

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

| ZBTE(D/CT) SWITCHES | CONTROLLER TYPE | NO. POLES | ENCLOSURE PART # | LUG RANGE | WIRE BENDING SPACE | | | | | | WIRE GUTTERS | |
|---------------------|-----------------|-----------|------------------|---|--------------------|------------------|-------------------|------------------|-----------------|-------------------|-----------------|-----------------|
| | | | | | TOP ENTRY | | | BOTTOM ENTRY | | | S(LEFT) | T(RIGHT) |
| 1600-2000 AMP | MX-350 | 2,3 | F-1854MP | (QTY 8) #2-600 MCM (33-304mm ²) | 27 3/4 (705) | 64 3/4 (1645) | 17 11/32 (441) | 52 3/4 (1340) | 15 3/4 (400) | 63 5/32 (1604) | 11 3/4 (298) | 15 1/8 (384) |
| | | 4 | F-1855MP | | | | | | | | 12 (305) | |
| 3000 AMP | | 2,3 | F-1856MP | (QTY 8) #2-600 MCM (33-304mm ²) | 28 3/4 (730) | 65 3/4 (1670) | 18 11/32 (466) | 51 3/4 (1314) | 14 3/4 (375) | 62 5/32 (1579) | 11 3/4 (298) | 15 1/8 (384) |
| | | 4 | F-1857MP | | | | | | | | 12 (305) | |

| CABINET DIMENSIONS | | | | | | |
|--------------------|--------------|--------------|------------------|-------------|-------------|-------------|
| CABINET | A | B | C | D | E | F |
| F-1854MP | 86 (2184) | 40 (1016) | 61 1/8 (1553) | 26 (660) | 21 (533) | 14 (356) |
| F-1855MP | 86 (2184) | 50 (1270) | 61 1/8 (1553) | 36 (914) | 21 (533) | 14 (356) |
| F-1856MP | 86 (2184) | 40 (1016) | 73 1/8 (1857) | 26 (660) | 33 (838) | 21 (533) |
| F-1857MP | 86 (2184) | 50 (1270) | 73 1/8 (1857) | 36 (914) | 33 (838) | 21 (533) |

NOTES:

- MATERIAL: 10 GA. STEEL .134(3) REF. UNLESS OTHERWISE NOTED.
- FINISH: PER F-7000.
- ALL CABLE ENTRY IN REAR OF CABINET. NO CABLE ENTRY IN FRONT OF CABINET.
- WIRING BENDING AND GUTTER SPACES MEASURED AT POINT OF CONNECTION TO LUGS.
- LUGS SHOWN FOR BOTTOM CABLE ENTRY. MAY BE REVERSED FOR TOP ENTRY CABLE ENTRY. LUGS ARE SUPPLIED AS OPTION ONLY.
- ALL DIMENSIONS ARE FOR REFERENCE ONLY AND SHOWN IN INCHES(MILLIMETERS).
- ALL HANDLING AND MOVEMENT OF CABINET MUST BE DONE IN THE UPRIGHT POSITION ONLY.
- ALL SIDE AND REAR DOOR/PANELS SHALL HAVE GUTTER AND KNIFE EDGE FLANGES, AND HAVE HINGES ON THE RIGHT HAND SIDE.
- CONSTRUCTION PER UL 1008
- FOR SEISMIC MOUNTING REFER TO SHEET NO. 2

IMPORTANT NOTE:
LUGS ARE SUPPLIED AS OPTIONAL ACCESSORY ONLY. TYPICAL CONFIGURATION SHOWN FOR REFERENCE ONLY.

| | | | |
|---|--------------------------------------|---|---|
| SIGNATURES | | DATE | ABB |
| MODEL | SG | 01/15/08 | |
| DETAIL | | | |
| CHECKED | | | |
| ENGRG | | | |
| MFG | | | |
| QUALITY | | | TITLE |
| ISSUED | | | ZBTE(D/CT) 1600-3000 AMP DIMENSIONAL DWG. NEMA-1 |
| DRAWING FILE: 90c-1004.dwg | | FIRST MADE FOR: ZBTE(D/CT) 1600 - 3000 A NEMA-1 | |
| MODEL / ASSEMBLY FILE: ZBTE(D/CT) 1600-3000 AMP | SIZE B | CAGE CODE | DWG NO |
| # CTQs | ⊖ CRITICAL TO QUALITY CHARACTERISTIC | | 90C-1004 |
| AutoCad Generated | | SCALE: N/A | SHEET 1 OF 2 |

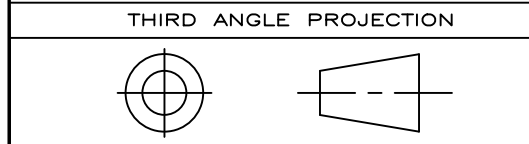
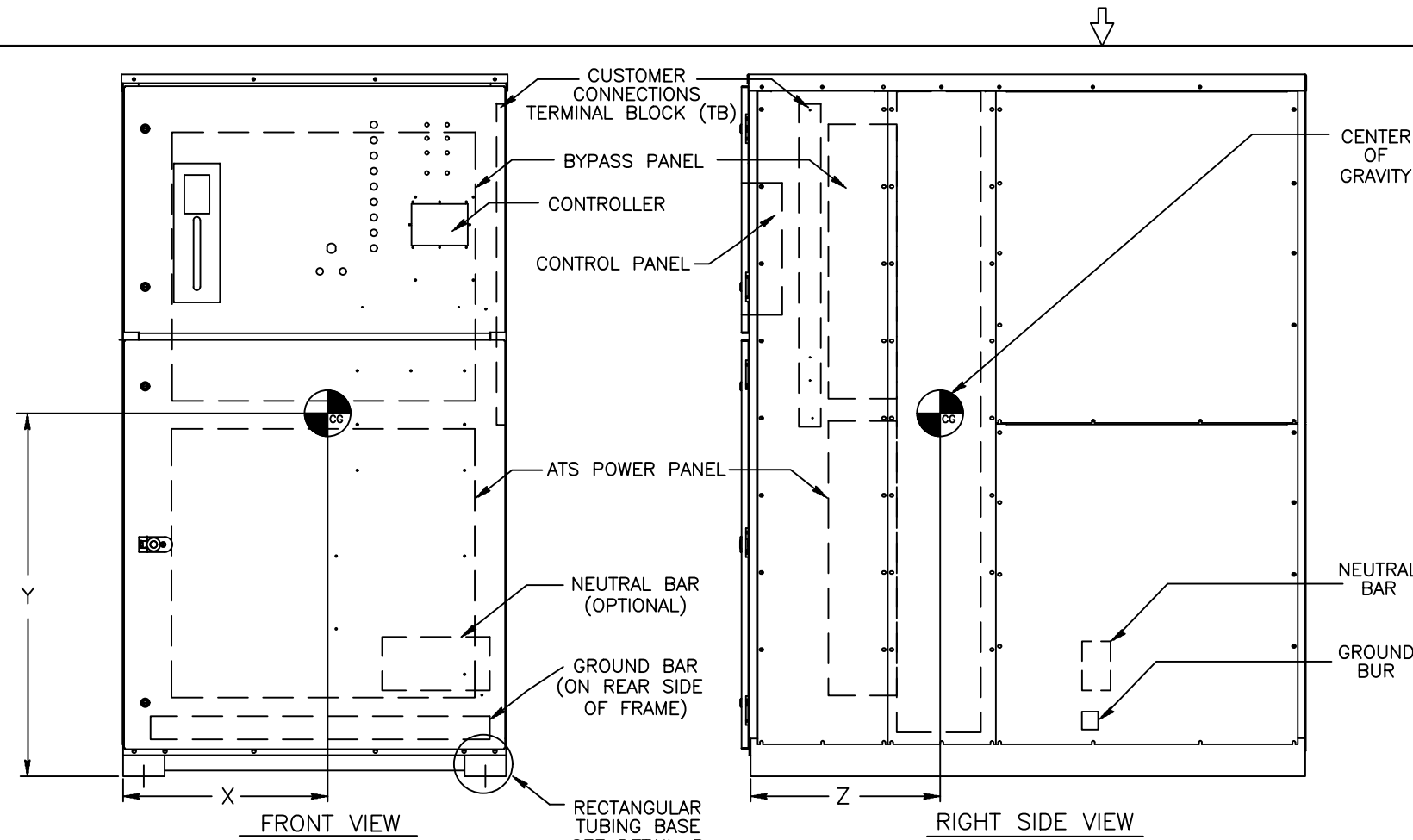


ABB PROPRIETARY AND CONFIDENTIAL INFORMATION
The information contained in the document has to be kept strictly confidential. Any unauthorized use, reproduction, distribution or disclosure to third parties is strictly forbidden. ABB reserves all rights regarding intellectual Property Rights. Copyright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

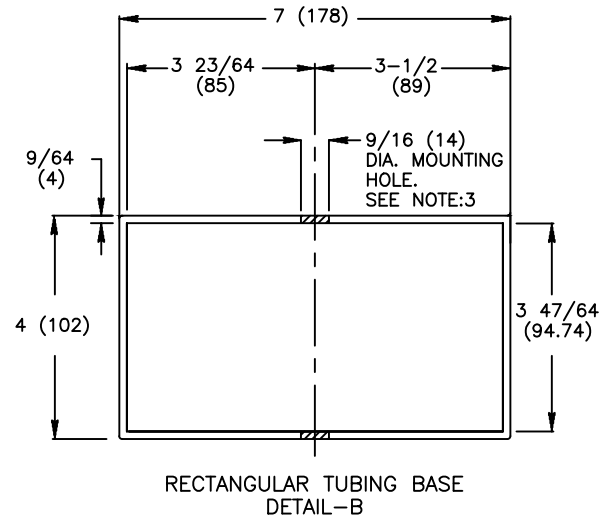
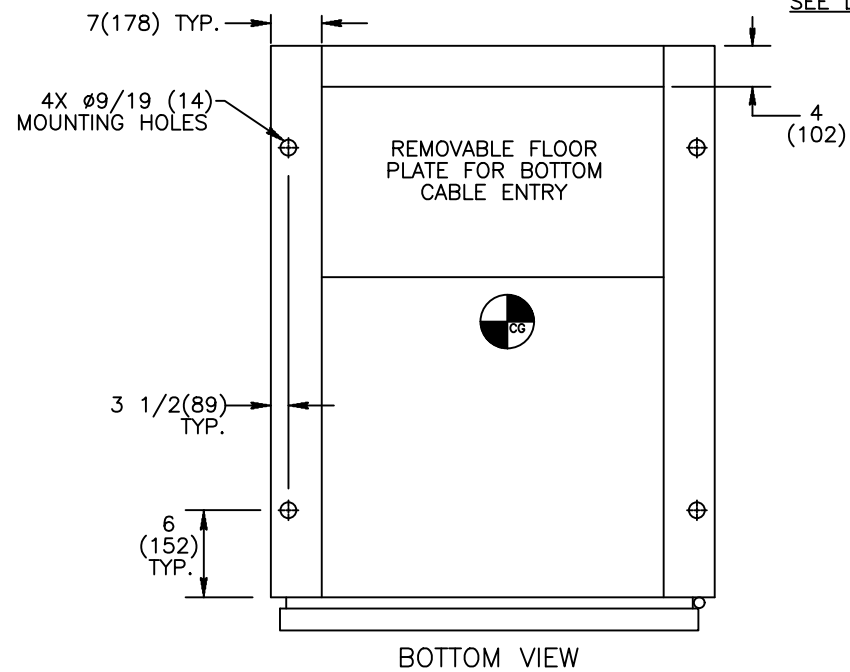
AutoCad Generated



NOTES:

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

| | |
|--|--|
| MAXIMUM DEFLECTION AT TOP OF GEAR: $d_{ss}=0.98$ INCHES (25 mm) $d_{fb}=0.21$ INCHES (4 mm) | |
| QUALIFIED BY: TIME HISTORY SHAKE TABLE TEST IEEE-693-2005-HIGHx2.5 (64 mm) IBC-2003-300%G | |
| RESONANCE FREQUENCIES: $f_{ss}=8.6$ Hz $f_{fb}=21.0$ Hz $f_v > 33.0$ Hz | |
| MAXIMUM REACTION TO ANY BOLT: $V_{ss}=5400$ LBS (2449 KG) SHEAR (DEAD LOAD +/- SEISMIC) $V_{fb}=5400$ LBS (2449 KG) SHEAR $T_v=12251$ LBS (5557 KG) UP $P_v=16492$ LBS (7480 KG) DOWN | |
- BOLT ENCLOSURE FROM C-CHANNEL BASE (SEE DETAIL B) USING THE FOLLOWING SEISMIC CERTIFIED MOUNTING HARDWARE PER MOUNTING HOLE: (HARDWARE PROVIDED BY INSTALLER).
 - 1/2-13 GRADE 5 BOLT TORQUE TO 15 FT-LBS. (20 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.
- CENTER OF GRAVITY DIMENSIONS ARE FOR REFERENCE ONLY.
- SWITCH IS DESIGNED FOR BOTH TOP AND BOTTOM CABLE ENTRY. REFER TO SHEET 1 FOR CABLE BENDING SPACE AND GUTTER SPACE DETAILS.
- ALL CONTROL WIRES (18-12 AWG) MUST BE TORQUED TO 19 in-lbs. (2 N-m)
- LUG TORQUE ARE APPLICABLE FOR CU & AL CABLES.
- FOR WORKING CLEARANCE REFER TO NATIONAL AND LOCAL CODES AND STANDARDS.



| SOCKET SIZE ACROSS FLATS | TIGHTENING TORQUE FOR LUGS | |
|--------------------------|----------------------------|------|
| | 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 |
| 1600-2000 | 3 | 3170(1438) | 21.0 (533) | 44.0 (1118) | 26.0 (660) |
| | 4 | 4070(1846) | | | |
| 3000 | 3 | 3970(1801) | 21.0 (533) | 44.0 (1118) | 30.0 (762) |
| | 4 | 5070(2300) | | | |

| SIGNATURES | | DATE |
|------------|----|----------|
| MODEL | SG | 01/15/08 |
| DETAIL | | |
| CHECKED | | |
| ENGRG | | |
| MFG | | |
| QUALITY | | |
| ISSUED | | |

ABB

TITLE
**ZBTE(D/CT) 1600-3000 AMP
DIMENSIONAL DWG. NEMA-1**

FIRST MADE FOR: ZBTE(D/CT) 1600 - 3000 A NEMA-1

| | | |
|------|-----------|----------|
| SIZE | CAGE CODE | DWG NO |
| B | | 90C-1004 |

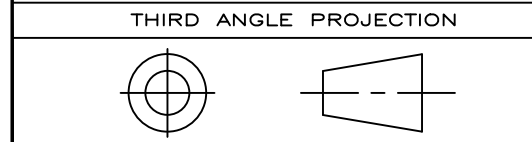


ABB PROPRIETARY AND CONFIDENTIAL INFORMATION
The information contained in the document has to be kept strictly confidential. Any unauthorized use, reproduction, distribution or disclosure to third parties is strictly forbidden. ABB reserves all rights regarding intellectual Property Rights. Copyright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

AutoCad Generated

| | |
|--------|--------------------------------------|
| # CTQs | ⊕ CRITICAL TO QUALITY CHARACTERISTIC |
|--------|--------------------------------------|

SCALE: N/A

SHEET 2 OF 2