

ABB PROPRIETARY AND CONFIDENTIAL INFORMATION

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

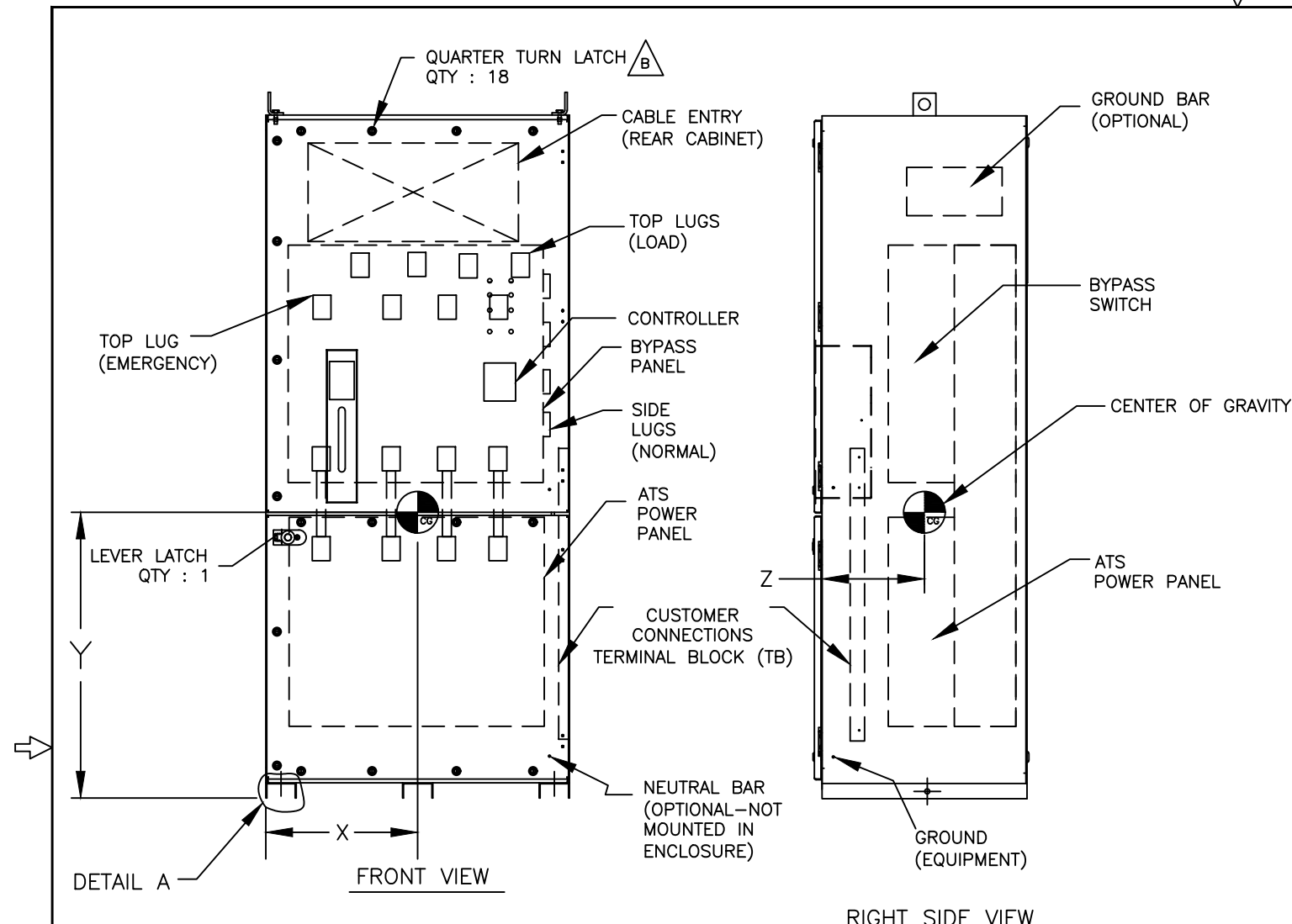
ZBTECT SWITCHES	CONTROLLER TYPE	NO. POLES	ENCLOSURE PART #	LUG RANGE	WIRE BENDING SPACE	
					P(EMERG)	R(NORMAL)
100-400 AMP	MX350	2,3	F-1860MP	(QTY 1) #4-600 MCM (33-304mm ²)	18 1/4 (464)	31 3/8 (797)
		4	F-1861MP			27 1/8 (689)

ZBTE(D/CT) SWITCHES	CONTROLLER TYPE	NO. POLES	ENCLOSURE PART #	LUG RANGE	WIRE BENDING SPACE	
					P(EMERG)	R(NORMAL)
600 AMP	MX350	2,3	F-1860MP	(QTY 2) #2-600 MCM (33-304mm ²)	18 1/4 (464)	31 3/8 (797)
		4	F-1861MP			27 1/8 (689)
800-1200 AMP	MX350	3	F-1862MP	(QTY 4) #2-600 MCM (33-304mm ²)	18 1/4 (464)	29 5/8 (752)
		4	F-1863MP			25 1/8 (638)

CABINET DIMENSIONS						
CABINET	A	B	C	D	E	F
F-1860MP	88 (2235)	36 (914)	28 1/4 (737)	24 (610)	29 (737)	24 (609)
F-1861MP	88 (2235)	40 (1016)		28 (711)	33 (838)	28 (711)
F-1862MP	88 (2235)	40 (1016)		28 (711)	33 (838)	28 (711)
F-1863MP	88 (2235)	46 (1168)		34 (864)	39 (991)	34 (863)

- NOTES:**
- MATERIAL: 10 GA. STEEL .134(3) REF. UNLESS OTHERWISE NOTED.
 - FINISH: PER F-7000
 - LOAD AND EMERGENCY LUG CONNECTIONS AT TOP OF BYPASS SWITCH. NORMAL LUG CONNECTIONS ON RIGHT SIDE OF MOUNTING FRAME.
 - ALL CABLES MUST ENTER IN TOP WIRING AREA OF CABINET ABOVE BYPASS SWITCH. NO CABLE ENTRY ALLOWED IN BOTTOM OF CABINET.
 - ADDITIONAL REAR BAY AVAILABLE FOR BOTTOM CABLE ENTRY. REFER TO 90C-1003AB DRAWING.
 - ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SHOWN IN INCHES(MILLIMETERS).
 - CONSTRUCTION PER UL 1008
 - FOR INSTALLLATION REFER TO SHEET NO. 2.

SIGNATURES		DATE	ABB TITLE ZBTE(D) & ZBTECT DIMENSIONAL DWG. NEMA-1
MODEL	SG	01/15/08	
DETAIL			
CHECKED			
ENGRG			
MFG			
QUALITY			FIRST MADE FOR: ZBTE(D) 600-1200 AMP & ZBTECT 100-1200 AMP
ISSUED			SIZE CAGE CODE DWG NO
DRAWING FILE:	90c-1003.dwg		B 90C-1003
MODEL / ASSEMBLY FILE:	ZBTE(D) 600-1200 AMP & ZBTECT 100-1200 AMP		
# CTQs	⊖ CRITICAL TO QUALITY CHARACTERISTIC	SCALE: N/A	SHEET 1 OF 2

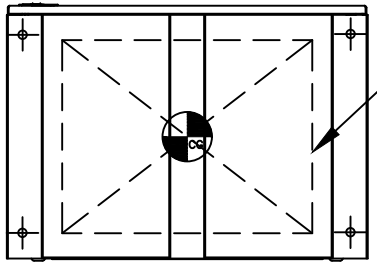


NOTES:

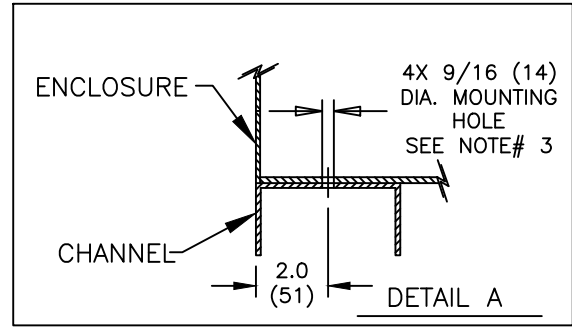
1. ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SHOWN IN INCHES (MILLIMETERS).
2. SEISMIC DATA OF MOST VULNERABLE ATS CONSTRUCTION WITHIN SERIES.

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. LOAD AND EMERGENCY LUG CONNECTIONS AT TOP OF BYPASS SWITCH. NORMAL LUG CONNECTIONS ON RIGHT SIDE OF MOUNTING FRAME.
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.



BOTTOM VIEW



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
100-600	3	1435(651)	18.0 (457)	36.0 (914)	19.0 (482)
	4	1540(699)			
800-1200	3	1485(674)	21.0 (533)	36.0 (914)	19.0 (482)
	4	1590(721)			

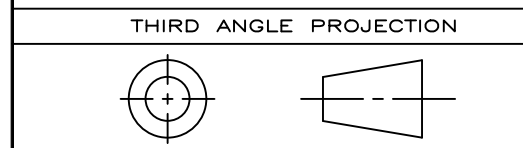


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AutoCad Generated		# CTQs	⊖ CRITICAL TO QUALITY CHARACTERISTIC	SCALE: N/A	SHEET 2 OF 2
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SIGNATURES	DATE
MODEL SG	01/15/08
DETAIL	
CHECKED	
ENGRG	
MFG	
QUALITY	
ISSUED	

ABB

TITLE
ZBTE(D) & ZBTECT
INSTALLATION DWG. NEMA-1

FIRST MADE FOR: ZBTE(D) 600-1200 AMP & ZBTECT 100-1200 AMP

DRAWING FILE: 90c-1003.dwg	SIZE B	CAGE CODE	DWG NO 90C-1003
MODEL / ASSEMBLY FILE: ZBTE(D) 600-1200 AMP & ZBTECT 100-1200 AMP			

