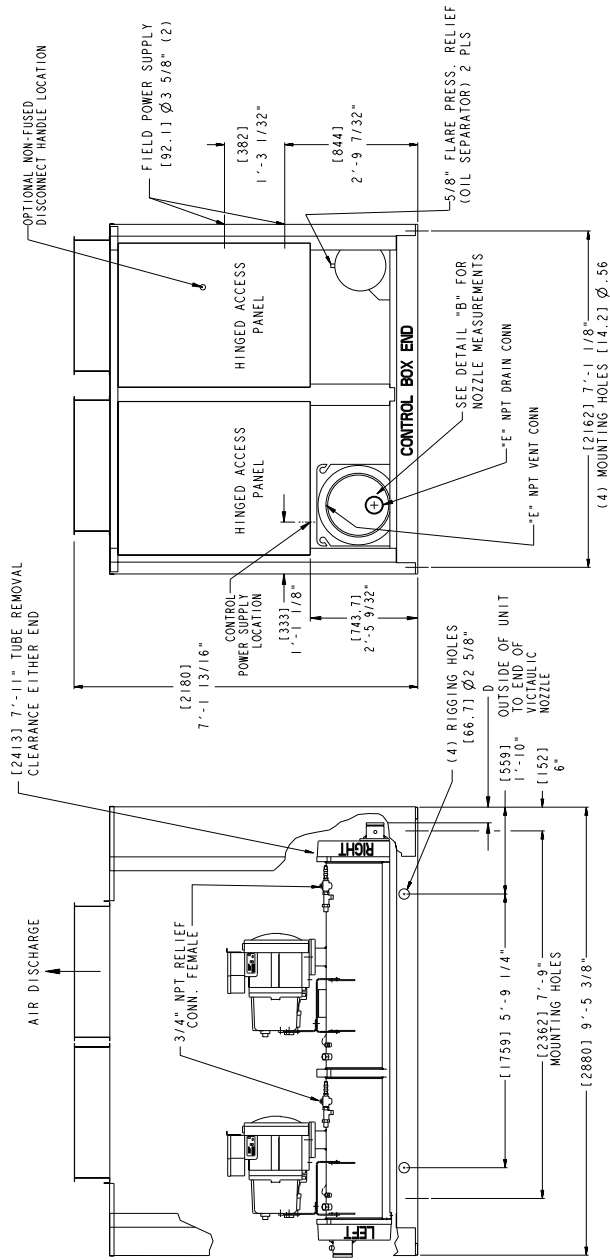
SIZE 30GXN,GXR	MODULE A	MODULE B
283	153	138
303	163	138
328	178	153
353	178	178
370	225	150
373	253	138
390	264	135
393	253	153
415	264	160
418	268	153
450	225	225
453	228	228
475	249	225
478	253	228
500	249	249
503	253	253
525	264	264
528	268	268

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING FLUID NOZZLE.
 4. VICTAULIC NOZZLES ARE STANDARD ON ALL MODELS.



*Cast Iron.
 †Steel.

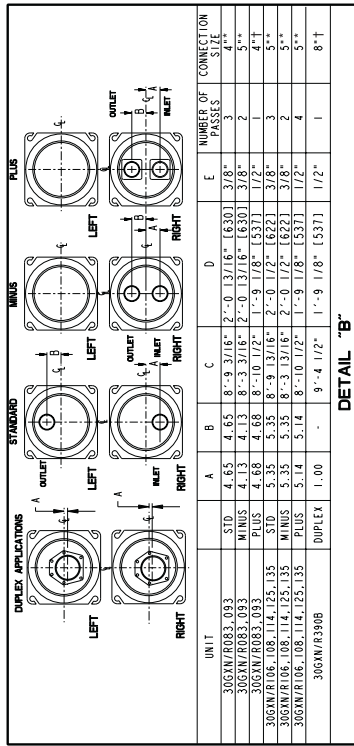
DETAIL "B"



UNIT	TOTAL OPERATING WEIGHT - AL. FIN WEIGHT - CO. FIN	
	LBS	KG
30GXN/R080	6313	2863
30GXN/R090	6333	2872

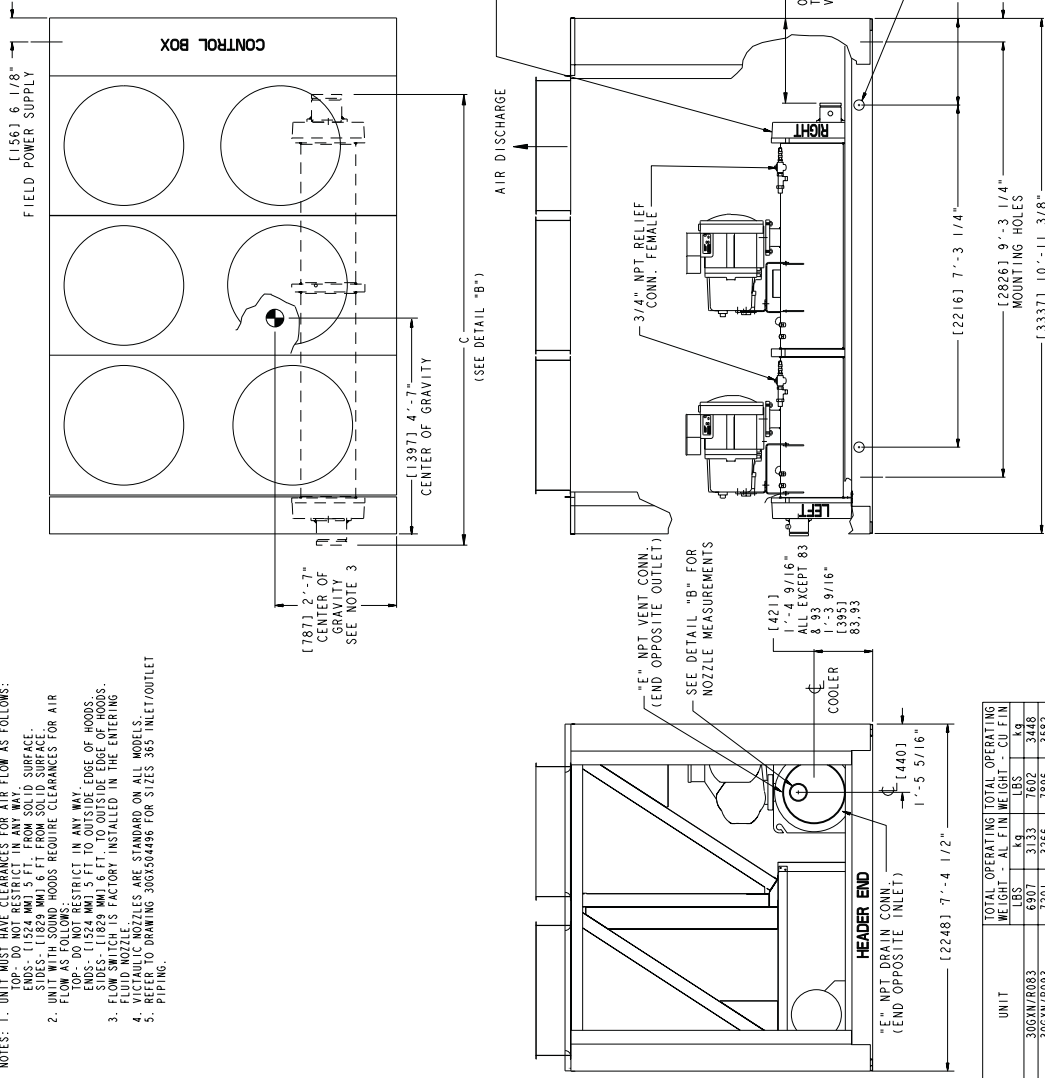
Fig. 1 — Dimensions 30GXN,R080,090

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1524 MM) 5 FT. FROM SOLID SURFACE.
 2. UNITS WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTLET EDGE OF HOODS.
 SIDES - (1524 MM) 5 FT. TO OUTLET EDGE OF HOODS.
 3. FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING FLUID NOZZLE.
 4. REFRIGERANT NOZZLES ARE STANDARD ON ALL MODELS.
 5. REFER TO DRAWING 30GXS4498 FOR SIZES 365 INLET/OUTLET PIPING.



*Cast iron.
 †Steel.

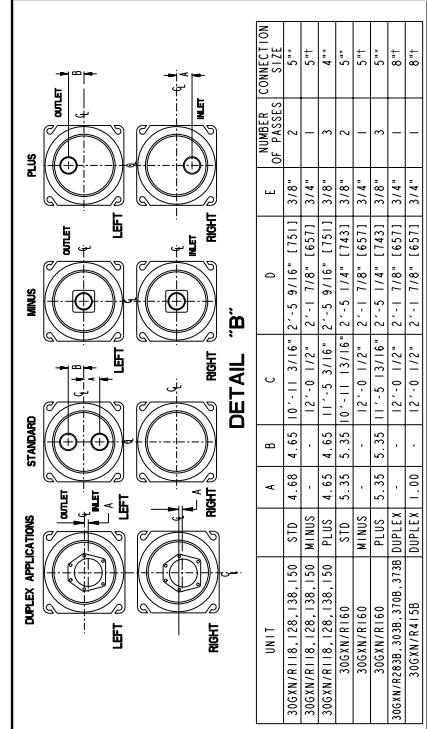
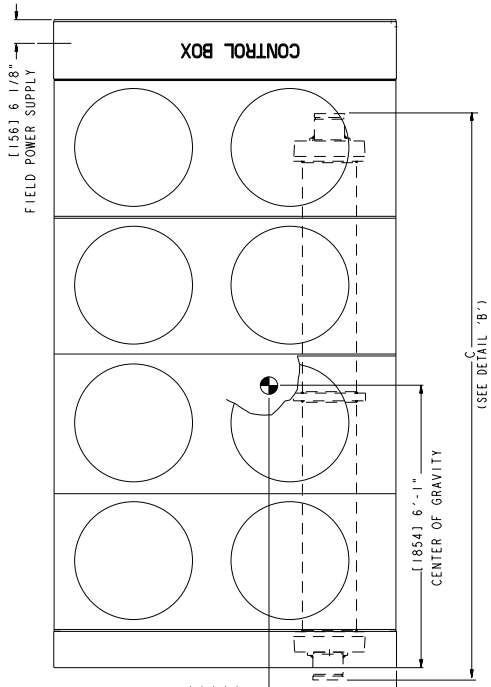
DETAIL "B"



UNIT	TOTAL OPERATING WEIGHT - AL F IN WEIGHT - CU F IN	kg	LBS
30GXM/R083		345	760
30GXM/R093		350	772
30GXM/R106		514	1136
30GXM/R114		662	1462
30GXM/R125, 220A, 240A		752	1662
30GXM/R390B		7714	17114

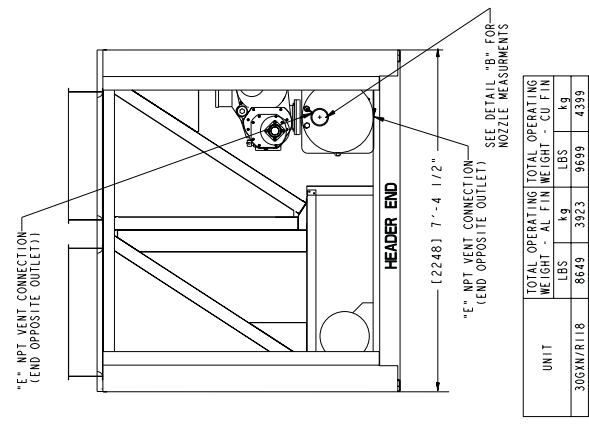
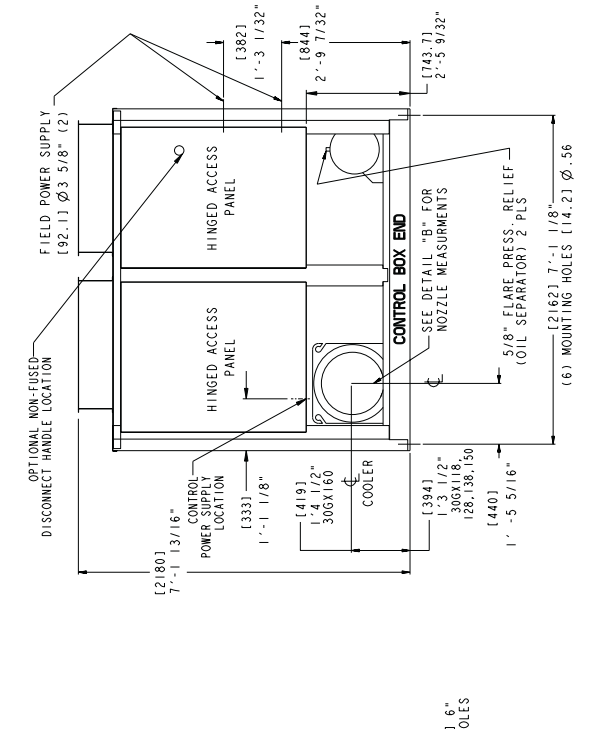
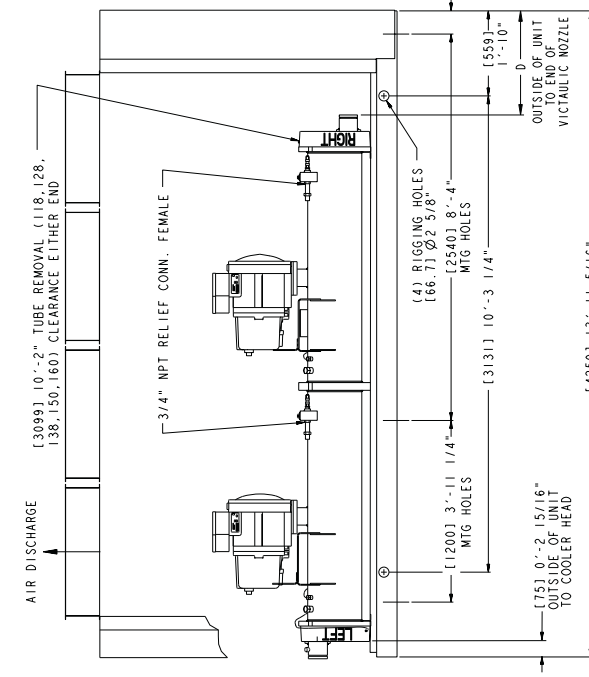
Fig. 2 — Dimensions 30GXM, R083, 093, 106, 114, 125, 135

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS: 1) TOP - DO NOT RESTRICT IN ANY WAY. SURFACE. SIDES - (1829 MM) 6 FT FROM SOLID SURFACE. FLOW - DO NOT RESTRICT IN ANY WAY. ENDS - (1524 MM) 5 FT TO OUTSIDE EDGE OF HOODS. SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS. 3. FLUID NOZZLE IS FACTORY INSTALLED IN THE ENTERING. 4. VICTAULIC NOZZLES ARE STANDARD ON ALL MODELS. REFER TO DRAWING 30GXS05295 FOR SIZE 283 INLET/OUTLET PIPING. REFER TO DRAWING 30GXS04497 FOR SIZE 310 INLET/OUTLET PIPING. REFER TO DRAWING 30GXS05299 FOR SIZE 313 INLET/OUTLET PIPING. REFER TO DRAWING 30GXS04498 FOR SIZE 415 INLET/OUTLET PIPING.



UNIT	A	B	C	D	E	NUMBER OF PASSES	CONNECTION SIZE
30GXN/R118, 128, 138, 150 STD	4.68	4.65	10'-11 3/16"	2'-5 9/16"	[751]	3/8"	5"
30GXN/R118, 128, 138, 150 MINUS	-	-	12'-0 1/2"	2'-1 7/8"	[657]	3/4"	5"
30GXN/R118, 128, 138, 150 PLUS	4.65	4.65	11'-5 3/16"	2'-5 9/16"	[751]	3/8"	4"
30GXN/R160 STD	5.35	5.35	10'-11 13/16"	2'-5 1/4"	[743]	3/8"	5"
30GXN/R160 MINUS	-	-	12'-0 1/2"	2'-1 7/8"	[657]	3/4"	5"
30GXN/R160 PLUS	5.35	5.35	11'-5 13/16"	2'-5 1/4"	[743]	3/8"	5"
30GXN/R283B, 303B, 370B, 373B DUPLEX	1.00	-	12'-0 1/2"	2'-1 7/8"	[657]	3/4"	8"
30GXN/R415B	-	-	12'-0 1/2"	2'-1 7/8"	[657]	3/4"	8"

*Cast Iron.
†Steel.



UNIT	TOTAL OPERATING TOTAL		CU FTN
	WEIGHT - AL FIN	WEIGHT - CU FIN	
	LBS	LBS	
30GXN/R118	8649	9699	4399
30GXN/R128	8664	9714	4406
30GXN/R138, 283B, 303B, 373B	8789	9739	4418
30GXN/R150, 370B, 415B	8784	9834	4461
30GXN/R160, 415B	9072	10172	4614

Fig. 3 — Dimensions 30GXN,R118, 128, 138, 150, 160

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING FLUID NOZZLES.
 4. FLUID NOZZLES ARE STANDARD ON ALL HOODS.
 5. REFER TO DRAWING 30GXS0295 FOR SIZE 283 INLET/OUTLET PIPING.
 REFER TO DRAWING 30GXS0297 FOR SIZE 328 INLET/OUTLET PIPING.
 REFER TO DRAWING 30GXS0300 FOR SIZE 393 INLET/OUTLET PIPING.
 REFER TO DRAWING 30GXS0300 FOR SIZE 418 INLET/OUTLET PIPING.

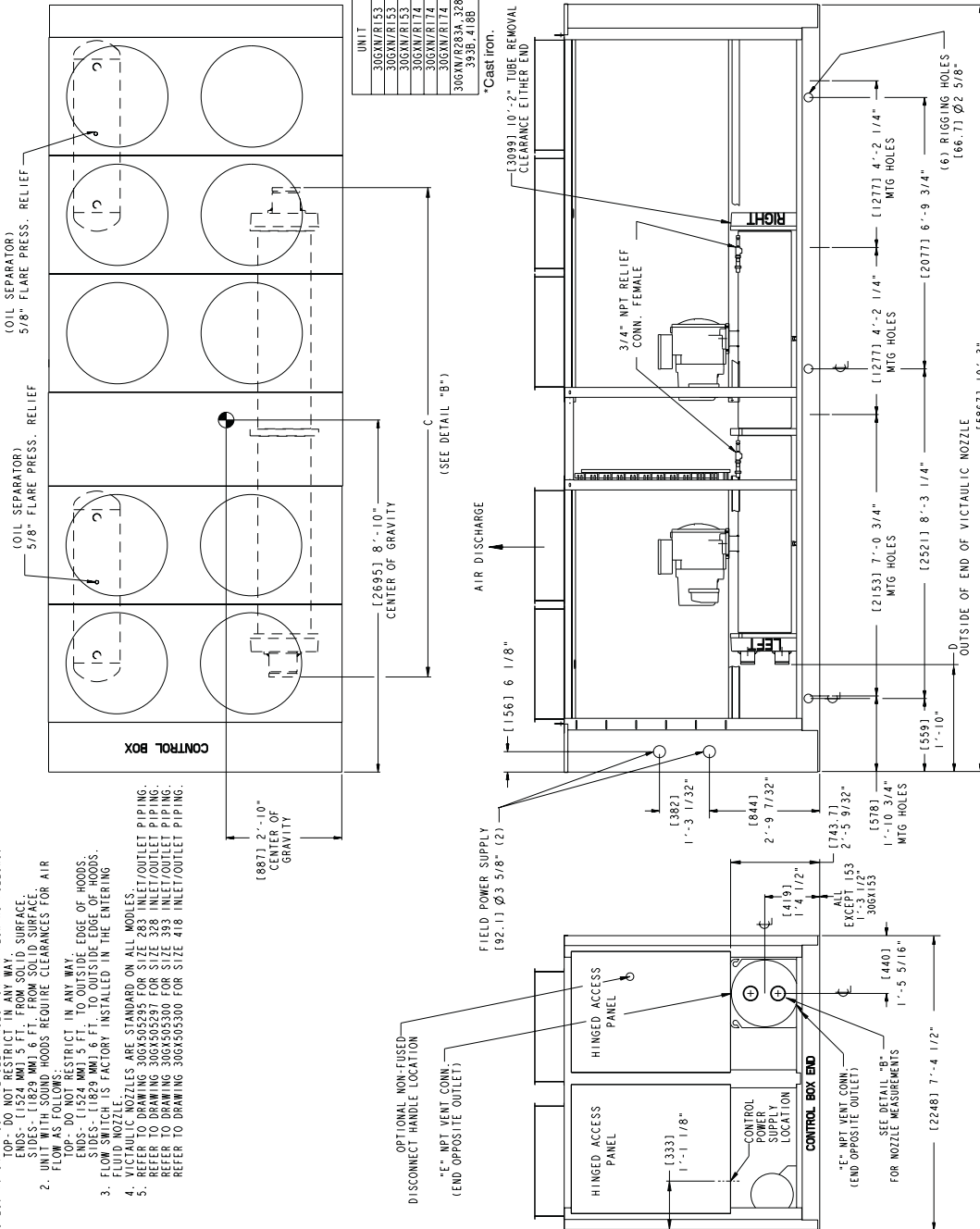
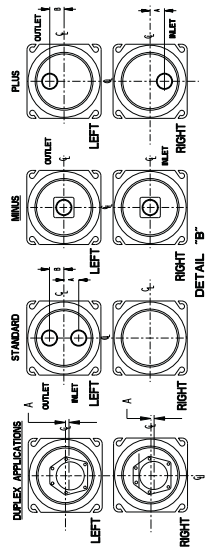


Fig. 4 — Dimensions 30GXN, R153, 174

UNIT	A	B	C	D	E	NUMBER OF CONNECTION PASSES	SIZE
30GXN/R163.178 STD	5.35	5.35	10'-11.13/16"	5'-9 11/16" [1770]	3/8"	2	5"
30GXN/R163.178 MINUS	-	-	12'-0 1/2"	5'-6 5/16" [1684]	3/4"	1	5"
30GXN/R163.178 PLUS	5.35	5.35	11'-5 13/16"	5'-9 11/16" [1770]	3/8"	3	5"
30GXN/R303A, 328A, 353A/B	1.00	-	12'-0 1/2"	5'-6 5/16" [1684]	3/4"	1	8"

*Cast iron.
†Steel.

UNIT	TOTAL OPERATING WEIGHT - LBS	TOTAL OPERATING WEIGHT - KG	AL F IN WEIGHT - LBS	CU F IN WEIGHT - KG
30GXN/R163.303A	10279	4662	11947	5419
30GXN/R178.328A, 353A/B	10294	4669	11962	5426



- NOTES:
- UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
TOPS: DO NOT RESTRICT IN ANY WAY.
SIDES: 11/8" MIN. FROM SOLID SURFACE.
SIZES: 11/8" MIN. 6 FT. FROM SOLID SURFACE.
 - UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
TOPS: DO NOT RESTRICT IN ANY WAY.
SIDES: 11/8" MIN. 6 FT. FROM SOLID SURFACE.
FRONT: 11/8" MIN. 6 FT. FROM SOLID SURFACE.
 - FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING FLUID NOZZLE.
 - VICTAULIC NOZZLES ARE STANDARD ON ALL MODELS.
 - REFER TO DRAWING 30GXN0296 FOR SIZE 303 INLET/OUTLET PIPING. REFER TO DRAWING 30GXN0297 FOR SIZE 303 INLET/OUTLET PIPING. REFER TO DRAWING 30GXN0298 FOR SIZE 328 INLET/OUTLET PIPING. REFER TO DRAWING 30GXN0299 FOR SIZE 353 INLET/OUTLET PIPING.

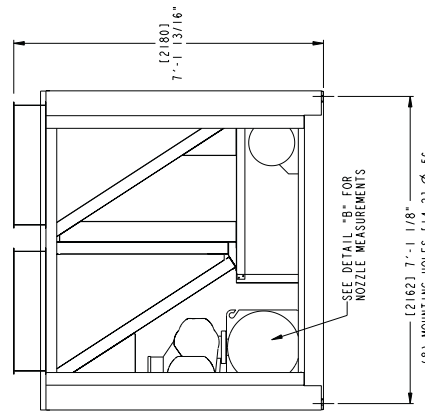
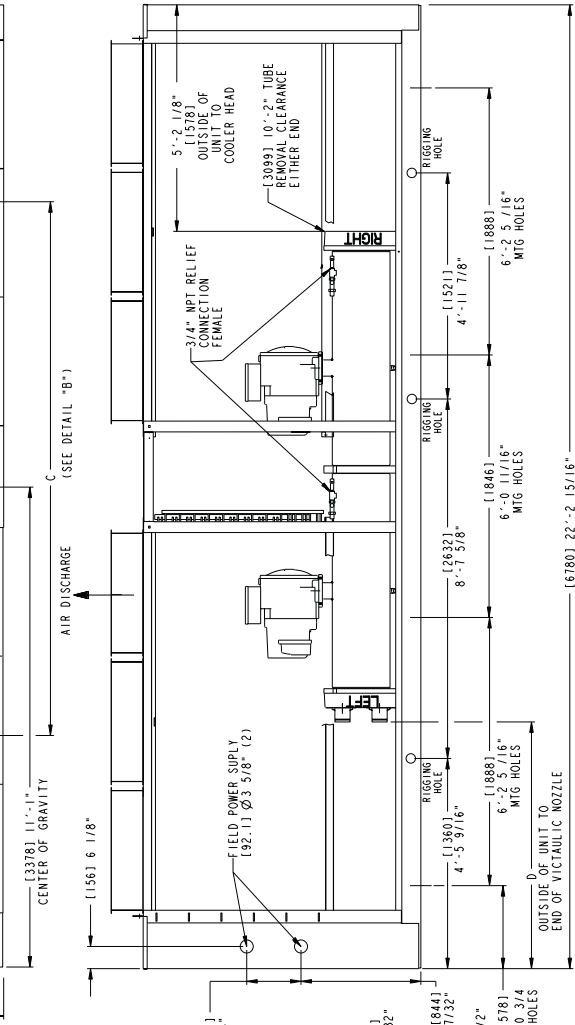
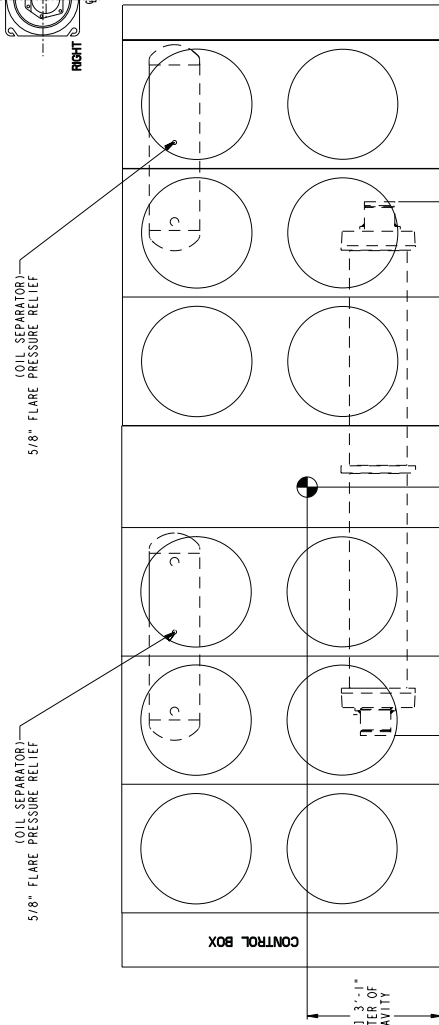
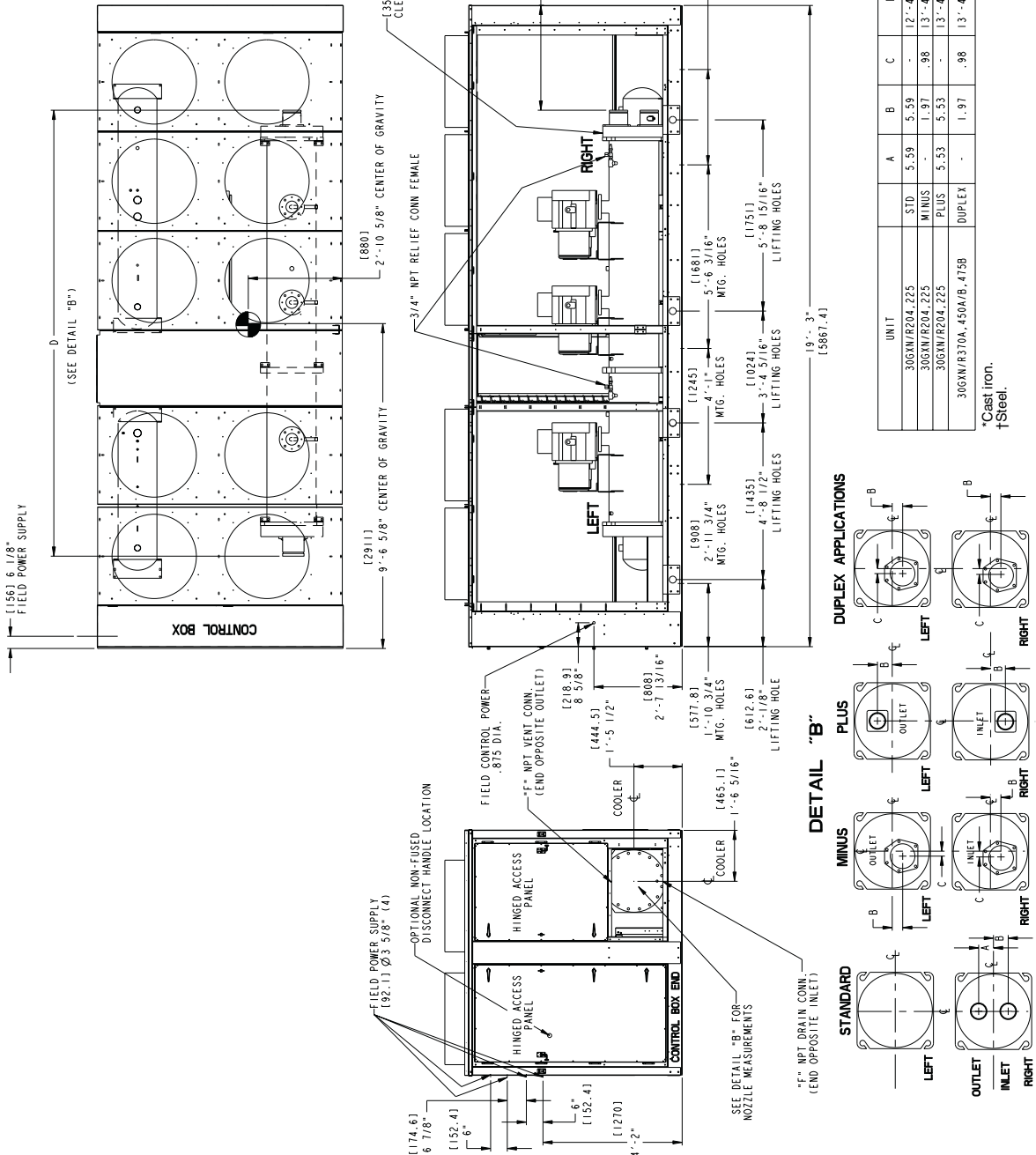


Fig. 5 — Dimensions 30GXN,R163, 178

NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. FLOW SWITCHES FACTORY INSTALLED IN THE ENTERING FLUID NOZZLE.
 4. VICTAULIC NOZZLES ARE COMMON ON ALL MODELS.
 5. REFER TO DRAWING 306X504497 FOR SIZE 370 INLETT/OUTLET PIPING.
 REFER TO DRAWING 306X504516 FOR SIZE 450 INLETT/OUTLET PIPING.
 REFER TO DRAWING 306X505467 FOR SIZE 475 INLETT/OUTLET PIPING.

UNIT	TOTAL OPERATING WEIGHT-ALUM FIN		TOTAL OPERATING WEIGHT-COPPER FIN	
	LBS.	KG	LBS.	KG
306XN/R204	12,747	5,782	14,147	6,417
306XN/R225-370A, 450A/B, 475B	12,985	5,890	14,360	6,514



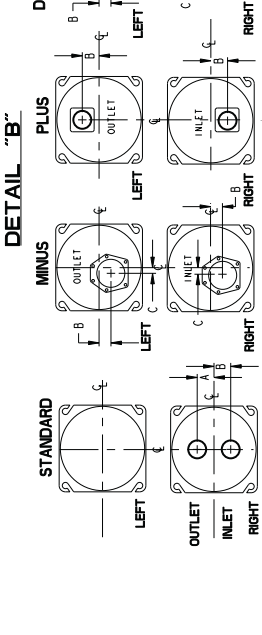
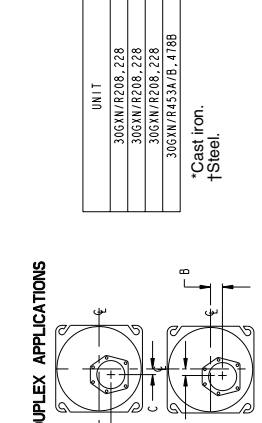
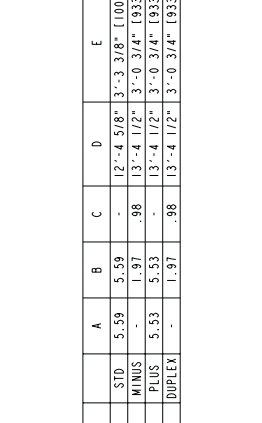
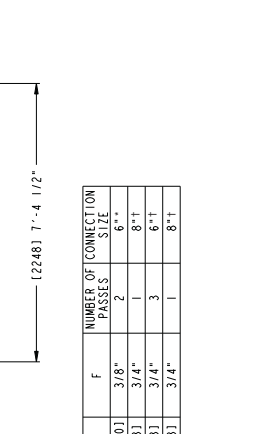
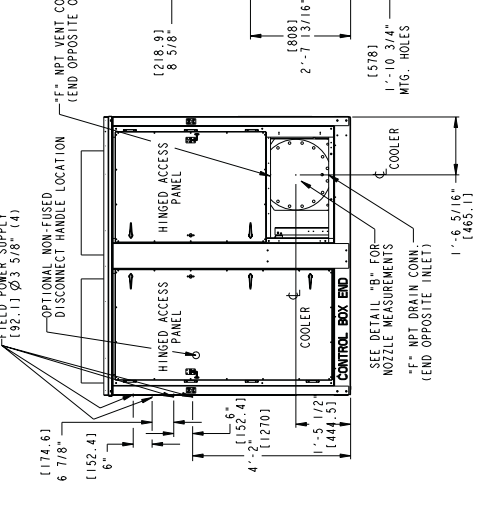
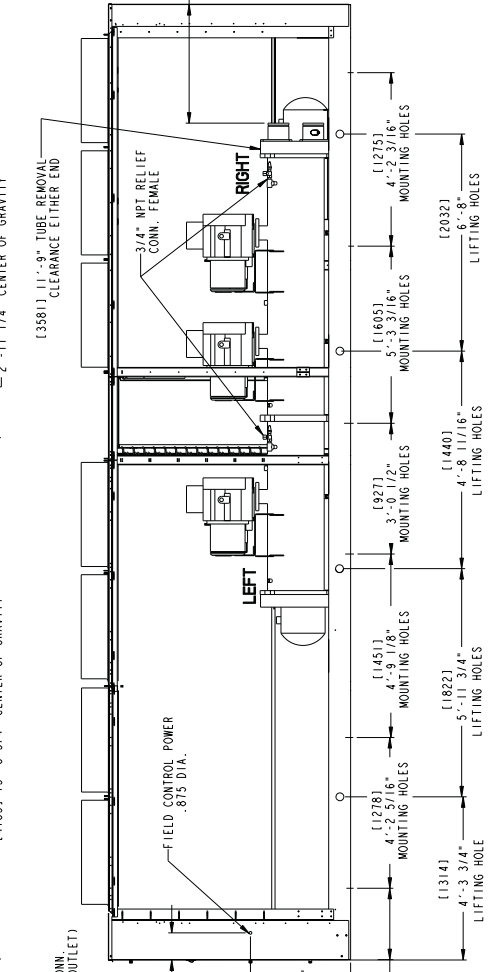
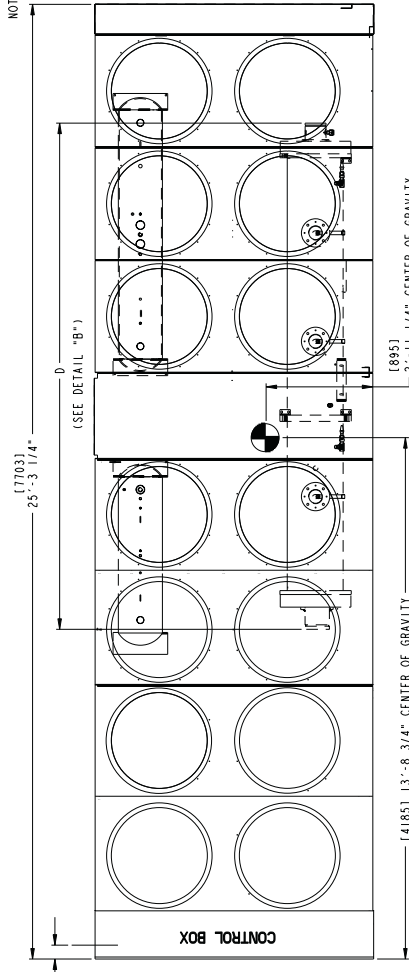
UNIT	A	B	C	D	E	F	NUMBER OF CONNECTION PASSES
306XN/R204, 225	STD	5.59	-	12'-4 5/8"	3'-3 3/8" (1000)	3/8"	2
306XN/R204, 225	MINUS	1.97	.98	13'-4 1/2"	3'-0 3/4" (933)	3/4"	1
306XN/R204, 225	PLUS	5.53	-	13'-4 1/2"	3'-0 3/4" (933)	3/4"	3
306XN/R370A, 450A/B, 475B	DUPLEX	1.97	.98	13'-4 1/2"	3'-0 3/4" (933)	3/4"	1
							8+

*Cast Iron.
†Steel.

Fig. 6 — Dimensions 306XN,R204, 225

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 SIDES - (1829 MM) 5 FT. FROM SOLID SURFACE.
 FLOOR - DO NOT RESTRICT IN ANY WAY.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 SIDES - (1829 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 FLOOR - DO NOT RESTRICT IN ANY WAY.
 3. FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING PIPING.
 4. FIELD NOZZLES ARE STANDARD ON ALL UNITS.
 5. REFER TO DRAWING 30GX505301 FOR SIZE 453 INLET/OUTLET PIPING.
 REFER TO DRAWING 30GX505302 FOR SIZE 478 INLET/OUTLET PIPING.

UNIT	TOTAL OPERATING WEIGHT - ALUMINUM	TOTAL OPERATING WEIGHT - COPPER	TOTAL OPERATING WEIGHT - ALUMINUM AND COPPER
	LBS.	KG	LBS.
30GXN/R208	14099	6395	19941
30GXN/R228	14114	6402	19956
453A/B, 478B			9052

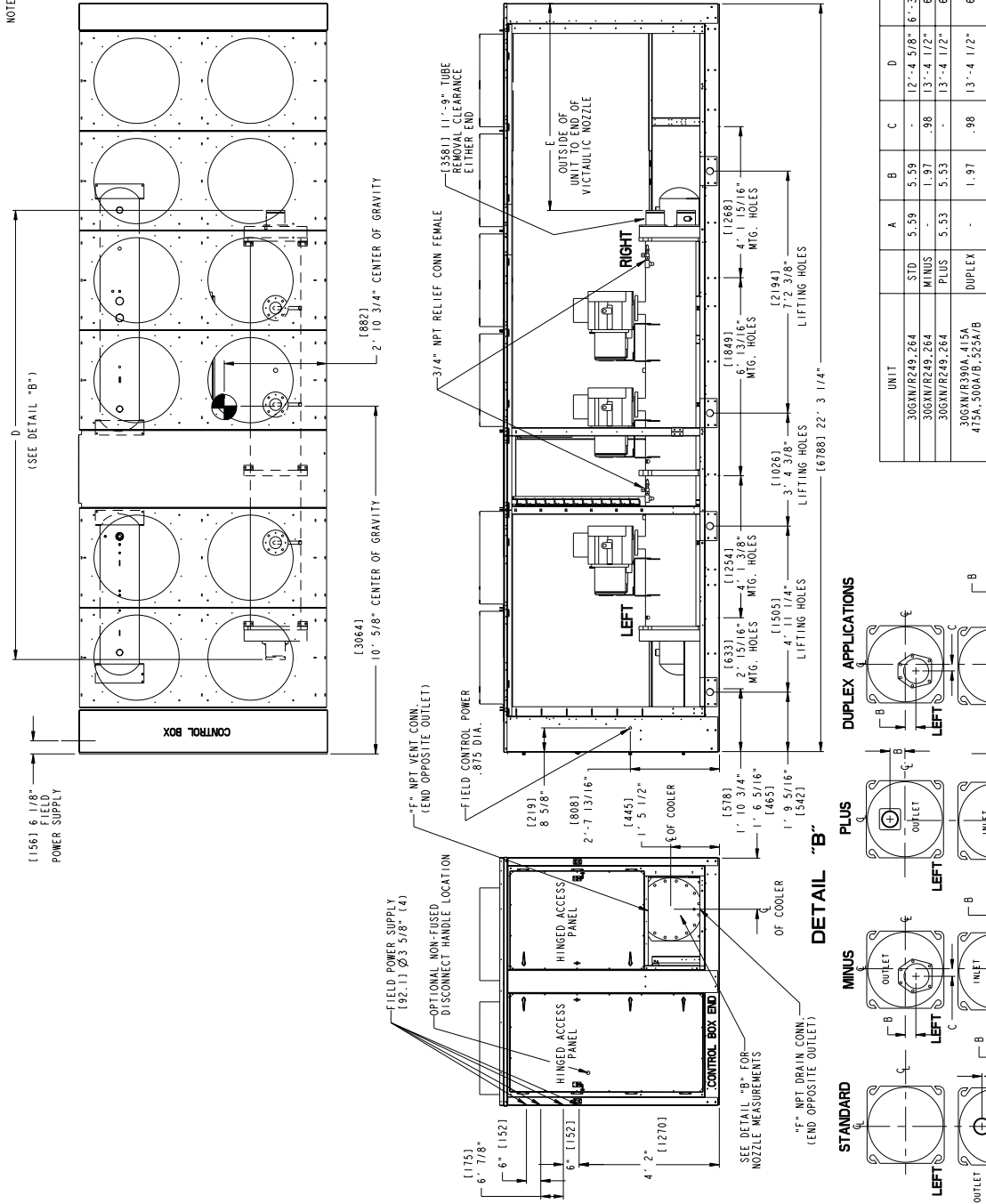


UNIT	A	B	C	D	E	F	NUMBER OF CONNECTION PASSES
30GXN/R208, 228	STD 5.59	5.59	-	12'-4 5/8"	3'-3 3/8"	(1000)	3/8"
30GXN/R208, 228	MINUS	1.97	98	13'-4 1/2"	3'-0 3/4"	(933)	3/4"
30GXN/R208, 228	PLUS	5.53	5.53	-	13'-4 1/2"	(933)	3/4"
30GXN/R453A/B, 478B	DUPEX	1.97	98	13'-4 1/2"	3'-0 3/4"	(933)	3/4"

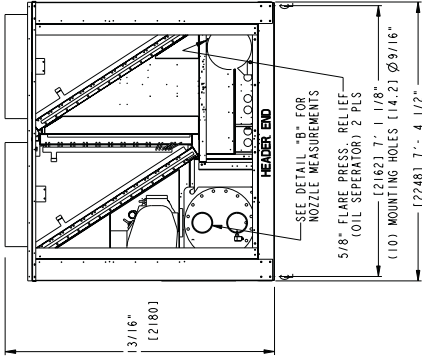
*Cast Iron.
 †Steel.

Fig. 7 — Dimensions 30GXN, R208, 228

NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
TOP—DO NOT RESTRICT IN ANY WAY.
ENDS—(1524 MM) 5 FT. FROM SOLID SURFACE.
SIDES—(1829 MM) 6 FT. FROM SOLID SURFACE.
2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
TOP—DO NOT RESTRICT IN ANY WAY.
ENDS—(1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
SIDES—(1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
3. FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING VICTAULIC NOZZLES.
4. VICTAULIC NOZZLES ARE STANDARD ON ALL MODELS.
5. REFER TO DRAWING 30GX50496 FOR SIZE 300 INLET/OUTLET PIPING.
REFER TO DRAWING 30GX50498 FOR SIZE 415 INLET/OUTLET PIPING.
REFER TO DRAWING 30GX50467 FOR SIZE 475 INLET/OUTLET PIPING.
REFER TO DRAWING 30GX50468 FOR SIZE 500 & 525 INLET/OUTLET PIPING.



UNIT	TOTAL OPERATING WEIGHT-ALUM FIN		TOTAL OPERATING WEIGHT-COPPER FIN	
	LBS.	KG	LBS.	KG
30GXN/R249, 475A, 500A/B	13,867	6,290	15,567	7,061
30GXN/R264, 390A, 415A, 525A/B	13,902	6,306	15,602	7,077



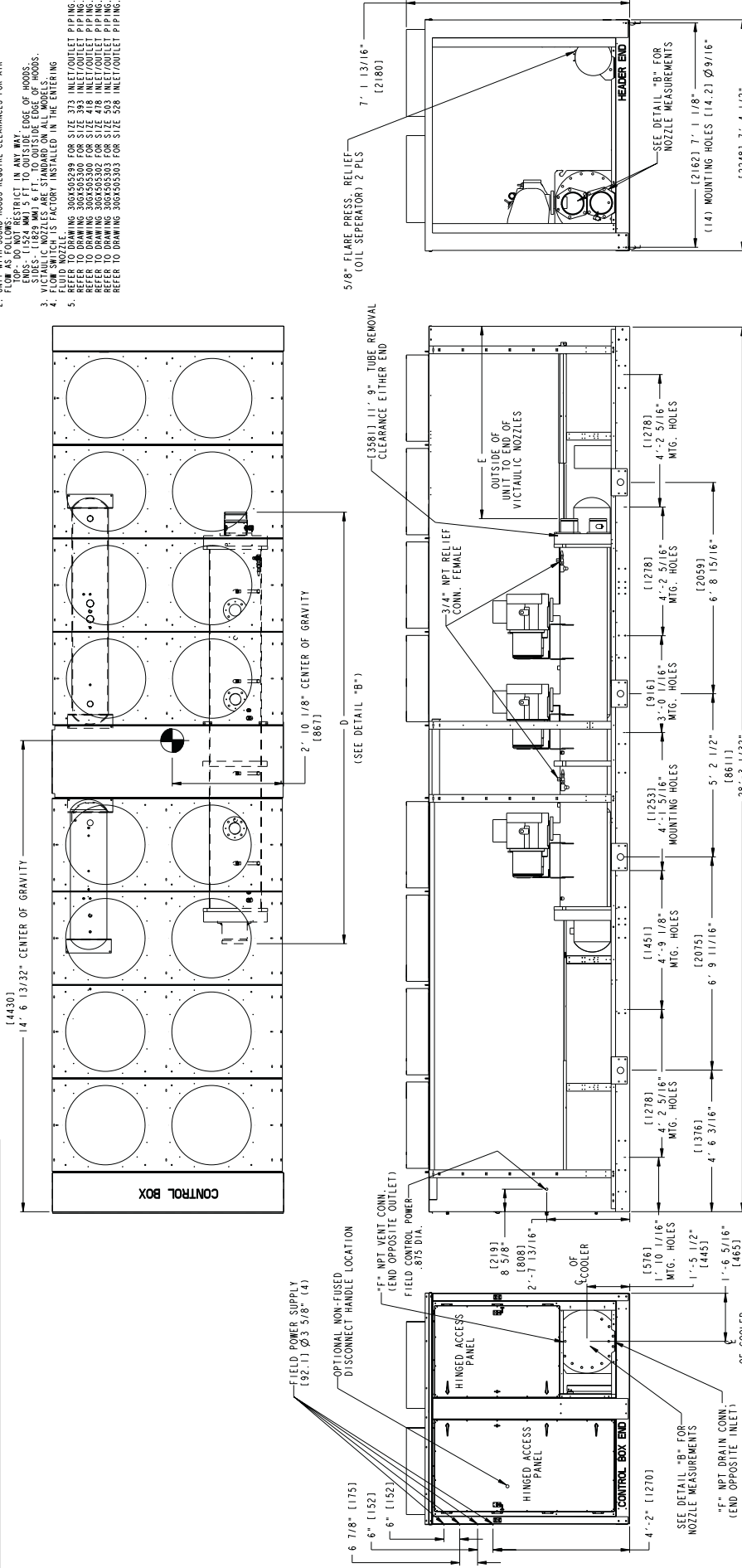
UNIT	A	B	C	D	E	F	NUMBER OF CONN. PASSES	CONNECTION SIZE
30GXN/R249, 264	STD 5.59	5.59	-	12'-4 3/8"	6'-3 15/16"	[1929]	3/8"	6"
30GXN/R249, 264	MINUS	1.97	.98	13'-4 1/2"	6'-1" [1854]	3/4"	1	8"
30GXN/R249, 264	PLUS	5.53	5.53	13'-4 1/2"	6'-1" [1854]	3/4"	3	6"
30GXN/R300A, 415A 475A, 500A/B, 525A/B	DUPLEX	1.97	.98	13'-4 1/2"	6'-1" [1854]	3/4"	1	8"

*Cast iron.
†Steel.

Fig. 8 — Dimensions 30GXN,R249, 264

UNIT	TOTAL OPERATING WEIGHT - ALUM FIN		TOTAL OPERATING WEIGHT - COPPER FIN	
	LBS.	KG	LBS.	KG
30GXN/R253, 373A, 393A, 478A, 503A/B	16,736	7,591	19,941	9,045
30GXN/R268, 418A, 528A/B	16,751	7,598	19,956	9,052

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP: DO NOT RESTRICT IN ANY WAY. SURFACE STUBS - (1829 MM) 6 FT FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP: DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 3 FT TO OUTSIDE EDGE OF HOODS.
 3. FLOW SWITCH IS FACTORY INSTALLED ON ALL MODEL HOODS.
 4. VICTAULIC NOZZLES ARE STANDARD ON ALL MODEL HOODS.
 5. REFER TO DRAWING 30G505298 FOR SIZE 933 INLET/OUTLET PIPING.
 REFER TO DRAWING 30G505306 FOR SIZE 983 INLET/OUTLET PIPING.
 REFER TO DRAWING 30G505308 FOR SIZE 418 INLET/OUTLET PIPING.
 REFER TO DRAWING 30G505309 FOR SIZE 403 INLET/OUTLET PIPING.
 REFER TO DRAWING 30G505303 FOR SIZE 903 INLET/OUTLET PIPING.
 REFER TO DRAWING 30G505303 FOR SIZE 828 INLET/OUTLET PIPING.



UNIT	DETAIL "B"						NUMBER OF CONNECTION PASSES	
	A	B	C	D	E	F	F	S
30GXN/R253, 268	STD. 5.59	5.59	-	12'-4 5/8" (3729)	6'-3 15/16" (1929)	3/8"	2	6"
30GXN/R253, 268	MINUS 1.97	1.97	.98	13'-4 1/2" (4084)	6'-1" (1854)	3/4"	1	8"-1
30GXN/R253, 268	PLUS 5.53	5.53	-	13'-4 1/2" (4084)	6'-1" (1854)	3/4"	3	6"-1
30GXN/R313A, 393A, 418A, 478A, 503A/B, 528A/B	-	1.97	.98	13'-4 1/2" (4084)	6'-1" (1854)	3/4"	1	8"-1

*Cast Iron.
 †Steel.

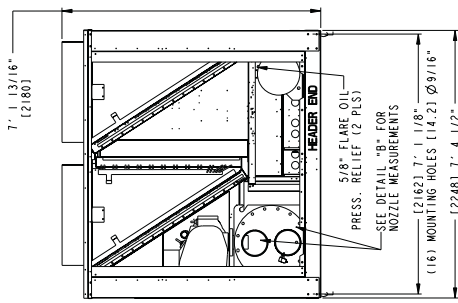
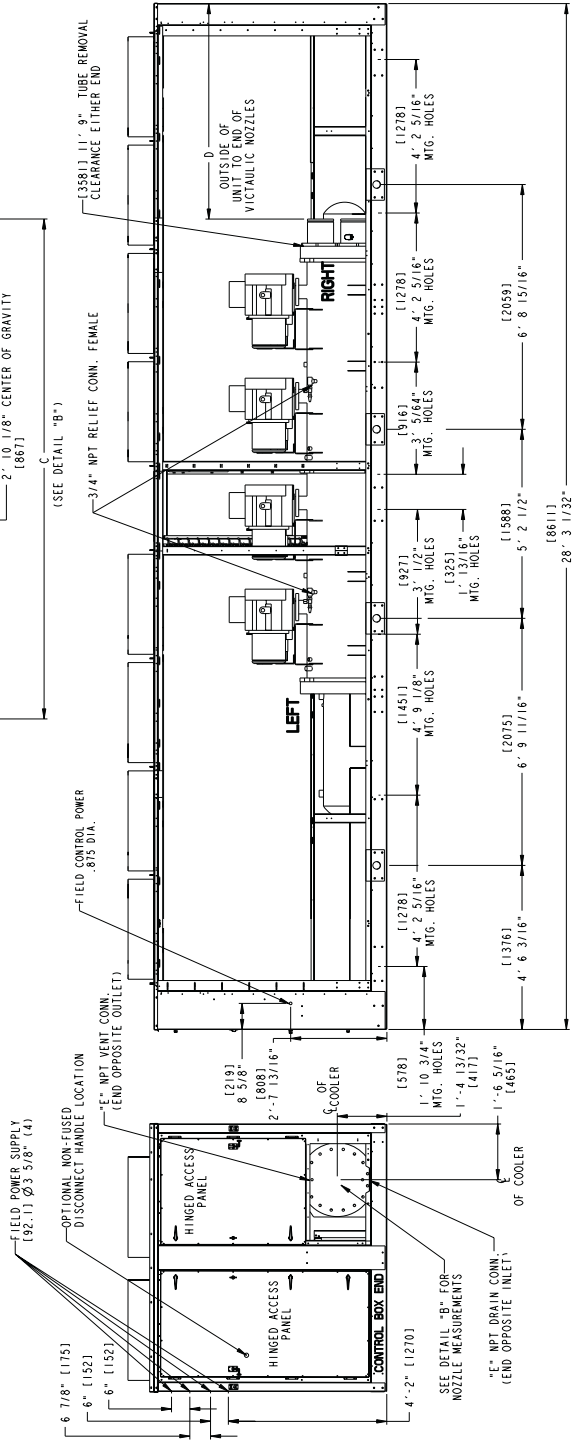
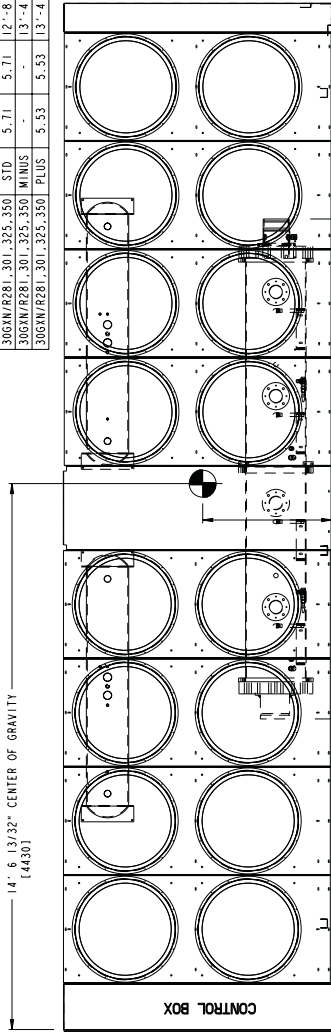
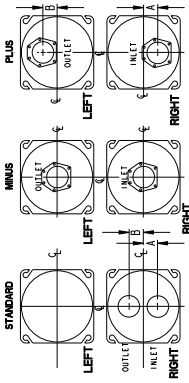
Fig. 9 — Dimensions 30GXN, R253, 268

NOTES:

- UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 ENDS - (1824 MM) 15 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 ENDS - (1824 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 FLOW SWITCH IS FACTORY INSTALLED IN THE ENTERING FLUID NOZZLES ARE STANDARD ON ALL UNITS.

DETAIL "B"							
UNIT	A	B	C	D	E	NUMBER OF CONNECTION PASSES	CONNECTION SIZE
30GXN/R281, 301, 325, 350 STD	5.71	5.71	12'-2 1/4"	6'-4 1/16" (1931)	3/8"	2	8"
30GXN/R281, 301, 325, 350 MINUS	5.53	5.53	13'-4 1/2"	5'-10 13/32" (1788)	3/4"	1	8"
30GXN/R281, 301, 325, 350 PLUS	5.53	5.53	13'-4 1/2"	5'-10 13/32" (1788)	3/4"	3	8"

*Cast iron.
 †Steel.



UNIT	TOTAL OPERATING WEIGHT-ALUM FIN		TOTAL OPERATING WEIGHT-COPPER FIN	
	LBS.	KG	LBS.	KG
30GXN/R281	18,718	8,499	21,923	9,944
30GXN/R301	18,738	8,499	21,943	9,953
30GXN/R325	18,778	8,517	21,983	9,971
30GXN/R350	18,828	8,540	22,033	9,994

Fig. 10 — Dimensions 30GXN,R281, 301, 325, 350

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT CLEARANCES: HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30G0245 & 3246 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - AL FTH WEIGHT - CU FTH	
	LBS	kg
30GXN/R283	18473	8334
	20823	9446

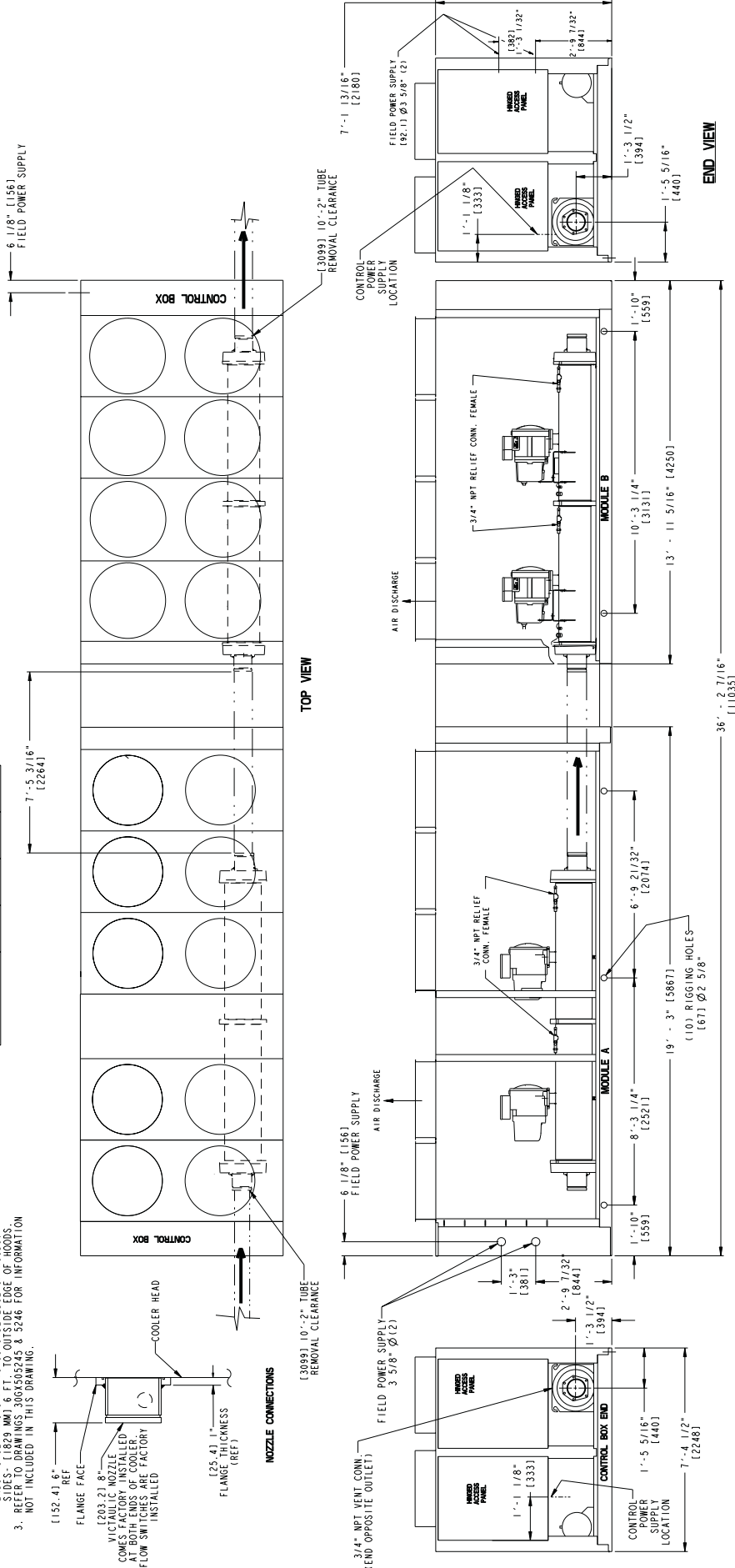


Fig. 11 — Dimensions 30GXN,R283

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30GX50245 & 5247 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT		TOTAL OPERATING WEIGHT	
	LBS	kg	LBS	kg
30GXN/R303	19068	8603	21686	9837

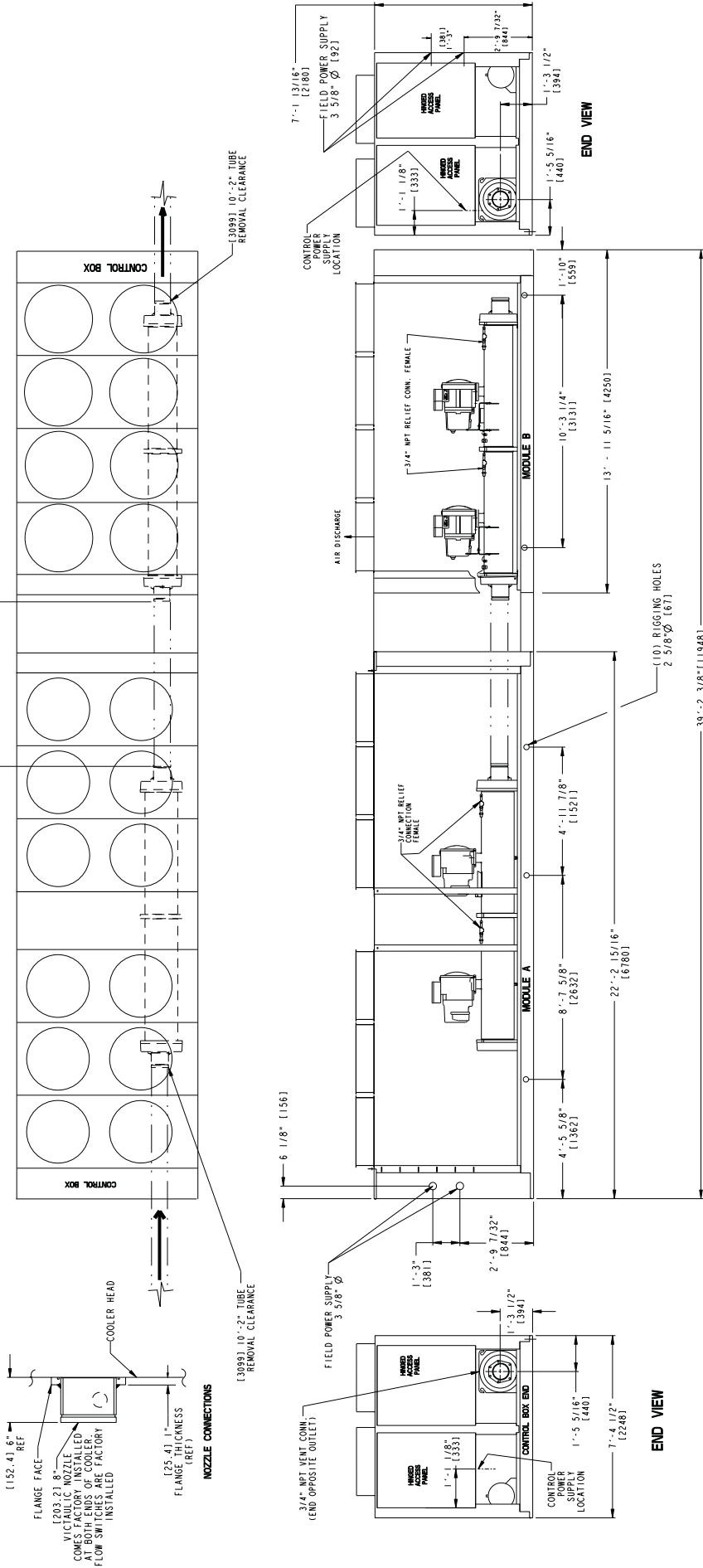


Fig. 12 — Dimensions 30GXN, R303

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 RESTRICT IN ANY WAY
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30GX50246 & 5247 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT		TOTAL OPERATING WEIGHT - CU FIN	
	LBS	Kg	LBS	Kg
30GXN/R328	19978	9062	23046	10454

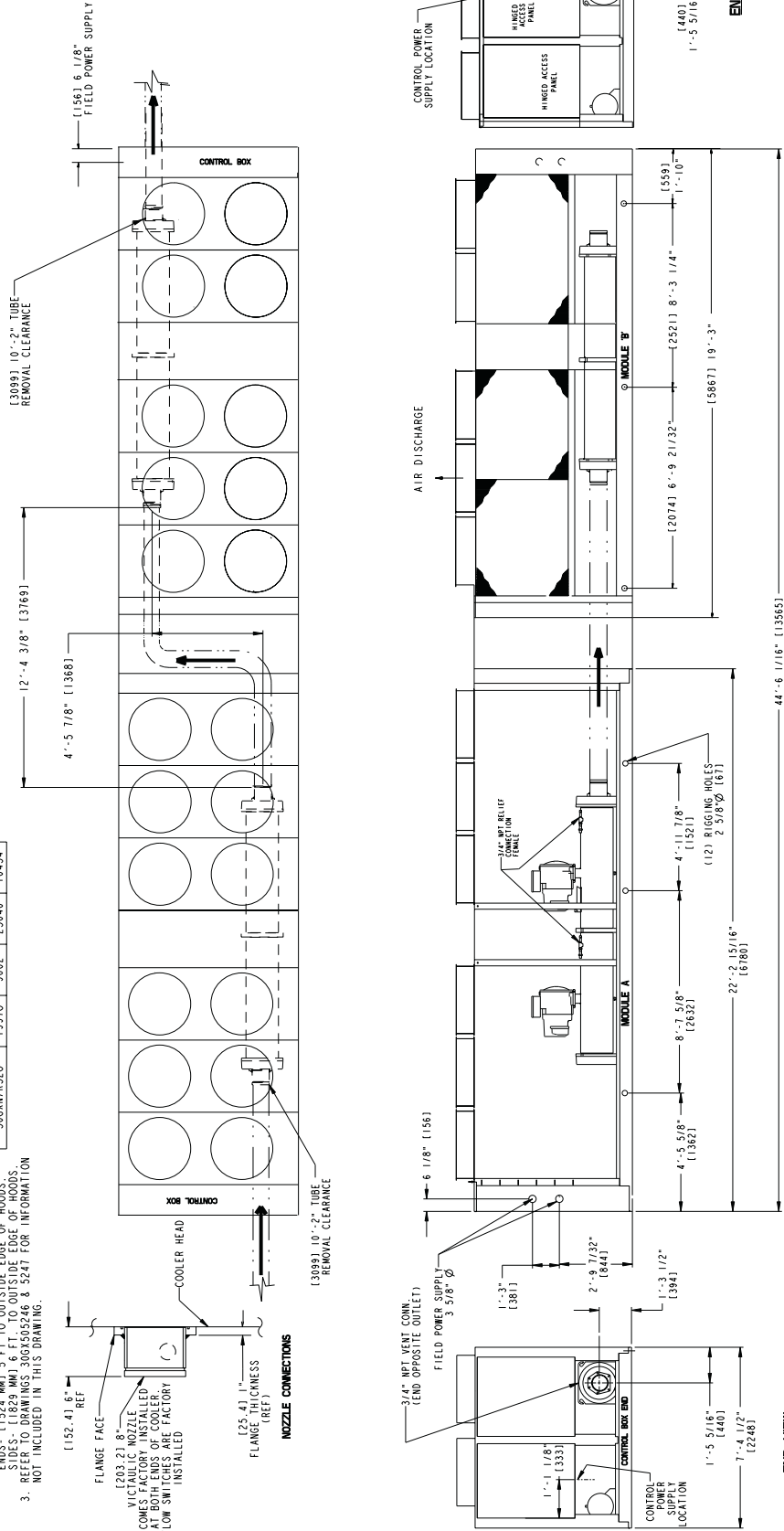


Fig. 13 — Dimensions 30GXN,R328

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING 30GX35247 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - AL FIN		TOTAL OPERATING WEIGHT - CU FIN	
	LBS	kg	LBS	kg
30GX/R353	20588	9338	23924	10852

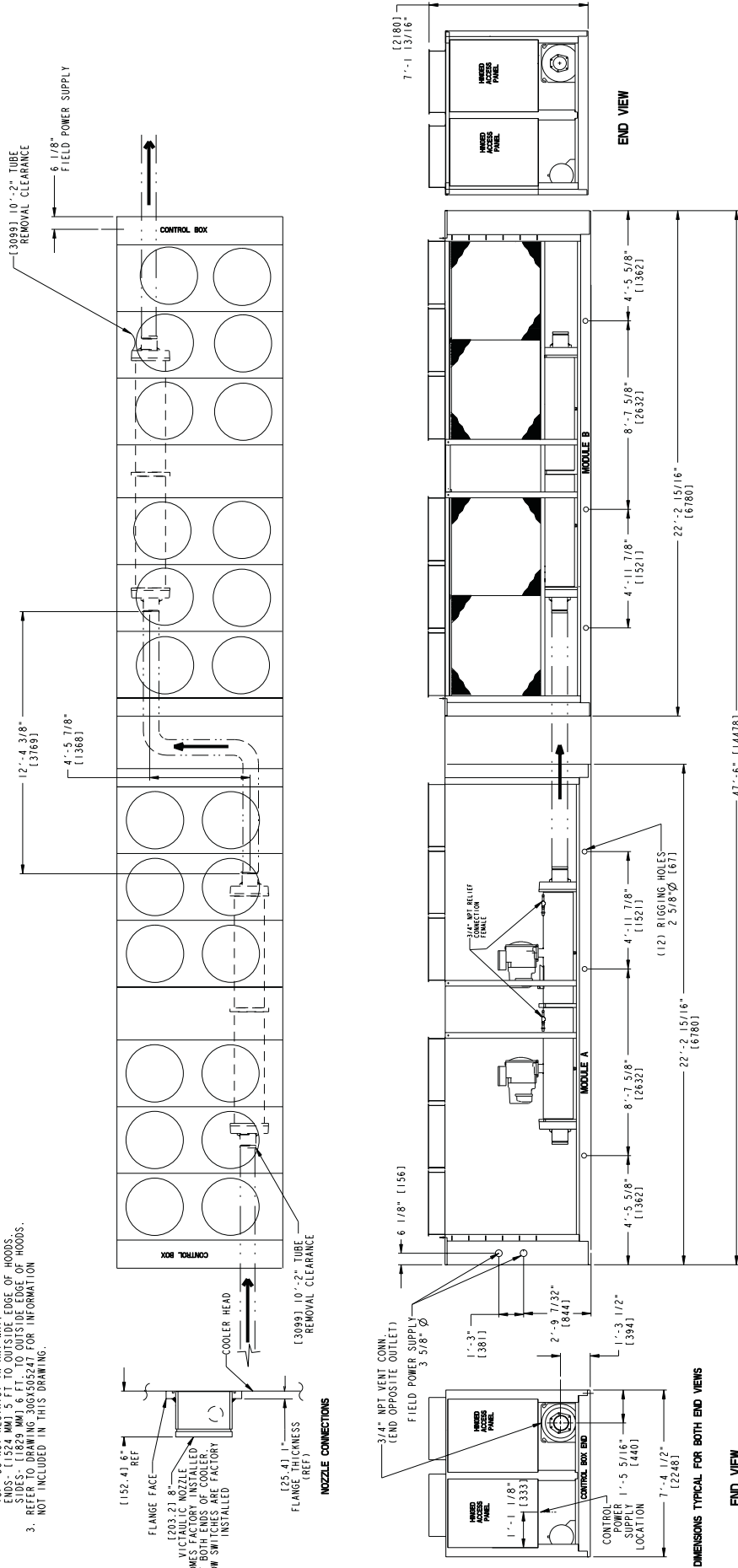
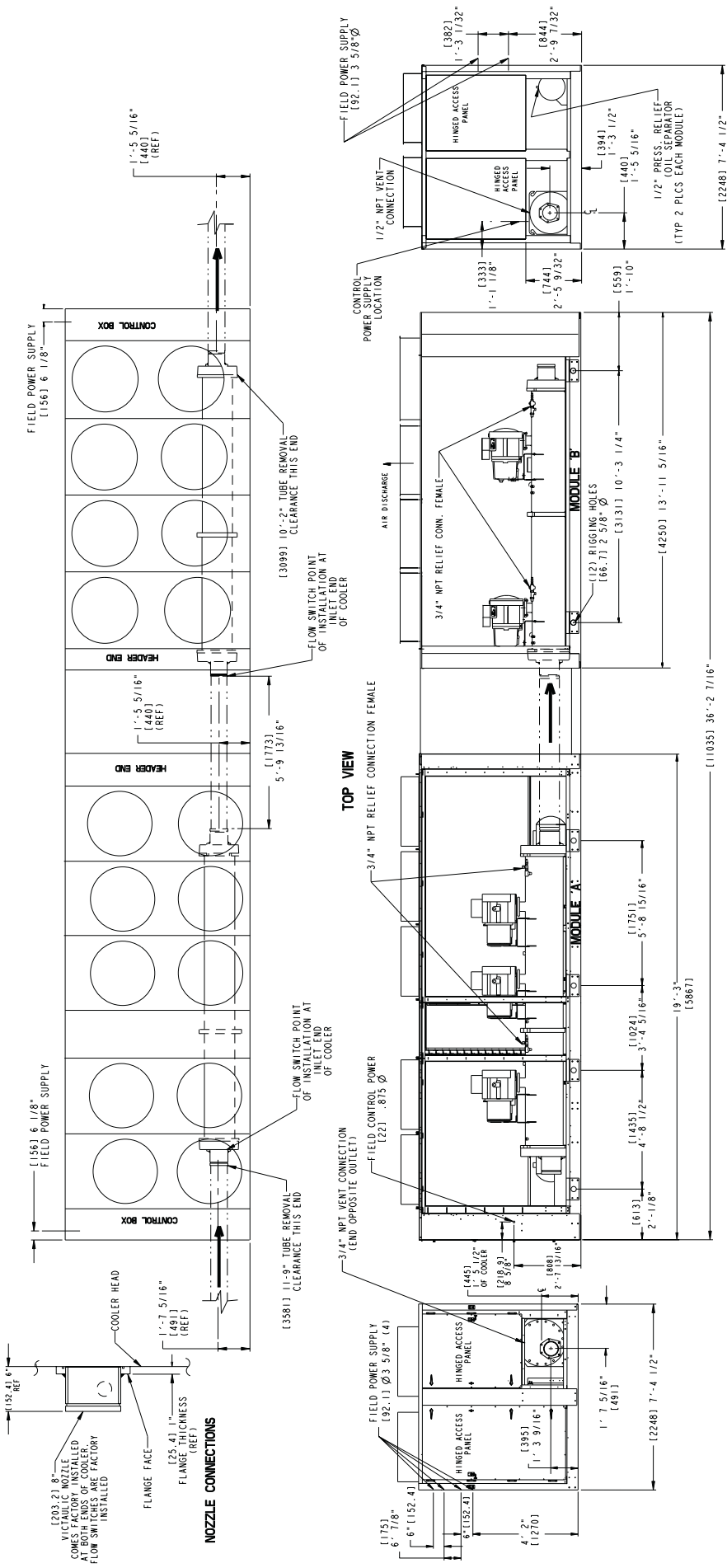


Fig. 14 — Dimensions 30GXN, R353

UNIT	TOTAL OPERATING TOTAL OPERATING	
	WEIGHT - AL F IN WEIGHT - CU F IN	
	LBS	KG
30GXN/R370	21769	9874
	LBS	KG
	24194	10974

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING 30GX504359 & 30GX505245 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.



END VIEW

Fig. 15 — Dimensions 30GXN,R370

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (11524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (11829 MM) 6 FT. FROM SOLID SURFACE.
 2. FLOW AS FOLLOWS: HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (11524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (11829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30GXN3245 & 3249 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - AL FIM WEIGHT - CU FIM	LBS	KG	LBS	KG
30GXN/R373		25525	11532	29680	13463

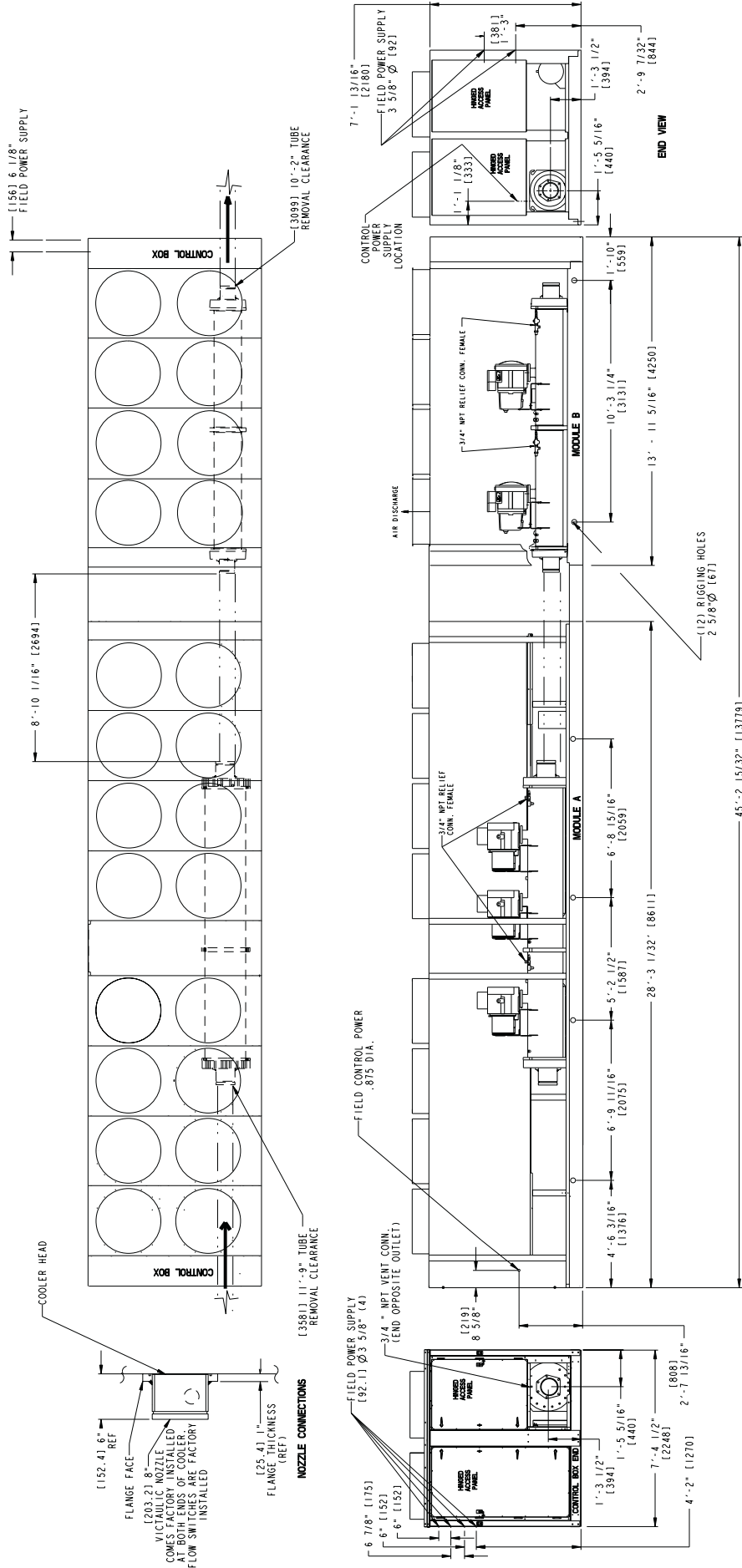


Fig. 16 — Dimensions 30GXN,R373

NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - 11524 MM (5 FT) FROM SOLID SURFACE.
 SIDES - 11524 MM (5 FT) FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - 11524 MM (5 FT) TO OUTSIDE EDGE OF HOODS.
 SIDES - 11524 MM (5 FT) FROM SOLID SURFACE.
 3. REFER TO DRAWINGS 30GXS04359 & 30GXS0244 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - ALL F IN WEIGHT - CU F IN	
	LBS	kg
30GXN/R390	2161.7	980.5
	2401.7	1089.4

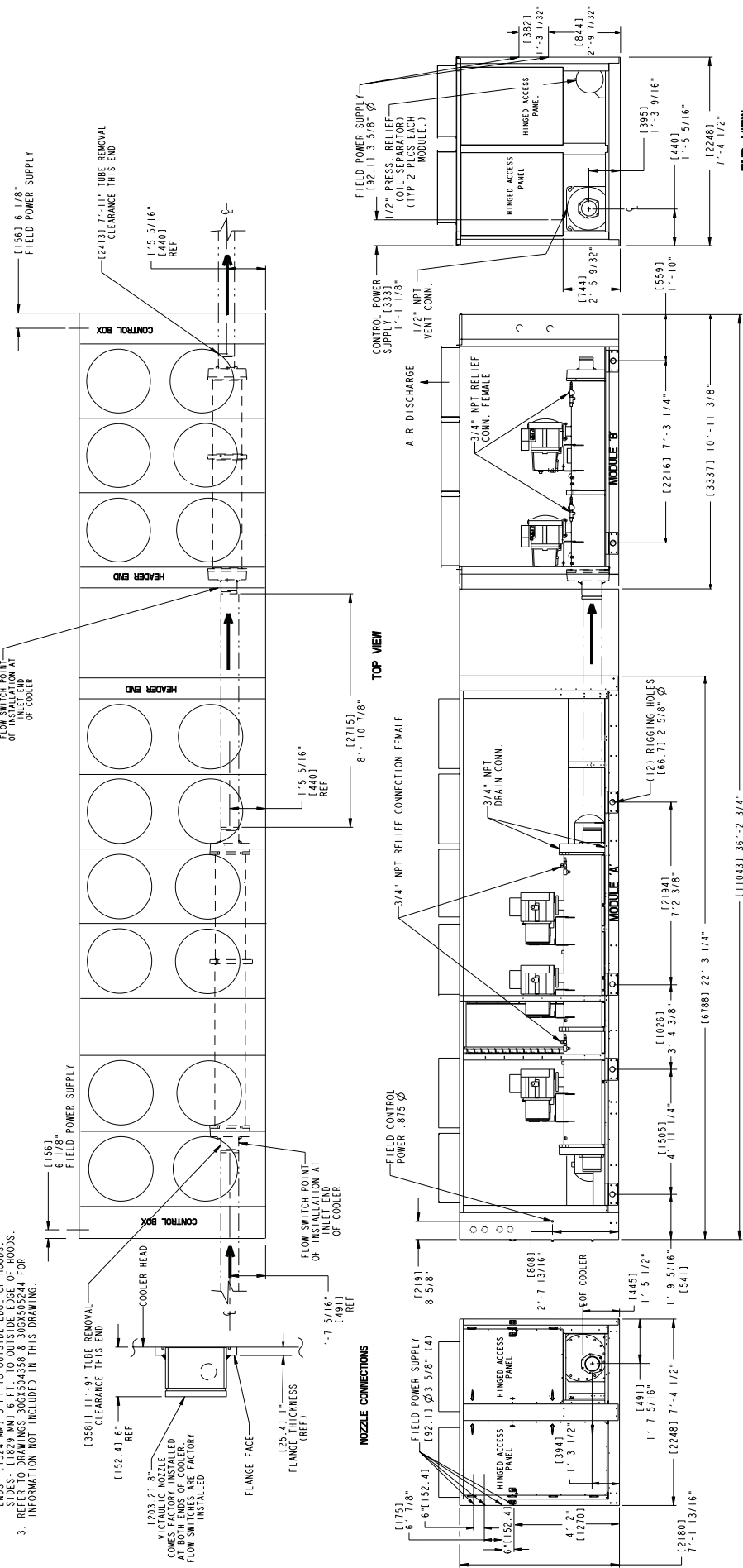


Fig. 17 — Dimensions 30GXN,R390

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 DO NOT RESTRICT IN ANY WAY.
 SIDES - 1829 MM (6 FT) FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 DO NOT RESTRICT IN ANY WAY.
 SIDES - 1829 MM (6 FT) TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30G505246 & 5249 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT		TOTAL OPERATING WEIGHT	
	LBS	kg	LBS	kg
30GXN/R393	26420	11984	31025	14073
30GXN/R418	26435	11991	31040	14080

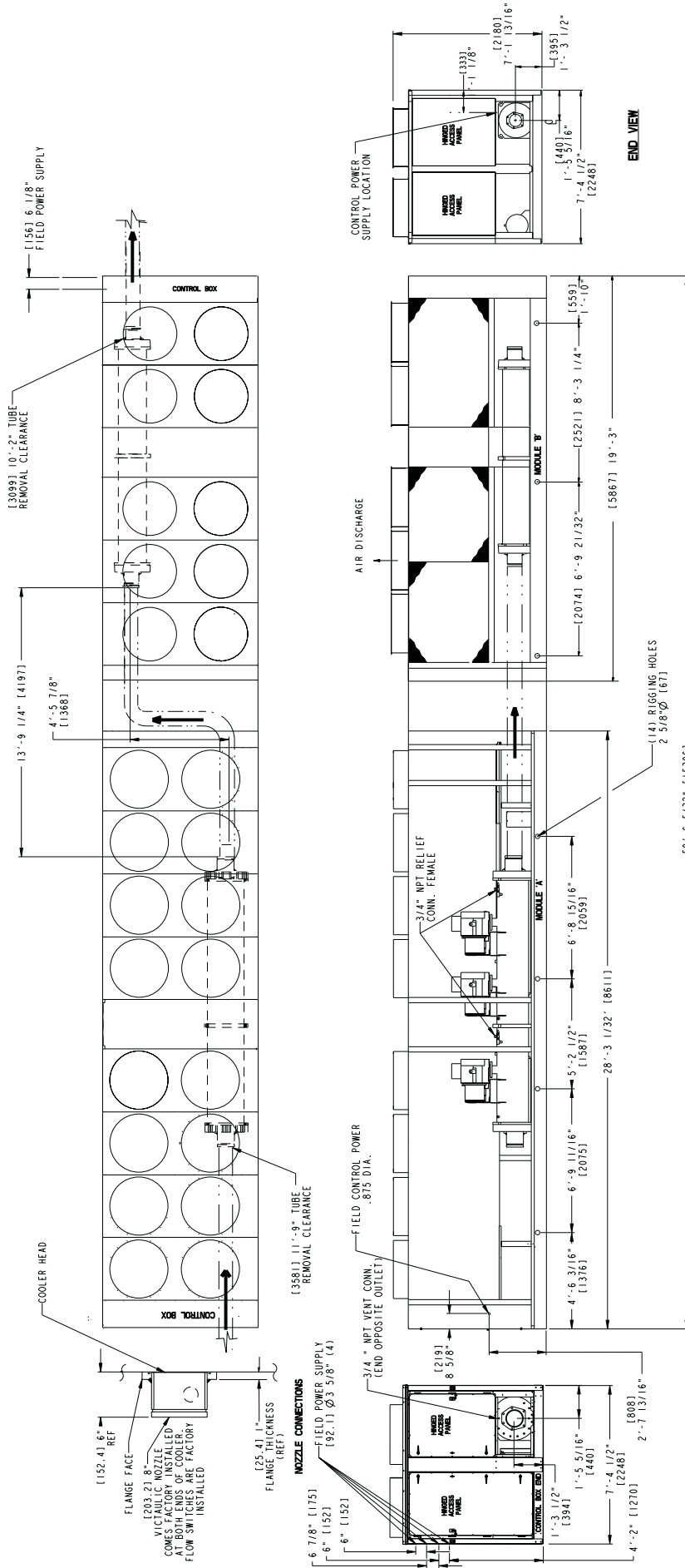


Fig. 18 — Dimensions 30GXN, R393, 418

UNIT	TOTAL OPERATING WEIGHT	TOTAL OPERATING HEIGHT	TOTAL OPERATING WIDTH
30GXN/R415	22974	10221	25774

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - 1524 MM (5 FT.) FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - 1524 MM (5 FT.) TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING 100504358 ON 30GXN HOODS FOR HOODS.
 INFORMATION NOT INCLUDED IN THIS DRAWING.

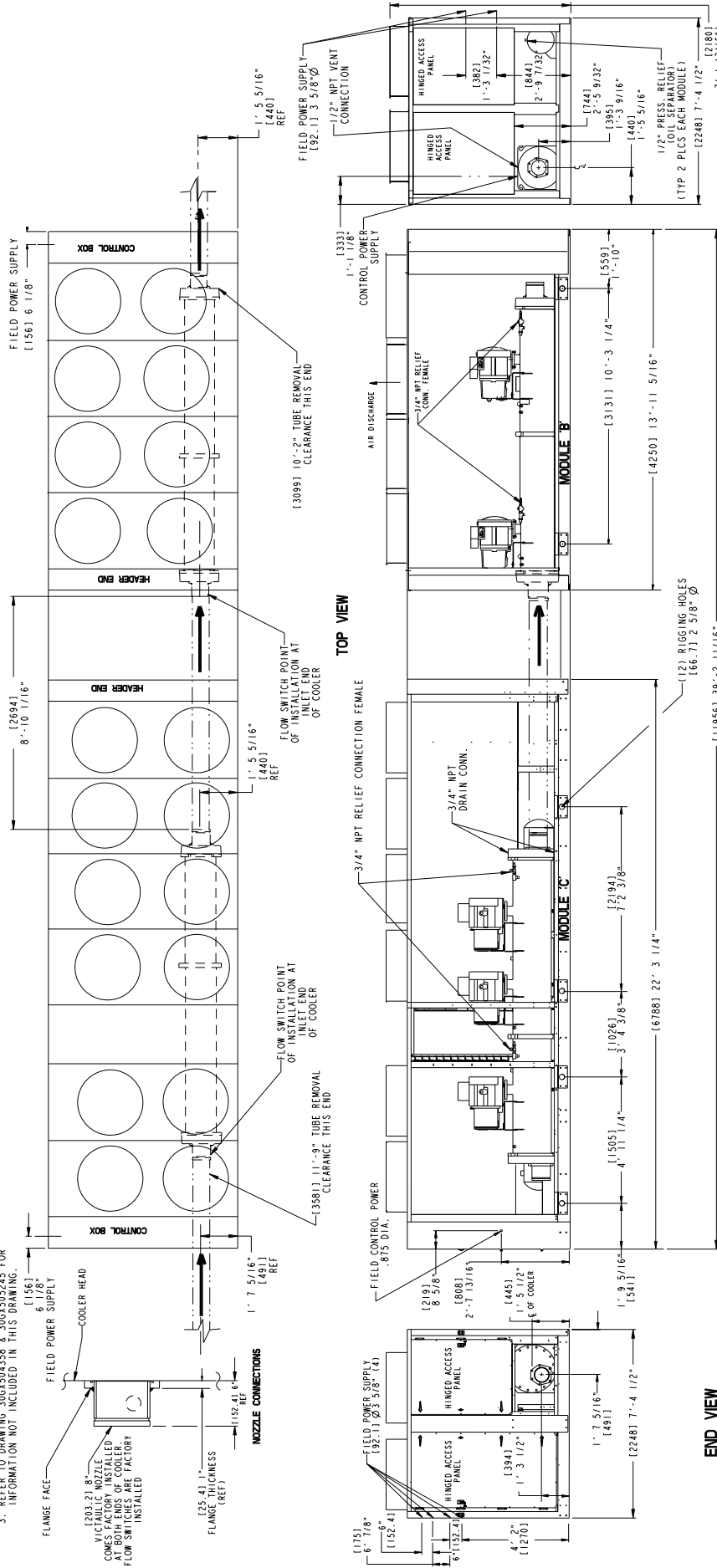


Fig. 19 — Dimensions 30GXN, R415

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING 30GX504339 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - LBS.	TOTAL OPERATING WEIGHT - K.G.
30GXN/R450	25910	11780
	28720	13027

FLOW SWITCH POINT OF INSTALLATION AT INLET END OF COOLER

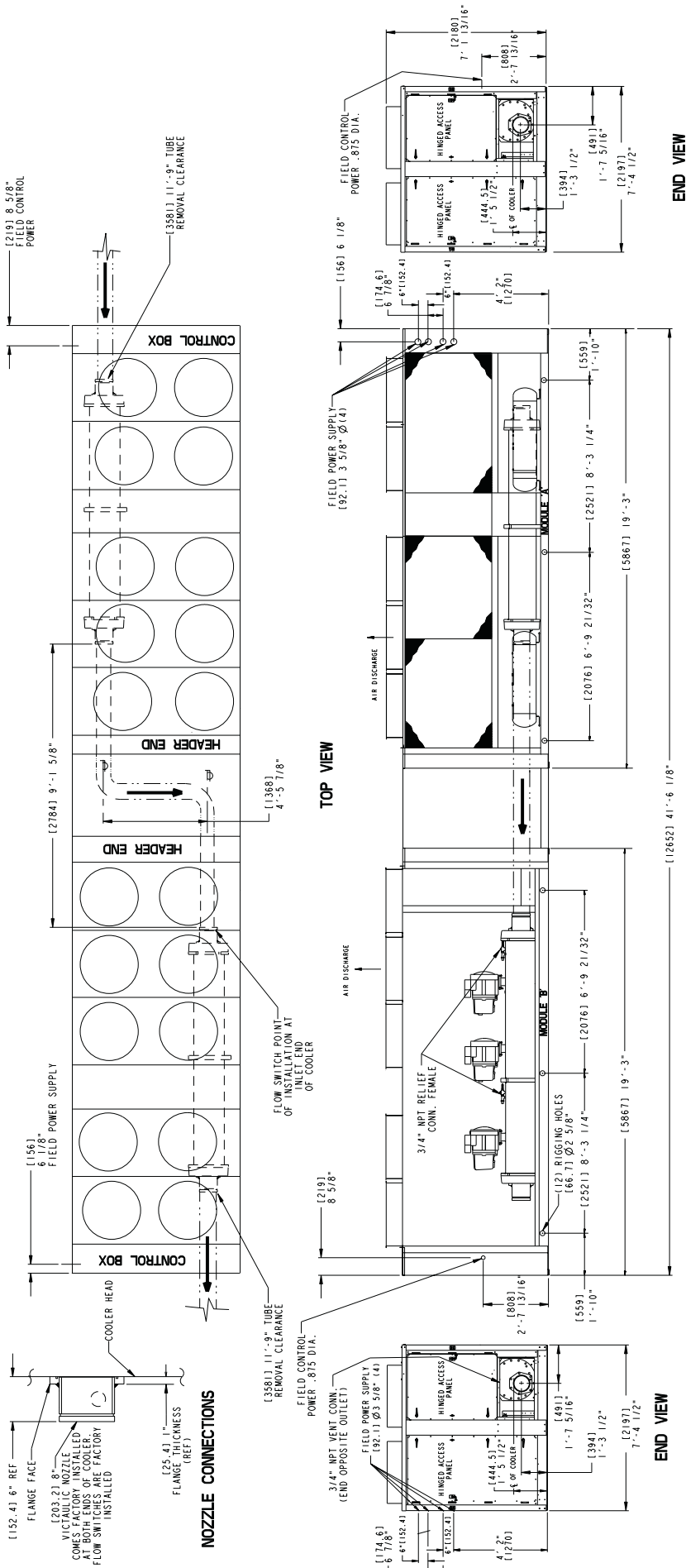


Fig. 20 — Dimensions 30GXN/R450

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNITS WITH COOLERS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING SUPPLEMENT FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - LBS.	TOTAL OPERATING WEIGHT - KG.
30GXN/R453	28228	12804
	39912	18104

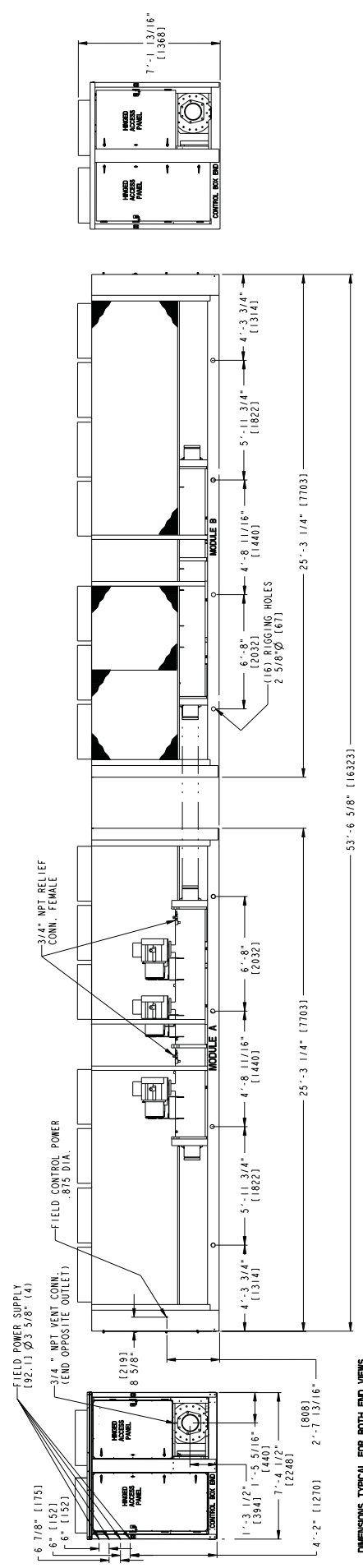
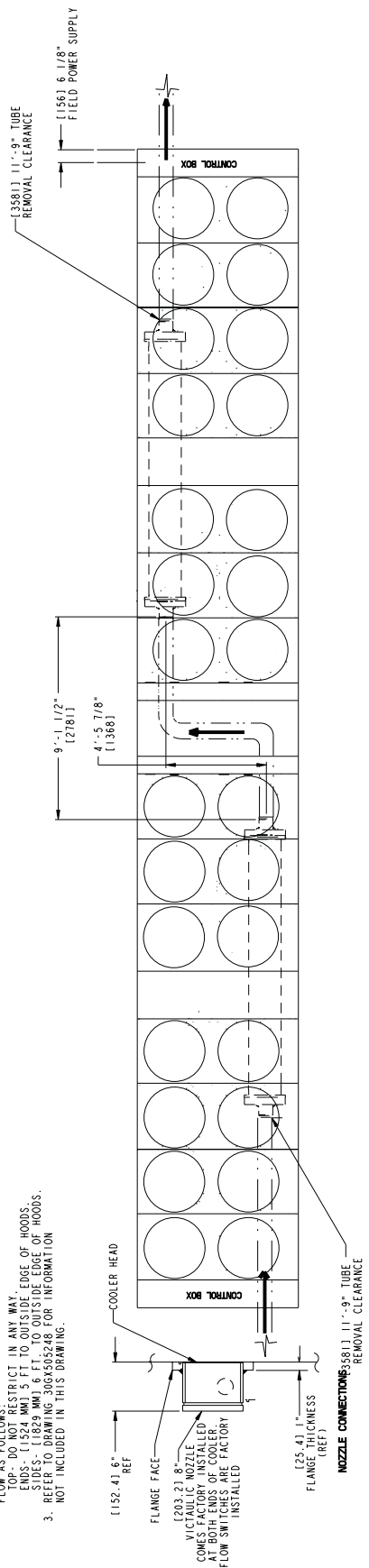


Fig. 21 — Dimensions 30GXN,R453

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30G504358 & 4359 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - AL FIN		TOTAL OPERATING WEIGHT - CU FIN	
	LBS	kg	LBS	kg
306XM/R475	26652	12053	22628	13575

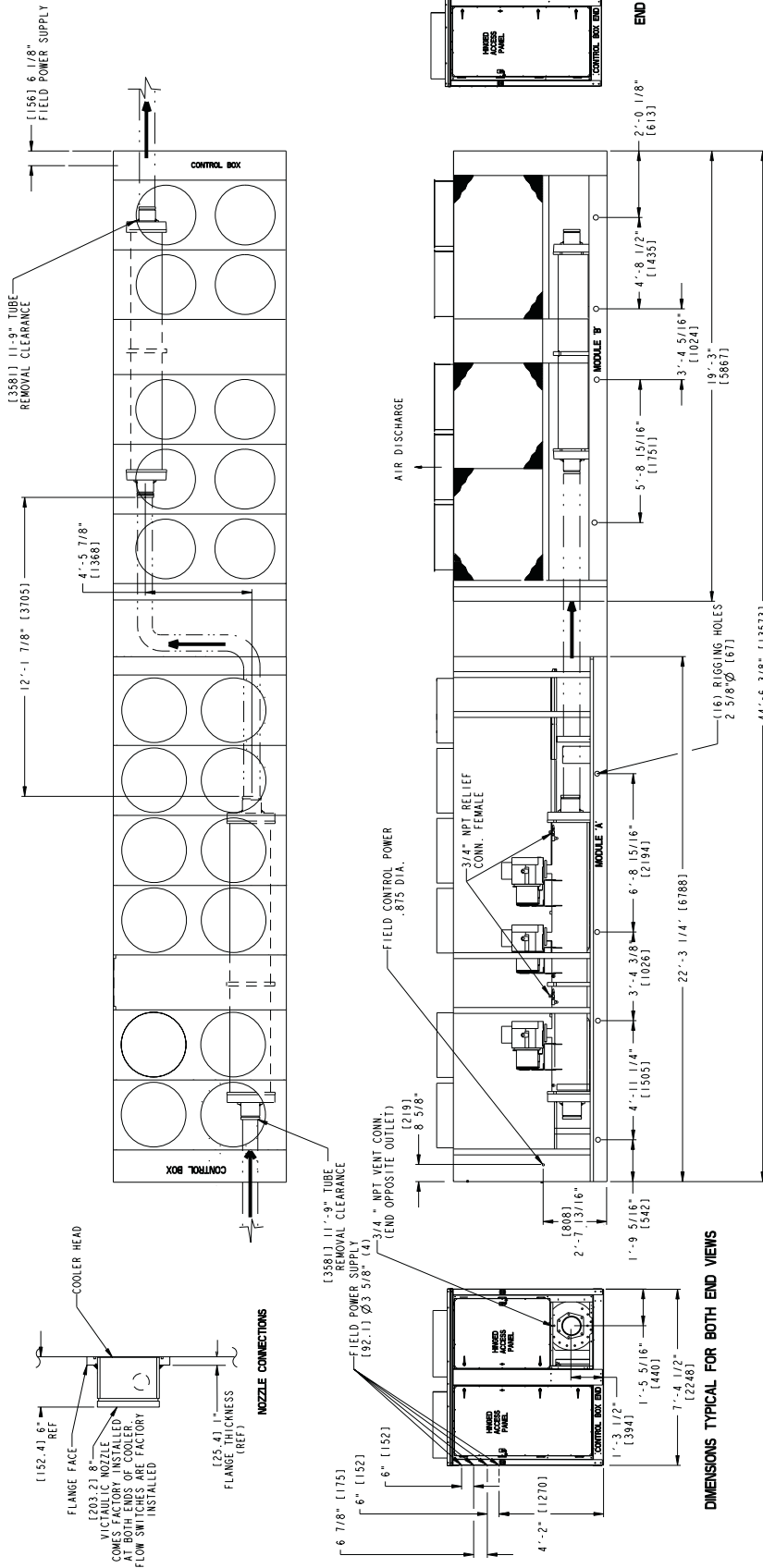


Fig. 22 — Dimensions 30GXN,R475

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (11524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES- (11825 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT MUST BE SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY.
 ENDS- (11524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES- (11825 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 30GX5248 & 3249 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING TOTAL OPERATING	
	WEIGHT - AL FIN	WEIGHT - CU FIN
	LBS	KG
30GXN/R478	30850	13993
	39897	18097

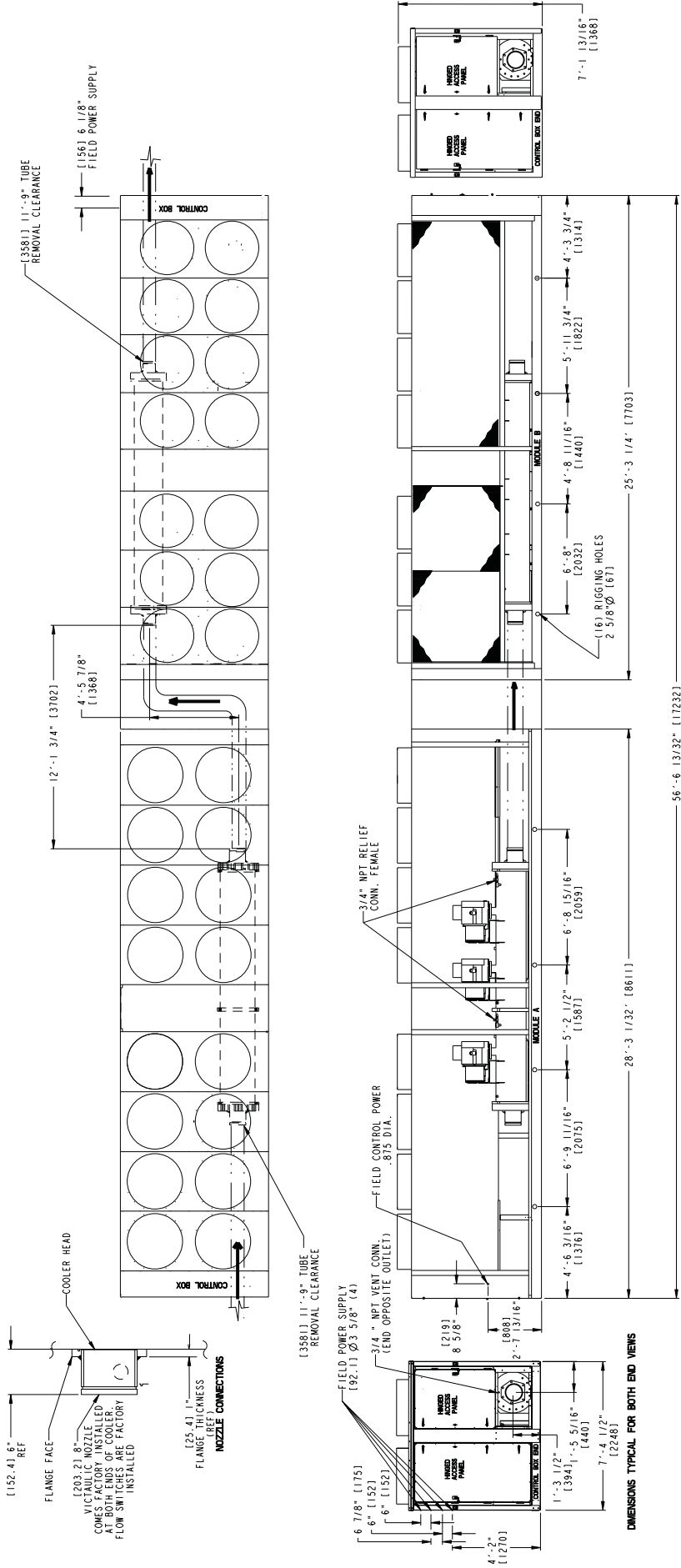


Fig. 23 — Dimensions 30GXN,R478

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 END WITH RESTRICTION FROM SOLID SURFACE.
 SIDES- (11829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP- DO NOT RESTRICT IN ANY WAY. EDGE OF HOODS.
 SIDES- (11829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWINGS 306X504358 FOR INFORMATION NOT INCLUDED IN THIS DRAWING.

UNIT	LBS	KG	TOTAL OPERATING WEIGHT - AL F.N	LBS	KG	TOTAL OPERATING WEIGHT - CU F.N
30GXN/R500	27134	12580	31134	14122		
306XN/R525	27804	12612	31204	14154		

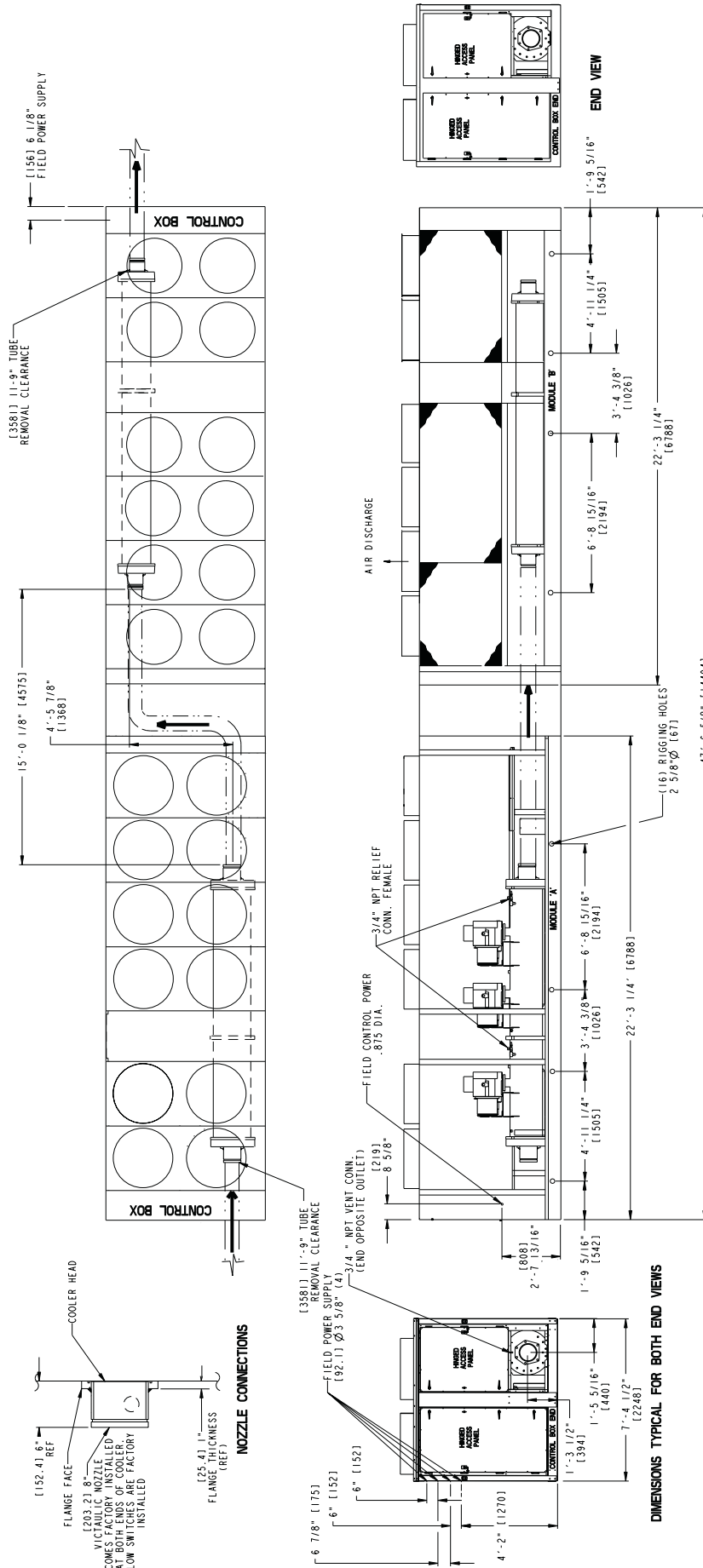


Fig. 24 — Dimensions 30GXN,R500, 525

- NOTES: 1. UNIT MUST HAVE CLEARANCES FOR AIR FLOW AS FOLLOWS:
 TOP - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. FROM SOLID SURFACE.
 SIDES - (1829 MM) 6 FT. FROM SOLID SURFACE.
 2. UNIT WITH SOUND HOODS REQUIRE CLEARANCES FOR AIR FLOW - DO NOT RESTRICT IN ANY WAY.
 ENDS - (1524 MM) 5 FT. TO OUTSIDE EDGE OF HOODS.
 SIDES - (1829 MM) 6 FT. TO OUTSIDE EDGE OF HOODS.
 3. REFER TO DRAWING 30GX50249 FOR INFORMATION
 3. NOT INCLUDED IN THIS DRAWING.

UNIT	TOTAL OPERATING WEIGHT - AL. FIN WEIGHT - CU. FIN.		TOTAL OPERATING WEIGHT - AL. FIN WEIGHT - CU. FIN.	
	LBS	kg	LBS	kg
30GXN/R503	33472	15182	39882	18090
30GXN/R528	33502	15196	39912	18104

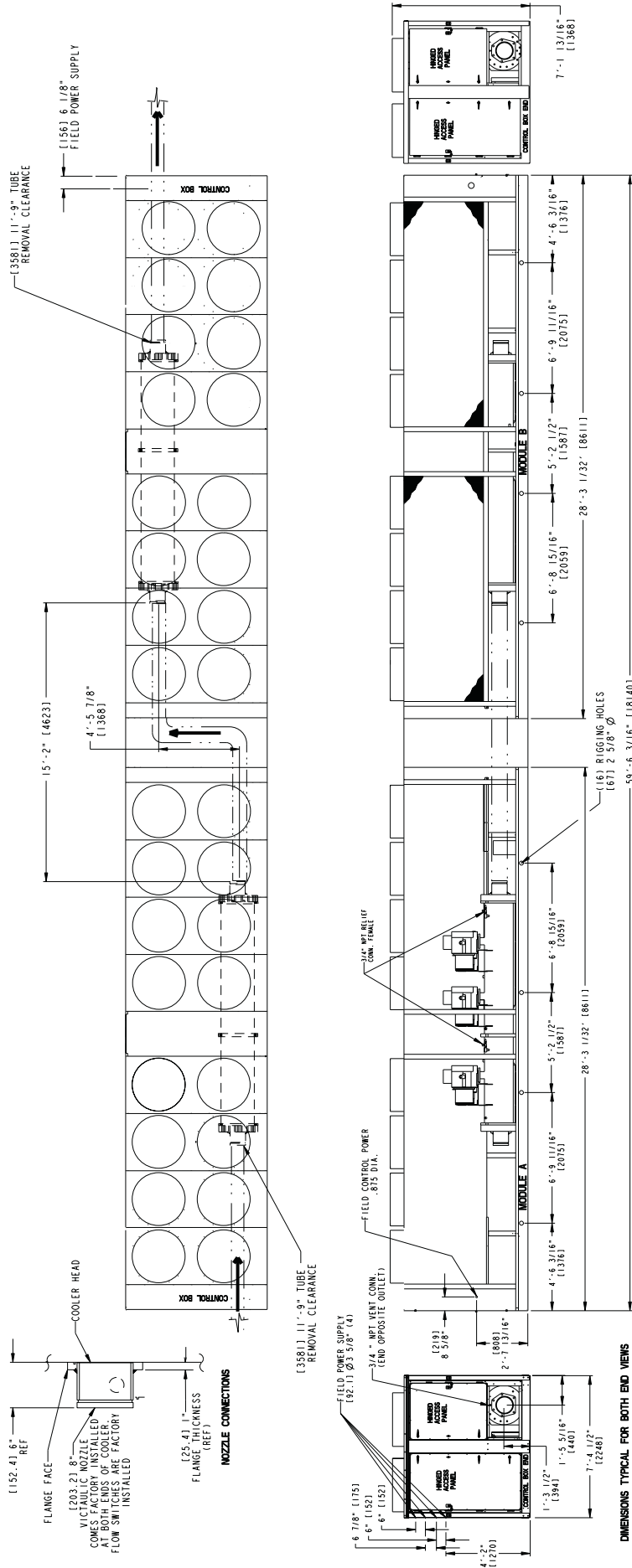
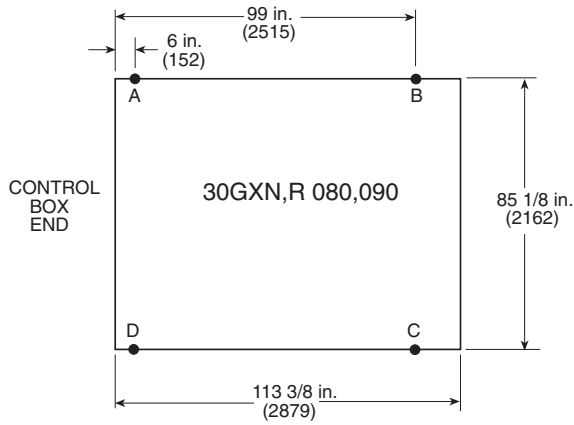


Fig. 25 — Dimensions 30GXN, R503, 528



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

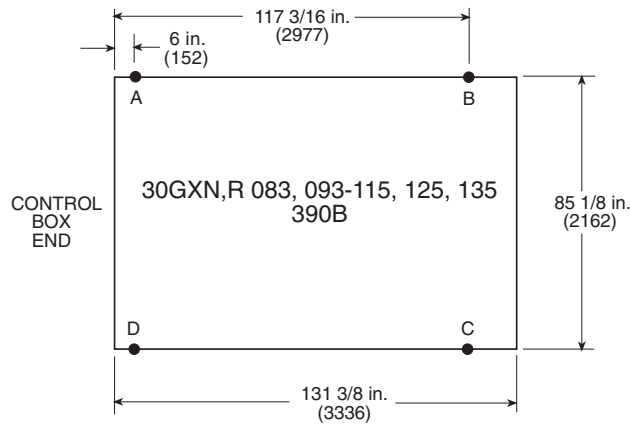
UNIT 30GXN,R	DISTRIBUTION POINTS			
	A	B	C	D
080	1384 (628)	2686 (1218)	1355 (614)	888 (403)
090	1388 (630)	2697 (1224)	1358 (616)	890 (404)

WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS			
	A	B	C	D
080	1486 (674)	2922 (1325)	1590 (721)	990 (449)
090	1490 (676)	2933 (1330)	1593 (723)	992 (450)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS			
	A	B	C	D
083	1744 (791)	2623 (1190)	1416 (642)	1125 (510)
093	1810 (821)	2704 (1227)	1497 (679)	1190 (540)
106	1895 (860)	2867 (1300)	1540 (698)	1213 (550)
108	1936 (878)	2944 (1335)	1560 (707)	1223 (555)
114	1898 (861)	2872 (1303)	1541 (699)	1213 (550)
125	1920 (871)	2953 (1339)	1506 (683)	1174 (527)
135, 390B	1954 (886)	3006 (1364)	1551 (703)	1203 (546)

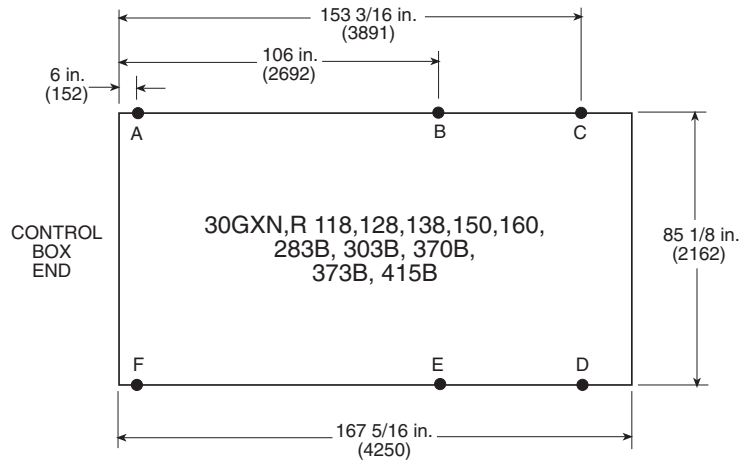
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS			
	A	B	C	D
083	1860 (843)	2855 (1295)	1648 (747)	1240 (562)
093	1925 (873)	2936 (1332)	1729 (784)	1306 (592)
106	2011 (912)	3099 (1406)	1772 (804)	1328 (602)
108	2051 (930)	3176 (1440)	1792 (813)	1339 (607)
114	2013 (913)	3104 (1408)	1773 (804)	1329 (603)
125	2035 (923)	3185 (1445)	1738 (788)	1290 (585)
135, 390B	2070 (939)	3240 (1470)	1784 (809)	1320 (599)

NOTES:

1. Install a 12-in. x 4-in. (305-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

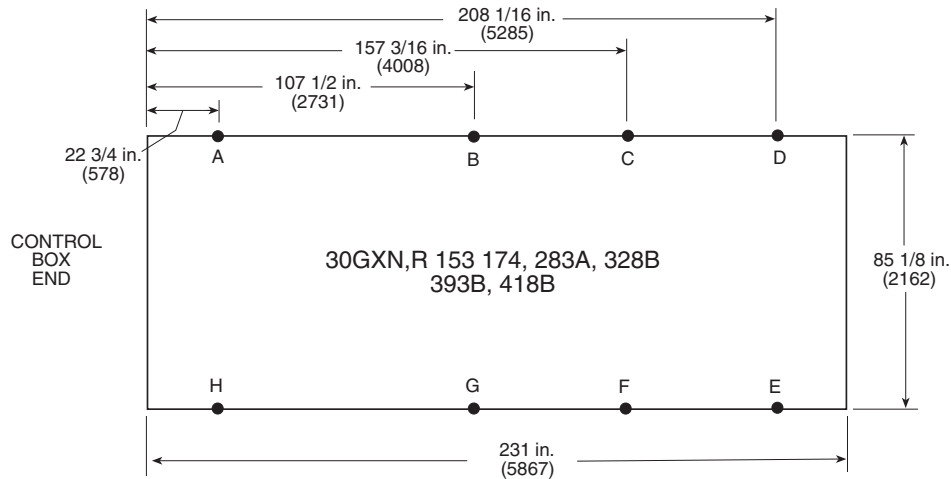
UNIT 30GXN,R	DISTRIBUTION POINTS					
	A	B	C	D	E	F
118	1757 (797)	2001 (907)	1524 (691)	809 (367)	1261 (572)	1298 (589)
128	1760 (798)	2005 (910)	1528 (693)	810 (367)	1262 (573)	1299 (589)
138, 283B, 303B, 373B	1765 (801)	2014 (913)	1534 (696)	811 (368)	1265 (574)	1300 (590)
150, 370B	1770 (803)	1982 (899)	1666 (756)	928 (421)	1180 (535)	1258 (570)
160, 415B	1830 (830)	2075 (941)	1743 (790)	948 (430)	1204 (546)	1273 (577)

WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS					
	A	B	C	D	E	F
118	1912 (867)	2154 (977)	1740 (789)	1025 (465)	1415 (642)	1453 (659)
128	1915 (869)	2159 (979)	1744 (791)	1026 (465)	1416 (642)	1454 (659)
138, 283B, 303B, 373B	1920 (871)	2167 (983)	1751 (794)	1028 (466)	1418 (643)	1455 (660)
150, 370B	1923 (872)	2156 (978)	1864 (846)	1126 (511)	1354 (614)	1410 (640)
160, 415B	1993 (904)	2257 (1024)	1947 (883)	1152 (523)	1386 (629)	1436 (652)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS							
	A	B	C	D	E	F	G	H
153, 283A, 328B, 393B, 418B	1278 (580)	1230 (558)	766 (347)	587 (266)	556 (252)	1386 (629)	2076 (942)	1805 (819)
174	1279 (580)	1233 (559)	768 (348)	587 (266)	556 (252)	1394 (632)	2085 (946)	1812 (822)

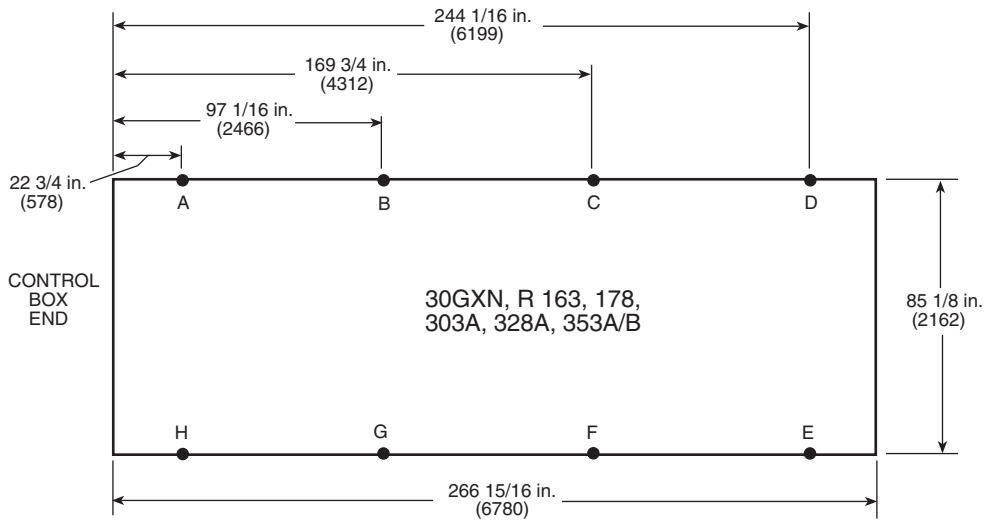
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS							
	A	B	C	D	E	F	G	H
153, 283A, 328B, 393B, 418B	1414 (641)	1446 (656)	935 (424)	766 (348)	735 (333)	1556 (706)	2291 (1039)	1941 (880)
174	1415 (642)	1448 (657)	937 (425)	766 (348)	735 (334)	1563 (709)	2301 (1044)	1948 (883)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

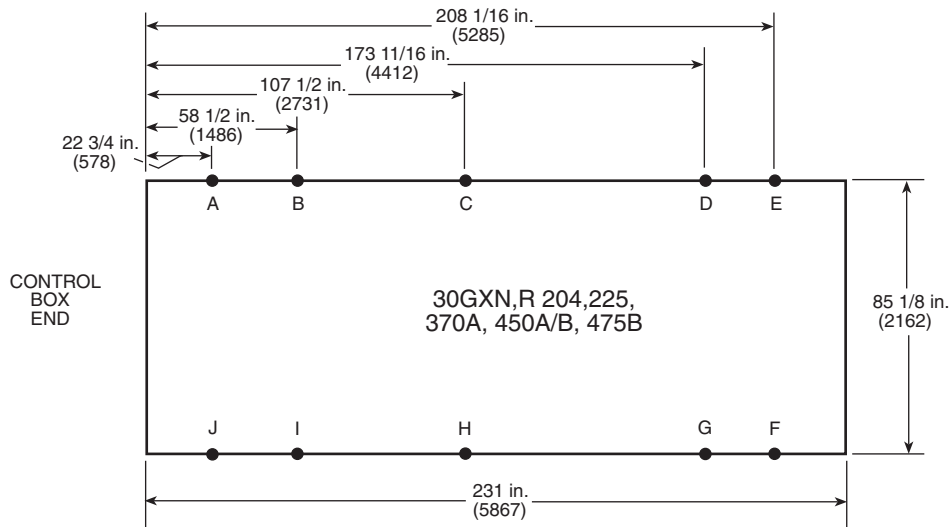
UNIT 30GXN,R	DISTRIBUTION POINTS							
	A	B	C	D	E	F	G	H
163,303A	905 (411)	1236 (560)	1184 (537)	825 (374)	996 (452)	2006 (910)	2061 (935)	1067 (484)
178,328A, 353A/B	907 (412)	1246 (565)	1194 (541)	828 (376)	1009 (457)	2044 (927)	2099 (952)	1075 (488)

UNIT 30GXN,R	DISTRIBUTION POINTS							
	A	B	C	D	E	F	G	H
163,303A	1116 (506)	1409 (639)	1419 (644)	1039 (471)	1211 (549)	2241 (1017)	2234 (1013)	1277 (579)
178,328A, 353A/B	1118 (507)	1419 (644)	1429 (648)	1043 (473)	1223 (555)	2279 (1034)	2273 (1031)	1285 (583)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS									
	A	B	C	D	E	F	G	H	I	J
204	836 (379)	1091 (495)	1230 (558)	1160 (526)	675 (306)	1049 (476)	1803 (818)	1909 (866)	1696 (769)	1298 (589)
225, 370A 450A/B, 475B	854 (387)	1113 (505)	1253 (568)	1182 (536)	687 (312)	1066 (483)	1836 (833)	1944 (882)	1728 (784)	1322 (600)

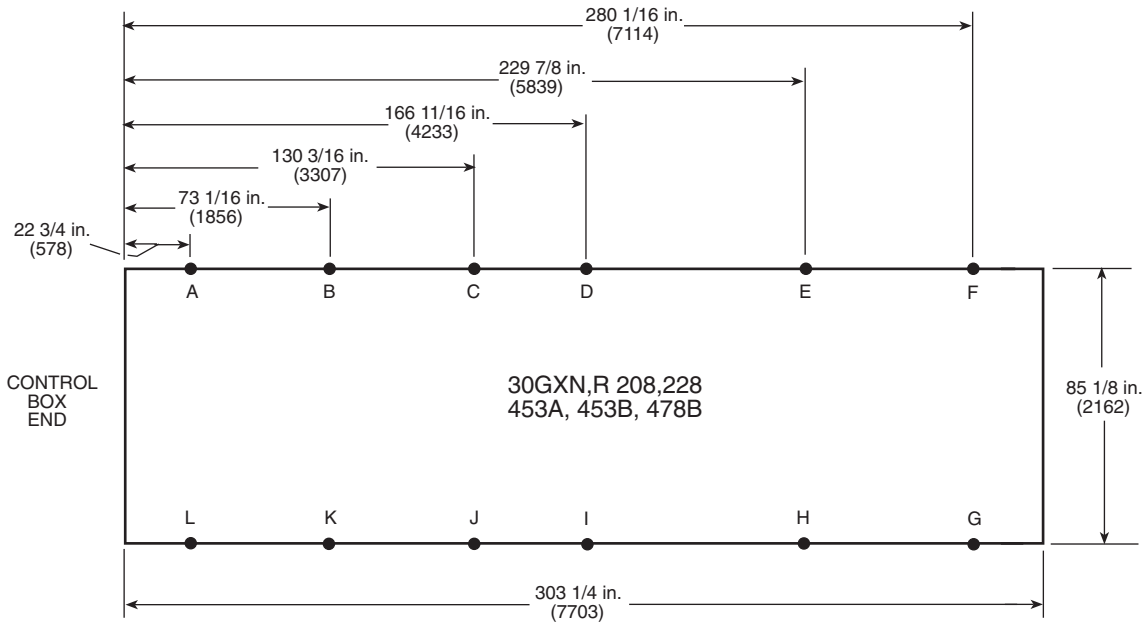
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS									
	A	B	C	D	E	F	G	H	I	J
204	929 (421)	1213 (550)	1365 (619)	1289 (585)	749 (340)	1161 (526)	2001 (900)	2119 (961)	1880 (853)	1441 (654)
225, 370A 450A/B, 475B	941 (427)	1231 (559)	1386 (629)	1308 (593)	760 (345)	1180 (535)	2030 (921)	2150 (975)	1910 (866)	1464 (664)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS											
	A	B	C	D	E	F	G	H	I	J	K	L
208	716 (325)	570 (259)	754 (342)	1263 (573)	769 (349)	983 (446)	1638 (743)	1617 (734)	2404 (1090)	1821 (826)	847 (384)	716 (325)
228, 453A/B, 478B	716 (325)	570 (259)	755 (342)	1264 (573)	769 (349)	983 (446)	1640 (744)	1620 (735)	2407 (1092)	1824 (827)	848 (385)	716 (325)

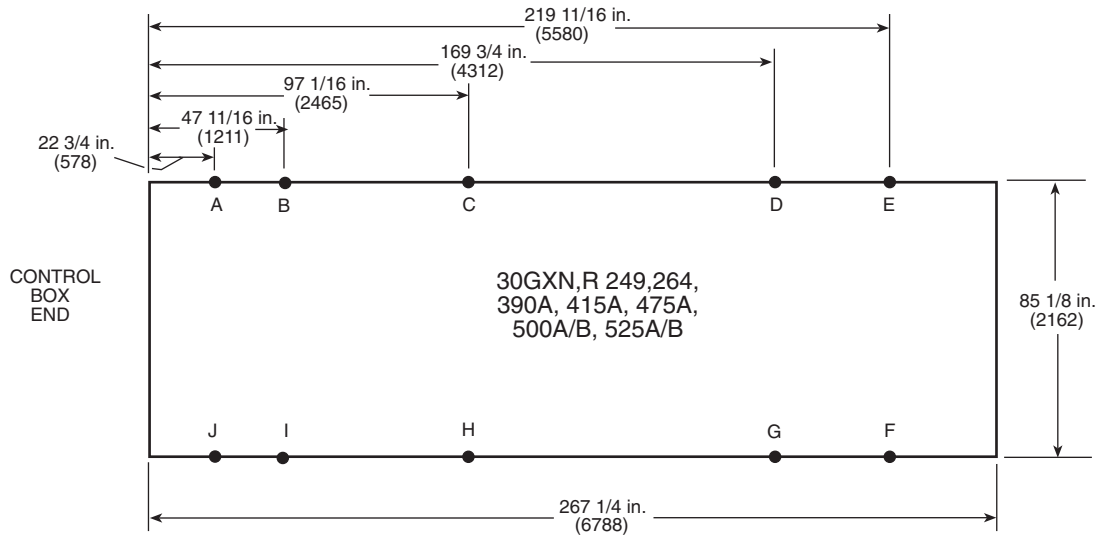
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS											
	A	B	C	D	E	F	G	H	I	J	K	L
208	948 (430)	726 (329)	816 (370)	1438 (652)	846 (384)	1169 (530)	1824 (827)	1695 (769)	2578 (1170)	1883 (854)	1003 (455)	948 (430)
228, 453A/B, 478B	948 (430)	726 (329)	817 (371)	1439 (653)	847 (384)	1170 (531)	1826 (828)	1697 (770)	2582 (1171)	1886 (856)	1005 (455)	948 (430)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS									
	A	B	C	D	E	F	G	H	I	J
249, 475A, 500A/B	934 (424)	1173 (532)	1274 (578)	1186 (538)	866 (402)	1368 (620)	1830 (830)	1966 (892)	1809 (820)	1441 (654)
264, 390A, 415A, 525A/B	936 (425)	1176 (533)	1278 (580)	1189 (539)	888 (403)	1371 (622)	1835 (832)	1971 (894)	1813 (822)	1445 (656)

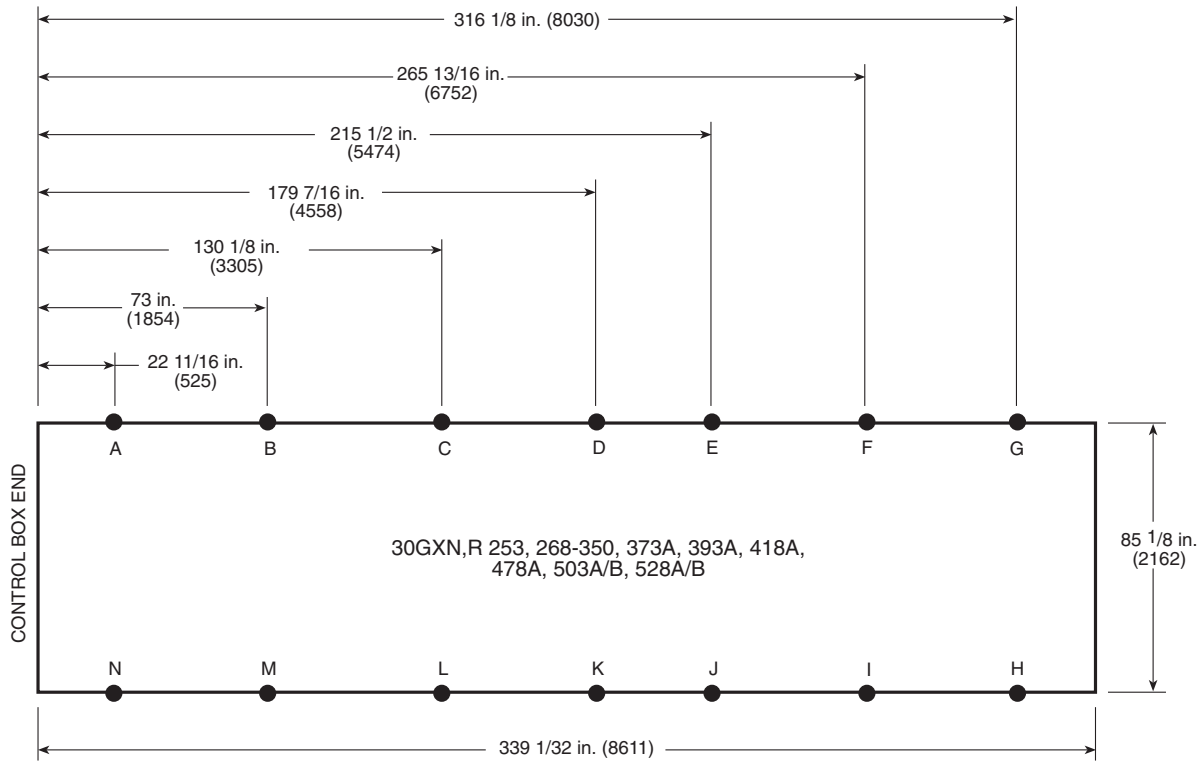
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS									
	A	B	C	D	E	F	G	H	I	J
249, 475A, 500A/B	1048 (475)	1316 (597)	1431 (649)	1331 (604)	995 (451)	1535 (696)	2084 (932)	2208 (1002)	2031 (921)	1618 (734)
264, 390A, 415A, 525A/B	1054 (478)	1322 (600)	1435 (651)	1336 (606)	1017 (454)	1538 (698)	2055 (932)	2208 (1001)	2032 (922)	1621 (735)

NOTES:

1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)



WEIGHT DISTRIBUTION, ALUMINUM-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
253, 373A, 393A, 478A, 503A/B	820 (372)	661 (300)	1047 (475)	1360 (617)	637 (289)	1006 (457)	842 (382)	907 (411)	2001 (907)	957 (434)	2451 (1112)	2290 (1039)	936 (425)	820 (372)
268, 418A, 528A/B	820 (372)	661 (300)	1048 (475)	1361 (617)	638 (289)	1007 (457)	842 (382)	907 (411)	2004 (909)	958 (434)	2454 (1113)	2294 (1041)	937 (425)	820 (372)
281	744 (337)	635 (288)	1253 (568)	1335 (606)	1089 (494)	787 (357)	795 (361)	860 (390)	1365 (619)	2700 (1225)	2442 (1108)	2830 (1284)	599 (272)	816 (370)
301	744 (337)	635 (288)	1254 (569)	1336 (606)	1090 (495)	788 (357)	795 (361)	860 (390)	1367 (620)	2705 (1227)	2446 (1109)	2835 (1286)	599 (272)	816 (370)
325	744 (337)	635 (288)	1256 (570)	1338 (607)	1093 (496)	789 (358)	795 (361)	860 (390)	1371 (622)	2714 (1231)	2454 (1113)	2845 (1290)	599 (272)	816 (370)
350	744 (337)	636 (288)	1260 (571)	1341 (608)	1096 (497)	790 (358)	795 (361)	860 (390)	1376 (624)	2726 (1237)	2463 (1117)	2857 (1296)	600 (272)	816 (370)

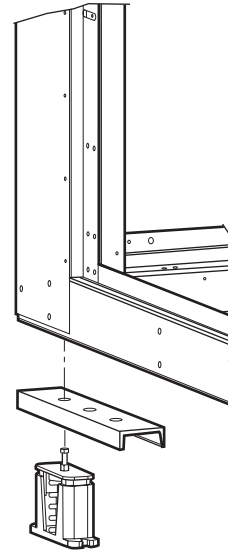
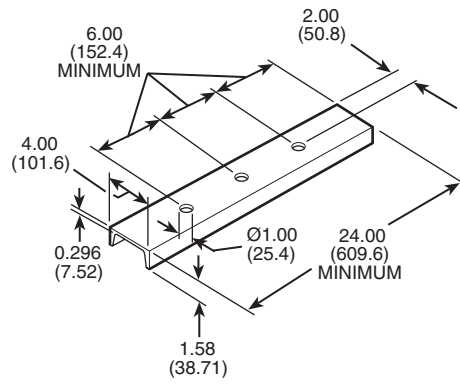
WEIGHT DISTRIBUTION, COPPER-FIN UNITS — lb (kg)

UNIT 30GXN,R	DISTRIBUTION POINTS													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
253, 373A, 393A, 478A, 503A/B	1121 (509)	879 (398)	1215 (551)	1637 (742)	857 (389)	1101 (500)	1166 (529)	1231 (558)	2095 (950)	1177 (534)	2728 (1237)	2459 (1115)	1154 (523)	1121 (509)
268, 418A, 528A/B	1121 (509)	879 (399)	1216 (552)	1638 (743)	857 (389)	1102 (500)	1166 (529)	1231 (558)	2098 (952)	1178 (534)	2731 (1239)	2462 (1117)	1155 (524)	1121 (509)
281	957 (434)	840 (381)	1519 (689)	1619 (734)	1308 (593)	879 (399)	1119 (508)	1184 (537)	1456 (661)	2919 (1324)	2726 (1237)	3096 (1404)	803 (364)	1030 (467)
301	957 (434)	840 (381)	1520 (689)	1620 (735)	1309 (594)	879 (399)	1119 (508)	1184 (537)	1458 (661)	2923 (1326)	2730 (1238)	3101 (1407)	803 (364)	1030 (467)
325	957 (434)	840 (381)	1522 (691)	1622 (736)	1312 (595)	880 (399)	1119 (508)	1184 (537)	1462 (663)	2933 (1330)	2738 (1242)	3111 (1411)	804 (365)	1030 (467)
350	957 (434)	840 (381)	1526 (692)	1625 (737)	1315 (596)	882 (400)	1119 (508)	1184 (537)	1467 (666)	2945 (1336)	2748 (1246)	3123 (1416)	804 (365)	1030 (467)

NOTES:

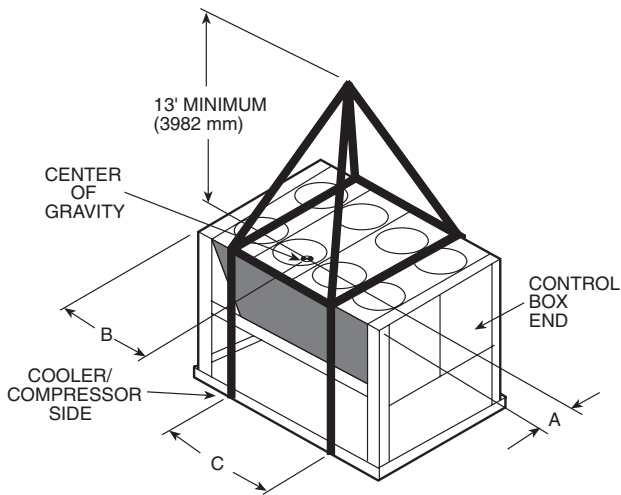
1. Install a 24-in. x 4-in. (610-mm x 102-mm) mounting pad (minimum) at mounting hole location. **Do not point load base rail.**
2. Dimensions in () are in millimeters.
3. ● Indicates mounting hole location on side base rail.

Fig. 26 — Mounting Weights (cont)

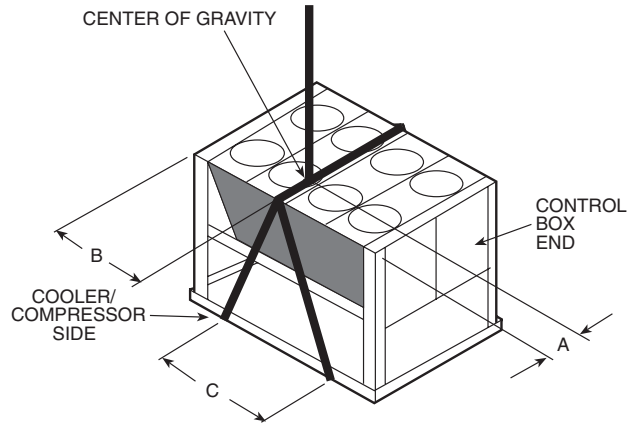


NOTE: Dimensions are in inches. Dimensions in () are in millimeters.

Fig. 27 — Recommended Mounting with Base Rail Plate



RIGGING OPTION 1



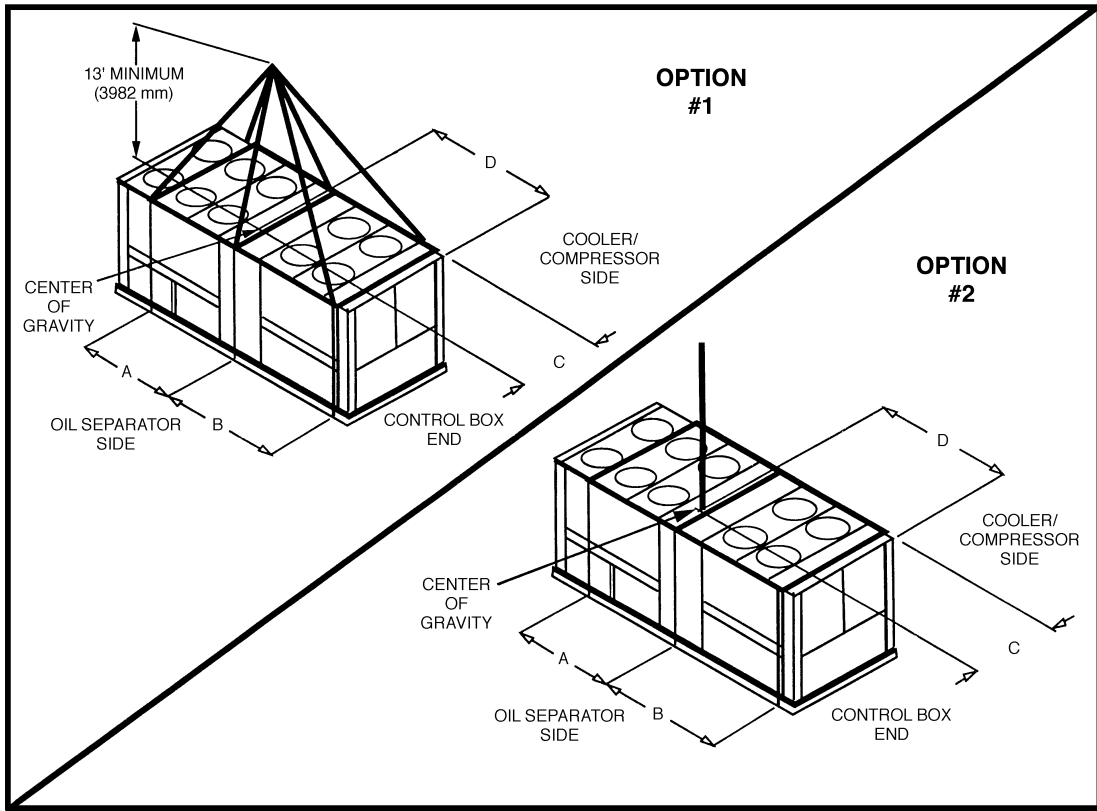
RIGGING OPTION 2

30GXN,R080-160 AND ASSOCIATED MODULAR UNITS

UNIT 30GXN,R	MAXIMUM SHIPPING WEIGHT WITHOUT PACKAGING		MAXIMUM SHIPPING WEIGHT WITH PACKAGING		LIFTING HOLES		CENTER OF GRAVITY (See Note 5)			
	lb	kg	lb	kg	C		A		B	
					in.	mm	in.	mm	in.	mm
080	6155	2792	6,749	3061	73.8	1875	31.0	787	51.0	1295
080	6830	3098	7,424	3367	73.8	1875	31.0	787	51.0	1295
083	6749	3061	7,343	3331	92.4	2346	31.0	787	55.0	1397
083	7444	3377	8,038	3646	92.4	2346	31.0	787	55.0	1397
090	6175	2801	6,769	3070	73.8	1875	31.0	787	51.0	1295
090	6850	3107	7,444	3377	73.8	1875	31.0	787	51.0	1295
093	7043	3195	7,637	3464	92.4	2346	31.0	787	55.0	1397
093	7738	3510	8,332	3779	92.4	2346	31.0	787	55.0	1397
106	7326	3323	7,920	3592	92.4	2346	31.0	787	55.0	1397
106	8021	3638	8,615	3908	92.4	2346	31.0	787	55.0	1397
108	7474	3390	8,068	3660	92.4	2346	31.0	787	55.0	1397
108	8169	3705	8,763	3975	92.4	2346	31.0	787	55.0	1397
114	7336	3328	7,930	3597	92.4	2346	31.0	787	55.0	1397
114	8031	3643	8,625	3912	92.4	2346	31.0	787	55.0	1397
118	8470	3842	9,070	4114	120.5	3061	33.0	838	73.0	1854
118	9520	4318	10,120	4590	120.5	3061	33.0	838	73.0	1854
125	7275	3300	7,869	3569	92.4	2346	31.0	787	55.0	1397
125	7970	3615	8,564	3885	92.4	2346	31.0	787	55.0	1397
128	8464	3839	9,064	4111	120.5	3061	33.0	838	73.0	1854
128	9514	4315	10,114	4588	120.5	3061	33.0	838	73.0	1854
135, 390B	7436	3373	8,036	3645	92.4	2346	31.0	787	55.0	1397
135, 390B	8136	3690	8,736	3963	92.4	2346	31.0	787	55.0	1397
138, 283B 303B, 373B	8489	3851	9,089	4123	120.5	3061	33.0	838	73.0	1854
138, 283B 303B, 373B	9539	4327	10,139	4599	120.5	3061	33.0	838	73.0	1854
150, 370B	8584	3894	9,159	4154	120.5	3061	33.0	838	73.0	1854
150, 370B	9634	4370	10,234	4642	120.5	3061	33.0	838	73.0	1854
160, 415B	8834	4007	9,434	4279	120.5	3061	33.0	838	73.0	1854
160, 415B	9934	4506	10,534	4778	120.5	3061	33.0	838	73.0	1854

*See Notes on page 37.

Fig. 28 — Rigging Information



30GXN,R153, 163, 174, 178 AND ASSOCIATED MODULAR UNITS

UNIT 30GXN,R	MAXIMUM SHIPPING WEIGHT WITHOUT PACKAGING		MAXIMUM SHIPPING WEIGHT WITH PACKAGING		LIFTING HOLES				CENTER OF GRAVITY			
					A		B		C		D	
	lb	kg	lb	kg	in.	mm	in.	mm	in.	mm	in.	mm
153, 283A, 328B, 393B, 418B	9,446	4285	10,446	4738	82.0	2083	99.0	2515	35.0	889	106.0	2692
153, 283A, 328B, 393B, 418B	10,846	4920	11,846	5373	82.0	2083	99.0	2515	35.0	889	106.0	2692
163, 303A	10,041	4555	11,041	5008	60.0	1521	103.0	2616	37.0	940	133.0	3378
163, 303A	11,709	5311	12,709	5765	60.0	1521	103.0	2616	37.0	940	133.0	3378
174	9,476	4298	10,476	4752	82.0	2083	99.0	2515	35.0	889	106.0	2692
174	10,876	4933	11,876	5387	82.0	2083	99.0	2515	35.0	889	106.0	2692
178, 328A, 353A/B	10,122	4591	11,122	5045	60.0	1521	103.0	2616	37.0	940	133.0	3378
178, 328A, 353A/B	11,790	5348	12,790	5801	60.0	1521	103.0	2616	37.0	940	133.0	3378

LEGEND

— Unit with Optional Copper-Fin Coils

NOTES:

- 2.62 in. (67 mm) diameter holes provided for lifting unit with Schedule 40 pipe.
- Rigging option 1:
Rig with a minimum of 25 ft (7620 mm) chains or cables.
If a central lifting point is used, it must be a minimum of 13 ft (3962 mm) above the top of the unit.
Spreader bars made from steel or double-nailed and notched 2 x 6's approximately 8 ft (2438 mm) long must be placed just above the top of the unit and stacks to reduce the risk of damage to the top of the unit and coil.
Chains on the cooler/compressor side must be shortened by 20 in. (508 mm), by the use of grab hooks for a more level lift.
Two-in. diameter, schedule 40 pipes should be used in the unit rigging holes.
- Rigging option 2:
Rig with a minimum of 12 ft (3658 mm) chains or cables.
If a central lifting point along the bar is used, the lift point must be over the center of gravity.

Lifting bars must be a minimum of 8 ft (2438 mm) long, and must be placed just above the top of the unit and stacks to reduce the risk of damage to the top of the unit and coil.

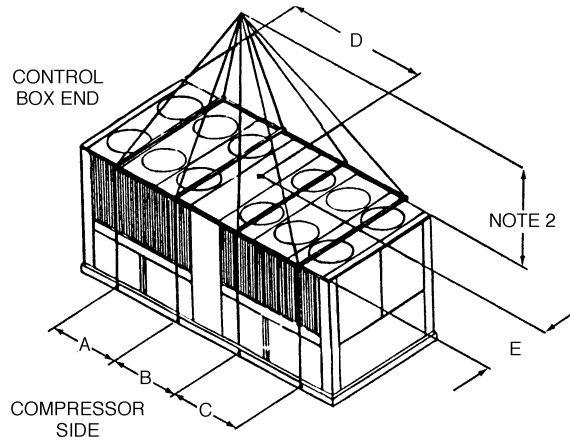
Two-in. diameter, schedule 40 pipes should be used in the unit rigging holes.

- 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 of one roller every 3 ft [915 mm] 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.
- Check bill of lading for shipping weight of unit.
- Center of gravity for lifting purposes only.

CAUTION

All panels must be in place when rigging unit. Do not attempt to forklift unit if no skid is supplied.

Fig. 28 — Rigging Information (cont)



30GXN,R204-350 AND ASSOCIATED MODULAR UNITS

UNIT 30GXN,R	SHIPPING WEIGHT WITHOUT PACKAGING		SHIPPING WEIGHT WITH PACKAGING		LIFTING HOLES						CENTER OF GRAVITY			
	lb	kg	lb	kg	A		B		C		D		E	
					in.	mm	in.	mm	in.	mm	in.	mm	in.	mm
204	12,426	5636	13,426	6 090	57.8	1467	40.3	1024	67.7	1720	114.6	2910	34.6	879
204	13,826	6271	14,826	6 725	57.8	1467	40.3	1024	67.7	1720	114.6	2910	34.6	879
208	13,778	6250	14,778	6 703	71.8	1824	56.7	1440	80.0	2032	164.8	4186	35.3	897
208	15,553	7055	16,553	7 508	71.8	1824	56.7	1440	80.0	2032	164.8	4186	35.3	897
225, 370A, 450A/B, 475B	12,626	5727	13,626	6 181	57.8	1467	40.3	1024	67.7	1720	114.6	2910	34.6	879
225, 370A, 450A/B, 475B	14,001	6351	15,001	6 804	57.8	1467	40.3	1024	67.7	1720	114.6	2910	34.6	879
228, 453A/B, 478B	13,793	6256	14,793	6 710	71.8	1824	56.7	1440	80.0	2032	164.8	4186	35.3	897
228, 453A/B, 478B	15,568	7062	16,568	7 515	71.8	1824	56.7	1440	80.0	2032	164.8	4186	35.3	897
249, 475A, 500A/B	13,474	6112	14,474	6 565	60.5	1537	40.3	1024	87.4	2219	121.6	3088	34.7	882
249, 475A, 500A/B	15,174	6883	16,174	7 336	60.5	1537	40.3	1024	87.4	2219	121.6	3088	34.7	882
253, 373A, 393A, 478A, 503A/B	16,415	7446	17,415	7 899	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
253, 373A, 393A, 478A, 503A/B	19,620	8899	20,620	9 353	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
264, 390A, 415A, 525A/B	13,509	6128	14,509	6 581	60.5	1537	40.3	1024	87.4	2219	121.6	3088	34.7	882
264, 390A, 415A, 525A/B	15,209	6899	16,209	7 352	60.5	1537	40.3	1024	87.4	2219	121.6	3088	34.7	882
268, 418A, 528A/B	16,430	7453	17,430	7 906	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
268, 418A, 528A/B	19,635	8906	20,635	9 360	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
281	18,250	8278	19,250	8 732	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
281	21,455	9732	22,455	10 185	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
301	18,270	8287	19,270	8 741	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
301	21,475	9741	22,475	10 194	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
325	18,310	8305	19,310	8 759	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
325	21,515	9759	22,515	10 213	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
350	18,360	8328	19,360	8 782	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866
350	21,565	9782	22,565	10 235	81.7	2075	62.5	1588	80.9	2055	174.4	4430	34.1	866

LEGEND

— Unit with Optional Copper-Fin Coils

NOTES:

- Rig with eight cables. Spread with four 95 in. [2413 mm] and two A + B + C long suitable spreader bars.
- Run the rigging cables to a central suspension point. Rigging point to be a minimum of 156 in. [3962 mm] above top of unit.
- 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 of one roller every 3 ft [915 mm] 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.

- Check bill of lading for shipping weight of unit.
- Center of gravity for lifting purposes only.

⚠ CAUTION

All panels must be in place when rigging unit. Do not attempt to forklift unit if no skid is supplied.

Fig. 28 — Rigging Information (cont)

Table 2A — Physical Data, 60 Hz Units — English

UNIT SIZE 30GXN,R	080	083	090	093	106	108	114	118	125	128	135	138	150	153	160
OPERATING WEIGHT (lb)															
Cu-Al	6313	6907	6333	7201	7514	7662	7524	8649	7553	8664	7714	8789	8784	9,684	9,072
Cu-Cu	6988	7602	7008	7896	8209	8357	8219	9699	8248	9714	8414	9739	9834	11,084	10,172
REFRIGERANT TYPE	HFC-134a														
Refrigerant Charge (lb) Ckt-A/Ckt-B	106/96	128/123	115/96	135/123	150/123	135/123	160/123	170/151	160/141	190/151	175/175	190/175	156/228	263/178	181/243
COMPRESSORS	Semi-Hermetic, Twin Screw														
Quantity	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Economized	No	No	No	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Capacity Steps															
Standard	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Optional (maximum)	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
Min. Capacity Step (%)															
Standard	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
Optional	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
COOLER*	Flooded Type Shell and Tube with Enhanced Copper Tubes														
Net Fluid Volume (gal)	18.9	18.9	18.9	18.9	22.6	22.6	22.6	20.9	33.4	24	33.4	24	24	24	28.5
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Maximum Fluid Side Pressure (psig)	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
FLUID CONNECTIONS (in.)	Victaulic Connections														
Inlet and Outlet	4	4	4	4	5	5	5	4	5	4	5	4	4	4	5
Drain (NPT)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
CONDENSER FANS	Shrouded Axial Type, Vertical Discharge														
Standard/Low Noise Type															
Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Blades...Dia. (in.)	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30
No. Fans...Total kW	4...6.4	6...9.6	4...6.4	6...9.6	6...9.6	6...9.6	6...9.6	8...12.8	6...9.6	8...12.8	6...9.6	8...12.8	8...12.8	8...12.8	8...12.8
Total Airflow (cfm)	45,600	68,400	45,600	68,400	68,400	68,400	68,400	91,200	68,400	91,200	68,400	91,200	91,200	114,000	91,200
High Static Type															
Fan Speed (rpm)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
No. Blades...Dia. (in.)	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30
No. Fans...Total kW	4...16.4	6...24.6	4...16.4	6...24.6	6...24.6	6...24.6	6...24.6	8...32.8	6...24.6	8...32.8	6...24.6	8...32.8	8...32.8	10...41	8...32.8
Total Airflow (cfm)†	39,200	58,800	39,200	58,800	58,800	58,800	58,800	78,400	58,800	78,400	58,800	78,400	78,400	98,000	78,400
CONDENSER COILS	3/8-in. OD Copper Tubes with Aluminum Fins														
Fins/in.	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
No. Rows	3	3	3	4	4	4	4	4	3	4	4	4	4	4	4
Total Face Area (sq ft)	135	162	135	162	162	162	162	216	162	216	162	216	216	270	216
Maximum Working Pressure (psig)	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450

UNIT SIZE 30GXN,R	163	174	178	204	208	225	228	249	253	264	268	281	301	325	350
OPERATING WEIGHT (lb)															
Cu-Al	10,279	9,714	10,294	12,747	14,099	12,985	14,114	13,867	16,736	13,902	16,751	18,718	18,738	18,778	18,828
Cu-Cu	11,947	11,114	11,962	14,147	19,941	14,360	19,956	15,567	19,941	15,602	19,956	21,923	21,943	21,983	22,033
REFRIGERANT TYPE	HFC-134a														
Refrigerant Charge (lb) Ckt-A/Ckt-B	263/220	263/207	263/263	270/205	330/175	285/215	340/175	339/205	410/205	339/215	410/215	385/385	400/400	415/415	430/430
COMPRESSORS	Semi-Hermetic, Twin Screw														
Quantity	2	2	2	3	3	3	3	3	3	3	3	4	4	4	4
Economized	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Capacity Steps															
Standard	6	6	6	8	8	8	8	8	8	8	8	10	10	10	10
Optional (maximum)	8	8	8	10	10	10	10	10	10	10	10	12	12	12	12
Min. Capacity Step (%)															
Standard	20	20	20	15	15	15	15	15	15	15	15	10	10	10	10
Optional	10	10	10	10	10	10	10	10	10	10	10	5	5	5	5
COOLER*	Flooded Type Shell and Tube with Enhanced Copper Tubes														
Net Fluid Volume (gal)	28.5	28.5	28.5	38.5	38.5	43.1	43.1	47.2	47.2	47.2	47.2	56.1	56.1	56.1	56.1
Maximum Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220	220	220	220	220	220	220
Maximum Fluid Side Pressure (psig)	300	300	300	300	300	300	300	300	300	300	300	300	300	300	300
FLUID CONNECTIONS (in.)	Victaulic Connections														
Inlet and Outlet	5	5	5	6	6	6	6	6	6	6	6	8	8	8	8
Drain (NPT)	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2	1/2
CONDENSER FANS	Shrouded Axial Type, Vertical Discharge														
Standard/Low Noise Type															
Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
No. Blades...Dia. (in.)	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30
No. Fans...Total kW	12...19.2	10...16	12...19.2	10...16	14...22.4	10...16	14...22.4	12...19.2	16...25.6	12...19.2	16...25.6	16...25.6	16...25.6	16...25.6	16...25.6
Total Airflow (cfm)	136,800	114,000	136,800	114,000	159,600	114,000	159,600	136,800	182,400	136,800	182,400	182,400	182,400	182,400	182,400
High Static Type															
Fan Speed (rpm)	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750	1750
No. Blades...Dia. (in.)	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30
No. Fans...Total kW	12...49.2	10...41	12...49.2	10...41	14...57.4	10...41	14...57.4	12...49.2	16...65.6	12...49.2	16...65.6	16...65.6	16...65.6	16...65.6	16...65.6
Total Airflow (cfm)†	117,600	98,000	117,600	98,000	137,200	98,000	137,200	117,600	156,800	117,600	156,800	156,800	156,800	156,800	156,800
CONDENSER COILS	3/8-in. OD Copper Tubes with Aluminum Fins														
Fins/in.	17	17	17	17	17	17	17	17	17	17	17	17	17	17	17
No. Rows	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
Total Face Area (sq ft)	324	270	324	270	378	270	378	324	432	324	432	432	432	432	432
Maximum Working Pressure (psig)	450	450	450	450	450	450	450	450	450	450	450	450	450	450	450

LEGEND

- Ckt — Circuit
- Cu-Al — Standard Coils with Copper Tubes and Aluminum Fins
- Cu-Cu — Optional Coils with Copper Tubes and Copper Fins

*Each cooler is shipped with approximately 5 gallons of propylene glycol to provide freeze protection during storage and shipment.

†Based on rated external static pressure of 0.4 in. wg or 0.8 in. wg as appropriate.

Table 2B — Physical Data, 60 Hz Duplex Units — English

UNIT SIZE 30GXN,R	283	303	328	353	370	373	390	393	415	
OPERATING WEIGHT (lb)										
Cu-Al	18,473	19,068	19,978	20,588	HFC-134a		25,525	21,617	26,420	
Cu-Cu	20,823	21,686	23,046	23,924	21,769	24,194	29,680	24,017	31,025	
22,974									25,774	
REFRIGERANT CHARGE										
Circuits Qty	4	4	4	4	4	4	4	4	4	
Module A Ckt A/Ckt B (lb)	263/178	263/220	263/263	263/263	285/215	410/205	339/215	410/205	339/215	
Module B Ckt A/Ckt B (lb)	190/175	190/175	263/178	263/263	156/228	190/175	175/175	263/178	181/243	
COMPRESSORS					Semi-Hermetic, Twin Screw					
Quantity	4	4	4	4	5	5	5	5	5	
Economized	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
No. Capacity Steps										
Standard	12	12	12	12	14	14	14	14	14	
Optional (maximum)	16	16	16	16	18	18	18	18	18	
Min. Capacity Step (%)										
Standard	10	10	10	10	8	8	7	8	8	
Optional	5	5	5	5	4	4	3.5	4	4	
COOLER*					Flooded Type Shell and Tube with Enhanced Copper Tubes					
Net Fluid Volume (gal)	48.0	52.5	52.5	57.0	67.1	71.2	80.6	71.2	75.7	
Max Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220	
Max Fluid Side Pressure (psig)	300	300	300	300	300	300	300	300	300	
FLUID CONNECTIONS					Victaulic Connections					
Inlet and Outlet (in.)	8	8	8	8	8	8	8	8	8	
Cooler Interconnecting (in.)	8	8	8	8	8	8	8	8	8	
Drain — Qty...Size (in.)	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	
CONDENSER FANS					Shrouded Axial Type, Vertical Discharge					
Standard/Low Noise Type					Propeller Type, Vertical Discharge					
Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	
No. Blades...Dia. (in.)	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	
No. Fans...Total kW	18...28.8	20...32	22...35.2	24...38.4	18...28.8	24...38.4	18...28.8	26...41.6	20...32	
Total Airflow (cfm)	205,200	228,000	250,800	273,600	205,200	273,600	205,200	296,400	228,000	
High Static Type					Propeller Type, Vertical Discharge					
Fan Speed (rpm)	1750	1750	1750	1750	1750	1750	1750	1750	1750	
No. Blades...Dia. (in.)	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	
No. Fans...Total kW	18...73.8	20...82	22...90.2	24...98.4	18...73.8	24...98.4	18...73.8	26...107	20...82	
Total Airflow (cfm)†	176,400	196,000	215,600	235,200	176,400	235,200	176,400	254,800	196,000	
CONDENSER COILS					3/8-in. OD Copper Tubes with Aluminum Fins					
Fins/in.	17	17	17	17	17	17	17	17	17	
No. Rows	4	4	4	4	4	4	4	4	4	
Total Face Area (sq ft)	486	594	593	648	476	648	486	702	540	
Maximum Working Pressure (psig)	450	450	450	450	450	450	450	450	450	

UNIT SIZE 30GXN,R	418	450	453	475	478	500	503	525	528	
OPERATING WEIGHT (lb)										
Cu-Al	26,435	25,970	28,228	26,852	HFC-134a		27,734	33,472	27,804	
Cu-Cu	31,040	28,720	39,912	29,927	30,850	39,897	31,134	33,502	31,204	
33,502									33,502	
REFRIGERANT CHARGE										
Circuits Qty	4	4	4	4	4	4	4	4	4	
Module A Ckt A/Ckt B (lb)	410/215	285/215	340/175	339/205	410/205	339/205	410/205	339/215	410/215	
Module B Ckt A/Ckt B (lb)	263/178	285/215	340/175	285/215	340/175	339/205	410/205	339/215	410/215	
COMPRESSORS					Semi-Hermetic, Twin Screw					
Quantity	5	6	6	6	6	6	6	6	6	
Economized	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
No. Capacity Steps										
Standard	14	16	16	16	16	16	16	16	16	
Optional (maximum)	18	20	20	20	20	20	20	20	20	
Min. Capacity Step (%)										
Standard	8	7.5	7.5	8	8	7.5	7.5	7.5	7.5	
Optional	4	5	5	4	4	5	5	5	5	
COOLER*					Flooded Type Shell and Tube with Enhanced Copper Tubes					
Net Fluid Volume (gal)	71.2	86.2	86.2	90.3	90.3	94.4	94.4	94.4	94.4	
Max Refrigerant Pressure (psig)	220	220	220	220	220	220	220	220	220	
Max Fluid Side Pressure (psig)	300	300	300	300	300	300	300	300	300	
FLUID CONNECTIONS					Victaulic Connections					
Inlet and Outlet (in.)	8	8	8	8	8	8	8	8	8	
Cooler Interconnecting (in.)	8	8	8	8	8	8	8	8	8	
Drain — Qty...Size (in.)	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	
CONDENSER FANS					Shrouded Axial Type, Vertical Discharge					
Standard/Low Noise Type					Propeller Type, Vertical Discharge					
Fan Speed (rpm)	1140	1140	1140	1140	1140	1140	1140	1140	1140	
No. Blades...Dia. (in.)	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	11...30	
No. Fans...Total kW	26...41.6	20...32	28...44.8	22...35.2	30...48	24...38.4	32...51.2	24...38.4	32...51.2	
Total Airflow (cfm)	296,400	228,000	319,200	250,800	342,000	273,600	364,800	273,600	364,800	
High Static Type					Propeller Type, Vertical Discharge					
Fan Speed (rpm)	1750	1750	1750	1750	1750	1750	1750	1750	1750	
No. Blades...Dia. (in.)	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	12...30	
No. Fans...Total kW	26...107	20...82	28...115	22...90.2	30...123	24...98.4	32...131	24...98.4	32...131	
Total Airflow (cfm)†	254,800	196,000	274,400	215,600	294,000	235,200	313,600	235,200	313,600	
CONDENSER COILS					3/8-in. OD Copper Tubes with Aluminum Fins					
Fins/in.	17	17	17	17	17	17	17	17	17	
No. Rows	4	4	4	4	4	4	4	4	4	
Total Face Area (sq ft)	702	540	756	593	864	594	864	648	864	
Maximum Working Pressure (psig)	450	450	450	450	450	450	450	450	450	

LEGEND

- Ckt — Circuit
- Cu-Al — Standard Coils with Copper Tubes and Aluminum Fins
- Cu-Cu — Optional Coils with Copper Tubes and Copper Fins

*Each cooler is shipped with approximately 5 gallons of propylene glycol to provide freeze protection during storage and shipment.

†Based on rated external static pressure of 0.4 in. wg or 0.8 in. wg as appropriate.

Table 2C — Physical Data, 60 Hz Units — SI

UNIT SIZE 30GXN,R	080	083	090	093	106	108	114	118	125	128	135	138	150	153	160	
OPERATING WEIGHT (kg) Cu-Al Cu-Cu	2863 3169	3133 3448	2872 3179	3266 3582	3408 3724	3475 3791	3413 3728	3923 4399	3426 3741	3930 4406	3499 3817	3987 4418	3984 4461	4393 5028	4115 4614	
REFRIGERANT TYPE Refrigerant Charge (kg) Ckt-A/Ckt-B	HFC-134a															
	48/44	58/56	52/44	61/56	68/56	61/56	73/56	77/68	73/64	86/68	79/79	86/79	71/103	119/81	82/110	
COMPRESSORS Quantity Economized No. Capacity Steps Standard Optional (maximum) Min. Capacity Step (%) Standard Optional	Semi-Hermetic, Twin Screw															
	2 No	2 No	2 No	2 No	2 No	2 Yes	2 No	2 Yes	2 Yes	2 Yes	2 Yes	2 Yes	2 Yes	2 Yes	2 Yes	
	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	6 8	
	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	20 10	
COOLER* Net Fluid Volume (L) Maximum Refrigerant Pressure (kPa) Maximum Fluid Side Pressure (kPa)	Flooded Type Shell and Tube with Enhanced Copper Tubes															
	72	72	72	72	86	86	86	79	126	91	126	91	91	91	108	
	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	
	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	
FLUID CONNECTIONS (in.) Inlet and Outlet Drain (NPT)	Victaulic Connections															
	4 1/2	4 1/2	4 1/2	4 1/2	5 1/2	5 1/2	5 1/2	4 1/2	5 1/2	4 1/2	5 1/2	4 1/2	4 1/2	4 1/2	5 1/2	
CONDENSER FANS Standard/Low Noise Type Fan Speed (r/s) No. Blades...Dia. (mm) No. Fans...Total kW Total Airflow (L/s) High Static Type Fan Speed (r/s) No. Blades...Dia. (mm) No. Fans...Total kW Total Airflow (L/s)†	Shrouded Axial Type, Vertical Discharge															
	19.0 11...762 4...6.4 21 521	19.0 11...762 6...9.6 32 281	19.0 11...762 4...6.4 21 521	19.0 11...762 6...9.6 32 281	19.0 11...762 6...9.6 32 281	19.0 11...762 6...9.6 32 281	19.0 11...762 6...9.6 32 281	19.0 11...762 8...12.8 43 042	19.0 11...762 6...9.6 32 281	19.0 11...762 8...12.8 43 042	19.0 11...762 6...9.6 32 281	19.0 11...762 8...12.8 43 042	19.0 11...762 8...12.8 43 042	19.0 11...762 8...12.8 43 042	19.0 11...762 10...16 53 802	19.0 11...762 8...12.8 43 042
	29.2 12...762 4...16.4 18 500	29.2 12...762 6...24.6 27 751	29.2 12...762 4...16.4 18 500	29.2 12...762 6...24.6 27 751	29.2 12...762 6...24.6 27 751	29.2 12...762 6...24.6 27 751	29.2 12...762 8...32.8 37 001	29.2 12...762 6...24.6 27 751	29.2 12...762 8...32.8 37 001	29.2 12...762 6...24.6 27 751	29.2 12...762 8...32.8 37 001	29.2 12...762 8...32.8 37 001	29.2 12...762 8...32.8 37 001	29.2 12...762 10...41 46 251	29.2 12...762 8...32.8 37 001	
CONDENSER COILS Fins/m No. Rows Total Face Area (sq m) Maximum Working Pressure (kPa)	9.53-mm. OD Copper Tubes with Aluminum Fins															
	669 3	669 3	669 3	669 4	669 4	669 4	669 4	669 3	669 3	669 4	669 4	669 4	669 4	669 4	669 4	
	12.6	15.1	12.6	15.1	15.1	15.1	15.1	20.1	15.1	20.1	15.1	20.1	20.1	25.1	20.1	
	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	

UNIT SIZE 30GXN,R	163	174	178	204	208	225	228	249	253	264	268	281	301	325	350	
OPERATING WEIGHT (kg) Cu-Al Cu-Cu	4663 5419	4406 5041	4669 5426	5782 6417	6395 9045	5890 6514	6402 9052	6290 7061	7591 9045	6306 7077	7598 9052	8490 9944	8499 9953	8517 9971	8540 9994	
REFRIGERANT TYPE Refrigerant Charge (kg) Ckt-A/Ckt-B	HFC-134a															
	119/100	119/94	119/119	122/93	150/79	129/98	154/79	154/93	186/93	154/98	186/98	175/175	181/181	188/188	195/195	
COMPRESSORS Quantity Economized No. Capacity Steps Standard Optional (maximum) Min. Capacity Step (%) Standard Optional	Semi-Hermetic, Twin Screw															
	2 Yes	2 Yes	2 Yes	3 Yes	3 Yes	3 Yes	3 Yes	3 Yes	3 Yes	3 Yes	3 Yes	4 Yes	4 Yes	4 Yes	4 Yes	
	6 8	6 8	6 8	8 10	8 10	8 10	8 10	8 10	8 10	8 10	8 10	10 12	10 12	10 12	10 12	
	20 10	20 10	20 10	15 10	15 10	15 10	15 10	15 10	15 10	15 10	15 10	10 5	10 5	10 5	10 5	
COOLER* Net Fluid Volume (L) Maximum Refrigerant Pressure (kPa) Maximum Fluid Side Pressure (kPa)	Flooded Type Shell and Tube with Enhanced Copper Tubes															
	108	108	108	146	146	163	163	179	179	179	179	212	212	212	212	
	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	1517	
	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	2069	
FLUID CONNECTIONS (in.) Inlet and Outlet Drain (NPT)	Victaulic Connections															
	5 1/2	5 1/2	5 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	6 1/2	8 1/2	8 1/2	8 1/2	8 1/2	
CONDENSER FANS Standard/Low Noise Type Fan Speed (r/s) No. Blades...Dia. (mm) No. Fans...Total kW Total Airflow (L/s) High Static Type Fan Speed (r/s) No. Blades...Dia. (mm) No. Fans...Total kW Total Airflow (L/s)†	Shrouded Axial Type, Vertical Discharge															
	19.0 11...762 12...19.2 64 563	19.0 11...762 10...16 53 802	19.0 11...762 12...19.2 64 563	19.0 11...762 10...16 53 802	19.0 11...762 14...22.4 75 323	19.0 11...762 10...16 53 802	19.0 11...762 14...22.4 75 323	19.0 11...762 12...19.2 64 563	19.0 11...762 16...25.6 86 084	19.0 11...762 12...19.2 64 563	19.0 11...762 16...25.6 86 084	19.0 11...762 16...25.6 86 084	19.0 11...762 16...25.6 86 084	19.0 11...762 16...25.6 86 084	19.0 11...762 16...25.6 86 084	19.0 11...762 16...25.6 86 084
	29.2 12...762 12...49.2 55 501	29.2 12...762 10...41 46 251	29.2 12...762 12...49.2 55 501	29.2 12...762 10...41 46 251	29.2 12...762 14...57.4 64 752	29.2 12...762 10...41 46 251	29.2 12...762 14...57.4 64 752	29.2 12...762 12...49.2 55 501	29.2 12...762 16...65.6 74 002	29.2 12...762 12...49.2 55 501	29.2 12...762 16...65.6 74 002	29.2 12...762 16...65.6 74 002	29.2 12...762 16...65.6 74 002	29.2 12...762 16...65.6 74 002	29.2 12...762 16...65.6 74 002	29.2 12...762 16...65.6 74 002
CONDENSER COILS Fins/m No. Rows Total Face Area (sq m) Maximum Working Pressure (kPa)	9.53-mm. OD Copper Tubes with Aluminum Fins															
	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	669 4	
	30.1	25.1	30.1	25.1	35.1	25.1	35.1	30.1	40.1	30.1	40.1	40.1	40.1	40.1	40.1	
	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	3103	

LEGEND

- Ckt — Circuit
- Cu-Al — Standard Coils with Copper Tubes and Aluminum Fins
- Cu-Cu — Optional Coils with Copper Tubes and Copper Fins

*Each cooler is shipped with approximately 18.9 liters of propylene glycol to provide freeze protection during storage and shipment.

†Based on rated external static pressure of 100 Pa or 200 Pa as appropriate.

Table 2D — Physical Data, 60 Hz Duplex Units — SI

UNIT SIZE 30GXN,R	283	303	328	353	370	373	390	393	415
OPERATING WEIGHT (kg)	HFC-134a								
Cu-Al	8379	8649	9 062	9 339	9 874	11 578	9 805	11 984	10 421
Cu-Cu	9445	9837	10 454	10 852	10 974	13 463	10 894	14 073	11 691
REFRIGERANT CHARGE									
Circuits Qty	4	4	4	4	4	4	4	4	4
Module A Ckt A/Ckt B (kg)	119/81	119/100	119/119	119/119	129/98	186/93	154/98	186/93	154/98
Module B Ckt A/Ckt B (kg)	86/79	86/79	119/81	119/119	71/103	86/79	79/79	119/81	82/110
COMPRESSORS	Semi-Hermetic, Twin Screw								
Quantity	4	4	4	4	5	5	5	5	5
Economized	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Capacity Steps									
Standard	12	12	12	12	14	14	14	14	14
Optional (maximum)	16	16	16	16	18	18	18	18	18
Min. Capacity Step (%)									
Standard	10	10	10	10	8	8	7	8	8
Optional	5	5	5	5	4	4	3.5	4	4
COOLER*	Flooded Type Shell and Tube with Enhanced Copper Tubes								
Net Fluid Volume (L)	182	199	199	216	254.0	270	305.1	270	286.6
Max Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517
Max Fluid Side Pressure (kPa)	2069	2069	2069	2069	2069	2069	2069	2069	2069
FLUID CONNECTIONS	Victaulic Connections								
Inlet and Outlet (in.)	8	8	8	8	8	8	8	8	8
Cooler Interconnecting (in.)	8	8	8	8	8	8	8	8	8
Drain — Qty...Size (in.)	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2
CONDENSER FANS									
Standard/Low Noise Type	Shrouded Axial Type, Vertical Discharge								
Fan Speed (r/s)	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0	19.0
No. Blades...Dia. (mm)	11...762	11...762	11...762	11...762	11...762	11...762	11...762	11...762	11...762
No. Fans...Total kW	18...28.8	20...32	22...35.2	24...38.4	18...28.8	24...38.4	18...28.8	26...41.6	20...32
Total Airflow (L/s)	96 844	107 605	118 365	129 126	96 845	129 126	96 845	139 886	107 605
High Static Type	Propeller Type, Vertical Discharge								
Fan Speed (r/s)	29.2	29.2	29.2	29.2	29.2	29.2	19	29.2	19
No. Blades...Dia. (mm)	12...762	12...762	12...762	12...762	12...762	12...762	12...762	12...762	12...762
No. Fans...Total kW	18...73.8	20...82	22...90.2	24...98.4	18...73.8	24...98.4	18...73.8	26...107	20...82
Total Airflow (L/s)†	83 252	92 502	101 752	111 003	83 252	111 003	83 252	120 253	92 503
CONDENSER COILS	3/8-in. OD Copper Tubes with Aluminum Fins								
Fins/m	669	669	669	669	669	669	669	669	669
No. Rows	4	4	4	4	4	4	4	4	4
Total Face Area (sq m)	48.2	50.2	55.2	60.2	45.2	60.2	45.2	65.2	50.2
Maximum Working Pressure (kPa)	3103	3103	3103	3103	3103	3103	3103	3103	3103

UNIT SIZE 30GXN,R	418	450	453	475	478	500	503	525	528
OPERATING WEIGHT (kg)	HFC-134a								
Cu-Al	11 991	11 780	12 804	12 180	13 994	12 580	15 183	12 612	15 197
Cu-Cu	14 080	13 027	18 104	13 575	18 097	14 122	15 197	14 154	18 104
REFRIGERANT CHARGE									
Circuits Qty	4	4	4	4	4	4	4	4	4
Module A Ckt A/Ckt B (kg)	186/98	129/98	154/79	154/93	186/93	154/93	186/93	154/98	186/98
Module B Ckt A/Ckt B (kg)	119/81	129/98	154/79	129/98	154/79	154/93	186/93	154/98	186/98
COMPRESSORS	Semi-Hermetic, Twin Screw								
Quantity	5	6	6	6	6	6	6	6	6
Economized	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. Capacity Steps									
Standard	14	16	16	16	16	16	16	16	16
Optional (maximum)	18	20	20	20	20	20	20	20	20
Min. Capacity Step (%)									
Standard	8	7.5	7.5	8	8	7.5	7.5	7.5	7.5
Optional	4	5	5	4	4	5	5	5	5
COOLER*	Flooded Type Shell and Tube with Enhanced Copper Tubes								
Net Fluid Volume (L)	270	326.3	326	342	342	357	357	357	357
Max Refrigerant Pressure (kPa)	1517	1517	1517	1517	1517	1517	1517	1517	1517
Max Fluid Side Pressure (kPa)	2069	2069	2069	2069	2069	2069	2069	2069	2069
FLUID CONNECTIONS	Victaulic Connections								
Inlet and Outlet (in.)	8	8	8	8	8	8	8	8	8
Cooler Interconnecting (in.)	8	8	8	8	8	8	8	8	8
Drain — Qty...Size (in.)	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2	2...1/2
CONDENSER FANS									
Standard/Low Noise Type	Shrouded Axial Type, Vertical Discharge								
Fan Speed (r/s)	19.0	29.2	19.0	19.0	19.0	19.0	19.0	19.0	19.0
No. Blades...Dia. (mm)	11...762	11...762	11...762	11...762	11...762	11...762	11...762	11...762	11...762
No. Fans...Total kW	26...41.6	20...32	28...44.8	22...35.2	30...48	24...38.4	32...51.2	24...38.4	32...51.2
Total Airflow (L/s)	139 886	107 605	150 646	118 365	161 407	129 126	172 167	129 126	172 167
High Static Type	Propeller Type, Vertical Discharge								
Fan Speed (r/s)	29.2	19	29.2	29.2	29.2	29.2	29.2	29.2	29.2
No. Blades...Dia. (mm)	12...762	12...762	12...762	12...762	12...762	12...762	12...762	12...762	12...762
No. Fans...Total kW	26...107	20...82	28...115	22...90.2	30...123	24...98.4	32...131	24...98.4	32...131
Total Airflow (L/s)†	120 253	92 503	129 503	101 752	138 753	111 003	148 004	111 003	148 004
CONDENSER COILS	3/8-in. OD Copper Tubes with Aluminum Fins								
Fins/m	669	669	669	669	669	669	669	669	669
No. Rows	4	4	4	4	4	4	4	4	4
Total Face Area (sq m)	65.2	50.2	70.2	55.2	75.2	60.2	80.3	60.2	80.3
Maximum Working Pressure (kPa)	3103	3103	3103	3103	3103	3103	3103	3103	3103

LEGEND

- Ckt — Circuit
- Cu-Al — Standard Coils with Copper Tubes and Aluminum Fins
- Cu-Cu — Optional Coils with Copper Tubes and Copper Fins

*Each cooler is shipped with approximately 18.9 liters of propylene glycol to provide freeze protection during storage and shipment.
 †Based on rated external static pressure of 100 Pa or 200 Pa as appropriate.

Table 3A — Unit Operating Range*

ITEM			MAX		MIN		NOMINAL	
Cooler Leaving Fluid Temperature†			60 F (15 C)		40 F (4.4 C)		—	
Cooler Entering Fluid Temperature**			70 F (21.1 C)		45 F (7.2 C)		—	
Cooler Flow Rates 30GXN,R	Cooler	Number of Passes	Max Cooler Temp Difference		Reference Min Flow Rate†		Nominal Flow Rate	
			F	C	Gpm	L/s	Gpm	L/s
080, 083	minus 1 pass	2	13	7.4	136	8.6	182	11.5
	std	3	20	11.1	91	5.7		
	plus 1 pass	4	27	14.8	68	4.3		
090, 093	minus 1 pass	2	13	7.4	149	9.4	199	12.6
	std	3	20	11.1	100	6.3		
	plus 1 pass	4	27	14.8	75	4.7		
106, 108	minus 1 pass	2	13	7.4	176	11.1	234	14.8
	std	3	20	11.1	117	7.4		
	plus 1 pass	4	27	14.8	88	5.5		
114	minus 1 pass	2	13	7.4	191	12.0	254	16.1
	std	3	20	11.1	127	8.0		
	plus 1 pass	4	27	14.8	95	6.0		
118	minus 1 pass	1	10	5.6	254	16.1	254	16.1
	std	2	20	11.1	127	8.0		
	plus 1 pass	3	30	16.7	85	5.4		
125	minus 1 pass	2	13	7.4	209	13.2	278	17.6
	std	3	20	11.1	139	8.8		
	plus 1 pass	4	27	14.8	104	6.6		
128	minus 1 pass	1	10	5.6	278	17.6	278	17.6
	std	2	20	11.1	139	8.8		
	plus 1 pass	3	30	16.7	93	5.9		
135	minus 1 pass	2	13	7.4	229	14.4	305	19.2
	std	3	20	11.1	152	9.6		
	plus 1 pass	4	27	14.8	114	7.2		
138	minus 1 pass	1	10	5.6	305	19.2	305	19.2
	std	2	20	11.1	152	9.6		
	plus 1 pass	3	30	16.7	102	6.4		
150, 153	minus 1 pass	1	10	5.6	336	21.2	336	21.2
	std	2	20	11.1	168	10.6		
	plus 1 pass	3	30	16.7	112	7.1		
160, 163	minus 1 pass	1	10	5.6	364	23.0	364	23.0
	std	2	20	11.1	182	11.5		
	plus 1 pass	3	30	16.7	121	7.7		
174, 178††	minus 1 pass	1	10	5.6	401	25.3	401	25.3
	std	2	20	11.1	200	12.6		
	plus 1 pass	3	30	16.7	134	8.4		
204, 208††	minus 1 pass	1	10	5.6	461	29.1	461	29.1
	std	2	20	11.1	230	14.5		
	plus 1 pass	3	30	16.7	154	9.7		
225, 228††	minus 1 pass	1	10	5.6	502	31.6	502	31.6
	std	2	20	11.1	251	15.8		
	plus 1 pass	3	30	16.7	167	10.5		
249, 253††	minus 1 pass	1	10	5.6	562	35.4	562	35.4
	std	2	20	11.1	281	17.7		
	plus 1 pass	3	30	16.7	187	11.8		
264, 268††	minus 1 pass	1	10	5.6	588	37.1	588	37.1
	std	2	20	11.1	294	18.6		
	plus 1 pass	3	30	16.7	196	12.4		
281††	minus 1 pass	1	10	5.6	641	40.5	641	40.5
	std	2	20	11.1	321	20.2		
	plus 1 pass	3	30	16.7	214	13.5		
301††	minus 1 pass	1	10	5.6	689	43.4	689	43.4
	std	2	20	11.1	344	21.7		
	plus 1 pass	3	30	16.7	230	14.5		
325††	minus 1 pass	1	10	5.6	741	46.8	741	46.8
	std	2	20	11.1	371	23.4		
	plus 1 pass	3	30	16.7	247	15.6		
350††	minus 1 pass	1	10	5.6	801	50.5	801	50.5
	std	2	20	11.1	401	25.3		
	plus 1 pass	3	30	16.7	267	16.8		

*Maximum ambient temperature and percent of unit capacity will vary based on unit load and return water temperature. All models are qualified for use at 125 F (46 C). Some models may require the high ambient fan option. Contact your local Carrier representative to obtain performance data using the Carrier electronic catalog.

†For applications requiring cooler leaving water temperature operation at less than 40 F (4.4 C), the units require the use of antifreeze and application may require the special order brine option. Contact your local Carrier representative for more information.

**For applications requiring cooler entering water temperature operation at less than 45 F (7.2 C), contact your local Carrier representative for unit selection using the Carrier electronic catalog.

††Requires optional or accessory low ambient kit for operation below 15 F (-9 C). All other models require the low ambient control for operation below 0° F (-17.8 C)

NOTES:

1. The 30GXN,R units will start with loop temperatures up to 95 F (35 C).
2. Nominal flow rates required at ARI conditions 44 F (7 C) leaving fluid temperature, 54 F (12 C) entering water temperature, 95 F (35 C) ambient. Fouling factor 0.00010 ft²-hr-F/Btu (0.000018 m²-K/kW).
3. To obtain proper temperature control, cooler loop fluid volume must be at least 3 gal/ton (3.23 L/kW) of chiller nominal capacity for air conditioning and at least 6 gal/ton (6.5 L/kW) for process applications or systems that must operate in low ambient temperatures (below 32 F [0° C]).
4. Where winds of 5 mph (2.2 m/s) or greater are anticipated at outdoor ambient temperatures below 32 F (0° C), wind baffles are required.

Table 3B — Duplex Unit Operating Range

30GXN,R	COOLER	NO. OF PASSES	MAX. COOLER TEMPERATURE DIFFERENCE		REFERENCE MIN FLOW RATE		NOMINAL FLOW RATE	
			F	C	Gpm	L/s	Gpm	L/s
283	STD	1	20	11.1	329	20.8	658	41.5
303	STD	1	20	11.1	347	21.9	694	43.8
328	STD	1	20	11.1	382	24.1	764	48.2
353	STD	1	20	11.1	420	26.5	839	53.0
370	STD	1	20	11.1	502	31.7	879	55.5
373	STD	1	20	11.1	444	28.0	889	56.1
390	STD	1	20	11.1	588	37.1	909	57.3
393	STD	1	20	11.1	461	29.1	921	58.1
415	STD	1	20	11.1	588	37.1	974	61.4
418	STD	1	20	11.1	475	30.0	950	59.9
450	STD	1	20	11.1	502	31.7	1031	65.0
453	STD	1	20	11.1	512	32.3	1025	64.7
475	STD	1	20	11.1	542	34.2	1085	68.4
478	STD	1	20	11.1	546	34.4	1091	68.8
500	STD	1	20	11.1	571	36.0	1141	72.0
503	STD	1	20	11.1	579	36.5	1158	73.0
525	STD	1	20	11.1	601	37.9	1202	75.8
528	STD	1	20	11.1	607	38.3	1214	76.6

Step 3 — Piping Connections — See Fig. 29-35 for piping applications.

⚠ CAUTION

Remove 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.

GENERAL — The factory-installed victaulic connections allow clamp-on connection of water lines to the coolers in all 30GXN,R units. See Tables 4 and 5 for proper piping alignment with the victaulic flanges. Each unit is shipped with 2 flange assemblies (Fig. 29) with integral nozzles, 2 gaskets (located in control box) and one flow sensor. See Fig. 30. The flow sensor is factory-installed in the side of the entering fluid nozzle.

DUPLEX UNIT PIPING CONNECTIONS — The 30GXN,R duplex units require a field piping connection between the two modules. All duplex 30GXN,R chillers have standard 8 in. (219.1 mm) diameter pipe connections. Victaulic style grooved pipe fittings are recommended for the interconnecting piping to ensure no weld slag enters the cooler. A flexible coupling (Braided Stainless Flex Hose SVG8 or Butyl Rubber Unaflex Style 1000 or similar) is required between the two modules. See Fig. 11-25. Tables 4 and 5 provide alignment criteria for the Victaulic and Flex-Hose couplings. Piping details for use with the Duplex Trim Kit are shown on the Typical Duplex Connection Piping diagram in Fig. 32B and 33.

COOLER FLUID, VENT, AND DRAIN — The inlet (return) fluid connection is always the lower of the 2 cooler connections. See Fig. 1-25 for locations. A screen strainer with a minimum size of 20 mesh must be installed ahead of the cooler inlet to prevent debris from damaging internal tubes of the cooler. Outlet (supply) fluid connection is the upper connection of the 2 cooler connections.

The cooler has victaulic connections to connect the field-supplied piping. Plan the piping arrangement in accordance

with good piping practices and so that the piping does not cross in front of the cooler head. Use flexible connections on cooler piping to reduce vibration transmission. Offset the piping to permit removal of the cooler head for maintenance. Install pipe hangers where needed. Make sure no weight or stress is placed on the water nozzle.

Standard piping alignment criteria is shown in Tables 4 and 5.

IMPORTANT: Installation of a cooler pump interlock is recommended to aid in preventing potential system damage due to loss of fluid flow. Install on TB5-1 to TB5-2 and connect pump interlock. See Field Control Power Connections section.

Provide openings in fluid piping for pressure gages and thermometers (if used). These openings should be 5 to 10 pipe diameters from the unit leaving water nozzle. For thorough mixing and temperature stabilization, wells in the leaving fluid pipe should extend at least 2 in. (50 mm) into the pipe.

Although cooler has an air vent, it is recommended that a field-supplied air vent be installed in the system to facilitate servicing. Field-supplied shut-off and balancing valves should also be installed to facilitate servicing and flow balancing. Locate valves in return and supply fluid lines as close to the chiller as possible. Locate air vent at highest point of the cooler fluid system. See Fig. 32A and 32B.

Provide drain connections at all low points to permit complete drainage of the system.

A thermal flow sensor is factory installed in the entering fluid nozzle. The sensor is factory wired. If a cooler pump interlock is used, connect the interlock to terminals TB5-1, 2. The factory-installed flow sensor and cooler interlock must be wired in series.

Table 4 — Victaulic Connection Alignment

PIPE SIZE NOM. in. (ACTUAL mm)	PIPE END SEPARATION in. (mm)	PIPE ALIGNMENT in./Ft (mm/m)
8 (219.1)	0-0.13 (0-3.2)	0.27 (21)

Table 5 — Flexible Coupling Alignment

MODEL	PIPE SIZE in. (mm)	LENGTH in. (mm)	MAX. PARALLEL OFFSET in. (mm)	MAX. ELONGATION in. (mm)	MAX. COMPRESSION in. (mm)	CONNECTION STYLE	MAX. WORKING PRESSURE PSI
Flex-Hose SVG8	8 (219)	16 (406)	0.5 (13)	0	0	Victaulic/Varies	155
Unaflex Style 1000	8 (219)	6 (152)	1 (25)	0.75 (19)	1.75 (44)	Flange	150

BRINE UNITS — Special factory modifications to the units are required to allow them to operate at fluid temperatures less than 34 F (1.1 C). Be sure that the fluid has sufficient inhibited glycol or other suitable corrosion-resistant antifreeze solution to prevent cooler freeze-up.

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 cooler fluid loop. It is recommended that once the cooler water lines have been installed and leak checked that the cooler heads be insulated with a suitable thickness of closed-cell insulation. This will minimize the amount of condensation that will form on the cooler heads.

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 antifreeze 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 codes. Identify disconnect as heater tape power source with 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).

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

A drain connection is located at the bottom of the cooler head. See Fig. 1-25 and 34 for connection location. Install shut-off valves to the drain line before filling the system with fluid.

WINTER SHUTDOWN PREPARATION — At the end of each cooling season the fluid should be drained from the system. However, due to the cooler circuiting, some fluid will remain in the cooler after draining. To prevent freeze-up damage to the cooler tubes perform the following procedure.

1. If factory-installed cooler heaters have been installed, deenergize the heaters to prevent damage and possible safety hazards when draining, or when there is no liquid in the system. Remove Fuse 1 to deenergize heaters. Drain the fluid from the system.
2. Isolate the cooler from the rest of the system with water shut-off valves.

3. Completely fill the cooler with an appropriate amount of inhibited glycol solution (or other suitable corrosion-inhibitive antifreeze) for 15° F (8.3° C) below the expected low ambient conditions, 5 gallons (19 L) minimum.
4. Leave the cooler filled with the antifreeze solution for the winter, or drain if desired. Be sure to deenergize heaters (if installed) as explained in Step 1 to prevent damage. Use an approved method of disposal when removing antifreeze solution.

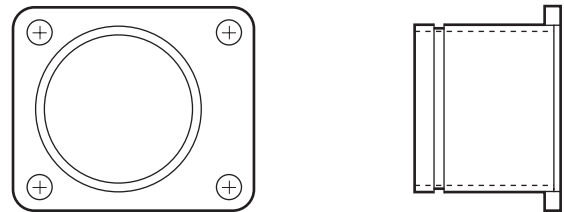


Fig. 29 — Victaulic Flange

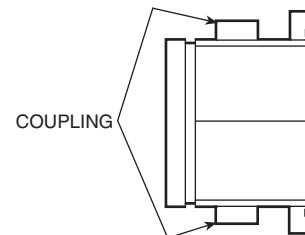


Fig. 30 — Flow Sensor Coupling, Victaulic Flange

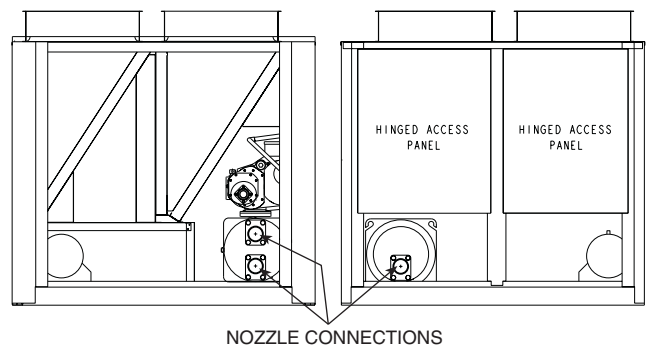
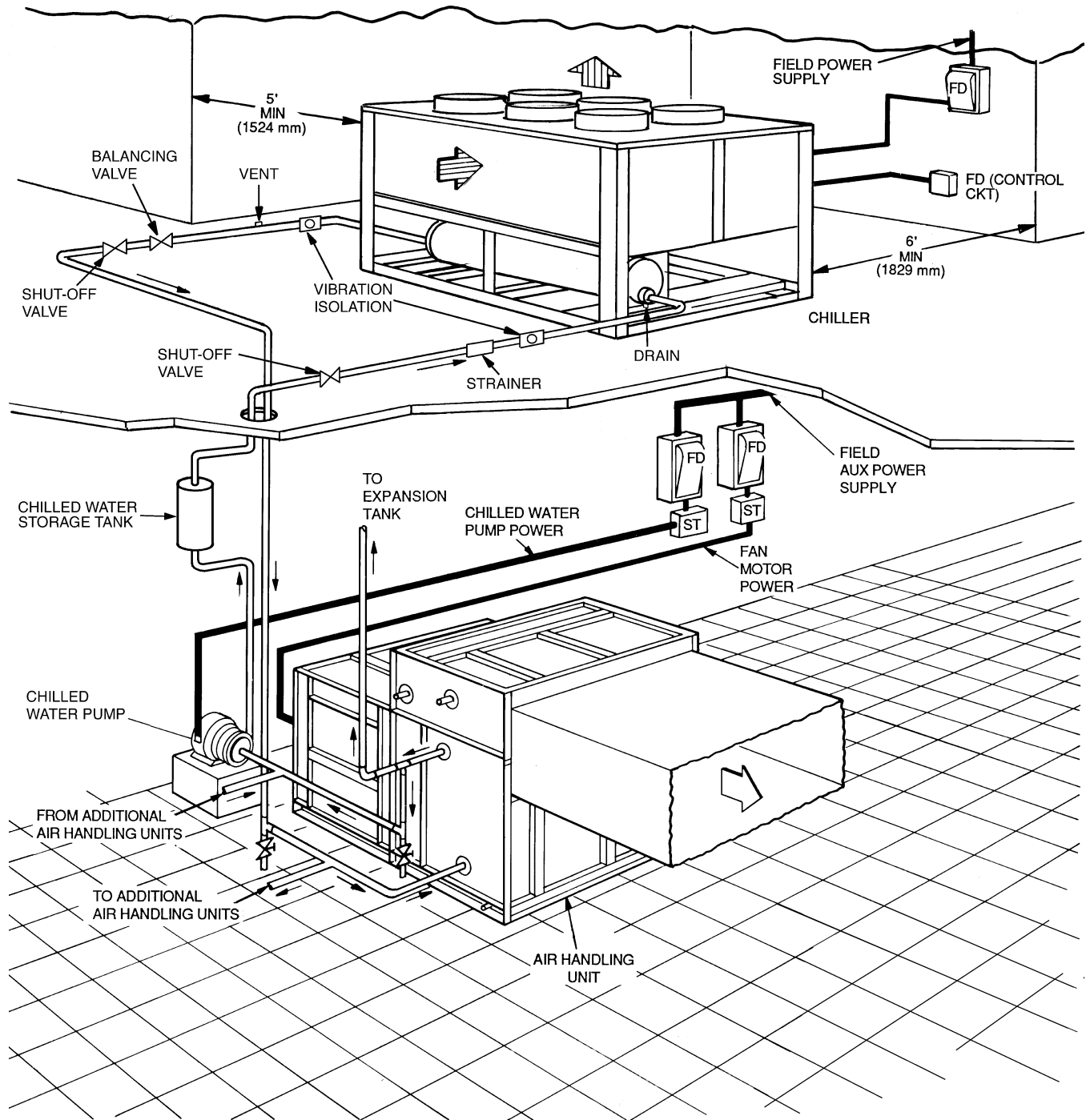


Fig. 31 — Victaulic Flange Connection Locations



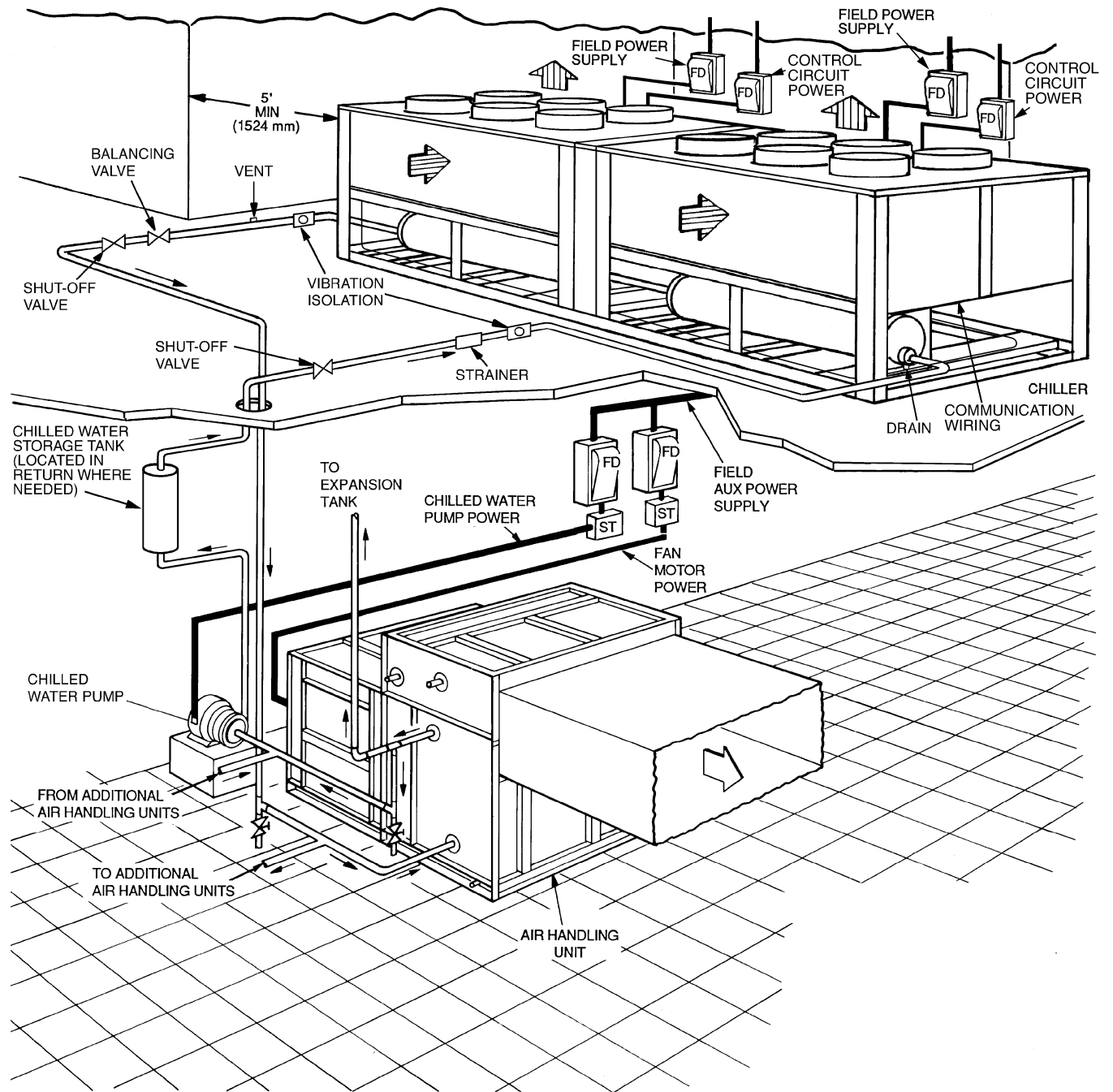
NOTES:

1. Chiller must be installed level to maintain proper compressor oil return and hydraulics.
2. Wiring and piping shown are general points-of-connection guides only and are not intended for a specific installation. Wiring and piping shown are for a quick overview of system and are not in accordance with recognized standards. Certified field wiring and dimensional diagrams are available upon request. The 30GXN,R units should be installed using certified drawings.
3. All wiring must comply with applicable local and national codes.
4. All piping must follow standard piping techniques. Refer to Carrier System Design Manual or appropriate ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) handbook for details.

LEGEND

- AUX** — Auxiliary
- CKT** — Circuit
- FD** — Field-Supplied Disconnect
- ST** — Starter
- Airflow Through Condenser
- Airflow Through Air-Handling Unit
- Power Wiring
- Chilled Water Piping

Fig. 32A — Typical Piping and Wiring (30GXN,R106-135 Shown)



NOTES:

1. Chiller must be installed level to maintain proper compressor oil return and hydraulics.
2. Wiring and piping shown are general points-of-connection guides only and are not intended for a specific installation. Wiring and piping shown are for a quick overview of system and are not in accordance with recognized standards. Certified field wiring and dimensional diagrams are available upon request. The 30GXN,R units should be installed using certified drawings.
3. All wiring must comply with applicable local and national codes.
4. All piping must follow standard piping techniques. Refer to Carrier System Design Manual or appropriate ASHRAE (American Society of Heating, Refrigeration, and Air Conditioning Engineers) handbook for details.

LEGEND





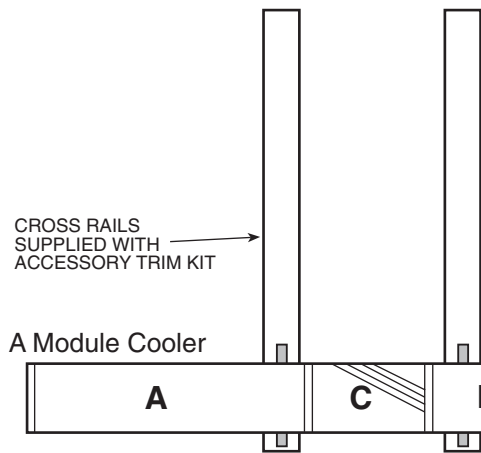
- AUX** — Auxiliary
- CKT** — Circuit
- FD** — Field-Supplied Disconnect
- ST** — Starter
-  Airflow Through Condenser
-  Airflow Through Air-Handling Unit
-  Power Wiring
-  Chilled Water Piping

Fig. 32B — Typical Piping and Wiring for Duplex Units



Assume Victaulic Style 77 connections at all joints

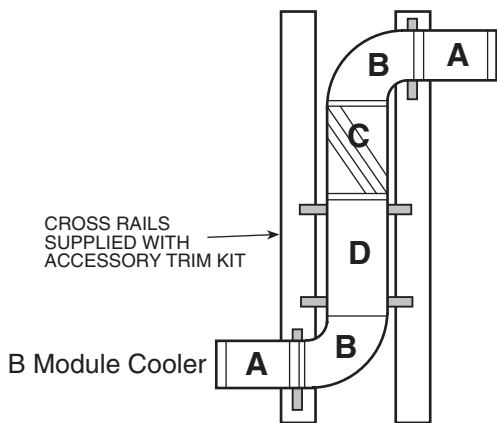
For all models: A pipe is 8" x length shown below;
 B pipe is 8" x length shown below
 C is Flexhose 8 x 16 SVG, 16" (406.4 mm) long

Weight: 23.5 lbs (10.7 kg)

Size	'A' pipe length	'A' pipe weight	'B' pipe length	'B' pipe weight	Total piping weight
303, 283	61.00" (1549 mm)	144.9 lbs (65.7 kg)	12.00" (304.8 mm)	28.5 lbs (12.9 kg)	196.9 lbs (89.3 kg)
390	78.88" (2003 mm)	187.6 lbs (85.1 kg)	12.00" (304.8 mm)	28.5 lbs (12.9 kg)	239.6 lbs (108.7 kg)
370	41.81" (1062 mm)	99.5 lbs (45.1 kg)	12.00" (304.8 mm)	28.5 lbs (12.9 kg)	151.5 lbs (68.7 kg)
373, 415	78.06" (1983 mm)	185.7 lbs (84.2 kg)	12.00" (304.8 mm)	28.5 lbs (12.9 kg)	237.7 lbs (107.8 kg)

Hat channel type brackets should be used (shaded areas) as required to support piping.
 This assumes nozzle to nozzle spacing shown in dimensional drawing.

Field Piping: Sizes 283, 303, 370, 373, 390, 415



Assume Victaulic Style 77 connections at all joints

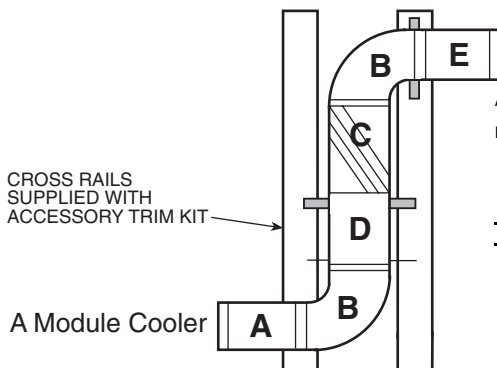
For all models: A pipe is 8" x length shown below
 B elbow is 7.75" (196.9 mm) CL to end 8" elbow
 C is Flexhose 8 x 16 SVG, 16" (406.4 mm) long
 D pipe is 8" x 22.375" (568.3 mm) long

Weight: 29.9 lbs (13.6 kg)
 Weight: 23.5 lbs (10.7 kg)
 Weight: 53.2 lbs (24.1 kg)

Size	'A' pipe length	'A' pipe weight	Total piping weight
450	47.06" (1195 mm)	112.0 lbs (50.8 kg)	360.5 lbs (163.5 kg)

Hat channel type brackets should be used (shaded areas) as required to support piping.
 This assumes nozzle to nozzle spacing shown in dimensional drawing.

Field Piping: Sizes 450



Assume Victaulic Style 77 connections at all joints

For all models: A pipe is 8" x length shown below
 B elbow is 7.75" (196.9 mm) CL to end (8" elbow)
 C is Flexhose 8 x 16 SVG, 16" (406.4 mm) long
 D pipe is 8" x 22.375" (568.3 mm) long
 E pipe is 8" x length shown below

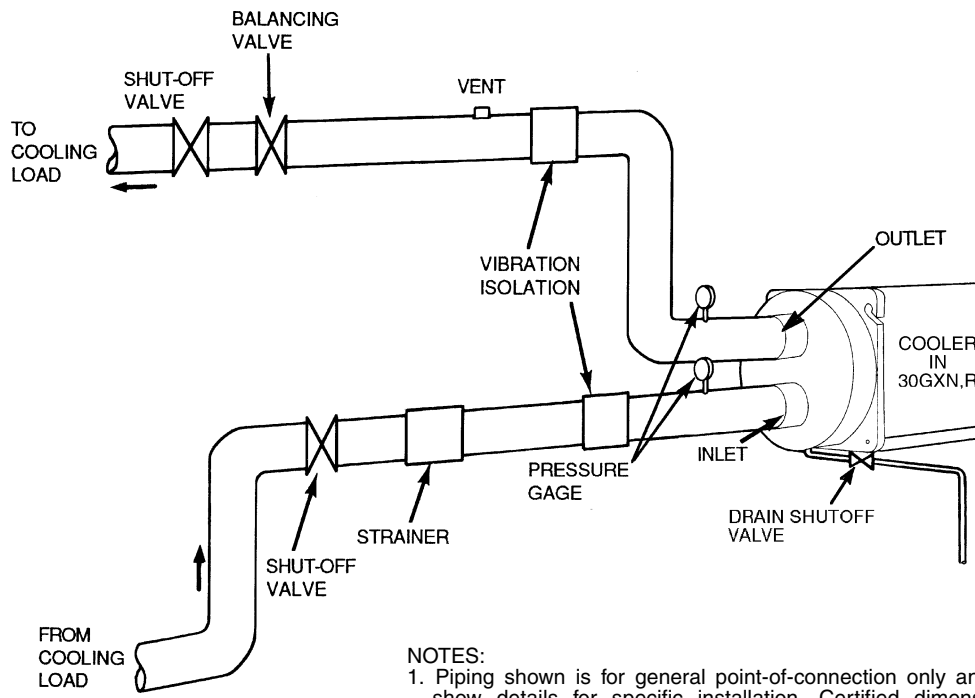
Weight: 29.9 lbs (13.6 kg)
 Weight: 23.5 lbs (10.7 kg)
 Weight: 53.2 lbs (24.1 kg)


Size	'A' pipe length	'A' pipe weight	'E' pipe length	'E' pipe weight	Total piping weight
328, 353	66.44" (1687 mm)	158.1 lbs (71.7 kg)	66.44" (1687 mm)	158.1 lbs (71.7 kg)	452.7 lbs (205.3 kg)
393, 418	83.25" (2114 mm)	197.7 lbs (89.7 kg)	66.44" (1687 mm)	158.1 lbs (71.7 kg)	492.3 lbs (223.5 kg)
453	47.06" (1195 mm)	112.0 lbs (50.8 kg)	47.06" (1195 mm)	112.0 lbs (50.8 kg)	360.5 lbs (163.7 kg)
478, 475	83.25" (2114 mm)	197.7 lbs (89.7 kg)	47.06" (1195 mm)	112.0 lbs (50.8 kg)	381.3 lbs (173.1 kg)
503, 528	83.25" (2114 mm)	197.7 lbs (89.7 kg)	83.25" (2114 mm)	197.7 lbs (89.7 kg)	531.9 lbs (241.5 kg)
500, 525	83.25" (2114 mm)	197.7 lbs (89.7 kg)	83.25" (2114 mm)	197.7 lbs (89.7 kg)	531.9 lbs (241.5 kg)

Hat channel type brackets should be used (shaded areas) as required to support piping.
 This assumes nozzle to nozzle spacing shown in dimensional drawing.

Field Piping: Sizes 328, 353, 393, 418, 475, 478, 500, 503, 525, 528

Fig. 33 — Victaulic Connection Details



LEGEND
 Field Piping

- NOTES:
1. Piping shown is for general point-of-connection only and is not intended to show details for specific installation. Certified dimensional diagrams are available upon request. The 30GXN,R units should be installed using certified drawings.
 2. Refer to Carrier System Design Manual for details regarding piping techniques.
 3. Piping, switches, valves, vent, gages, strainers, drain, and vibration isolation are all field supplied.

Fig. 34 — Typical Cooler Piping

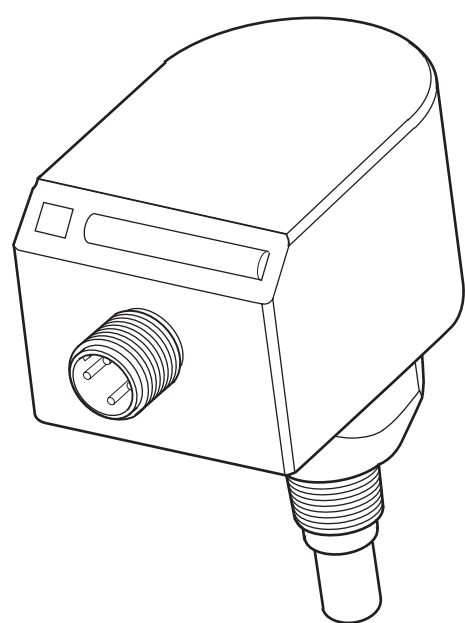


Fig. 35 — Thermal Flow Sensor

Step 4 — Make Electrical Connections — The electrical characteristics of the available power supply must agree with the unit nameplate rating. Supply voltage must be within the limits shown. Refer to Tables 6-9 for electrical and configuration data.

FIELD POWER CONNECTIONS (See Fig. 35 and 37) — 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 7A-7E for unit electrical data. See Tables 8A and 8B for compressor electrical data. See Table 9 for Condenser Fan Electrical data.

IMPORTANT: The 30GXN,R units 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 size that the unit terminal block or non-fused disconnect will accept is 500 kcmil.

The 30GXN,R units require 1 or 2 power supplies, depending on the unit and circuit voltage. See Tables 7A and 7E for the number of power supplies and conductors required for each unit.

National Electric Code requires all conduits from the conditioned space to the control box to be sealed to prevent the flow of air and moisture into the control box.

FIELD CONTROL POWER CONNECTIONS (See Fig. 38) — Units with a power supply of 208/230-, 460-, and 575-3-60 require 115-1-60 control circuit power. Units with a 380-3-60 power supply require 230-1-60 control circuit power.

For units with 380-3-60 power: Control voltage is tapped from line to neutral. No additional power supply is required. If a separate power source is required, disconnect the wires between the control and power terminal blocks.

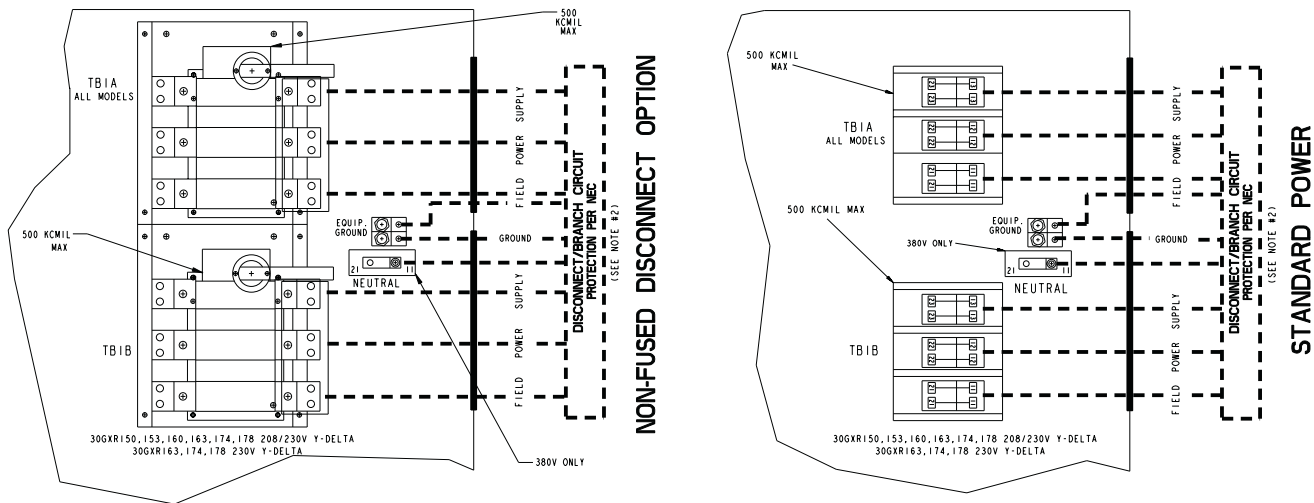
Terminals TB5-1 and TB5-2 are provided for field installation of a chilled water (fluid) pump interlock (CWPI). Chilled water (fluid) flow sensor (CWFS) is factory installed. These devices are to be installed in series. Contacts must be capable of handling a 24-vac at 50 mA load.

Accessory remote on-off switch can be wired into TB5-13 and TB5-14. To use this feature, remove the factory-installed jumper and install the device in series. See Fig. 38. Contacts must be capable of handling a 24-vac at 50 mA.

⚠ CAUTION

Do not use interlocks or other safety device contacts connected between TB5-13 and TB5-14 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. 38. Failure to wire the remote on-off as recommended will result in tube freeze damage.

Terminals TB5-10 and TB5-12 are provided for a field-supplied chilled water (fluid) pump relay (CWP). A field-supplied control relay of appropriate voltage must be provided. Maximum load allowed is 75 va at either 115 or 230 v control power. See Fig. 38.



1. FACTORY WIRING IS IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC). FIELD MODIFICATIONS OR ADDITIONS MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES.
2. WIRING FOR MAIN FIELD SUPPLY MUST BE RATED 75°C MINIMUM. USE COPPER FOR ALL UNITS. MAXIMUM INCOMING WIRE SIZE FOR EACH TERMINAL BLOCK IS 500KCMIL.
3. POWER FOR CONTROL CIRCUIT SHOULD BE SUPPLIED FROM A SEPARATE SOURCE (EXCEPT 380V UNITS) THROUGH A FIELD SUPPLIED DISCONNECT WITH 30 AMP MAXIMUM PROTECTION FOR 115 VOLT CONTROL CIRCUITS AND 15 AMP MAXIMUM PROTECTION FOR 230 VOLT CONTROL CIRCUIT. CONNECT CONTROL CIRCUIT POWER TO TERMINALS 1 AND 2 OF TB4. CONTROL CIRCUIT CONDUCTORS FOR ALL UNITS MUST BE COPPER ONLY. CONTROL CIRCUIT POWER IS FACTORY WIRED FOR 380V UNITS.
4. TERMINALS 13 AND 14 OF TB5 ARE FOR FIELD EXTERNAL CONNECTION FOR REMOTE ON-OFF THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA.
5. TERMINALS 11 & 12 OF TB5 ARE FOR CHILLED WATER PUMP INTERLOCK (CWPI) FUNCTIONS. IF ADDED, CHILLED WATER PUMP INTERLOCK CONTACTS MUST BE WIRED IN SERIES WITH FLOW SWITCH CONTACTS. THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA LOAD. CHILLED WATER FLOW SWITCH (CWFS) IS FACTORY INSTALLED.
6. TERMINALS 10 & 12 OF TB5 ARE FOR CONTROL OF CHILLED WATER PUMP STARTER. THE MAXIMUM LOAD ALLOWED FOR THE CHILLED WATER PUMP RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
7. TERMINALS 11 & 12 OF TB5 ARE FOR ALARM RELAY. THE MAXIMUM LOAD ALLOWED FOR THE ALARM RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
8. MAKE APPROPRIATE CONNECTIONS TO TB6 AS SHOWN FOR ENERGY MANAGEMENT BOARD OPTIONS. THE CONTACTS FOR DEMAND LIMIT AND ICE DONE OPTIONS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA.

- LEGEND:
- A - ALARM
 - CCN - CARRIER COMFORT NETWORK
 - CWFS - CHILLED WATER FLOW SWITCH
 - CWP - CHILLED WATER PUMP
 - CWPI - CHILLED WATER PUMP INTERLOCK
 - TB - TERMINAL BLOCK
- FIELD POWER WIRING
 - - - FIELD CONTROL WIRING
 - FACTORY INSTALLED WIRING

Fig. 36 — Field Power Wiring — 30GXN,R080-178 and Associated Modular Sizes

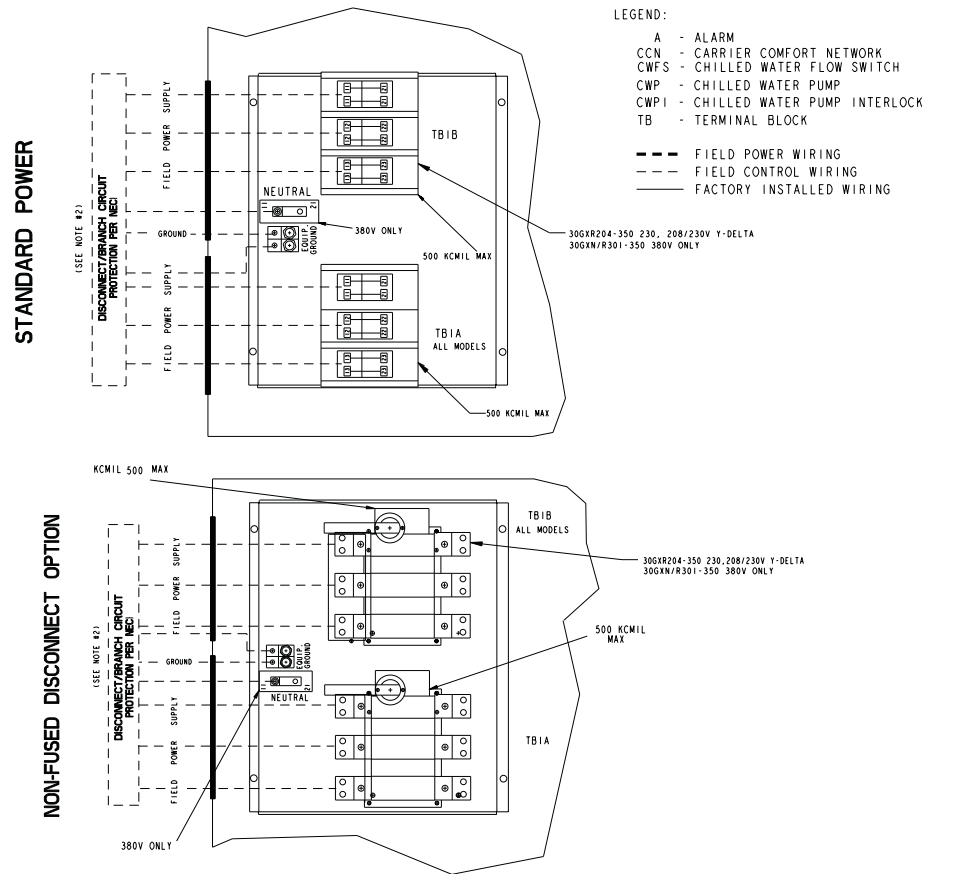
DUPLEX UNIT POWER CONNECTIONS — The 30GXN,R duplex units will require separate power supplies to each module for both main power and control power. Power should be provided according to the requirements for each module (see Table 1 for duplex unit designations and Tables 7A-8B for electrical data).

The *ComfortLink™* controllers on the two modules must be linked together following the procedure outlined below and in the Controls Start-Up, Operation, Service, and Troubleshooting manual. The communication wire specification is detailed below.

COMFORTLINK COMMUNICATION WIRING — 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

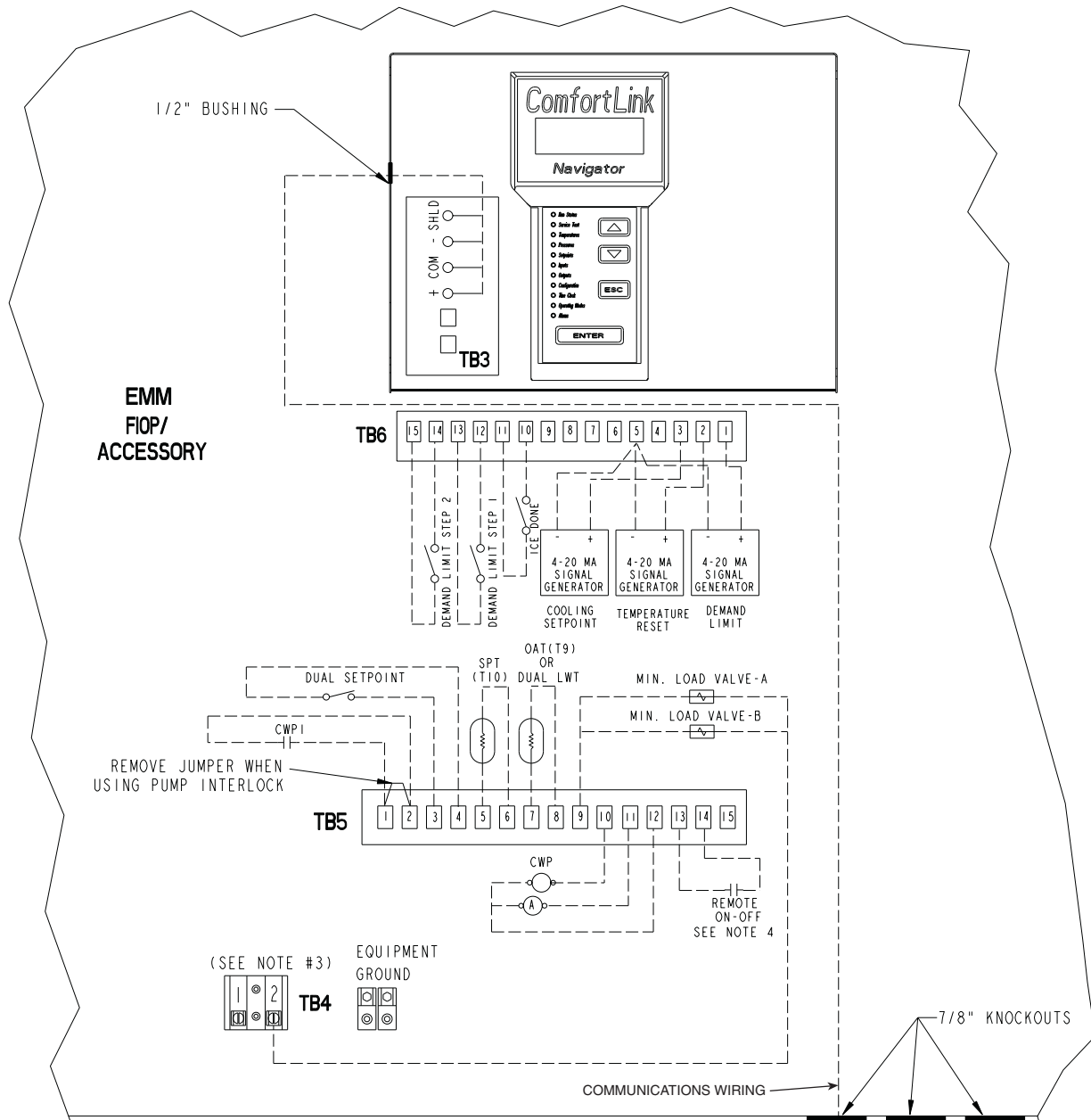
polyethylene. An aluminum/polyester 100% foil shield and an outer jacket of PVC, PVC/nylon, chrome vinyl, or Teflon with a minimum operating temperature range of -20 C to 60 C is required. Wire manufactured by Alpha (2413 or 5463), American (A22503), Belden (8772), or Columbia (02525) meets the above mentioned requirements.

ComfortLink communication wiring should be kept separate from high voltage power wiring to avoid electromagnetic interference. The communication wiring should have a weatherproof jacket or dedicated conduit. The wiring should be supported with wire ties or conduit clamps.



1. FACTORY WIRING IS IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (NEC). FIELD MODIFICATIONS OR ADDITIONS MUST BE IN COMPLIANCE WITH ALL APPLICABLE CODES.
2. WIRING FOR MAIN FIELD SUPPLY MUST BE RATED 75°C MINIMUM. USE COPPER FOR ALL UNITS. MAXIMUM INCOMING WIRE SIZE FOR EACH TERMINAL BLOCK IS 500KCMIL.
3. POWER FOR CONTROL CIRCUIT SHOULD BE SUPPLIED FROM A SEPARATE SOURCE (EXCEPT 380V UNITS) THROUGH A FIELD SUPPLIED DISCONNECT WITH 30 AMP MAXIMUM PROTECTION FOR (50 AMP MAXIMUM WITH COOLER HEATERS) FOR 115 VOLT CONTROL CIRCUITS AND 15 AMP MAXIMUM PROTECTION (25 AMP MAXIMUM WITH COOLER HEATERS) FOR 230 VOLT CONTROL CIRCUIT. CONNECT CONTROL CIRCUIT POWER TO TERMINALS 1 AND 2 OF TB4. CONTROL CIRCUIT CONDUCTORS FOR ALL UNITS MUST BE COPPER ONLY. CONTROL CIRCUIT POWER IS FACTORY WIRED FOR 380V UNITS.
4. TERMINALS 13 AND 14 OF TB5 ARE FOR FIELD EXTERNAL CONNECTION FOR REMOTE ON-OFF THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA.
5. TERMINALS 1 & 2 OF TB5 ARE FOR CHILLED WATER PUMP INTERLOCK (CWPI) FUNCTIONS. IF ADDED, CHILLED WATER PUMP INTERLOCK CONTACTS MUST BE WIRED IN SERIES WITH FLOW SWITCH CONTACTS. THE CONTACTS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA LOAD. CHILLED WATER FLOW SWITCH (CWFS) IS FACTORY INSTALLED.
6. TERMINALS 10 & 12 OF TB5 ARE FOR CONTROL OF CHILLED WATER PUMP STARTER. THE MAXIMUM LOAD ALLOWED FOR THE CHILLED WATER PUMP RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
7. TERMINALS 11 & 12 OF TB5 ARE FOR ALARM RELAY. THE MAXIMUM LOAD ALLOWED FOR THE ALARM RELAY IS 75 VA SEALED, 360 VA INRUSH AT 115 OR 230 VOLT. FIELD POWER SUPPLY IS NOT REQUIRED.
8. MAKE APPROPRIATE CONNECTIONS TO TB6 AS SHOWN FOR ENERGY MANAGEMENT BOARD OPTIONS. THE CONTACTS FOR DEMAND LIMIT AND ICE DONE OPTIONS MUST BE RATED FOR DRY CIRCUIT APPLICATION CAPABLE OF HANDLING A 24VAC LOAD UP TO 50 MA.

Fig. 37 — Field Power Wiring — 30GXN,R204-350 and Associated Modular Sizes



- LEGEND**
- A** — Alarm
 - CWP** — Chilled Water Pump
 - CWPI** — Chilled Water Pump Interlock
 - EMM** — Energy Management Module
 - FIOP** — Factory-Installed Option
 - LWT** — Leaving Water Thermistor
 - OAT** — Outdoor-Air Thermistor
 - SPT** — Space Temperature Thermistor
 - TB** — Terminal Block
 - Field Control Wiring

NOTES:

1. Power for control circuit should be supplied from a separate source through a field-supplied disconnect (see Tables 7A-7E for maximum current protection requirements). Connect control circuit power to terminals 1 and 2 of TB4. Control circuit conductors for all units must be copper only.
2. Terminals 13 and 14 of TB5 are for field external connection for remote on-off. The contacts must be capable of handling a 24-vac load up to 50 mA. For Dual Chiller installations, remote on-off contacts should be supplied to both modules.
3. Terminals 1 and 2 of TB5 are for Chilled Water Pump Interlock (CWPI) functions. If added, remove jumper. The contacts must be rated for dry circuit application capable of handling a 24-vac load up to 50 mA load. Chilled Water Flow Switch (CWFS) is factory installed.
4. Terminals 10 and 12 of TB5 are for control of chilled water pump starter. The maximum load allowed for the chilled water pump relay is 75-va sealed, 360-va inrush at 115 or 230 volt depending on control circuit voltage. Field power supply is not required.
5. Terminals 11 and 12 of TB5 are for alarm relay. The maximum load allowed for the alarm relay is 75-va sealed, 360-va inrush at 115 or 230 volt depending on control circuit voltage. Field power supply is not required.
6. Make appropriate connections to TB6 as shown for energy management board options. The contacts for Demand Limit and Ice Done options must be capable of handling a 24-vac load up to 50 mA.
7. All 30GXN,R duplex chillers have the EMM option mounted in the master chiller (B) only. All remote chiller control interfaces are required on the master (B) chiller only.

Fig. 38 — Field Control Wiring

Duplex Chiller Control Configuration — See Fig. 36-39 and Table 6. The dual chiller routine is available for the control of two units supplying chiller fluid on a common loop. One chiller must be configured as the master chiller, the other as the slave chiller. The module B chiller is the master and the module A chiller is the slave.

NOTE: Chiller module B must be configured on site as the master chiller and module A must be configured on site as the slave chiller for all 30GXN,R duplex chiller applications. Field installation of communication wiring is required. Connections can be made to the CCN screw terminals on TB3 in both chillers.

The master chiller will be configured with a slave chiller at address 2. The chillers will be configured for series fluid flow. The master and slave chillers cannot have the same CCN

address (CCNA, Configuration mode under OPT2). In addition, the chillers must reside on the same CCN bus. The master chiller controls the slave chiller by changing its mode (STAT, *control mode*) and its operating setpoint (CTPT, *control point*). Any energy management functions need only be connected to the Master chiller. The EMM accessory has to be installed in the Master chiller only.

The master chiller is now configured for dual chiller operation. To configure the slave chiller, only the LLEN, MSSL, and PARA variables need to be set. Set the Lead Lag Enable (LLEN) variable to ENBL. Set the Master Slave Select (MSSL) variable to SLVE. Set the Parallel (PARA) variable to NO. The variables SLVA, LLBL, LLBD and LLDY are not used by the slave chiller.

Table 6 — Duplex Configuration

MODE	SUB-MODE	ITEM	DESCRIPTION	MASTER	SLAVE
Configuration	OPT2	CTRL	Controls Method	Switch*	Switch*
		CCNA	CCN Address	1	2
	RSET	LLEN	Lead/Lag Chiller Enable	ENBL	ENBL
		MSSL	Master/Slave Select	MAST	SLVE
		SLVA	Slave Address	2	N/R
		LLBL†	Lead/Lag Balance Select	Master Leads - 0; Slave Leads - 1; Automatic - 2	N/R
		LLBD†	Lead/Lag Balance Data	168 hrs.	N/R
		LLDY†	Lag Start Delay	5 min.	N/R
PARA	Parallel Configuration	No	No		

LEGEND

N/R — Not Required

*Set to desired control method: switch (0); 7-day occupancy (1); CCN occupancy (2); CCN (3). Slave is always configured to switch (0).

†Optional.



Fig. 39 — Dual Chiller Piping Arrangement, Series Fluid Flow

Table 7A — Electrical Data Reduced Ambient 115 F Data

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	STANDARD CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP
		Min	Max					XL	WD	XL	WD		
080	208/230-60	187	253	1	3	356.5	500	*	527.9	*	400	115-60	30
	230-60	207	253	1	3	324.5	450	*	515.1	*	400	115-60	30
	460-60	414	506	1	3	160.9	225	652.6	255.6	200	200	115-60	30
	575-60	518	633	1	3	129.0	175	542.4	205.4	150	150	115-60	30
	380-60	342	418	1	3	195.6	250	729.3	291.3	225	225	230-60	15
083	208/230-60	187	253	1	3	353.7	500	*	534.5	*	400	115-60	30
	230-60	207	253	1	3	324.4	450	*	522.9	*	400	115-60	30
	460-60	414	506	1	3	160.1	225	655.8	258.8	200	200	115-60	30
	575-60	518	633	1	3	128.0	175	544.6	207.6	150	150	115-60	30
	380-60	342	418	1	3	193.7	250	732.7	294.7	225	225	230-60	15
090	208/230-60	187	253	1	6	406.1	600	*	593.9	*	500	115-60	30
	230-60	207	253	1	3	369.3	500	*	581.1	*	450	115-60	30
	460-60	414	506	1	3	183.2	250	757.6	288.6	225	225	115-60	30
	575-60	518	633	1	3	148.1	200	606.4	231.4	175	175	115-60	30
	380-60	342	418	1	3	222.9	300	845.3	327.3	250	250	230-60	15
093	208/230-60	187	253	1	6	389.1	500	*	600.5	*	450	115-60	30
	230-60	207	253	1	3	356.4	500	*	588.9	*	400	115-60	30
	460-60	414	506	1	3	176.1	250	760.8	291.8	200	200	115-60	30
	575-60	518	633	1	3	140.8	200	608.6	233.6	175	175	115-60	30
	380-60	342	418	1	3	213.0	300	848.7	330.7	250	250	230-60	15
106	208/230-60	187	253	1	6	482.0	700	*	693.9	*	600	115-60	30
	230-60	207	253	1	6	438.9	600	*	681.1	*	500	115-60	30
	460-60	414	506	1	3	217.3	300	899.4	338.4	250	250	115-60	30
	575-60	518	633	1	3	174.4	250	719.8	270.8	200	200	115-60	30
	380-60	342	418	1	3	264.9	350	1002.5	382.5	300	300	230-60	15
108	208/230-60	187	253	1	6	445.8	600	*	705.2	*	500	115-60	30
	230-60	207	253	1	6	407.7	500	*	691.7	*	500	115-60	30
	460-60	414	506	1	3	201.7	250	904.7	343.7	250	250	115-60	30
	575-60	518	633	1	3	161.4	225	723.8	274.8	200	200	115-60	30
	380-60	342	418	1	3	244.1	350	1008.5	388.5	300	300	230-60	15
114	208/230-60	187	253	1	6	507.7	700	*	719.6	*	600	115-60	30
	230-60	207	253	1	6	462.0	600	*	704.2	*	600	115-60	30
	460-60	414	506	1	3	228.9	300	911.0	350.0	300	300	115-60	30
	575-60	518	633	1	3	183.4	250	728.8	279.8	225	225	115-60	30
	380-60	342	418	1	3	279.0	400	1016.6	396.6	350	350	230-60	15
118	208/230-60	187	253	1	6	486.0	600	*	745.5	*	600	115-60	30
	230-60	207	253	1	6	445.6	600	*	729.6	*	500	115-60	30
	460-60	414	506	1	3	219.9	300	922.9	361.9	250	250	115-60	30
	575-60	518	633	1	3	175.9	250	738.3	289.3	200	200	115-60	30
	380-60	342	418	1	3	266.1	350	1030.5	410.5	300	300	230-60	15
125	208/230-60	187	253	1	6	576.6	800	*	814.6	*	700	115-60	30
	230-60	207	253	1	6	525.4	700	*	795.4	*	600	115-60	30
	460-60	414	506	1	3	260.6	350	1025.1	396.1	300	300	115-60	30
	575-60	518	633	1	3	207.8	300	820.3	317.3	250	250	115-60	30
	380-60	342	418	1	3	316.1	450	1145.6	449.6	400	400	230-60	15

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

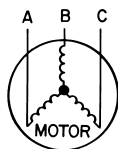
*Wye-delta start is standard. Across-the-line start is not available.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
BC = 236 v
AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

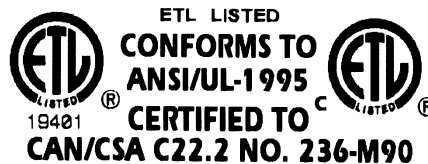


Table 7A — Electrical Data Reduced Ambient 115 F Data (cont)

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	STANDARD CONDENSER FAN							CONTROL CIRCUIT	
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP
		Min	Max					XL	WD	XL	WD		
128	208/230-60	187	253	1	6	527.7	700	*	808.5	*	600	115-60	30
	230-60	207	253	1	6	483.3	700	*	792.6	*	600	115-60	30
	460-60	414	506	1	3	238.8	300	1022.9	393.9	300	300	115-60	30
	575-60	518	633	1	3	191.0	250	818.3	315.3	225	225	115-60	30
	380-60	342	418	1	3	288.9	400	1141.5	445.5	350	350	230-60	15
138, 283B, 303B, 373B	208/230-60	187	253	1	6	567.3	800	*	848.0	*	700	115-60	30
	230-60	207	253	1	6	519.1	700	*	828.4	*	600	115-60	30
	460-60	414	506	1	3	256.7	350	1040.8	411.8	300	300	115-60	30
	575-60	518	633	1	3	205.3	250	832.6	329.6	250	250	115-60	30
	380-60	342	418	1	3	310.6	400	1163.2	467.2	350	350	230-60	15
153, 283A, 328B, 393B, 418B	208/230-60	187	253	2	9	453.7/259	700/450	*	818.2/518.0	*	600/350	115-60	30
	230-60	207	253	1	6	604.9	800	*	1005.4	*	700	115-60	30
	460-60	414	506	1	3	298.9	400	1302.6	498.6	350	350	115-60	30
	575-60	518	633	1	3	239.1	300	1042.1	399.1	300	300	115-60	30
	380-60	342	418	1	3	361.6	500	1453.4	564.4	450	450	230-60	15
163, 303A	208/230-60	187	253	2	9	468.7/300	700/500	*	833.2/581.0	*	600/400	115-60	30
	230-60	207	253	2	9	432.7/272	700/450	*	833.2/581.0	*	600/350	115-60	30
	460-60	414	506	1	3	320.8	450	1324.5	520.5	400	400	115-60	30
	575-60	518	633	1	3	256.6	350	1059.6	416.6	300	300	115-60	30
	380-60	342	418	1	6	388.1	500	1479.9	590.9	450	450	230-60	15
178, 328A, 353A/B,	208/230-60	187	253	2	9	468.7/378	700/600	*	833.2/743.0	*	600/500	115-60	30
	230-60	207	253	2	9	432.7/343	700/600	*	833.2/743.0	*	600/450	115-60	30
	460-60	414	506	1	3	349.1	450	1352.8	548.8	400	400	115-60	30
	575-60	518	633	1	3	279.2	350	1082.2	439.2	350	350	115-60	30
	380-60	342	418	1	6	422.4	500	1514.2	625.2	500	500	230-60	15
208	208/230-60	187	253	2	9	541/350	700/500	*	821.2/609.0	*	700/450	115-60	30 (50)
	230-60	207	253	2	9	489/325	700/500	*	798.4/609.0	*	600/400	115-60	30 (50)
	460-60	414	506	1	6	383	450	1167.1	538.1	450	450	115-60	30 (50)
	575-60	518	633	1	3	306	350	932.8	429.8	350	350	115-60	30 (50)
	380-60	342	418	1	6	467	500	1319.4	623.4	500	500	230-60	15 (25)
228, 453A/B, 478B	208/230-60	187	253	2	9	619/350	800/500	*	983.2/609.0	*	700/450	115-60	30 (50)
	230-60	207	253	2	9	560/325	800/500	*	960.4/609.0	*	700/400	115-60	30 (50)
	460-60	414	506	1	6	418	500	1422.1	618.1	500	500	115-60	30 (50)
	575-60	518	633	1	3	334	400	1136.8	493.8	400	400	115-60	30 (50)
	380-60	342	418	1	6	510	600	1601.4	712.4	600	600	230-60	15 (25)
253, 373A, 393A, 478A, 503A/B	208/230-60	187	253	2	12	681/404	800/600	*	1045.8/685.0	*	800/500	115-60	30 (50)
	230-60	207	253	2	9	617/350	800/500	*	1017.0/659.0	*	700/450	115-60	30 (50)
	460-60	414	506	1	6	466	600	1471.9	667.9	600	600	115-60	30 (50)
	575-60	518	633	1	3	374	450	1176.6	533.6	450	450	115-60	30 (50)
	380-60	342	418	1	6	570	700	1662.1	773.1	700	700	230-60	15 (25)
268, 418A, 528A/B	208/230-60	187	253	2	12	681/482	800/700	*	1045.8/847.0	*	800/600	115-60	30 (50)
	230-60	207	253	2	12	617/447	800/700	*	1017.0/847.0	*	700/600	115-60	30 (50)
	460-60	414	506	1	6	496	600	1500.2	696.2	600	600	115-60	30 (50)
	575-60	518	633	1	6	396	500	1199.2	556.2	450	450	115-60	30 (50)
	380-60	342	418	1	6	605	700	1696.4	807.4	700	700	230-60	15 (25)

LEGEND

- ICF** — Maximum Instantaneous Current Flow
- MCA** — Minimum Circuit Ampacity (for wire sizing)
- MOCP** — Maximum Overcurrent Protection
- Rec Fuse Size** — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

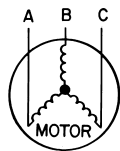
*Wye-delta start is standard. Across-the-line start is not available.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
BC = 236 v
AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

ETL LISTED

CONFORMS TO

ANSI/UL-1995

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CAN/CSA C22.2 NO. 236-M90

19401

Table 7A — Electrical Data Reduced Ambient 115 F Data (cont)

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP
		Min	Max					XL	WD	XL	WD		
080	208/230-60	187	253	1	6	384.8	500	*	556.2	*	450	115-60	30
	230-60	207	253	1	3	352.8	450	*	543.4	*	400	115-60	30
	460-60	414	506	1	3	172.5	225	664.2	267.2	200	200	115-60	30
	575-60	518	633	1	3	138.9	175	552.3	215.3	175	175	115-60	30
	380-60	342	418	1	3	208.8	250	742.4	304.4	250	250	230-60	15
083	208/230-60	187	253	1	6	396.2	500	*	577.0	*	450	115-60	30
	230-60	207	253	1	3	366.9	500	*	565.4	*	450	115-60	30
	460-60	414	506	1	3	177.5	225	673.2	276.2	200	200	115-60	30
	575-60	518	633	1	3	142.9	175	559.5	222.5	175	175	115-60	30
	380-60	342	418	1	3	213.4	250	752.4	314.4	250	250	230-60	15
090	208/230-60	187	253	1	6	434.5	600	*	622.2	*	500	115-60	30
	230-60	207	253	1	6	397.7	500	*	609.4	*	450	115-60	30
	460-60	414	506	1	3	194.8	250	769.2	300.2	225	225	115-60	30
	575-60	518	633	1	3	158.1	225	616.3	241.3	200	200	115-60	30
	380-60	342	418	1	3	236.0	300	858.4	340.4	300	300	230-60	15
093	208/230-60	187	253	1	6	431.6	600	*	643.0	*	500	115-60	30
	230-60	207	253	1	6	398.9	500	*	631.4	*	450	115-60	30
	460-60	414	506	1	3	193.5	250	778.2	309.2	225	225	115-60	30
	575-60	518	633	1	3	155.7	200	623.5	248.5	175	175	115-60	30
	380-60	342	418	1	3	232.7	300	868.4	350.4	300	300	230-60	15
106	208/230-60	187	253	1	6	524.5	700	*	736.4	*	600	115-60	30
	230-60	207	253	1	6	481.4	700	*	723.6	*	600	115-60	30
	460-60	414	506	1	3	234.7	300	916.8	355.8	300	300	115-60	30
	575-60	518	633	1	3	189.3	250	734.7	285.7	225	250	115-60	30
	380-60	342	418	1	3	284.6	400	1022.2	402.2	350	350	230-60	15
108	208/230-60	187	253	1	6	488.3	600	*	747.7	*	600	115-60	30
	230-60	207	253	1	6	450.2	600	*	734.2	*	500	115-60	30
	460-60	414	506	1	3	219.1	300	922.1	361.1	250	250	115-60	30
	575-60	518	633	1	3	176.2	250	738.6	289.6	200	200	115-60	30
	380-60	342	418	1	3	263.8	350	1028.2	408.2	300	300	230-60	15
114	208/230-60	187	253	1	6	550.2	700	*	762.1	*	700	115-60	30
	230-60	207	253	1	6	504.5	700	*	746.7	*	600	115-60	30
	460-60	414	506	1	3	246.3	350	928.4	367.4	300	300	115-60	30
	575-60	518	633	1	3	198.3	250	743.7	294.7	225	225	115-60	30
	380-60	342	418	1	3	298.7	400	1036.3	416.3	350	350	230-60	15
118	208/230-60	187	253	1	6	542.7	700	*	802.1	*	600	115-60	30
	230-60	207	253	1	6	502.2	600	*	786.2	*	600	115-60	30
	460-60	414	506	1	3	243.1	300	946.1	385.1	300	300	115-60	30
	575-60	518	633	1	3	195.8	250	758.2	309.2	225	225	115-60	30
	380-60	342	418	1	3	292.4	400	1056.8	436.8	350	350	230-60	15
125	208/230-60	187	253	1	6	619.1	800	*	857.1	*	700	115-60	30
	230-60	207	253	1	6	567.9	800	*	837.9	*	700	115-60	30
	460-60	414	506	1	3	278.0	400	1042.5	413.5	350	350	115-60	30
	575-60	518	633	1	3	222.7	300	835.2	332.2	250	250	115-60	30
	380-60	342	418	1	3	335.8	450	1165.3	469.3	400	400	230-60	15

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

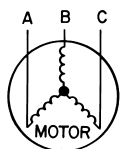
*Wye-delta start is standard. Across-the-line start is not available.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
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4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
BC = 236 v
AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 - 239 = 4 v
- (BC) 239 - 236 = 3 v
- (AC) 239 - 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.



Table 7A — Electrical Data Reduced Ambient 115 F Data (cont)

UNIT 30GXN.R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP
		Min	Max					XL	WD	XL	WD		
128	208/230-60	187	253	1	6	584.4	800	*	865.1	*	700	115-60	30
	230-60	207	253	1	6	540.0	700	*	849.2	*	600	115-60	30
	460-60	414	506	1	3	262.0	350	1046.1	417.1	300	300	115-60	30
	575-60	518	633	1	3	210.9	250	838.2	335.2	250	250	115-60	30
	380-60	342	418	1	3	315.2	400	1167.8	471.8	350	350	230-60	15
138, 283B, 303B, 373B	208/230-60	187	253	1	6	623.9	800	*	904.7	*	700	115-60	30
	230-60	207	253	1	6	575.8	700	*	885.0	*	700	115-60	30
	460-60	414	506	1	3	279.9	350	1064.0	435.0	350	350	115-60	30
	575-60	518	633	1	3	225.2	300	852.5	349.5	250	250	115-60	30
	380-60	342	418	1	3	336.9	450	1189.5	493.5	400	400	230-60	15
153, 283A, 328B, 393B, 418B	208/230-60	187	253	2	9	524.5/259	800/450	*	889.0/518.0	*	700/350	115-60	30
	230-60	207	253	1	6	675.7	800	*	1076.2	*	800	115-60	30
	460-60	414	506	1	3	327.9	450	1331.6	527.6	400	400	115-60	30
	575-60	518	633	1	3	263.9	350	1066.9	423.9	300	300	115-60	30
	380-60	342	418	1	6	394.5	500	1486.3	597.3	450	450	230-60	15
163, 303A	208/230-60	187	253	2	9	553.7/300	800/500	*	918.2/581.0	*	700/400	115-60	30
	230-60	207	253	2	9	517.7/272	700/450	*	918.2/581.0	*	600/350	115-60	30
	460-60	414	506	1	3	355.6	450	1359.3	555.3	400	400	115-60	30
	575-60	518	633	1	3	286.4	350	1089.4	446.4	350	350	115-60	30
	380-60	342	418	1	6	427.5	500	1519.3	630.3	500	500	230-60	15
178, 328A, 353A/B	208/230-60	187	253	2	9	553.7/378	800/600	*	918.2/743.0	*	700/500	115-60	30
	230-60	207	253	2	9	517.7/343	700/600	*	918.2/743.0	*	600/450	115-60	30
	460-60	414	506	1	6	383.9	500	1387.6	583.6	450	450	115-60	30
	575-60	518	633	1	3	309.0	400	1112.0	469.0	350	350	115-60	30
	380-60	342	418	1	6	461.8	600	1553.6	664.6	600	600	230-60	15
208	208/230-60	187	253	2	12	541/463	700/600	*	821.2/722.4	*	700/600	115-60	30 (50)
	230-60	207	253	2	12	489/443	700/600	*	798.4/705.2	*	600/500	115-60	30 (50)
	460-60	414	506	1	6	426	500	1210.5	581.5	500	500	115-60	30 (50)
	575-60	518	633	1	3	343	400	970.6	467.6	400	400	115-60	30 (50)
	380-60	342	418	1	6	513	600	1365.4	669.4	600	600	230-60	15 (25)
228, 453A/B, 478B	208/230-60	187	253	2	12	619/463	800/600	*	983.2/722.4	*	700/600	115-60	30 (50)
	230-60	207	253	2	12	560/443	800/600	*	960.4/705.2	*	700/500	115-60	30 (50)
	460-60	414	506	1	6	462	500	1465.5	661.5	500	500	115-60	30 (50)
	575-60	518	633	1	3	372	450	1174.6	531.6	400	400	115-60	30 (50)
	380-60	342	418	1	6	556	700	1647.4	758.4	600	600	230-60	15 (25)
253, 373A, 393A, 478A, 503A/B	208/230-60	187	253	2	12	681/534	800/700	*	1045.8/814.6	*	800/600	115-60	30 (50)
	230-60	207	253	2	12	617/509	800/700	*	1017.0/798.4	*	700/600	115-60	30 (50)
	460-60	414	506	1	6	518	600	1521.5	717.5	600	600	115-60	30 (50)
	575-60	518	633	1	6	417	500	1219.8	576.8	450	450	115-60	30 (50)
	380-60	342	418	1	6	623	700	1714.7	825.7	700	700	230-60	15 (25)
268, 418A, 528A/B	208/230-60	187	253	2	12	681/612	800/800	*	1045.8/976.6	*	800/700	115-60	30 (50)
	230-60	207	253	2	12	617/576	800/800	*	1017.0/976.6	*	700/700	115-60	30 (50)
	460-60	414	506	1	6	546	600	1549.8	745.8	600	600	115-60	30 (50)
	575-60	518	633	1	6	439	500	1242.4	599.4	500	500	115-60	30 (50)
	380-60	342	418	1	6	657	800	1748.9	859.9	700	700	230-60	15 (25)

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

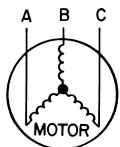
*Wye-delta start is standard. Across-the-line start is not available.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
BC = 236 v
AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 - 239 = 4 v
- (BC) 239 - 236 = 3 v
- (AC) 239 - 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

ETL LISTED

CONFORMS TO

ANSI/UL-1995

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CAN/CSA C22.2 NO. 236-M90

19401

Table 7B — Electrical Data High Ambient 125 F Data, Standard Condenser Fan

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQ'D	# Power Supply Conductors	STANDARD CONDENSER FAN						CONTROL CIRCUIT	
	V-Hz (3 Ph)	Supplied				MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*
		Min	Max					XL	WD	XL	WD		
080	208/230-60	187	253	1	3	374.0	500	†	534.3	†	450	115-60	30
	230-60	207	253	1	3	339.2	450	†	520.2	†	400	115-60	30
	460-60	414	506	1	3	168.2	225	655.2	258.2	200	200	115-60	30
	575-60	518	633	1	3	136.3	175	544.9	207.9	175	175	115-60	30
	380-60	342	418	1	3	206.0	250	733.2	295.2	250	250	230-60	15
083	208/230-60	187	253	1	3	357.6	500	†	536.8	†	400	115-60	30
	230-60	207	253	1	3	327.9	450	†	524.9	†	400	115-60	30
	460-60	414	506	1	3	161.8	225	656.8	259.8	200	200	115-60	30
	575-60	518	633	1	3	129.4	175	545.4	208.4	150	150	115-60	30
	380-60	342	418	1	3	195.8	250	733.9	295.9	225	225	230-60	15
090	208/230-60	187	253	1	6	418.9	600	†	600.3	†	500	115-60	30
	230-60	207	253	1	6	384.1	500	†	586.2	†	450	115-60	30
	460-60	414	506	1	3	190.7	250	760.2	291.2	225	225	115-60	30
	575-60	518	633	1	3	153.9	225	608.9	233.9	175	175	115-60	30
	380-60	342	418	1	3	233.3	300	849.2	331.2	300	300	230-60	15
093	208/230-60	187	253	1	6	400.2	500	†	602.8	†	450	115-60	30
	230-60	207	253	1	3	366.4	500	†	590.9	†	450	115-60	30
	460-60	414	506	1	3	181.1	250	761.8	292.8	225	225	115-60	30
	575-60	518	633	1	3	144.8	200	609.4	234.4	175	175	115-60	30
	380-60	342	418	1	3	219.1	300	849.9	331.9	250	250	230-60	15
106	208/230-60	187	253	1	6	490.1	700	†	700.3	†	600	115-60	30
	230-60	207	253	1	6	447.1	600	†	686.2	†	600	115-60	30
	460-60	414	506	1	3	221.5	300	902.0	341.0	250	250	115-60	30
	575-60	518	633	1	3	178.6	250	722.3	273.3	225	225	115-60	30
	380-60	342	418	1	3	270.3	400	1006.4	386.4	350	350	230-60	15
108	208/230-60	187	253	1	6	484.6	700	†	719.1	†	600	115-60	30
	230-60	207	253	1	6	442.8	600	†	704.3	†	500	115-60	30
	460-60	414	506	1	3	219.3	300	911.0	350.0	250	250	115-60	30
	575-60	518	633	1	3	175.4	250	728.8	279.8	200	200	115-60	30
	380-60	342	418	1	3	265.3	350	1016.1	396.1	300	300	230-60	15
114	208/230-60	187	253	1	6	518.3	700	†	728.5	†	600	115-60	30
	230-60	207	253	1	6	472.8	600	†	711.9	†	600	115-60	30
	460-60	414	506	1	3	234.3	300	914.8	353.8	300	300	115-60	30
	575-60	518	633	1	3	188.9	250	732.6	283.6	225	225	115-60	30
	380-60	342	418	1	3	285.7	400	1021.8	401.8	350	350	230-60	15
118	208/230-60	187	253	1	6	527.7	700	†	762.2	†	600	115-60	30
	230-60	207	253	1	6	483.3	600	†	744.8	†	600	115-60	30
	460-60	414	506	1	3	238.8	300	930.5	369.5	300	300	115-60	30
	575-60	518	633	1	3	191.0	250	744.4	295.4	225	225	115-60	30
	380-60	342	418	1	3	288.9	400	1039.7	419.7	350	350	230-60	15
125	208/230-60	187	253	1	6	579.2	800	†	817.2	†	700	115-60	30
	230-60	207	253	1	6	527.9	700	†	797.9	†	600	115-60	30
	460-60	414	506	1	3	261.8	350	1026.3	397.3	300	300	115-60	30
	575-60	518	633	1	3	209.1	300	821.6	318.6	250	250	115-60	30
	380-60	342	418	1	3	317.4	450	1146.9	450.9	400	400	230-60	15
128	208/230-60	187	253	1	6	587.9	800	†	825.2	†	700	115-60	30
	230-60	207	253	1	6	537.8	700	†	807.8	†	600	115-60	30
	460-60	414	506	1	3	266.0	350	1030.5	401.5	300	300	115-60	30
	575-60	518	633	1	3	212.8	300	824.4	321.4	250	250	115-60	30
	380-60	342	418	1	3	321.9	450	1150.7	454.7	400	400	230-60	15
135	208/230-60	187	253	1	6	615.1	800	†	853.1	†	700	115-60	30
	230-60	207	253	1	6	561.3	800	†	831.3	†	700	115-60	30
	460-60	414	506	1	3	278.5	400	1043.0	414.0	350	350	115-60	30
	575-60	518	633	1	3	221.9	300	834.4	331.4	250	250	115-60	30
	380-60	342	418	1	3	336.6	450	1166.1	470.1	400	400	230-60	15
138	208/230-60	187	253	1	6	630.6	800	†	867.9	†	700	115-60	30
	230-60	207	253	1	6	576.4	800	†	846.4	†	700	115-60	30
	460-60	414	506	1	3	285.3	400	1049.8	420.8	350	350	115-60	30
	575-60	518	633	1	3	228.2	300	839.8	336.8	300	300	115-60	30
	380-60	342	418	1	3	345.2	450	1174.1	478.1	400	400	230-60	15
150	208/230-60	187	253	2	9	343.9/418.4**	500/700**	†	578.2/743.0**	†	450/600**	115-60	30
	230-60	207	253	1	6	643.6	800	†	1008.4	†	800	115-60	30
	460-60	414	506	1	3	318.9	450	1034.8	500.8	400	400	115-60	30
	575-60	518	633	1	3	254.6	350	1043.9	400.9	300	300	115-60	30
	380-60	342	418	1	6	386.6	500	1456.3	567.3	450	450	230-60	15
153	208/230-60	187	253	2	9	493.2/283**	800/500**	†	818.2/518.0**	†	600/350**	115-60	30
	230-60	207	253	1	6	687.2	800	†	1023.4	†	800	115-60	30
	460-60	414	506	1	3	325.7	450	1311.6	507.6	400	400	115-60	30
	575-60	518	633	1	3	260.6	350	1049.3	406.3	300	300	115-60	30
	380-60	342	418	1	6	394.1	500	1464.3	575.3	450	450	230-60	15
160	208/230-60	187	253	2	12	403.2/418.4**	600/700**	†	641.2/743.0**	†	500/600**	115-60	30
	230-60	207	253	1	6	687.2	800	†	1052.0	†	800	115-60	30
	460-60	414	506	1	3	340.7	450	1326.6	522.6	400	400	115-60	30
	575-60	518	633	1	3	271.3	350	1060.6	417.6	350	350	115-60	30
	380-60	342	418	1	6	412.2	500	1481.9	592.9	500	500	230-60	15
163	208/230-60	187	253	2	9	508.2/344**	800/600**	†	833.2/581.0**	†	600/450**	115-60	30
	230-60	207	253	2	9	468.5/311**	700/500**	†	833.2/581.0**	†	600/400**	115-60	30
	460-60	414	506	1	3	354.3	500	1340.2	536.2	400	400	115-60	30
	575-60	518	633	1	3	283.5	400	1072.2	429.2	350	350	115-60	30
	380-60	342	418	1	6	428.8	600	1498.9	609.9	500	500	230-60	15
174	208/230-60	187	253	2	12	493.6/418.4**	800/700**	†	818.2/743.0**	†	600/600**	115-60	30
	230-60	207	253	2	9	453.4/378.3**	700/600**	†	818.2/743.0**	†	600/500**	115-60	30
	460-60	414	506	1	3	374.4	500	1360.3	556.3	450	450	115-60	30
	575-60	518	633	1	3	308.3	400	1087.8	444.8	350	350	115-60	30
	380-60	342	418	1	6	453.8	600	1523.6	634.6	500	500	230-60	15
178	208/230-60	187	253	2	12	508.2/418.4**	800/700**	†	833.2/743.0**	†	600/600**	115-60	30
	230-60	207	253	2	9	468.5/378**	700/600**	†	833.2/743.0**	†	600/500**	115-60	30
	460-60	414	506	1	3	381.2	500	1367.1	563.1	450	450	115-60	30
	575-60	518	633	1	3	305.0	400	1093.7	450.7	350	350	115-60	30
	380-60	342	418	1									

Table 7B — Electrical Data High Ambient 125 F Data, Standard Condenser Fan (cont)

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQ'D	STANDARD CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*
		Min	Max					XL	WD	XL	WD		
225	208/230-60	187	253	2	12	609/483**	800/800**	†	934.1/808.0**	†	700/600**	115-60	30 (50)
	230-60	207	253	2	12	550/443**	800/700**	†	914.8/808.0**	†	700/600**	115-60	30 (50)
	460-60	414	506	1	6	458	600	1444.2	640.2	500	500	115-60	30 (50)
	575-60	518	633	1	3	366	450	1154.9	511.9	400	400	115-60	30 (50)
	380-60	342	418	1	6	559	700	1628.8	739.8	700	700	230-60	15 (25)
228	208/230-60	187	253	2	12	693/374**	1000/600**	†	1017.9/609.0**	†	800/450**	115-60	30 (50)
	230-60	207	253	2	12	627/296**	800/500**	†	991.8/557.0**	†	800/350**	115-60	30 (50)
	460-60	414	506	1	6	461	600	1446.8	642.8	500	500	115-60	30 (50)
	575-60	518	633	1	3	368	450	1156.6	513.6	400	400	115-60	30 (50)
	380-60	342	418	1	6	561	700	1631.3	742.3	700	700	230-60	15 (25)
249	208/230-60	187	253	2	12	753/421**	1000/600**	†	1077.7/659.0**	†	1000/500**	115-60	30 (50)
	230-60	207	253	2	12	681/389**	800/600**	†	1045.6/659.0**	†	800/500**	115-60	30 (50)
	460-60	414	506	1	6	503	600	1489.1	685.1	600	600	115-60	30 (50)
	575-60	518	633	1	6	400	500	1189.4	546.4	450	450	115-60	30 (50)
	380-60	342	418	1	6	612	700	1681.8	792.8	700	700	230-60	15 (25)
253	208/230-60	187	253	2	12	752/448**	1000/700**	†	1077.4/685.0**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/389**	800/600**	†	1045.6/659.0**	†	800/500**	115-60	30 (50)
	460-60	414	506	1	6	516	600	1501.9	697.9	600	600	115-60	30 (50)
	575-60	518	633	1	6	412	500	1200.6	557.6	450	450	115-60	30 (50)
	380-60	342	418	1	6	628	800	1698.4	809.4	700	700	230-60	15 (25)
264	208/230-60	187	253	2	12	753/496**	1000/800**	†	1077.7/821.0**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/389**	800/700**	†	1045.6/821.0**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	530	600	1516.0	712.0	600	600	115-60	30 (50)
	575-60	518	633	1	6	422	500	1211.2	568.2	500	500	115-60	30 (50)
	380-60	342	418	1	6	645	800	1715.2	826.2	700	700	230-60	15 (25)
268	208/230-60	187	253	2	12	752/522**	1000/800**	†	1077.4/847.0**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/482**	800/700**	†	1045.6/847.0**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	543	600	1528.8	724.8	600	600	115-60	30 (50)
	575-60	518	633	1	6	433	500	1222.1	579.1	500	500	115-60	30 (50)
	380-60	342	418	1	6	661	800	1731.0	842.0	800	800	230-60	15 (25)
281	460-60	414	506	1	6	563	700	1549.3	745.3	700	700	115-60	30 (50)
	575-60	518	633	1	6	450	500	1239.2	596.2	500	500	115-60	30 (50)
	380-60	342	418	1	6	689	800	1758.7	869.7	800	800	230-60	15 (25)
301	460-60	414	506	1	6	597	700	1582.7	778.7	700	700	115-60	30 (50)
	575-60	518	633	1	6	476	500	1264.8	621.8	600	600	115-60	30 (50)
	380-60	342	418	2	9	354/420**	500/600**	1423.4/1489.3**	534.4/600.3**	400/500**	400/500**	230-60	15 (25)
325	460-60	414	506	1	6	640	700	1626.3	822.3	700	700	115-60	30 (50)
	575-60	518	633	1	6	509	600	1298.2	655.2	600	600	115-60	30 (50)
	380-60	342	418	2	9	379/445**	500/600**	1449.0/1514.9**	560.0/625.9**	450/500**	450/500**	230-60	15 (25)
350	460-60	414	506	1	6	694	800	1680.1	876.1	800	800	115-60	30 (50)
	575-60	518	633	1	6	553	600	1341.8	698.8	600	600	115-60	30 (50)
	380-60	342	418	2	12	413/479**	500/600**	1482.4/1548.3**	593.4/659.3**	500/600**	500/600**	230-60	15 (25)

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

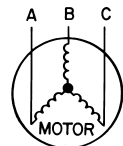
*Amperages in () are for units with cooler heaters installed.
 †Wye-delta start is standard. Across-the-line start is not available.
 **Circuit A/Circuit B.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
 BC = 236 v
 AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3}$$

$$= 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239}$$

$$= 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

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CAN/CSA C22.2 NO. 236-M90

19401

Table 7C — Electrical Data High Ambient 125 F Data, Duplex Units (Standard Condenser Fan)

UNIT 30GXN,R	UNIT VOLTAGE		POWER SUPPLY QTY. REQ'D	# Power Supply Conductors	STANDARD CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*	
		Min					Max	XL	WD	XL			WD
283A, 328B, 393B, 418B	208/230-60	187	253	2	9	493.2/283**	800/500**	†	818.2/518.0**	†	600/350**	115-60	30
	230-60	207	253	1	6	658.6	800	†	1023.4	†	800	115-60	30
	460-60	414	506	1	3	325.7	450	1311.6	507.6	400	400	115-60	30
	575-60	518	633	1	3	260.6	350	1049.3	406.3	300	300	115-60	30
	380-60	342	418	1	6	394.1	500	1464.3	575.3	450	450	230-60	15
283B, 303B, 373B	208/230-60	187	253	1	6	630.6	800	†	867.9	†	700	115-60	30
	230-60	207	253	1	6	576.4	800	†	846.4	†	700	115-60	30
	460-60	414	506	1	3	285.3	400	1049.8	420.8	350	350	115-60	30
	575-60	518	633	1	3	228.2	300	839.8	336.8	300	300	115-60	30
	380-60	342	418	1	3	345.2	450	1174.1	478.1	400	400	230-60	15
303A	208/230-60	187	253	2	9	508.2/344**	800/600**	†	833.2/581.0**	†	600/450**	115-60	30
	230-60	207	253	2	9	468.5/311**	700/500**	†	833.2/581.0**	†	600/400**	115-60	30
	460-60	414	506	1	3	354.3	500	1340.2	536.2	400	400	115-60	30
	575-60	518	633	1	3	283.5	400	1072.2	429.2	350	350	115-60	30
	380-60	342	418	1	6	428.8	600	1498.9	609.9	500	500	230-60	15
328A, 353A/B	208/230-60	187	253	2	12	508.2/418**	800/700**	†	833.2/743.0**	†	600/600**	115-60	30
	230-60	207	253	2	9	468.5/378**	700/600**	†	833.2/743.0**	†	600/500**	115-60	30
	460-60	414	506	1	3	381.2	500	1367.1	563.1	450	450	115-60	30
	575-60	518	633	1	3	305.0	400	1093.7	450.7	350	350	115-60	30
	380-60	342	418	1	6	461.3	600	1531.5	642.5	600	600	230-60	15
370A, 450A/B, 475B	208/230-60	187	253	2	12	609/483**	800/800**	†	934.1/808.0**	†	700/600**	115-60	30 (50)
	230-60	207	253	2	12	550/443**	700/700**	†	914.8/808.0**	†	700/600**	115-60	30 (50)
	460-60	414	506	1	6	458	800	1444.2	640.2	500	500	115-60	30 (50)
	575-60	518	633	1	3	366	450	1154.9	511.9	400	400	115-60	30 (50)
	380-60	342	418	1	6	559	700	1628.8	739.8	700	700	230-60	15 (25)
370B	208/230-60	187	253	2	9	343.9/418.4**	500/700**	†	578.2/743.0**	†	450/600**	115-60	30
	230-60	207	253	1	6	643.6	800	†	1008.4	†	800	115-60	30
	460-60	414	506	1	3	318.9	450	1034.8	500.8	400	400	115-60	30
	575-60	518	633	1	3	254.6	350	1043.9	400.9	300	300	115-60	30
	380-60	342	418	1	6	386.6	500	1456.3	567.3	450	450	230-60	15
373A, 393A, 478A, 503A/B	208/230-60	187	253	2	12	752/448**	100/700**	†	1077.4/685.0**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/389**	800/600**	†	1045.6/659.0**	†	800/500**	115-60	30 (50)
	460-60	414	506	1	6	516	600	1501.9	697.9	600	600	115-60	30 (50)
	575-60	518	633	1	6	412	500	1200.6	557.6	450	450	115-60	30 (50)
	380-60	342	418	1	6	628	800	1698.4	809.4	700	700	230-60	15 (25)
390A, 415A, 525A/B	208/230-60	187	253	2	12	753/496**	1000/800**	†	1077.7/821.0**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/456**	800/700**	†	1045.6/821.0**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	530	600	1516.0	712.0	600	600	115-60	30 (50)
	575-60	518	633	1	6	422	500	1211.2	568.2	500	500	115-60	30 (50)
	380-60	342	418	1	6	645	800	1715.2	826.2	700	700	230-60	15 (25)
390B	208/230-60	187	253	1	6	615.1	800	†	853.1	†	700	115-60	30
	230-60	207	253	1	6	561.3	800	†	831.3	†	700	115-60	30
	460-60	414	506	1	3	278.5	400	1043.0	414.0	350	350	115-60	30
	575-60	518	633	1	3	221.9	300	834.4	331.4	250	250	115-60	30
	380-60	342	418	1	3	336.6	450	1166.1	470.1	400	400	230-60	15
415B	208/230-60	187	253	2	12	403.2/418.4**	600/700**	†	641.2/743.0**	†	500/600**	115-60	30
	230-60	207	253	1	6	687.2	800	†	1052.0	†	800	115-60	30
	460-60	414	506	1	3	340.7	450	1326.6	522.6	400	400	115-60	30
	575-60	518	633	1	3	271.3	350	1060.6	417.6	350	350	115-60	30
	380-60	342	418	1	6	412.2	500	1481.9	592.9	500	500	230-60	15
418A, 528A/B	208/230-60	187	253	2	12	752/522**	1000/800**	†	1077.4/847.0**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/482**	800/700**	†	1045.6/847.0**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	543	600	1528.8	724.8	600	600	115-60	30 (50)
	575-60	518	633	1	6	433	500	1222.1	579.1	500	500	115-60	30 (50)
	380-60	342	418	1	6	661	800	1731.0	842.0	800	800	230-60	15 (25)
453A/B, 478B	208/230-60	187	253	2	12	693/374**	1000/600**	†	1017.9/609.0**	†	800/450**	115-60	30 (50)
	230-60	207	253	2	12	627/296**	800/500**	†	991.8/557.0**	†	800/350**	115-60	30 (50)
	460-60	414	506	1	6	461	600	1446.8	642.8	500	500	115-60	30 (50)
	575-60	518	633	1	3	368	450	1156.6	513.6	400	400	115-60	30 (50)
	380-60	342	418	1	6	561	700	1631.3	742.3	700	700	230-60	15 (25)
475A, 500A/B	208/230-60	187	253	2	12	753/421**	1000/600**	†	1077.7/659.0**	†	1000/500**	115-60	30 (50)
	230-60	207	253	2	12	681/389**	800/600**	†	1045.6/659.0**	†	800/500**	115-60	30 (50)
	460-60	414	506	1	6	503	600	1489.1	685.1	600	600	115-60	30 (50)
	575-60	518	633	1	6	400	500	1189.4	546.4	450	450	115-60	30 (50)
	380-60	342	418	1	6	612	700	1681.8	792.8	700	700	230-60	15 (25)

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

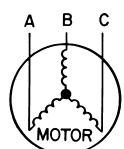
*Ampereages in () are for units with cooler heaters installed.
 †Wye-delta start is standard. Across-the-line start is not available.
 **Circuit A/Circuit B.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
 BC = 236 v
 AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 - 239 = 4 v
- (BC) 239 - 236 = 3 v
- (AC) 239 - 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

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Table 7D — Electrical Data High Ambient 125 F Data, High-Static Condenser Fan

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN							CONTROL CIRCUIT	
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*
		Min	Max					XL	WD	XL	WD		
080	208/230-60	187	253	1	6	402.4	500	†	562.6	†	450	115-60	30
	230-60	207	253	1	3	367.5	500	†	548.5	†	450	115-60	30
	460-60	414	506	1	3	179.8	250	666.8	269.8	200	200	115-60	30
	575-60	518	633	1	3	146.2	200	554.8	217.8	175	175	115-60	30
	380-60	342	418	1	3	219.2	300	746.3	308.3	250	250	230-60	15
083	208/230-60	187	253	1	6	400.1	500	†	579.2	†	450	115-60	30
	230-60	207	253	1	3	370.4	500	†	567.4	†	450	115-60	30
	460-60	414	506	1	3	179.2	225	674.2	277.2	200	200	115-60	30
	575-60	518	633	1	3	144.3	175	560.3	223.3	175	175	115-60	30
	380-60	342	418	1	3	215.5	250	753.6	315.6	250	250	230-60	15
090	208/230-60	187	253	1	6	447.2	600	†	628.6	†	500	115-60	30
	230-60	207	253	1	6	412.4	500	†	614.5	†	500	115-60	30
	460-60	414	506	1	3	202.3	250	771.8	302.8	250	250	115-60	30
	575-60	518	633	1	3	163.8	225	618.8	243.8	200	200	115-60	30
	380-60	342	418	1	3	246.4	350	862.3	344.3	300	300	230-60	15
093	208/230-60	187	253	1	6	442.6	600	†	645.2	†	500	115-60	30
	230-60	207	253	1	6	408.9	500	†	633.4	†	500	115-60	30
	460-60	414	506	1	3	198.5	250	779.2	310.2	225	225	115-60	30
	575-60	518	633	1	3	159.7	225	624.3	249.3	200	200	115-60	30
	380-60	342	418	1	3	238.8	300	869.6	351.6	300	300	230-60	15
106	208/230-60	187	253	1	6	532.6	700	†	742.8	†	600	115-60	30
	230-60	207	253	1	6	489.6	700	†	728.7	†	600	115-60	30
	460-60	414	506	1	3	238.9	350	919.4	358.4	300	300	115-60	30
	575-60	518	633	1	3	193.5	250	737.2	288.2	225	225	115-60	30
	380-60	342	418	1	3	290.0	400	1026.1	406.1	350	350	230-60	15
108	208/230-60	187	253	1	6	527.1	700	†	761.6	†	600	115-60	30
	230-60	207	253	1	6	485.3	600	†	746.8	†	600	115-60	30
	460-60	414	506	1	3	236.7	300	928.4	367.4	300	300	115-60	30
	575-60	518	633	1	3	190.3	250	743.7	294.7	225	225	115-60	30
	380-60	342	418	1	3	285.0	400	1035.8	415.8	350	350	230-60	15
114	208/230-60	187	253	1	6	560.8	800	†	771.0	†	700	115-60	30
	230-60	207	253	1	6	515.3	700	†	754.4	†	600	115-60	30
	460-60	414	506	1	3	251.7	350	932.2	371.2	300	300	115-60	30
	575-60	518	633	1	3	203.8	250	747.5	298.5	250	250	115-60	30
	380-60	342	418	1	3	350.4	400	1041.5	421.5	350	350	230-60	15
118	208/230-60	187	253	1	6	584.3	800	†	818.9	†	700	115-60	30
	230-60	207	253	1	6	539.9	700	†	801.4	†	600	115-60	30
	460-60	414	506	1	3	262.0	350	953.7	392.7	300	300	115-60	30
	575-60	518	633	1	3	210.8	250	764.2	315.2	250	250	115-60	30
	380-60	342	418	1	3	315.2	400	1066.0	446.0	350	350	230-60	15
125	208/230-60	187	253	1	6	621.7	800	†	859.7	†	700	115-60	30
	230-60	207	253	1	6	570.4	800	†	840.4	†	700	115-60	30
	460-60	414	506	1	3	279.2	400	1043.7	414.7	350	350	115-60	30
	575-60	518	633	1	3	224.0	300	836.5	333.5	250	250	115-60	30
	380-60	342	418	1	3	337.1	450	1166.6	470.5	400	400	230-60	15
128	208/230-60	187	253	1	6	644.5	800	†	881.9	†	800	115-60	30
	230-60	207	253	1	6	594.4	800	†	864.4	†	700	115-60	30
	460-60	414	506	1	3	289.2	400	1053.7	424.7	350	350	115-60	30
	575-60	518	633	1	3	232.6	300	844.2	341.2	300	300	115-60	30
	380-60	342	418	1	3	348.1	450	1177.0	481.0	400	400	230-60	15
135	208/230-60	187	253	1	6	657.6	800	†	895.6	†	800	115-60	30
	230-60	207	253	1	6	603.8	800	†	873.8	†	700	115-60	30
	460-60	414	506	1	3	295.9	400	1060.4	431.4	350	350	115-60	30
	575-60	518	633	1	3	236.8	300	849.3	346.3	300	300	115-60	30
	380-60	342	418	1	3	356.3	500	1185.8	489.8	400	400	230-60	15
138	208/230-60	187	253	1	6	687.2	800	†	924.5	†	800	115-60	30
	230-60	207	253	1	6	633.0	800	†	903.0	†	700	115-60	30
	460-60	414	506	1	3	308.5	400	1073.0	444.0	350	350	115-60	30
	575-60	518	633	1	3	248.1	300	859.7	356.7	300	300	115-60	30
	380-60	342	418	1	3	371.5	500	1200.3	504.3	450	450	230-60	15
150	208/230-60	187	253	2	12	400.8/418**	600/700**	†	634.8/743.0**	†	500/600**	115-60	30
	230-60	207	253	1	6	700.3	1000	†	1065.0	†	800	115-60	30
	460-60	414	506	1	3	342.1	450	1328.0	524.0	400	400	115-60	30
	575-60	518	633	1	3	274.5	350	1063.7	420.7	350	350	115-60	30
	380-60	342	418	1	3	412.9	500	1482.6	593.6	500	500	230-60	15
153	208/230-60	187	253	2	9	564.0/283**	800/500**	†	889.0/518.0**	†	700/350**	115-60	30
	230-60	207	253	1	6	207.2	1000	†	1094.2	†	1000	115-60	30
	460-60	414	506	1	3	354.7	500	1340.6	536.6	400	400	115-60	30
	575-60	518	633	1	3	285.4	400	1074.1	431.1	350	350	115-60	30
	380-60	342	418	1	6	427.0	600	1497.1	608.1	500	500	230-60	15
160	208/230-60	187	253	2	12	459.8/418**	700/700**	†	697.8/743.0**	†	600/600**	115-60	30
	230-60	207	253	1	6	743.9	1000	†	1108.6	†	1000	115-60	30
	460-60	414	506	1	3	363.9	500	1349.8	545.8	450	450	115-60	30
	575-60	518	633	1	3	291.2	400	1080.4	437.4	350	350	115-60	30
	380-60	342	418	1	6	438.5	600	1508.2	619.2	500	500	230-60	15
163	208/230-60	187	253	2	9	593.2/344**	800/600**	†	918.2/581.0**	†	700/450**	115-60	30
	230-60	207	253	2	9	553.5/311**	800/500**	†	918.2/581.0**	†	700/400**	115-60	30
	460-60	414	506	1	6	389.1	500	1375.0	571.0	450	450	115-60	30
	575-60	518	633	1	3	313.2	400	1101.9	458.9	350	350	115-60	30
	380-60	342	418	1	6	468.2	600	1538.3	649.3	600	600	230-60	15
174	208/230-60	187	253	2	12	564.4/418**	800/700**	†	889.0/743.0**	†	700/600**	115-60	30
	230-60	207	253	2	9	524.3/378**	800/600**	†	889.0/743.0**	†	600/500**	115-60	30
	460-60	414	506	1	6	403.4	500	1389.3	585.3	450	450	115-60	30
	575-60	518	633	1	3	323.4	400	1112.6	469.6	400	400	115-60	30
	380-60	342	418	1	6	486.7	600	1556.4	667.4	600	600	230-60	15
178	208/230-60	187	253	2	12	593.2/418**	800/700**	†	918.2/743.0**	†	700/600**	115-60	30
	230-60	207	253	2	9	553.5/378**	800/600**	†	918.2/743.0**	†	700/500**	115-60	30
	460-60	414	506	1	6	416.0	500	1401.9	597.9	500	500	115-60	30
	575-60	518	633	1	3	334.7	450	1123.4	480.4	400	400	115-60	30
	380-60	342	418	1									

Table 7D — Electrical Data High Ambient 125 F Data, High-Static Condenser Fan (cont)

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN							CONTROL CIRCUIT	
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*
		Min	Max					XL	WD	XL	WD		
228	208/230-60	187	253	2	12	693/488**	1000/700**	†	1017.9/722.4**	†	800/600**	115-60	30 (50)
	230-60	207	253	2	12	627/461**	800/600**	†	991.8/722.4**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	504	600	1490.2	686.2	600	600	115-60	30 (50)
	575-60	518	633	1	6	406	500	1194.4	551.4	450	450	115-60	30 (50)
	380-60	342	418	1	6	607	700	1677.3	788.3	700	700	230-60	15 (25)
249	208/230-60	187	253	2	12	753/518**	1000/700**	†	1077.7/756.2**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/486**	800/700**	†	1045.6/756.2**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	540	600	1526.3	722.3	600	600	115-60	30 (50)
	575-60	518	633	1	6	433	500	1221.8	578.8	500	500	115-60	30 (50)
	380-60	342	418	1	6	651	800	1721.2	832.2	700	700	230-60	15 (25)
253	208/230-60	187	253	2	12	752/577**	1000/800**	†	1077.4/814.6**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/545**	800/700**	†	1045.6/814.6**	†	800/700**	115-60	30 (50)
	460-60	414	506	1	6	566	700	1551.5	747.5	700	700	115-60	30 (50)
	575-60	518	633	1	6	455	500	1243.8	600.8	500	500	115-60	30 (50)
	380-60	342	418	1	6	681	800	1751.0	862.0	800	800	230-60	15 (25)
264	208/230-60	187	253	2	12	753/594**	1000/800**	†	1077.7/918.2**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/553**	800/800**	†	1045.6/918.2**	†	800/700**	115-60	30 (50)
	460-60	414	506	1	6	567	700	1553.2	749.2	700	700	115-60	30 (50)
	575-60	518	633	1	6	454	500	1243.6	600.6	500	500	115-60	30 (50)
	380-60	342	418	1	6	685	800	1754.6	865.6	800	800	230-60	15 (25)
268	208/230-60	187	253	2	12	752/652**	1000/800**	†	1077.4/814.6**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/612**	800/800**	†	1045.6/814.6**	†	800/700**	115-60	30 (50)
	460-60	414	506	1	6	593	700	1578.4	774.4	700	700	115-60	30 (50)
	575-60	518	633	1	6	477	500	1265.3	622.3	600	600	115-60	30 (50)
	380-60	342	418	1	6	713	800	1783.5	894.5	800	800	230-60	15 (25)
281	460-60	414	506	1	6	613	700	1598.9	794.9	700	700	115-60	30 (50)
	575-60	518	633	1	6	493	600	1282.4	639.4	600	600	115-60	30 (50)
	380-60	342	418	1	6	741	800	1811.2	922.2	800	800	230-60	15 (25)
301	460-60	414	506	1	6	646	700	1632.3	828.3	700	700	115-60	30 (50)
	575-60	518	633	1	6	519	600	1308.0	665.0	600	600	115-60	30 (50)
	380-60	342	418	2	9	354/472**	500/600**	1423.4/1541.8**	534.4/652.8**	400/600**	400/600**	230-60	15 (25)
325	460-60	414	506	1	6	539	600	1675.9	871.9	600	600	115-60	30 (50)
	575-60	518	633	1	6	432	500	1341.4	698.4	500	500	115-60	30 (50)
	380-60	342	418	2	9	379/498**	500/600**	1449.0/1567.4**	560.0/678.4**	450/600**	450/600**	230-60	15 (25)
350	460-60	414	506	1	6	744	800	1729.7	925.7	800	800	115-60	30 (50)
	575-60	518	633	1	6	596	700	1385.0	742.0	700	700	115-60	30 (50)
	380-60	342	418	2	12	413/531**	500/700**	1482.4/1600.8**	593.4/711.8**	500/600**	500/600**	230-60	15 (25)

LEGEND

- ICF** — Maximum Instantaneous Current Flow
- MCA** — Minimum Circuit Ampacity (for wire sizing)
- MOCP** — Maximum Overcurrent Protection
- Rec Fuse Size** — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

*Amperages in () are for units with cooler heaters installed.
 †Wye-delta start is standard. Across-the-line start is not available.
 **Circuit A/Circuit B.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\% \text{ Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.

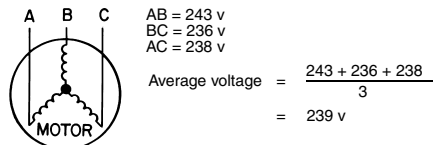


Table 7E — Electrical Data High Ambient 125 F Data, Duplex Units (High-Static Condenser Fan)

UNIT 30GXN,R	UNIT VOLTAGE				POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN						CONTROL CIRCUIT	
	V-Hz (3 Ph)	Supplied		# Power Supply Conductors		MCA	MOCF	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCF*
		Min	Max					XL	WD	XL	WD		
283A, 328B, 393B, 418B	208/230-60	187	253	2	9	564.0/283**	800/500**	†	889.0/518.0**	†	700/350**	115-60	30
	230-60	207	253	1	6	729.5	1000	†	1094.2	†	1000	115-60	30
	460-60	414	506	1	3	354.7	500	1340.6	536.6	400	400	115-60	30
	575-60	518	633	1	3	285.4	400	1074.1	431.1	350	350	115-60	30
	380-60	342	418	1	6	427.0	600	1497.1	608.1	500	500	230-60	15
283B, 303B, 373B	208/230-60	187	253	1	6	687.2	800	†	924.5	†	800	115-60	30
	230-60	207	253	1	6	633.0	800	†	903.0	†	700	115-60	30
	460-60	414	506	1	3	308.5	400	1073.0	444.0	350	350	115-60	30
	575-60	518	633	1	3	248.1	300	859.7	356.7	300	300	115-60	30
	380-60	342	418	1	3	371.5	500	1200.3	504.3	450	450	230-60	15
303A	208/230-60	187	253	2	9	593.2/344**	800/600**	†	918.2/581.0**	†	700/450**	115-60	30
	230-60	207	253	2	9	553.5/311**	800/500**	†	918.2/581.0**	†	700/400**	115-60	30
	460-60	414	506	1	6	389.1	500	1375.0	571.0	450	450	115-60	30
	575-60	518	633	1	3	313.2	400	1101.9	458.9	350	350	115-60	30
	380-60	342	418	1	6	468.2	600	1538.3	649.3	600	600	230-60	15
328A, 353A/B	208/230-60	187	253	2	12	593.2/418**	800/700**	†	918.2/743.0**	†	700/600**	115-60	30
	230-60	207	253	2	9	553.5/378**	800/600**	†	918.2/743.0**	†	700/500**	115-60	30
	460-60	414	506	1	6	416.0	500	1401.9	597.9	500	500	115-60	30
	575-60	518	633	1	3	334.7	450	1123.4	480.4	400	400	115-60	30
	380-60	342	418	1	6	500.7	600	1570.9	681.9	600	600	230-60	15
370A, 450A/B, 475B	208/230-60	187	253	2	12	609/564**	800/800**	†	934.1/889.0**	†	700/700**	115-60	30 (50)
	230-60	207	253	2	12	550/524**	800/800**	†	914.8/889.0**	†	700/600**	115-60	30 (50)
	460-60	414	506	1	6	489	600	1475.2	671.2	600	600	115-60	30 (50)
	575-60	518	633	1	6	393	500	1181.9	538.9	450	450	115-60	30 (50)
	380-60	342	418	1	6	592	700	1661.6	772.6	700	700	230-60	15 (25)
370B	208/230-60	187	253	2	12	400.6/418**	600/500**	†	634.8/743.0**	†	500/600**	115-60	30
	230-60	207	253	1	6	700.3	1000	†	1065.0	†	800	115-60	30
	460-60	414	506	1	3	342.1	450	1328.0	524.0	400	400	115-60	30
	575-60	518	633	1	3	274.5	350	1063.7	420.7	350	350	115-60	30
	380-60	342	418	1	6	412.9	500	1482.6	593.6	500	500	230-60	15
373A, 393A, 478A, 503A/B	208/230-60	187	253	2	12	752/577**	1000/800**	†	1077.4/814.6**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/545**	800/700**	†	1045.6/814.6**	†	800/700**	115-60	30 (50)
	460-60	414	506	1	6	566	700	1551.5	747.5	700	700	115-60	30 (50)
	575-60	518	633	1	6	455	500	1243.8	600.8	500	500	115-60	30 (50)
	380-60	342	418	1	6	681	800	1751.0	862.0	800	800	230-60	15 (25)
390A, 415A, 525A/B	208/230-60	187	253	2	12	753/594**	1000/800**	†	1077.7/918.2**	†	1000/700**	115-60	30 (50)
	230-60	207	253	2	12	681/553**	800/800**	†	1045.6/918.2**	†	800/700**	115-60	30 (50)
	460-60	414	506	1	6	567	700	1553.2	749.2	700	700	115-60	30 (50)
	575-60	518	633	1	6	454	500	1243.6	600.6	500	500	115-60	30 (50)
	380-60	342	418	1	6	685	800	1754.6	865.6	800	800	230-60	15 (25)
390B	208/230-60	187	253	1	6	657.6	800	†	895.6	†	800	115-60	30
	230-60	207	253	1	6	603.8	800	†	873.8	†	700	115-60	30
	460-60	414	506	1	3	295.9	400	1060.4	431.4	350	350	115-60	30
	575-60	518	633	1	3	236.8	300	849.3	346.3	300	300	115-60	30
	380-60	342	418	1	3	356.3	500	1185.8	489.8	400	400	230-60	15
415B	208/230-60	187	253	2	12	459.8/418**	700/700**	†	697.8/743.0**	†	600/600**	115-60	30
	230-60	207	253	1	6	743.9	1000	†	1108.6	†	1000	115-60	30
	460-60	414	506	1	3	363.9	500	1349.8	545.8	450	450	115-60	30
	575-60	518	633	1	3	291.2	400	1080.4	437.4	350	350	115-60	30
	380-60	342	418	1	6	438.5	600	1508.2	619.2	500	500	230-60	15

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCF — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

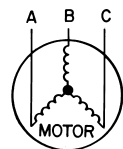
*Amperages in () are for units with cooler heaters installed.
 †Wye-delta start is standard. Across-the-line start is not available.
 **Circuit A/Circuit B.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
 BC = 236 v
 AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

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CONFORMS TO

ANSI/UL-1995

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CAN/CSA C22.2 NO. 236-M90

19401

Table 7E — Electrical Data High Ambient 125 F Data, Duplex Units (High-Static Condenser Fan) (cont)

UNIT 30GXN,R	UNIT VOLTAGE			POWER SUPPLY QTY. REQD	HIGH-STATIC CONDENSER FAN						CONTROL CIRCUIT		
	V-Hz (3 Ph)	Supplied			# Power Supply Conductors	MCA	MOCP	ICF		Rec Fuse Size		V-Hz (Single Ph)	MCA and MOCP*
		Min	Max					XL	WD	XL	WD		
418A, 528A,B	208/230-60	187	253	2	12	752/652**	1000/800**	†	1077.4/976.6**	†	800/700**	115-60	30 (50)
	230-60	207	253	2	12	681/612**	800/800**	†	1045.6/976.6**	†	700	115-60	30 (50)
	460-60	414	506	1	6	593	700	1578.4	774.4	700	700	115-60	30 (50)
	575-60	518	633	1	6	477	500	1265.3	622.3	600	600	115-60	30 (50)
	380-60	342	418	1	6	713	800	1783.5	894.5	800	800	230-60	15 (25)
453A/B, 478B	208/230-60	187	253	2	12	693/488**	1000/700**	†	1017.9/722.4**	†	800/600**	115-60	30 (50)
	230-60	207	253	2	12	627/461**	800/600**	†	991.8/722.4**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	504	600	1490.2	686.2	600	600	115-60	30 (50)
	575-60	518	633	1	3	406	500	1194.4	551.4	450	450	115-60	30 (50)
	380-60	342	418	1	6	607	700	1677.3	788.3	700	700	230-60	15 (25)
475A, 500A/B	208/230-60	187	253	2	12	753/518**	1000/700**	†	1077.7/756.2**	†	1000/600**	115-60	30 (50)
	230-60	207	253	2	12	681/486**	800/700**	†	1045.6/756.2**	†	800/600**	115-60	30 (50)
	460-60	414	506	1	6	540	600	1526.3	722.3	600	600	115-60	30 (50)
	575-60	518	633	1	6	433	500	1221.8	578.8	500	500	115-60	30 (50)
	380-60	342	418	1	6	651	800	1721.2	832.2	700	700	230-60	15 (25)

LEGEND

- ICF — Maximum Instantaneous Current Flow
- MCA — Minimum Circuit Ampacity (for wire sizing)
- MOCP — Maximum Overcurrent Protection
- Rec Fuse Size — Recommended Dual-Element Fuse Amps (150% of largest compressor rated load amps [RLA] plus 100% of remaining compressor RLAs and sum of condenser fan full load amps [FLAs]. Choose next largest standard fuse size.)
- WD — Wye-Delta Start
- XL — Across-the-Line Start

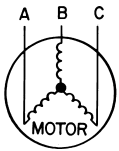
*Amperages in () are for units with cooler heaters installed.
 †Wye-delta start is standard. Across-the-line start is not available.
 **Circuit A/Circuit B.

NOTES:

1. Main power must be supplied from a field-supplied fused electrical service with a (factory or field-installed) disconnect located in sight from the unit.
2. Cooler heater, oil heater, and control circuit power must be supplied from a separate source through a field-supplied disconnect. The control circuit power transformer accessory may be applied to power from the main unit power supply.
3. Maximum incoming wire size for each terminal block is 500 kcmil.
4. Maximum allowable supply voltage phase imbalance is voltage 2%.
5. Never operate a motor where a phase imbalance in supply voltage is greater than 2%. Use the following formula to determine the percent voltage imbalance.

$$\text{Percent Voltage Imbalance} = 100 \times \frac{\text{max voltage deviation from average voltage}}{\text{average voltage}}$$

Example: Supply voltage is 240-3-60.



AB = 243 v
 BC = 236 v
 AC = 238 v

$$\text{Average voltage} = \frac{243 + 236 + 238}{3} = 239 \text{ v}$$

Determine maximum deviation from average voltage:

- (AB) 243 – 239 = 4 v
- (BC) 239 – 236 = 3 v
- (AC) 239 – 238 = 1 v

Maximum deviation is 4 v. Determine percent voltage imbalance:

$$\% \text{ Voltage Imbalance} = 100 \times \frac{4}{239} = 1.7\%$$

This amount of phase imbalance is satisfactory as it is below the maximum allowable 2%.

IMPORTANT: Contact your local electric utility company immediately if the supply voltage phase imbalance is more than 2%.

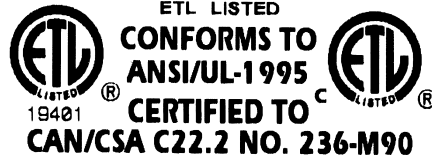


Table 8A — Compressor Electrical Data (High Ambient)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
080-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	74.4	580.0	61.6	485.0
	575-60	60.3	484.0	50.0	388.0
	380-60	91.1	641.0	75.7	536.0
080-WD	208/230-60	165.4	367.0	137.2	307.0
	230-60	148.8	367.0	123.1	307.0
	460-60	74.4	183.0	61.6	153.0
	575-60	60.3	147.0	50.0	123.0
	380-60	91.1	203.0	75.7	169.0
083-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	68.0	580.0	56.4	485.0
	575-60	54.4	484.0	45.1	388.0
	380-60	82.3	641.0	68.2	536.0
083-WD	208/230-60	136.0	367.0	112.8	307.0
	230-60	150.3	367.0	124.6	307.0
	460-60	68.0	183.0	56.4	153.0
	575-60	54.4	147.0	45.1	123.0
	380-60	82.3	203.0	68.2	169.0
090-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	92.4	685.0	61.6	485.0
	575-60	74.4	548.0	50.0	388.0
	380-60	112.9	757.0	75.7	536.0
090-WD	208/230-60	201.3	433.0	137.2	307.0
	230-60	184.7	433.0	123.1	307.0
	460-60	92.4	216.0	61.6	153.0
	575-60	74.4	173.0	50.0	123.0
	380-60	112.9	239.0	75.7	169.0
093-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	83.4	685.0	56.4	485.0
	575-60	66.7	548.0	45.1	388.0
	380-60	100.9	757.0	68.2	536.0
093-WD	208/230-60	166.8	433.0	112.8	307.0
	230-60	184.3	433.0	124.6	307.0
	460-60	83.4	216.0	56.4	153.0
	575-60	66.7	173.0	45.1	123.0
	380-60	100.9	239.0	68.2	169.0
106-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	111.6	820.0	61.6	485.0
	575-60	89.8	656.0	50.0	388.0
	380-60	135.9	906.0	75.7	536.0
106-WD	208/230-60	246.2	518.0	137.2	307.0
	230-60	223.1	518.0	123.1	307.0
	460-60	111.6	259.0	61.6	153.0
	575-60	89.8	207.0	50.0	123.0
	380-60	135.9	286.0	75.7	169.0

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
108-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	102.6	820.0	70.6	580.0
	575-60	82.1	656.0	56.5	484.0
	380-60	124.1	906.0	85.4	641.0
108-WD	208/230-60	226.7	518.0	141.2	367.0
	230-60	205.2	518.0	156.0	367.0
	460-60	102.6	259.0	70.6	183.0
	575-60	82.1	207.0	56.5	147.0
	380-60	124.1	286.0	85.4	203.0
114-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	111.6	820.0	74.4	580.0
	575-60	89.8	656.0	60.3	484.0
	380-60	135.9	906.0	91.1	641.0
114-WD	208/230-60	246.2	518.0	165.4	367.0
	230-60	223.1	518.0	148.8	367.0
	460-60	111.6	259.0	74.4	183.0
	575-60	89.8	207.0	60.3	147.0
	380-60	135.9	286.0	91.1	203.0
118-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	102.6	820.0	83.3	685.0
	575-60	82.1	656.0	66.6	548.0
	380-60	124.1	906.0	100.8	757.0
118-WD	208/230-60	226.7	518.0	166.6	433.0
	230-60	205.2	518.0	184.1	433.0
	460-60	102.6	259.0	83.3	216.0
	575-60	82.1	207.0	66.6	173.0
	380-60	124.1	286.0	100.8	239.0
125-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	85.9	685.0
	575-60	98.8	736.0	69.3	548.0
	380-60	150.0	1017.0	105.2	757.0
125-WD	208/230-60	274.4	581.0	191.1	433.0
	230-60	248.8	581.0	171.8	433.0
	460-60	124.4	291.0	85.9	216.0
	575-60	98.8	233.0	69.3	173.0
	380-60	150.0	321.0	105.2	239.0
128-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	83.3	685.0
	575-60	99.5	736.0	66.6	548.0
	380-60	150.5	1017.0	100.8	757.0
128-WD	208/230-60	274.9	581.0	166.6	433.0
	230-60	248.8	581.0	184.1	433.0
	460-60	124.4	291.0	83.3	216.0
	575-60	99.5	233.0	66.6	173.0
	380-60	150.5	321.0	100.8	239.0

LEGEND

- LRA** — Locked Rotor Amps
- RLA** — Rated Load Amps
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

*Units are shipped with wye-delta start as standard. Across-the-line start is not available.

Table 8A — Compressor Electrical Data (High Ambient) (cont)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
135-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	102.6	820.0
	575-60	98.8	736.0	82.1	656.0
	380-60	150.0	1017.0	124.4	906.0
135-WD	208/230-60	274.4	581.0	227.0	518.0
	230-60	248.8	581.0	205.2	518.0
	460-60	124.4	291.0	102.6	259.0
	575-60	98.8	233.0	82.1	207.0
	380-60	150.0	321.0	124.4	286.0
138-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	102.6	820.0
	575-60	99.5	736.0	82.1	656.0
	380-60	150.5	1017.0	124.1	906.0
138-WD	208/230-60	274.9	581.0	205.2	518.0
	230-60	248.8	581.0	226.7	518.0
	460-60	124.4	291.0	102.6	259.0
	575-60	99.5	233.0	82.1	207.0
	380-60	150.5	321.0	124.1	286.0
150-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	102.6	820.0	151.3	1175.0
	575-60	82.1	656.0	120.6	940.0
	380-60	124.4	906.0	183.4	1299.0
150-WD	208/230-60	227.0	518.0	334.7	743.0
	230-60	205.2	518.0	302.6	743.0
	460-60	102.6	259.0	151.3	371.0
	575-60	82.1	207.0	120.6	297.0
	380-60	124.4	286.0	183.4	410.0
153-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	151.3	1175.0	102.6	820.0
	575-60	121.0	940.0	82.1	656.0
	380-60	183.1	1299.0	124.1	906.0
153-WD	208/230-60	334.4	743.0	205.2	518.0
	230-60	302.6	743.0	226.7	518.0
	460-60	151.3	371.0	102.6	259.0
	575-60	121.0	297.0	82.1	207.0
	380-60	183.1	410.0	124.1	286.0

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
160-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	151.3	1175.0
	575-60	98.8	736.0	120.6	940.0
	380-60	150.0	1017.0	183.4	1299.0
160-WD	208/230-60	274.4	581.0	334.7	743.0
	230-60	248.8	581.0	302.6	743.0
	460-60	124.4	291.0	151.3	371.0
	575-60	98.8	233.0	120.6	297.0
	380-60	150.0	321.0	183.4	410.0
163-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	151.3	1175.0	124.4	920.0
	575-60	121.0	940.0	99.5	736.0
	380-60	183.1	1299.0	150.5	1017.0
163-WD	208/230-60	334.4	743.0	274.9	581.0
	230-60	302.6	743.0	248.8	581.0
	460-60	151.3	371.0	124.4	291.0
	575-60	121.0	297.0	99.5	233.0
	380-60	183.1	410.0	150.5	321.0
174-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	151.3	1175.0	151.3	1175.0
	575-60	120.6	940.0	120.6	940.0
	380-60	183.4	1299.0	183.4	1299.0
174-WD	208/230-60	334.7	743.0	334.7	743.0
	230-60	302.6	743.0	302.6	743.0
	460-60	151.3	371.0	151.3	371.0
	575-60	120.6	297.0	120.6	297.0
	380-60	183.4	410.0	183.4	410.0
178-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	151.3	1175.0	151.3	1175.0
	575-60	121.0	940.0	121.0	940.0
	380-60	183.1	1299.0	183.1	1299.0
178-WD	208/230-60	334.4	743.0	334.4	743.0
	230-60	302.6	743.0	302.6	743.0
	460-60	151.3	371.0	151.3	371.0
	575-60	121.0	297.0	121.0	297.0
	380-60	183.1	410.0	183.1	410.0

LEGEND

- LRA** — Locked Rotor Amps
- RLA** — Rated Load Amps
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

*Units are shipped with wye-delta start as standard. Across-the-line start is not available.

Table 8A — Compressor Electrical Data (High Ambient) (cont)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR					
		A1		A2		B1	
		RLA	LRA	RLA	LRA	RLA	LRA
204-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	151.3	1175.0	73.1	580.0	124.4	920.0
	575-60	120.6	940.0	57.7	484.0	98.8	736.0
	380-60	183.4	1299.0	87.2	641.0	150.0	1017.0
204-WD	208/230-60	334.7	743.0	161.6	367.0	274.4	581.0
	230-60	302.6	743.0	146.2	367.0	248.8	581.0
	460-60	151.3	371.0	73.1	183.0	124.4	291.0
	575-60	120.6	297.0	57.7	147.0	98.8	233.0
	380-60	183.4	410.0	87.2	203.0	150.0	321.0
208-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	124.4	920.0	124.4	920.0	102.6	820.0
	575-60	99.5	736.0	99.5	736.0	82.1	656.0
	380-60	150.5	1017.0	150.5	1017.0	124.1	906.0
208-WD	208/230-60	274.9	581.0	274.9	581.0	226.7	518.0
	230-60	248.8	581.0	248.8	581.0	205.2	518.0
	460-60	124.4	291.0	124.4	291.0	102.6	259.0
	575-60	99.5	233.0	99.5	233.0	82.1	207.0
	380-60	150.5	321.0	150.5	321.0	124.1	286.0
225-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	151.3	1175.0	85.9	685.0	151.3	1175.0
	575-60	120.6	940.0	69.3	548.0	120.6	940.0
	380-60	183.4	1299.0	105.2	757.0	183.4	1299.0
225-WD	208/230-60	334.7	743.0	191.1	433.0	334.7	743.0
	230-60	302.6	743.0	171.8	433.0	302.6	743.0
	460-60	151.3	371.0	85.9	216.0	151.3	371.0
	575-60	120.6	297.0	69.3	173.0	120.6	297.0
	380-60	183.4	410.0	105.2	239.0	183.4	410.0
228-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	151.3	1175.0	124.4	920.0	102.6	820.0
	575-60	121.0	940.0	99.5	736.0	82.1	656.0
	380-60	183.1	1299.0	150.5	1017.0	124.1	906.0
228-WD	208/230-60	334.4	743.0	274.9	581.0	226.7	518.0
	230-60	302.6	743.0	248.8	581.0	205.2	518.0
	460-60	151.3	371.0	124.4	291.0	102.6	259.0
	575-60	121.0	297.0	99.5	233.0	82.1	207.0
	380-60	183.1	410.0	150.5	321.0	124.1	286.0
249-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	151.3	1175.0	151.3	1175.0	124.4	920.0
	575-60	120.6	940.0	120.6	940.0	98.8	736.0
	380-60	183.4	1299.0	183.4	1299.0	150.0	1017.0
249-WD	208/230-60	334.7	743.0	334.7	743.0	274.4	581.0
	230-60	302.6	743.0	302.6	743.0	248.8	581.0
	460-60	151.3	371.0	151.3	371.0	124.4	291.0
	575-60	120.6	297.0	120.6	297.0	98.8	233.0
	380-60	183.4	410.0	183.4	410.0	150.0	321.0
253-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	151.3	1175.0	151.3	1175.0	124.4	920.0
	575-60	121.0	940.0	121.0	940.0	99.5	736.0
	380-60	183.1	1299.0	183.1	1299.0	150.5	1017.0
253-WD	208/230-60	334.4	743.0	334.4	743.0	274.9	581.0
	230-60	302.6	743.0	302.6	743.0	248.8	581.0
	460-60	151.3	371.0	151.3	371.0	124.4	291.0
	575-60	121.0	297.0	121.0	297.0	99.5	233.0
	380-60	183.1	410.0	183.1	410.0	150.5	321.0

Table 8A — Compressor Electrical Data (High Ambient) (cont)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR							
		A1		A2		B1		B2	
		RLA	LRA	RLA	LRA	RLA	LRA	RLA	LRA
264-XL	208/230-60	*	*	*	*	*	*	—	—
	230-60	*	*	*	*	*	*	—	—
	460-60	151.3	1175.0	151.3	1175.0	151.3	1175.0	—	—
	575-60	120.6	940.0	120.6	940.0	120.6	940.0	—	—
	380-60	183.4	1299.0	183.4	1299.0	183.4	1299.0	—	—
264-WD	208/230-60	334.7	743.0	334.7	743.0	334.7	743.0	—	—
	230-60	302.6	743.0	302.6	743.0	302.6	743.0	—	—
	460-60	151.3	371.0	151.3	371.0	151.3	371.0	—	—
	575-60	120.6	297.0	120.6	297.0	120.6	297.0	—	—
	380-60	183.4	410.0	183.4	410.0	183.4	410.0	—	—
268-XL	208/230-60	*	*	*	*	*	*	—	—
	230-60	*	*	*	*	*	*	—	—
	460-60	151.3	1175.0	151.3	1175.0	151.3	1175.0	—	—
	575-60	121.0	940.0	121.0	940.0	121.0	940.0	—	—
	380-60	183.1	1299.0	183.1	1299.0	183.1	1299.0	—	—
268-WD	208/230-60	334.4	743.0	334.4	743.0	334.4	743.0	—	—
	230-60	302.6	743.0	302.6	743.0	302.6	743.0	—	—
	460-60	151.3	371.0	151.3	371.0	151.3	371.0	—	—
	575-60	121.0	297.0	121.0	297.0	121.0	297.0	—	—
	380-60	183.1	410.0	183.1	410.0	183.1	410.0	—	—
281-XL	460-60	151.3	1175.0	85.9	685.0	151.3	1175.0	85.9	685.0
	575-60	120.6	940.0	69.3	548.0	120.6	940.0	69.3	548.0
	380-60	183.4	1299.0	105.2	757.0	183.4	1299.0	105.2	757.0
281-WD	460-60	151.3	371.0	85.9	216.0	151.3	371.0	85.9	216.0
	575-60	120.6	297.0	69.3	173.0	120.6	297.0	69.3	173.0
	380-60	183.4	410.0	105.2	239.0	183.4	410.0	105.2	239.0
301-XL	460-60	151.3	1175.0	102.6	820.0	151.3	1175.0	102.6	820.0
	575-60	120.6	940.0	82.1	656.0	120.6	940.0	82.1	656.0
	380-60	183.4	1299.0	124.4	906.0	183.4	1299.0	124.4	906.0
301-WD	460-60	151.3	371.0	102.6	259.0	151.3	371.0	102.6	259.0
	575-60	120.6	297.0	82.1	207.0	120.6	297.0	82.1	207.0
	380-60	183.4	410.0	124.4	286.0	183.4	410.0	124.4	286.0
325-XL	460-60	151.3	1175.0	124.4	920.0	151.3	1175.0	124.4	920.0
	575-60	120.6	940.0	98.8	736.0	120.6	940.0	98.8	736.0
	380-60	183.4	1299.0	150.0	1017.0	183.4	1299.0	150.0	1017.0
325-WD	460-60	151.3	371.0	124.4	291.0	151.3	371.0	124.4	291.0
	575-60	120.6	297.0	98.8	233.0	120.6	297.0	98.8	233.0
	380-60	183.4	410.0	150.0	321.0	183.4	410.0	150.0	321.0
350-XL	460-60	151.3	1175.0	151.3	1175.0	151.3	1175.0	151.3	1175.0
	575-60	120.6	940.0	120.6	940.0	120.6	940.0	120.6	940.0
	380-60	183.4	1299.0	183.4	1299.0	183.4	1299.0	183.4	1299.0
350-WD	460-60	151.3	371.0	151.3	371.0	151.3	371.0	151.3	371.0
	575-60	120.6	297.0	120.6	297.0	120.6	297.0	120.5	297.0
	380-60	183.4	410.0	183.4	410.0	183.4	410.0	183.4	410.0

LEGEND

- LRA** — Locked Rotor Amps
- RLA** — Rated Load Amps
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

*Units are shipped with wye-delta start as standard. Across-the-line start is not available.

Table 8B — Compressor Electrical Data (Reduced Ambient)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
080-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	70.6	580.0	59.0	485.0
	575-60	56.5	484.0	47.5	388.0
	380-60	85.9	641.0	71.8	536.0
080-WD	208/230-60	156.5	367.0	130.8	307.0
	230-60	141.1	367.0	118.0	307.0
	460-60	70.6	183.0	59.0	153.0
	575-60	56.5	147.0	47.5	123.0
	380-60	85.9	203.0	71.8	169.0
083-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	67.4	580.0	55.4	485.0
	575-60	53.9	484.0	44.3	388.0
	380-60	81.6	641.0	67.0	536.0
083-WD	208/230-60	149.0	367.0	122.4	307.0
	230-60	134.8	367.0	110.8	307.0
	460-60	67.4	183.0	55.4	153.0
	575-60	53.9	147.0	44.3	123.0
	380-60	81.6	203.0	67.0	169.0
090-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	88.5	685.0	59.0	485.0
	575-60	71.8	548.0	47.5	388.0
	380-60	107.7	757.0	71.8	536.0
090-WD	208/230-60	196.2	433.0	130.8	307.0
	230-60	177.0	433.0	118.0	307.0
	460-60	88.5	216.0	59.0	153.0
	575-60	71.8	173.0	47.5	123.0
	380-60	107.7	239.0	71.8	169.0
093-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	80.2	685.0	55.4	485.0
	575-60	64.2	548.0	44.3	388.0
	380-60	97.0	757.0	67.0	536.0
093-WD	208/230-60	177.2	433.0	122.4	307.0
	230-60	160.4	433.0	110.8	307.0
	460-60	80.2	216.0	55.4	153.0
	575-60	64.2	173.0	44.3	123.0
	380-60	97.0	239.0	67.0	169.0
106-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	110.3	820.0	59.0	485.0
	575-60	88.5	656.0	47.5	388.0
	380-60	134.7	906.0	71.8	536.0
106-WD	208/230-60	244.9	518.0	130.8	307.0
	230-60	220.6	518.0	118.0	307.0
	460-60	110.3	259.0	59.0	153.0
	575-60	88.5	207.0	47.5	123.0
	380-60	134.7	286.0	71.8	169.0
108-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	93.6	820.0	64.3	580.0
	575-60	74.9	656.0	51.4	484.0
	380-60	113.3	906.0	77.8	641.0
108-WD	208/230-60	206.9	518.0	142.1	367.0
	230-60	187.2	518.0	128.6	367.0
	460-60	93.6	259.0	64.3	183.0
	575-60	74.9	207.0	51.4	147.0
	380-60	113.3	286.0	77.8	203.0
114-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	110.3	820.0	70.6	580.0
	575-60	88.5	656.0	56.5	484.0
	380-60	134.7	906.0	85.9	641.0
114-WD	208/230-60	244.9	518.0	156.5	367.0
	230-60	220.6	518.0	141.1	367.0
	460-60	110.3	259.0	70.5	183.0
	575-60	88.5	207.0	56.5	147.0
	380-60	134.7	286.0	85.9	203.0

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR			
		A1		B1	
		RLA	LRA	RLA	LRA
118-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	93.6	820.0	75.7	685.0
	575-60	74.9	656.0	60.6	548.0
	380-60	113.3	906.0	91.6	757.0
118-WD	208/230-60	206.9	518.0	167.3	433.0
	230-60	187.2	518.0	151.4	433.0
	460-60	93.6	259.0	75.7	216.0
	575-60	74.9	207.0	60.6	173.0
	380-60	113.3	286.0	91.6	239.0
125-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	124.4	920.0	84.7	685.0
	575-60	98.8	736.0	68.0	548.0
	380-60	150.0	1017.0	103.9	757.0
125-WD	208/230-60	274.4	581.0	188.5	433.0
	230-60	248.8	581.0	169.3	433.0
	460-60	124.4	291.0	84.7	216.0
	575-60	98.8	233.0	68.0	173.0
	380-60	150.0	321.0	103.9	239.0
128-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	108.7	920.0	75.7	685.0
	575-60	87.0	736.0	60.6	548.0
	380-60	131.5	1017.0	91.6	757.0
128-WD	208/230-60	240.2	581.0	167.3	433.0
	230-60	217.4	581.0	151.4	433.0
	460-60	108.7	291.0	75.7	216.0
	575-60	87.0	233.0	60.6	173.0
	380-60	131.5	321.0	91.6	239.0
138-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	108.7	920.0	93.6	820.0
	575-60	87.0	736.0	74.9	656.0
	380-60	131.5	1017.0	113.3	906.0
138-WD	208/230-60	240.2	581.0	206.9	518.0
	230-60	217.4	581.0	187.2	518.0
	460-60	108.7	291.0	93.6	259.0
	575-60	87.0	233.0	74.9	207.0
	380-60	131.5	321.0	113.3	286.0
153-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	137.0	1175.0	93.6	820.0
	575-60	109.6	940.0	74.9	656.0
	380-60	165.8	1299.0	113.3	906.0
153-WD	208/230-60	302.8	743.0	206.9	518.0
	230-60	274.0	743.0	187.2	518.0
	460-60	137.0	371.0	93.6	259.0
	575-60	109.6	297.0	74.9	207.0
	380-60	165.8	410.0	113.3	286.0
163-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	137.0	1175.0	108.7	920.0
	575-60	109.6	940.0	87.0	736.0
	380-60	165.8	1299.0	131.5	1017.0
163-WD	208/230-60	302.8	743.0	240.2	581.0
	230-60	274.0	743.0	217.4	581.0
	460-60	137.0	371.0	108.7	291.0
	575-60	109.6	297.0	87.0	233.0
	380-60	165.8	410.0	131.5	321.0
178-XL	208/230-60	*	*	*	*
	230-60	*	*	*	*
	460-60	137.0	1175.0	137.0	1175.0
	575-60	109.6	940.0	109.6	940.0
	380-60	165.8	1299.0	165.8	1299.0
178-WD	208/230-60	302.8	743.0	302.8	743.0
	230-60	274.0	743.0	274.0	743.0
	460-60	137.0	371.0	137.0	371.0
	575-60	109.6	297.0	109.6	297.0
	380-60	165.8	410.0	165.8	410.0

Table 8B — Compressor Electrical Data (Reduced Ambient) (cont)

UNIT SIZE 30GXN,R	NAMEPLATE V-Hz (3 Phase)	COMPRESSOR					
		A1		A2		B1	
		RLA	LRA	RLA	LRA	RLA	LRA
208-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	108.7	920.0	108.7	920.0	93.6	820.0
	575-60	87.0	736.0	87.0	736.0	74.9	656.0
	380-60	131.5	1017.0	131.5	1017.0	113.3	906.0
208-WD	208/230-60	240.2	581.0	240.2	581.0	206.9	518.0
	230-60	217.4	581.0	217.4	581.0	187.2	518.0
	460-60	108.7	291.0	108.7	291.0	93.6	259.0
	575-60	87.0	233.0	87.0	233.0	74.9	207.0
	380-60	131.5	321.0	131.5	321.0	113.3	286.0
228-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	137.0	1175.0	108.7	920.0	93.6	820.0
	575-60	109.6	940.0	87.0	736.0	74.9	656.0
	380-60	165.8	1299.0	131.5	1017.0	113.3	906.0
228-WD	208/230-60	302.8	743.0	240.2	581.0	206.9	518.0
	230-60	274.0	743.0	217.4	581.0	187.2	518.0
	460-60	137.0	371.0	108.7	291.0	93.6	259.0
	575-60	109.6	297.0	87.0	233.0	74.9	207.0
	380-60	165.8	410.0	131.5	321.0	113.3	286.0
253-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	137.0	1175.0	137.0	1175.0	108.7	920.0
	575-60	109.6	940.0	109.6	940.0	87.0	736.0
	380-60	165.8	1299.0	165.8	1299.0	131.5	1017.0
253-WD	208/230-60	302.8	743.0	302.8	743.0	240.2	581.0
	230-60	274.0	743.0	274.0	743.0	217.4	581.0
	460-60	137.0	371.0	137.0	371.0	108.7	291.0
	575-60	109.6	297.0	109.6	297.0	87.0	233.0
	380-60	165.8	410.0	165.8	410.0	131.5	321.0
268-XL	208/230-60	*	*	*	*	*	*
	230-60	*	*	*	*	*	*
	460-60	137.0	1175.0	137.0	1175.0	137.0	1175.0
	575-60	109.6	940.0	109.6	940.0	109.6	940.0
	380-60	165.8	1299.0	165.8	1299.0	165.8	1299.0
268-WD	208/230-60	302.8	743.0	302.8	743.0	302.8	743.0
	230-60	274.0	743.0	274.0	743.0	274.0	743.0
	460-60	137.0	371.0	137.0	371.0	137.0	371.0
	575-60	109.6	297.0	109.6	297.0	109.6	297.0
	380-60	165.8	410.0	165.8	410.0	165.8	410.0

LEGEND

- LRA** — Locked Rotor Amps
- RLA** — Rated Load Amps
- WD** — Wye-Delta Start
- XL** — Across-the-Line Start

*Units are shipped with wye-delta start as standard. Across-the-line start is not available.

Table 9 — Condenser Fan Electrical Data

UNIT 30GXN,R	NAMEPLATE VOLTAGE (V-Hz) (3-Phase)	STANDARD/LOW NOISE CONDENSER FAN		HIGH STATIC CONDENSER FAN	
		Total Quantity	FLA (ea)	Total Quantity	FLA (ea)
080, 090	208/230-60	4	7.5	4	14.6
	230-60	4	7.5	4	14.6
	460-60	4	3.4	4	6.3
	575-60	4	2.7	4	5.2
	380-60	4	4.1	4	7.4
083, 093, 108 106, 125, 135, 390B	208/230-60	6	7.5	6	14.6
	230-60	6	7.5	6	14.6
	460-60	6	3.4	6	6.3
	575-60	6	2.7	6	5.2
	380-60	6	4.1	6	7.4
114	208/230-60	6	7.5	6	14.6
	230-60	6	7.5	6	14.6
	460-60	6	3.4	6	6.3
	575-60	6	2.7	6	5.2
	380-60	6	4.1	6	7.4
118, 128, 138, 283B, 303B, 373B 150, 160, 370B, 415B	208/230-60	8	7.5	8	14.6
	230-60	8	7.5	8	14.6
	460-60	8	3.4	8	6.3
	575-60	8	2.7	8	5.2
	380-60	8	4.1	8	7.4
174, 204, 225, 370A, 450A/B, 475B	208/230-60	10	7.5	10	14.6
	230-60	10	7.5	10	14.6
	460-60	10	3.4	10	6.3
	575-60	10	2.7	10	5.2
	380-60	10	4.1	10	7.4
153, 283A, 328B, 393B, 418B	208/230-60	10	7.5	10	14.6
	230-60	10	7.5	10	14.6
	460-60	10	3.4	10	6.3
	575-60	10	2.7	10	5.2
	380-60	10	4.1	10	7.4
249, 475A, 500A/B	208/230-60	12	7.5	12	14.6
	230-60	12	7.5	12	14.6
	460-60	12	3.4	12	6.3
	575-60	12	2.7	12	5.2
	380-60	12	4.1	12	7.4
163, 178, 303A, 328A, 353A/B	208/230-60	12	7.5	12	14.6
	230-60	12	7.5	12	14.6
	460-60	12	3.4	12	6.3
	575-60	12	2.7	12	5.2
	380-60	12	4.1	12	7.4
264, 390A, 415A, 525A/B	208/230-60	12	7.5	12	14.6
	230-60	12	7.5	12	14.6
	460-60	12	3.4	12	6.3
	575-60	12	2.7	12	5.2
	380-60	12	4.1	12	7.4
208, 228, 453A/B, 478B	208/230-60	14	7.5	14	14.6
	230-60	14	7.5	14	14.6
	460-60	14	3.4	14	6.3
	575-60	14	2.7	14	5.2
	380-60	14	4.1	14	7.4
253, 268, 373A, 393A, 418A, 478A, 503A/B, 528A/B	208/230-60	16	7.5	14	14.6
	230-60	16	7.5	14	14.6
	460-60	16	3.4	14	6.3
	575-60	16	2.7	14	5.2
	380-60	16	4.1	14	7.4
281	460-60	16	3.4	16	6.3
	575-60	16	2.7	16	5.2
	380-60	16	4.1	16	7.4
301	460-60	16	3.4	16	6.3
	575-60	16	2.7	16	5.2
	380-60	16	4.1	16	7.4
325	460-60	16	3.4	16	6.3
	575-60	16	2.7	16	5.2
	380-60	16	4.1	16	7.4
350	460-60	16	3.4	16	6.3
	575-60	16	2.7	16	5.2
	380-60	16	4.1	16	7.4

LEGEND

FLA — Full Load Amps

Step 5 — Install Accessories

ELECTRICAL — Several optional control accessories are available to provide the following features:

- control transformer
- cooler pump interlock
- remote enhanced display panel
- temperature reset (from occupied space or outdoor-air temperature)
- CSM-III Chillvisor System Manager (multi-chiller control)
- low-ambient control
- minimum load control

NOTE: Only one remote enhanced display is required for 30GXN,R duplex applications. Chillvisor System Manager III may not be used for multiple duplex 30GXN,R applications.

Refer to Controls, Start-Up, Operation, Service, and Troubleshooting literature and separate accessory installation instructions for additional information.

LOW-AMBIENT OPERATION — If outdoor ambient operating temperatures below 0° F (–18 C) for 30GXN,R080-160 units and 15 F (–9 C) for 30GXN,R153, 163, 174-350 units are expected, addition of a low ambient kit is required. Refer to separate installation instructions for low-ambient operation using accessory Motormaster® V control.

MINIMUM LOAD ACCESSORY — If minimum load accessory is required, use the appropriate package. Contact your local Carrier representative for more details. For installation details, refer to separate installation instructions supplied with the accessory package.

MISCELLANEOUS ACCESSORIES — For applications requiring special accessories, the following packages are available: Control power transformer, minimum load control, sound reduction/wind baffle/hail guard kits (see Fig. 40), external vibration isolation, remote enhanced display and temperature reset sensor. Refer to individual accessory installation instructions for installation details.

Step 6 — Leak Test Unit — These units are shipped from the factory with a full charge of R-134a. 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 a number of O-ring face seal fittings used on the refrigerant 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 reuse O-rings.

⚠ CAUTION

DO NOT OVERTIGHTEN THESE FITTINGS. Overtightening will result in O-ring damage.

Step 7 — Refrigerant Charge

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

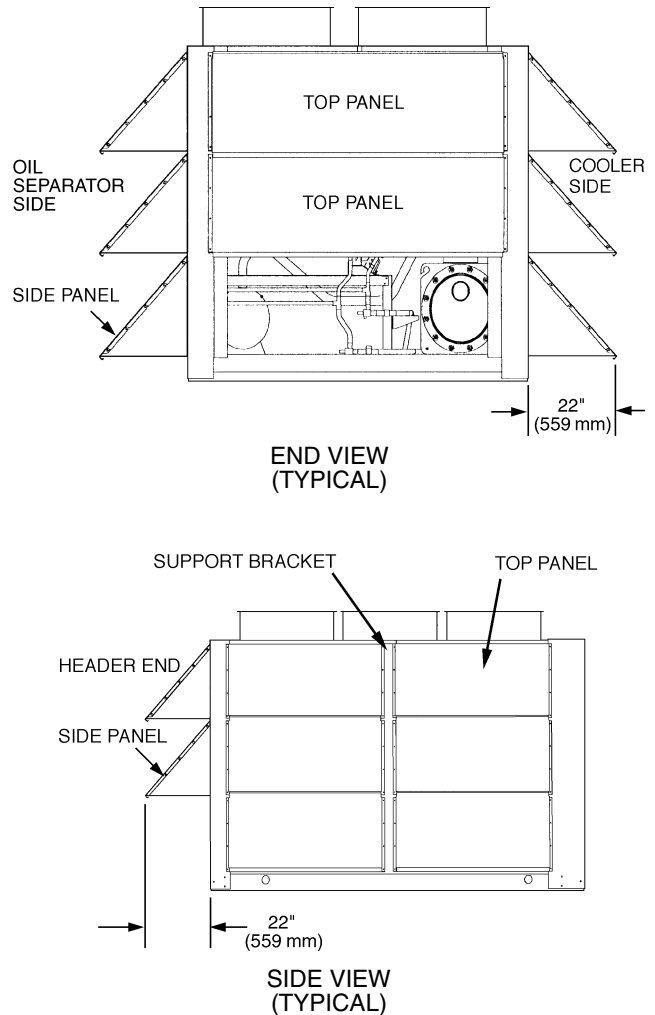


Fig. 40 — Accessory Sound Enclosure Dimensions

The liquid charging method is recommended for complete charging or when additional charge is required.

⚠ CAUTION

When charging, circulate water through the cooler at all times to prevent freezing. Freezing damage is considered abuse and may void the Carrier warranty.

⚠ CAUTION

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

The 30GXN,R units are shipped from the factory with a full charge of R-134a. Unit should not need to be charged at installation unless a leak was detected in Step 6 — Leak Test Unit section. If dehydration and recharging is necessary, use industry standard practices or refer to Carrier Standard Service Techniques Manual as required.

SERVICE TRAINING

Packaged Service Training programs are an excellent way to increase your knowledge of the equipment discussed in this manual, including:

- Unit Familiarization
- Installation Overview
- Maintenance
- Operating Sequence

A large selection of product, theory, and skills programs are available, using popular video-based formats and materials. All include video and/or slides, plus companion book.

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