

NOTES:

1. TOLERANCES ON ALL DIMENSIONS ARE ±0.0mm [±0.008"] UNLESS OTHERWISE SPECIFIED.	2. WEIGHT:	CABINET SIZE			
		31.34"	49.45"	59.49"	71.78"
	NET [KG]	25.1	36.6	42.1	53.2
	[LBS]	55.3	80.7	92.8	117.0
	SHIPPING [KG]	30.0	44.0	48.0	65.5
	[LBS]	65.0	95.0	105.0	142.0

3. **AMBIENT TEMPERATURE LIMITATIONS:**
 OPERATIONAL: -45°C TO 40°C (-49°F TO 104°F)
 STORAGE: -45°C TO 80°C (-49°F TO 176°F)
4. **UL LISTING NO.:** #E87128

5. **CONVECTOR ENCLOSURES HAZARDOUS LOCATION APPROVALS:**

DEFENDER ENCLOSURE	WITHOUT BUILT-IN T'STAT ENCLOSURE	CLASS I, DIV. 1 & 2, GROUPS B, C & D CLASS I, ZONES 1 & 2, GROUPS IIA & IIB + H ₂
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x-Max ENCLOSURE	WITHOUT BUILT-IN T'STAT ENCLOSURE	CLASS I, DIV. 1 & 2, GROUPS A, B, C, & D CLASS I, ZONES 1 & 2, GROUPS IIA, IIB, & IIC
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x-Max ENCLOSURE	BUILT-IN T'STAT ENCLOSURE	CLASS I, DIV. 1 & 2, GROUPS A, B, C, & D CLASS I, ZONES 1 & 2, GROUPS IIA, IIB, & IIC
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6. **CABINET PAINT SPEC.:**

DESCRIPTION -	EPOXY SEMI GLOSS
COLOR -	RUFFNECK GREEN
SPECIFIC GRAVITY:	1.48
GLOSS (60°) -	11'
FILM THICKNESS -	2.5 MIL
PENCIL HARDNESS -	2H
CROSS HATCH -	5b NO LIFTING OF SQUARES
MANDREL BEND -	PASS 1/8" BEND, NO CRACKING OR LOSS OF ADHESION

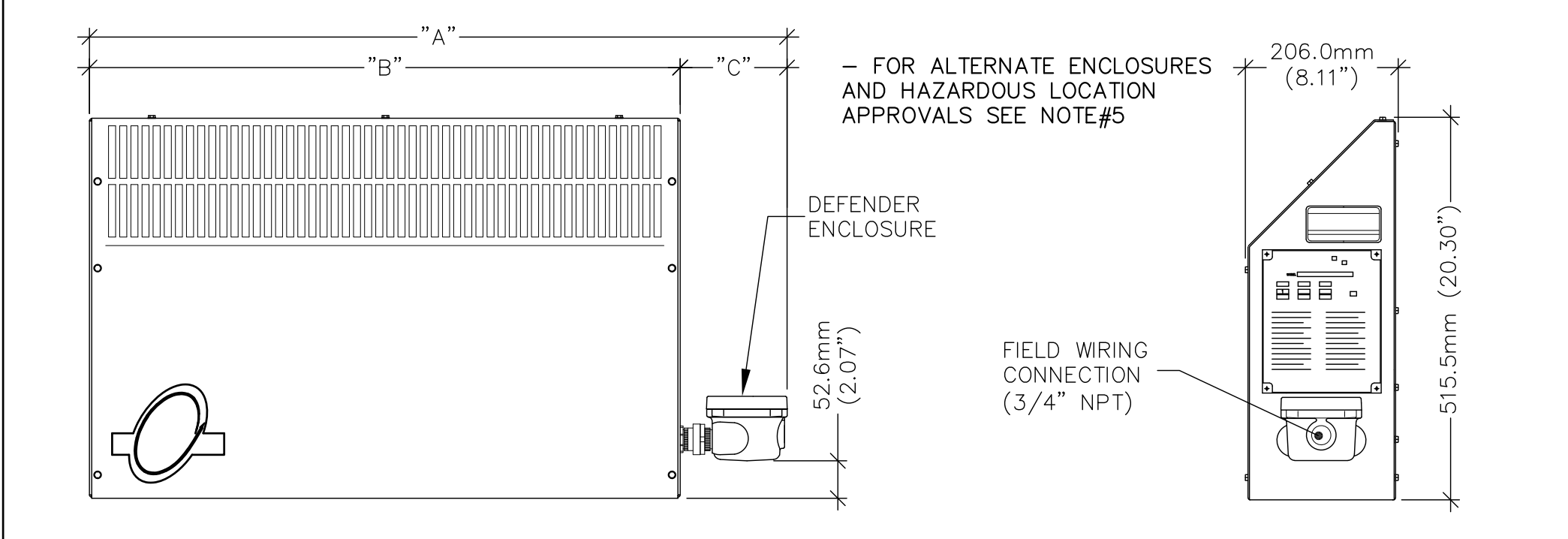
7. **HEATER PLACEMENT:**
- HEATER SHOULD BE INSTALLED AS FOLLOWS:
- HEATER MUST BE MOUNTED LEVEL ON A VERTICAL SURFACE USING FACTORY SUPPLIED MOUNTING BRACKETS SUCH THAT THERE ARE NO OBSTRUCTIONS TO IMPEDE AIR INLET OR DISCHARGE. [REFER TO INSTALLATION CLEARANCES DIAGRAM]
 - AIR DISCHARGE IS NOT DIRECTED AT A THERMOSTAT.
 - AIR DISCHARGE IS ACROSS AREAS OF HEAT LOSS (SUCH AS WINDOWS).
 - FOR EQUIPMENT FREEZE PROTECTION, LOCATE HEATER AS CLOSE TO EQUIPMENT AS POSSIBLE.
 - MOUNTING SURFACE MUST BE STRONG ENOUGH TO:
 - SUPPORT THE HEATER'S WEIGHT,
 - WITHSTAND ABUSIVE SITUATIONS SUCH AS TRANSPORTABLE INSTALLATIONS.
 - SECURE MOUNTING BRACKETS TO VERTICAL SURFACE WITH BRACKETS SPACED TO BOTH SUPPORT THE UNITS WEIGHT AND TO MATCH SPACING OF SLOTS IN REAR PANEL. THE MOUNTING BRACKETS TOP MOUNTING SLOT IS APPROXIMATELY 38.0mm (1.5") BELOW HEATER'S TOP SURFACE.
 - ALIGN SLOTS ON BACK PANEL OF HEATER WITH TABS AT TOP OF WALL MOUNTING BRACKETS. WITH HEATER TILTED, INSERT TABS INTO SLOTS AND ROTATE UNIT UNTIL IT RESTS AGAINST THE BOTTOM TAB OF WALL MOUNT BRACKET. SECURE HEATER TO BOTTOM OF TABS USING SCREWS SUPPLIED. [REFER TO CONVECTOR MOUNTING DIAGRAMS]

8. **FIELD WIRING:**

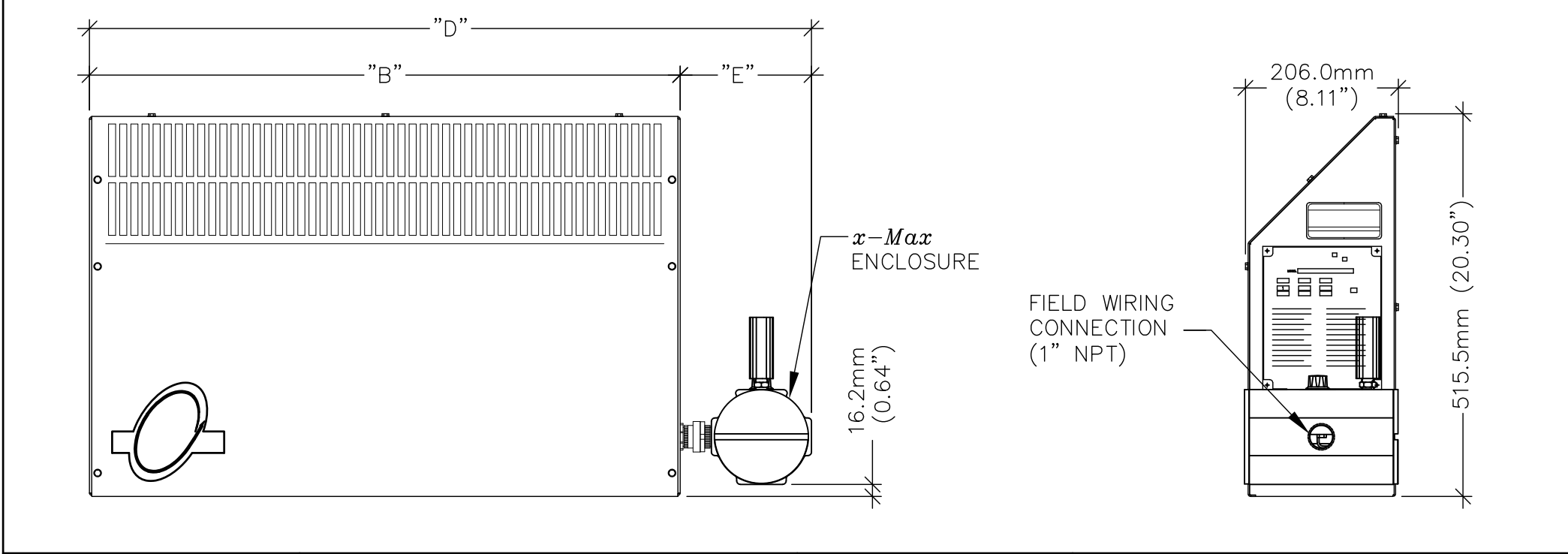
- CONDUIT SEALS ARE REQUIRED WITHIN 152.4mm (6") OF FIELD ENTRIES.
- USE ONLY COPPER CONDUCTORS RATED FOR 90°C (194°F) AND APPROVED EXPLOSION PROOF WIRING METHODS. [REFER TO TECHNICAL DATA CHART FOR APPROPRIATE CONDUCTOR SIZES]
- SUPPLY VOLTAGE MUST BE WITHIN 10% OF DATA PLATE RATINGS.
- EXTERNAL OVER-CURRENT PROTECTION IS REQUIRED AND MUST MEET DATA PLATE RATINGS FOR VOLTAGE, AMPERAGE, AND FREQUENCY.
- FIELD CONNECTION:
 - Defender enclosure: 3/4" - 14 NPT
 - x-Max enclosure: 1" - 11.5 NPT
- WIRE CONNECTORS: 90°C (194°F) MIN. RATING (REMOTE T'STAT) & CONTROL DEVICES:
- ONLY USE HEATER IN LOCATION MATCHING HEATER'S HAZARDOUS CLASSIFICATION RATING. REMOTE T'STAT MUST MEET HAZARDOUS CLASSIFICATION FOR LOCATION AND NOT ALLOW ROOM TEMPERATURE TO EXCEED AMBIENT TEMPERATURE LIMITATION OF HEATER (SEE NOTE#3). VOLTAGE AND AMPERAGE RATINGS MUST MATCH HEATER'S ELECTRICAL RATING. IF NOT, A CONTACTOR MAY BE REQUIRED.

9. **BEFORE APPLYING ELECTRICAL POWER:**

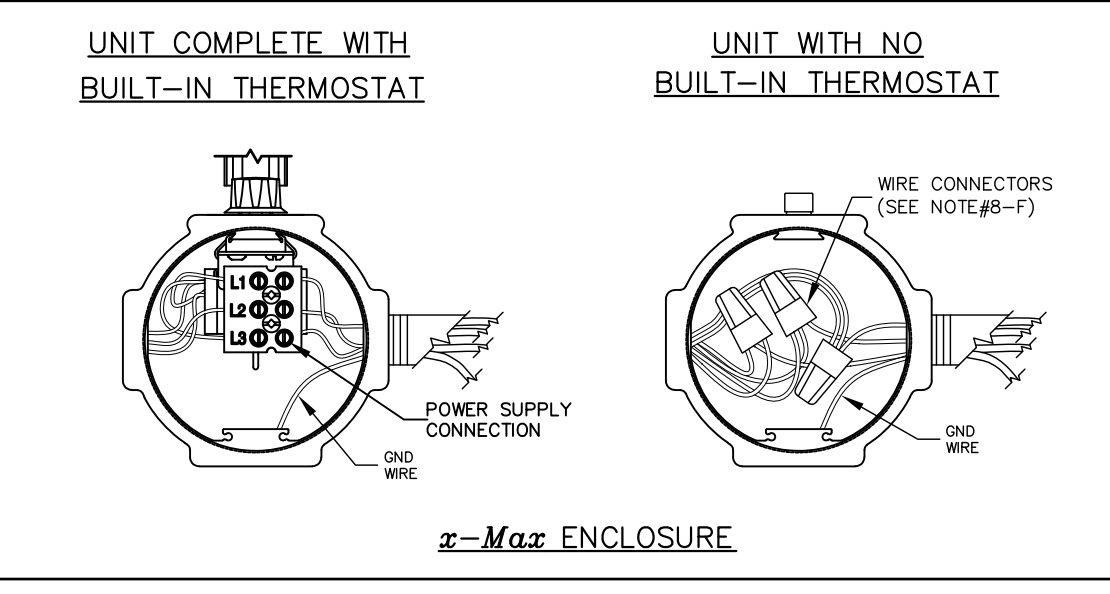
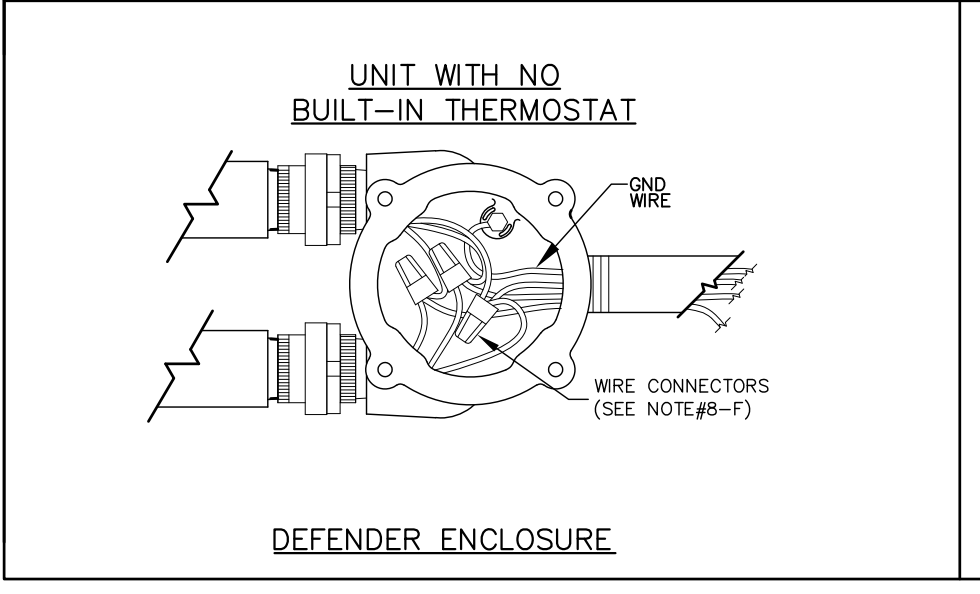
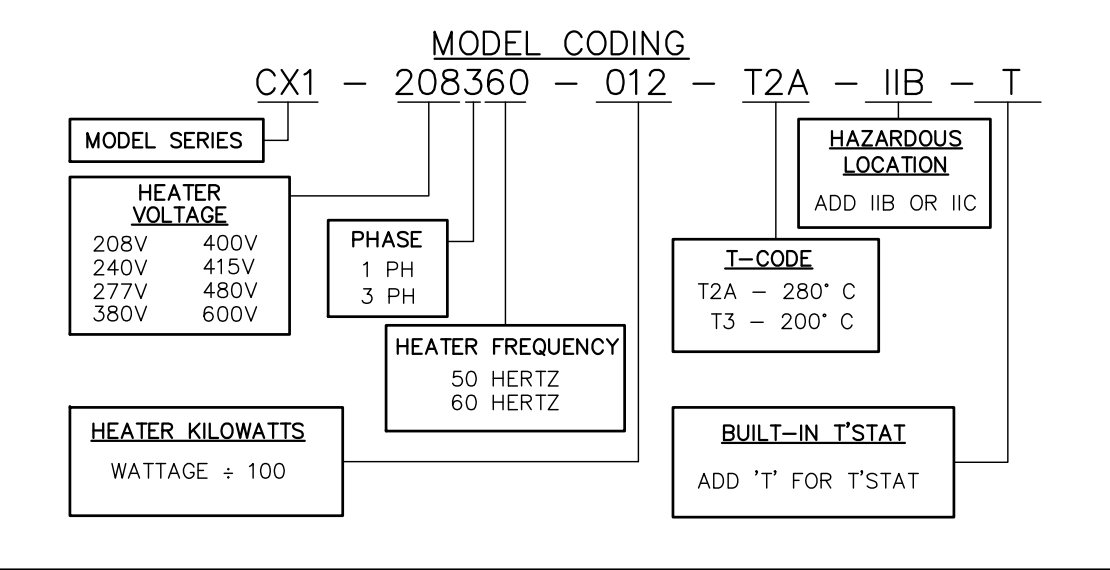
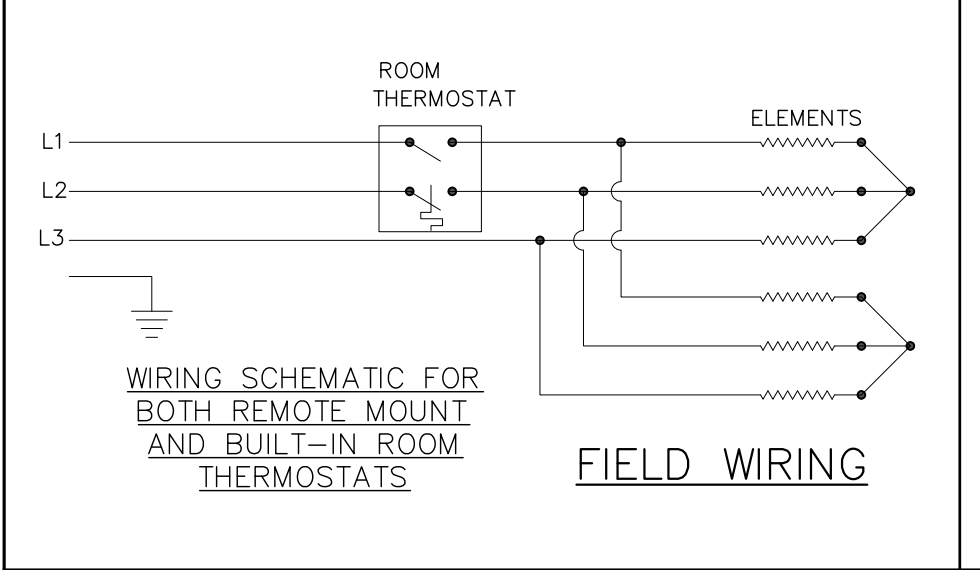
- CHECK THAT ALL CONNECTIONS ARE SECURE, COMPLY WITH APPLICABLE CODES REQUIREMENTS, AND WITH WIRING DIAGRAM. [REFER TO FIELD WIRING]
- CONFIRM SUPPLY VOLTAGE IS COMPATIBLE WITH THE DATA PLATE SPECIFICATIONS.
- REMOVE ANY FOREIGN OBJECTS FROM HEATER.
- ENSURE EXTERNAL FITTINGS AND ENCLOSURE COVERS ARE SECURED.



HEATER KW RATING	"A" DIMENSION		"B" DIMENSION	"C" DIMENSION	
	W/O EXTENSION	WITH EXTENSION		W/O EXTENSION	WITH EXTENSION
0.75 - 2.69 & 3.6 (T2A)	938mm (36.9")	991mm (39.0")	796.0mm (31.34")	142mm (5.6")	195mm (7.7")
3.01 - 3.59, 3.6 (T3) & 4.8	1398mm (55.0")	1451mm (57.1")	1256.0mm (49.45")	142mm (5.6")	195mm (7.7")
4.76, 5.28 - 7.6	1653mm (65.1")	1706mm (67.2")	1511.0mm (59.49")	142mm (5.6")	195mm (7.7")
3.13, 3.47, 3.74, 5.0, 6.26, 6.94, 7.47 & 10.0	1965mm (77.4")	2018mm (79.4")	1823.0mm (71.78")	142mm (5.6")	195mm (7.7")



HEATER KW RATING	"D" DIMENSION		"B" DIMENSION	"E" DIMENSION	
	W/O EXTENSION	WITH EXTENSION		W/O EXTENSION	WITH EXTENSION
0.75 - 2.69 & 3.6 (T2A)	973mm (38.3")	N/A	796.0mm (31.34")	177mm (7.0")	N/A
3.01 - 3.59, 3.6 (T3) & 4.8	1433mm (56.4")	N/A	1256.0mm (49.45")	177mm (7.0")	N/A
4.76, 5.28 - 7.6	1688mm (66.5")	N/A	1511.0mm (59.49")	177mm (7.0")	N/A
3.13, 3.47, 3.74, 5.0, 6.26, 6.94, 7.47 & 10.0	2000mm (78.7")	N/A	1823.0mm (71.78")	177mm (7.0")	N/A



MODEL NUMBER	KW (BTU/hr)	UNIT VOLTAGE (VOLTS)	PHASE	BASIC UNIT	GAS GROUP				SUPPLY WIRE SIZE (AWG)***	UNIT CURRENT (AMPS)	MAXIMUM CIRCUIT FUSE (AMPS)*	CABINET LENGTH in(mm)	TEMP. CODE (°C)
					IIB + H ₂	IIB	IIC	IIC					
					W/O T'STAT	W/ T'STAT	W/O T'STAT	W/ T'STAT					
CX1-208360-012-T3	1.2 (4095)	208	3	□	□	N/A	□	□	12	3.3	15	31.3 (796)	T3 (200)
CX1-208360-018-T3	1.8 (6142)	208	3	□	□	N/A	□	□	12	5.0	15	31.3 (796)	T3 (200)
CX1-208360-036-T3**	3.6 (12284)	208	3	□	□	N/A	□	□	12	10.0	15	49.5 (1256)	T3 (200)
CX1-208360-048-T2A	4.8 (16378)	208	3	□	□	N/A	□	□	10	13.3	15	49.5 (1256)	T2A (280)
CX1-208360-050-T3	5.0 (17060)	208	3	□	□	N/A	□	□	10	13.9	20	71.8 (1823)	T3 (200)
CX1-208360-076-T2A	7.6 (25932)	208	3	□	□	N/A	□	□	8	21.1	30	59.5 (1511)	T2A (280)
CX1-208360-100-T2A	10.0 (34121)	208	3	□	□	N/A	□	□	8	27.8	40	71.8 (1823)	T2A (280)
CX1-240360-012-T3	1.2 (4095)	240	3	□	□	N/A	□	□	12	2.9	15	31.3 (796)	T3 (200)
CX1-240360-018-T3	1.8 (6142)	240	3	□	□	N/A	□	□	12	4.3	15	31.3 (796)	T3 (200)
CX1-240360-036-T3**	3.6 (12284)	240	3	□	□	N/A	□	□	12	8.7	15	49.5 (1256)	T3 (200)
CX1-240360-048-T2A	4.8 (16378)	240	3	□	□	N/A	□	□	12	11.5	15	49.5 (1256)	T2A (280)
CX1-240360-050-T3	5.0 (17060)	240	3	□	□	N/A	□	□	12	12.0	15	71.8 (1823)	T3 (200)
CX1-240360-076-T2A	7.6 (25932)	240	3	□	□	N/A	□	□	10	18.3	25	59.5 (1511)	T2A (280)
CX1-240360-100-T2A	10.0 (34121)	240	3	□	□	N/A	□	□	8	24.1	30	71.8 (1823)	T2A (280)
CX1-277360-012-T3	1.2 (4095)	277	3	□	□	N/A	□	□	12	2.5	15	31.3 (796)	T3 (200)
CX1-277360-018-T3	1.8 (6142)	277	3	□	□	N/A	□	□	12	3.8	15	31.3 (796)	T3 (200)
CX1-277360-036-T3**	3.6 (12284)	277	3	□	□	N/A	□	□	12	7.5	15	49.5 (1256)	T3 (200)
CX1-277360-048-T2A	4.8 (16378)	277	3	□	□	N/A	□	□	12	10.0	15	49.5 (1256)	T2A (280)
CX1-277360-050-T3	5.0 (17060)	277	3	□	□	N/A	□	□	12	10.4	15	71.8 (1823)	T3 (200)
CX1-277360-076-T2A	7.6 (25932)	277	3	□	□	N/A	□	□	10	15.8	20	59.5 (1511)	T2A (280)
CX1-277360-100-T2A	10.0 (34121)	277	3	□	□	N/A	□	□	8	20.8	30	71.8 (1823)	T2A (280)
CX1-380360-0113-T3	1.13 (3856)	380	3	□	□	N/A	□+	□+	12	1.7	15	31.3 (796)	T3 (200)
CX1-380360-0226-T2A	2.26 (7711)	380	3	□	□	N/A	□+	□+	12	3.4	15	31.3 (796)	T2A (280)
CX1-380360-0301-T3	3.01 (10271)	380	3	□	□	N/A	□+	□+	12	4.6	15	49.5 (1256)	T3 (200)
CX1-380360-0313-T3	3.13 (10680)	380	3	□	□	N/A	□+	□+	12	4.8	15	71.8 (1823)	T3 (200)
CX1-380360-0476-T2A	4.76 (16241)	380	3	□	□	N/A	□+	□+	12	7.2	15	59.5 (1511)	T2A (280)
CX1-380360-050-T3	5.0 (17060)	380	3	□	□	N/A	□	□	12	7.6	15	71.8 (1823)	T3 (200)
CX1-380360-0626-T2A	6.26 (21360)	380	3	□	□	N/A	□	□	12	9.5	15	71.8 (1823)	T2A (280)
CX1-380360-100-T2A	10.0 (34121)	380	3	□	□	N/A	□	□	10	15.2	20	71.8 (1823)	T2A (280)
CX1-400360-0125-T3	1.25 (4565)	400	3	□	□	N/A	□+	□+	12	1.8	15	31.3 (796)	T3 (200)
CX1-400360-025-T2A	2.5 (8530)	400	3	□	□	N/A	□+	□+	12	3.6	15	31.3 (796)	T2A (280)
CX1-400360-0333-T3	3.33 (11362)	400	3	□	□	N/A	□+	□+	12	4.8	15	49.5 (1256)	T3 (200)
CX1-400360-0347-T3	3.47 (11840)	400	3	□	□	N/A	□	□	12	5.0	15	71.8 (1823)	T3 (200)
CX1-400360-050-T3	5.0 (17060)	400	3	□	□	N/A	□	□	12	7.2	15	71.8 (1823)	T3 (200)
CX1-400360-0528-T2A	5.28 (18016)	400	3	□	□	N/A	□+	□+	12	7.6	15	59.5 (1511)	T2A (280)
CX1-400360-0694-T2A	6.94 (23680)	400	3	□	□	N/A	□	□	12	1.0	15	71.8 (1823)	T2A (280)
CX1-400360-100-T2A	10.0 (34121)	400	3	□	□	N/A	□	□	10	14.4	20	71.8 (1823)	T2A (280)
CX1-415360-0135-T3	1.35 (4606)	415	3	□	□	N/A	□+	□+	12	1.9	15	31.3 (796)	T3 (200)
CX1-415360-0269-T2A	2.69 (9179)	415	3	□	□	N/A	□+	□+	12	3.7	15	31.3 (796)	T2A (280)
CX1-415360-0359-T3	3.59 (12250)	415	3	□	□	N/A	□+	□+	12	5.0	15	49.5 (1256)	T3 (200)
CX1-415360-0374-T3	3.74 (12761)	415	3	□	□	N/A	□	□	12	5.2	15	71.8 (1823)	T3 (200)
CX1-415360-050-T3	5.0 (17060)	415	3	□	□	N/A	□	□	12	7.0	15	71.8 (1823)	T3 (200)
CX1-415360-0568-T2A	5.68 (19381)	415	3	□	□	N/A	□+	□+	12	7.9	15	59.5 (1511)	T2A (280)
CX1-415360-0747-T2A	7.47 (25488)	415	3	□	□	N/A	□	□	12	10.4	15	71.8 (1823)	T2A (280)
CX1-415360-100-T2A	10.0 (34121)	415	3	□	□	N/A	□	□	10	13.9	20	71.8 (1823)	T2A (280)
CX1-480360-018-T3	1.8 (6142)	480	3	□	□	N/A	□	□	12	2.2	15	31.3 (796)	T3 (200)
CX1-480360-036-T3**	3.6 (12284)	480	3	□	□	N/A	□	□	12	4.3	15	49.5 (1256)	T3 (200)
CX1-480360-048-T2A	4.8 (16378)	480	3	□	□	N/A	□	□	12	5.8	15	49.5 (1256)	T2A (280)
CX1-480360-050-T3	5.0 (17060)	480	3	□	□	N/A	□	□	12	6.0	15	71.8 (1823)	T3 (200)
CX1-480360-076-T2A	7.6 (25932)	480	3	□	□	N/A	□	□	12	9.1	15	59.5 (1511)	T2A (280)
CX1-480360-100-T2A	10.0 (34121)	480	3	□	□	N/A	□	□	12	12.0	15	71.8 (1823)	T2A (280)
CX1-600360-036-T3**	3.6 (12284)	600	3	□	□	N/A	□	□	12	3.5	15	49.5 (1256)	T3 (200)
CX1-600360-048-T2A	4.8 (16378)	600	3	□	□	N/A	□	□	12	4.6	15	49.5 (1256)	T2A (280)
CX1-600360-050-T3	5.0 (17060)	600	3	□	□	N/A	□	□	12	4.8	15	71.8 (1823)	T3 (200)
CX1-600360-076-T2A	7.6 (25932)	600	3	□	□	N/A	□	□	12	7.3	15	59.5 (1511)	T2A (280)
CX1-600360-100-T2A	10.0 (34121)	600	3	□	□	N/A	□	□	12	9.6	15	71.8 (1823)	T2A (280)

CONVECTOR TECHNICAL DATA

- OPERATION AT LOWER VOLTAGES THAN RATED WILL RESULT IN REDUCED OUTPUT AND AMP DRAW.
- ACTUAL OUTPUT (kW) = [(SUPPLY VOLTAGE)² / (RATED VOLTAGE)²] x RATED UNIT WATTAGE (kW).
- AVAILABLE IN 50 Hz ONLY.
- OR EQUIVALENT BREAKER AS PER LOCAL ELECTRICAL INSPECTION AUTHORITY REQUIREMENTS.
- FOR 3.6 kW HEATERS RATED T3 CABINET LENGTH IS 49.5" (1256mm). 3.6 kW HEATERS RATED T2A ** CABINET LENGTH IS 31.3" (796mm)
- ***ENSURE SUPPLY WIRE SIZE ADHERES TO APPLICABLE LOCAL AND NATIONAL ELECTRICAL CODES

14 NOV 2015	DEFENDER T'STAT REM'D; CHART UPDATE x-MAX HOUSING UPDATED	3	NJS	LB
21 AUG 2018	FX4 ENCL. REMOVED. MODEL CHART REVISED.	2	NJS	LB
17 NOV 2016	MODELS REMOVED	1		