

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
1	CO76899 UPDATED REBRANDING	10/14/19	AR MAS

NEMA TYPE	ENCLOSURE PART #	ZBTE/ZBTED SWITCHES	NO. POLES	LUG RANGE	WIRE BENDING SPACE		WIRE GUTTERS	
					P(TOP)	R(BOTTOM)	S(LEFT)	T(RIGHT)
3R, 4 & 12	F-1898MP	100-225 AMP	2,3,4	#6-250 MCM (16-150mm ²)	15 1/4 (387)	16 (406)	3 3/8 (86)	2 1/4 (57)
3R, 4 & 12		260-400 AMP	2,3,4	#4-600 MCM (21-304mm ²)				

- NOTES:
- MATERIAL: 10 GA. STEEL .134(3) REF. UNLESS OTHERWISE NOTED.
 - FINISH: PER F-7000
 - ALL LUG CONNECTIONS AT TOP OF BYPASS SWITCH.
 - ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SHOWN IN INCHES(MILLIMETERS).
 - CONSTRUCTION PER UL 1008
 - FOR INSTALLATION, REFER TO SHEET NO. 2

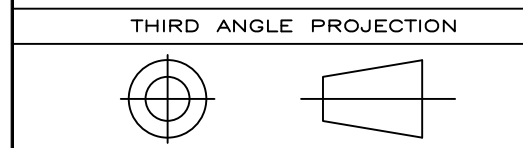

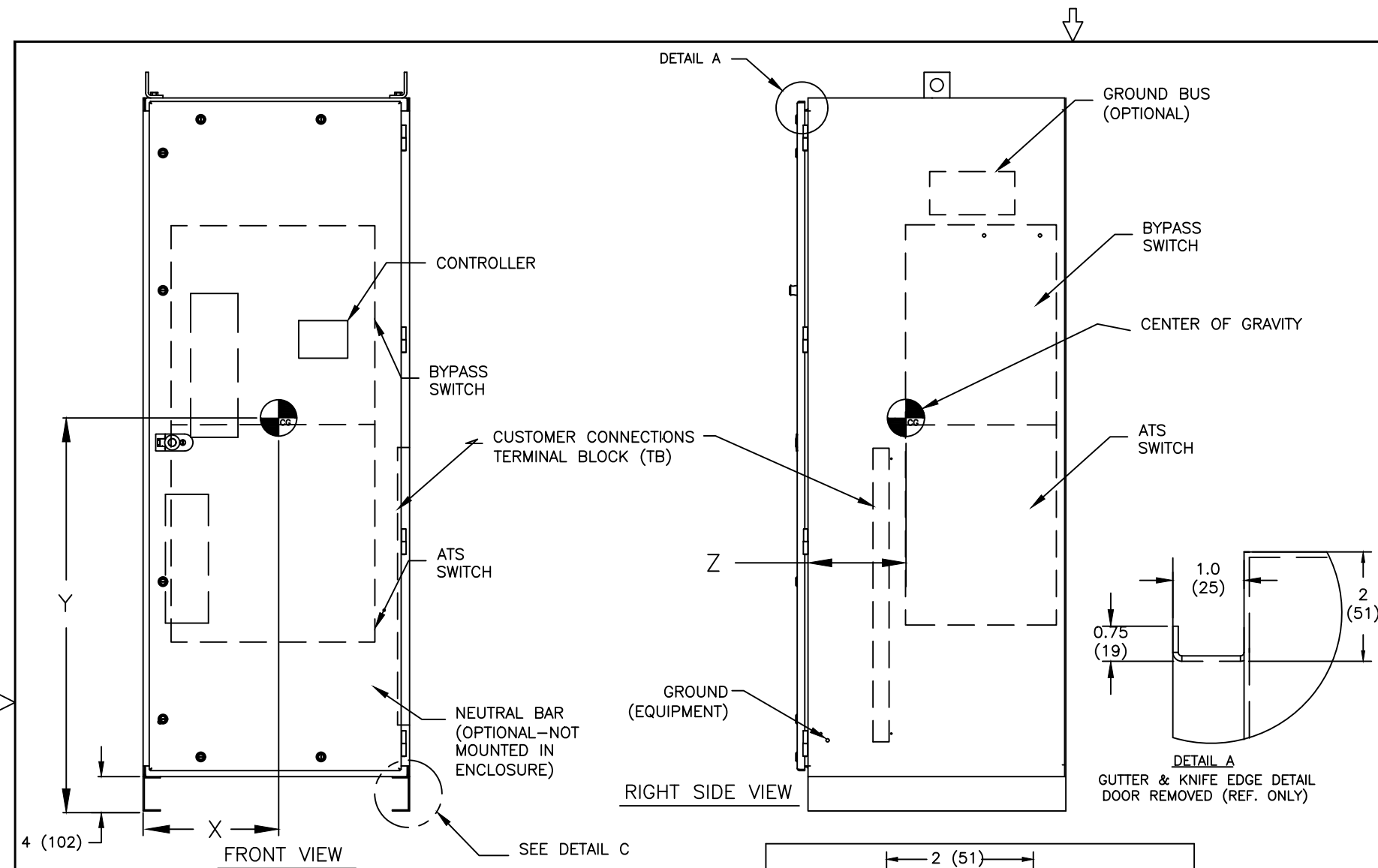


ABB PROPRIETARY AND CONFIDENTIAL INFORMATION
 The information contained in the document has to be kept strictly confidential. Any unauthorized use, reproduction, distribution or disclosure to third parties is strictly forbidden. ABB reserves all rights regarding intellectual Property Rights. Copyright 2018 ABB. All rights reserved.

SIGNATURES		DATE	TITLE	
MODEL	DF	01/15/08	 ZBTE(D) 100 - 400 AMP DIM. DWG. NEMA 3R, 4 & 12	
DETAIL				
CHECKED				
ENGRG				
MFG				
QUALITY				
ISSUED			FIRST MADE FOR: ZBTE(D) 100 - 400 AMP NEMA 3R, 4 & 12 ENCLOSURE	
DRAWING FILE:	90c-1027.dwg	SIZE	CAGE CODE	DWG NO
MODEL / ASSEMBLY FILE:	ZBTE(D) 100-400 AMP	B		90C-1027
# CTQs	⊖ CRITICAL TO QUALITY CHARACTERISTIC	SCALE:	N/A	SHEET 1 OF 2

AutoCad Generated



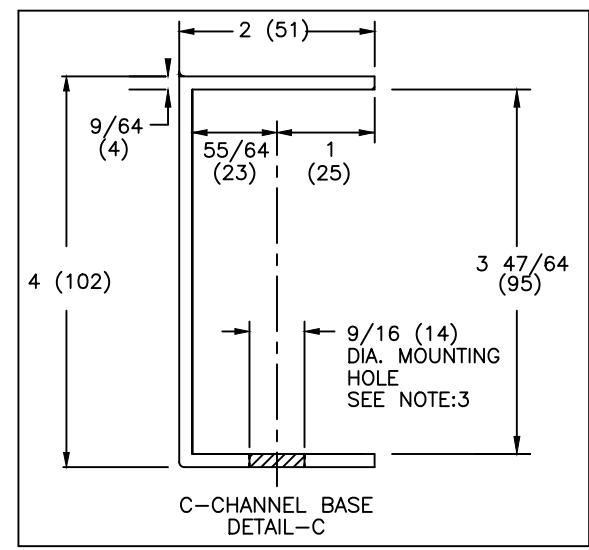
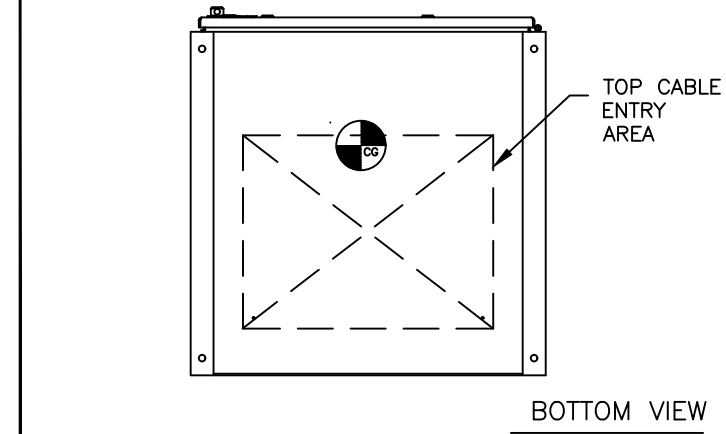
NOTES:

1. ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SHOWN IN INCHES (MILLIMETERS).
2. SEISMIC DATA OF MOST VULNERABLE ATS CONSTRUCTION WITHIN ITS PLATFORM:

MAXIMUM DEFLECTION AT TOP OF GEAR:	dss=1.41 INCHES (36 mm)
	dfb=0.67 INCHES (17 mm)
QUALIFIED BY: TIME HISTORY SHAKE TABLE TEST	
IEEE-693-2005-HIGHx2.5 (64 mm)	
IBC-2003-300%G	
RESONANCE FREQUENCIES:	fss=7.0 Hz
	ffb=10.2 Hz
	fv>>33.0 Hz
MAXIMUM REACTION TO ANY BOLT:	Vss=788 LBS (358 KG) SHEAR
(DEAD LOAD +/- SEISMIC)	Vfb=788 LBS (358 KG) SHEAR
	Tv=3170 LBS (1441 KG) UP
	Pv=3787 LBS (1721 KG) DOWN

3. BOLT ENCLOSURE FROM C-CHANNEL BASE (SEE DETAIL A) USING THE FOLLOWING SEISMIC CERTIFIED MOUNTING HARDWARE PER MOUNTING HOLE: (HARDWARE PROVIDED BY INSTALLER).
 - 1/2-13 GRADE 5 BOLT TORQUE TO 75 FT-LBS. (102 NEWTON METERS).
 - US STANDARD HIGH STRENGTH ZINC-PLATED FLAT WASHER 5/8 (16) I.D. AND 1-1/2 (38) O.D.
 - 1/2 (13) HELICAL SPRING LOCK WASHER.

4. CENTER OF GRAVITY DIMENSIONS ARE FOR REFERENCE ONLY.
5. STANDARD SWITCH CONFIGURATION HAS ALL LUGS LOCATED AT TOP.
6. SWITCH SUPPLIED WITH STANDARD MECHANICAL LUG. REFER TO SHEET 1 FOR LUG DETAILS
7. ALL CONTROL WIRES (18-12 AWG) MUST BE TORQUED TO 19 in-lbs. (2 N-m)
8. LUG TORQUE ARE APPLICABLE FOR CU & AL CABLES.
9. FOR WORKING CLEARANCE REFER TO NATIONAL AND LOCAL CODES AND STANDARDS.
10. NEMA 4 AND 12 ENCLOSURE TYPE ATS WILL COME WITH WINDOW KIT (NOT SHOWN).



SOCKET SIZE ACROSS FLATS	TORQUE	
	Lb-Ft	N-m
1/8	4	5.4
5/32	8	10.9
3/16	10	13.6
7/32	12	16.3
1/4	17	23.1
5/16	23	31.2
3/8	31	42.1
1/2	42	57.0
9/16	50	67.9

AMP	POLE	WEIGHT LB(kg)	CENTER OF GRAVITY in(mm)		
			X	Y	Z
100-400	2,3	1300(590)	18.0	37.0	18.0
	4	1405(637)	(457)	(940)	(457)



ZBTE(D) 100-400 AMP INST. DWG. NEMA 4, 12 & 3R

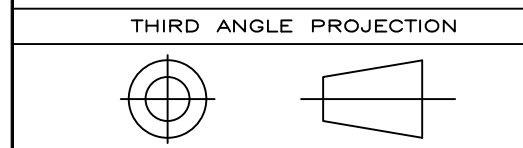


ABB PROPRIETARY AND CONFIDENTIAL INFORMATION
 The information contained in the document has to be kept strictly confidential. Any unauthorized use, reproduction, distribution or disclosure to third parties is strictly forbidden. ABB reserves all rights regarding intellectual Property Rights. Copyright 2018 ABB. All rights reserved.

SIGNATURES		DATE	TITLE	
MODEL	DF	01/15/08	ZBTE(D) 100 - 400 AMP - NEMA- 3R, 4 & 12	
DETAIL			SIZE	DWG NO
CHECKED			B	90C-1027
ENGRG			SCALE: N/A	SHEET 2 OF 2
MFG				
QUALITY				
ISSUED				
DRAWING FILE:	90c-1027.dwg			
MODEL / ASSEMBLY FILE:	ZBTE(D) 100-400 AMP			
# CTQs	⊕ CRITICAL TO QUALITY CHARACTERISTIC			

AutoCad Generated