

CLEARANCES:
 FRONT: 42IN [1067]
 REAR: 6IN [152]
 LEFT: 4IN [102]
 RIGHT: 4IN [102]
 TOP: 18IN [457]

WEIGHT: 4250#
 [1950KG]

HEAT DISSIPATION:
 27900 BTU/hr
 [8177W]

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM

NOTES:

- Front access only required for operation and servicing of Type X Controls, Transformer and Transformer Mains. Top or Bottom Input / Output Cable Access is available.
- Sheets 2 through 5 will show the assembly in various forms.
- See Sheet 3 for Cable Access Areas
- See Sheet 4, Table I, for available configurations of Sub-Feed Circuit Breakers.
 - Circuit Breakers are based on their maximum frame rating (AF).
 - 36 rows are available for this specific configuration.
 - The SafePanel is center-tapped with a maximum total current of 1200A. The maximum current on either side of the top is 800A.
 - For 400A Breakers the maximum rating of adjacent circuit breakers is 80%. For a 100% rating one empty space is required above circuit breaker
- See Sheet 5, Table 2, for recommended wire sizes.
- Fork lift provision from the front and rear of the assembly is available.
- The transformer exhaust plate is removable for installation and servicing of the Input Source Cabling.
- A junction box is required for top entry input cables.
- Optional floor stand is available and ships separately.
- See Sheet 6 for optional seismic cleats.
- WARNING: A MINIMUM OF 6.0 INCHES IS REQUIRED BETWEEN THE BACK AND 4.0 INCHES IS REQUIRED BETWEEN THE SIDES OF THE SYSTEM AND ANY OBSTRUCTION OR WALL TO PERMIT THE PROPER COOLING OF THE TRANSFORMER.
- See One-Line electrical diagram for further detail.

Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED
 DIMENSIONS ARE IN INCHES
 DIMENSIONS IN [] ARE IN mm
 DO NOT SCALE DRAWING

TOLERANCES:
 .XX ± .03
 .XXX ± .010
 ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
 POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
 /500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED
 CIRCUIT BREAKERS 1200A SAFE PANEL SUB-FEED
 DISTRIBUTION TYPE XEP0D

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO.	REV
CHK SPJ	DATE 1/5/2022			94-MS-01111901	A
APVD NEM	DATE 1/5/2022	SCALE 1:1.25	94-MS-01111901-ASHTI	SHEET	1 of 6

8

7

6

5

4

3

2

1

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM

D

ACCESS AREA
 TRANSFORMER EXHAUST AREA
 SUB-FEED OUTPUT ACCESS AREA

ePODS BAY

CB60I MAIN

CONTROLS / MONITORING SECTION

T620

IR PORTS (FOR SUB-FEED PLEASE SPECIFY QTY AND POSITION UPON ORDERING)

SEISMIC RESTRAINT 6 PLACES

SUB-FEED CB VIEWING WINDOW

FORK LIFT HOLE COVERS (OPTIONAL PERFORATED)

SUB-FEED CIRCUIT BREAKERS

SUB-FEED BAY

ISOMETRIC VIEW

ISOMETRIC VIEW

SUB-FEED AND ePODS BAY OUTER DOORS REMOVED

B

B

C

C

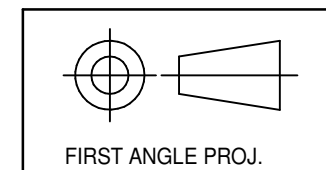
A

A

Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING

TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2



OUTLINE, MOUNTING, INSTALLATION DIAGRAM /500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED CIRCUIT BREAKERS 1200A SAFEPANEL SUB-FEED DISTRIBUTION TYPE XEP0D

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO. 94-MS-01111901	REV A
CHK SPJ	DATE 1/5/2022	SCALE 1:10	94-MS-01111901-ASHT2	SHEET 2 of 6	
APVD NEM	DATE 1/5/2022				

8

7

6

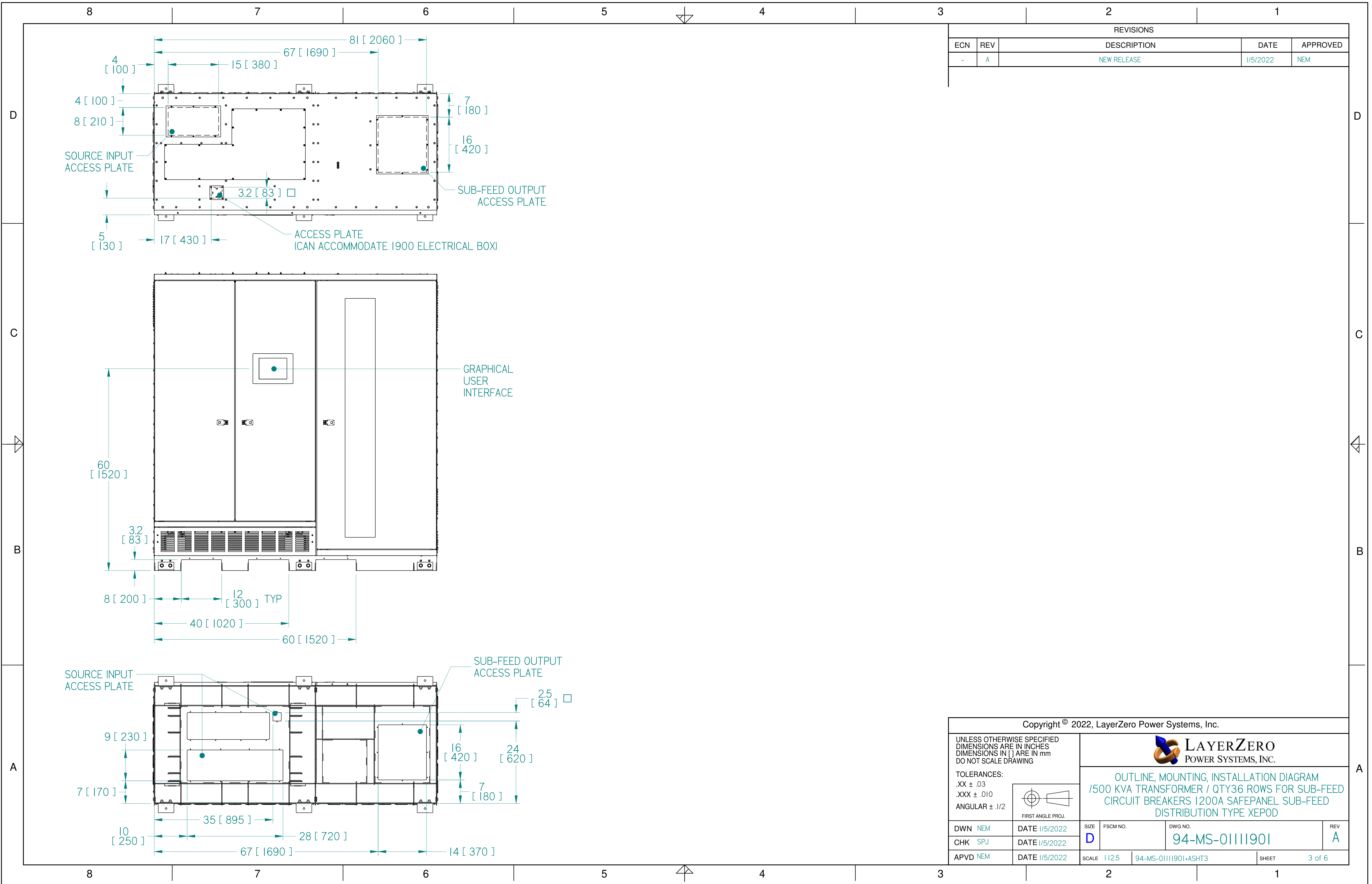
5

4

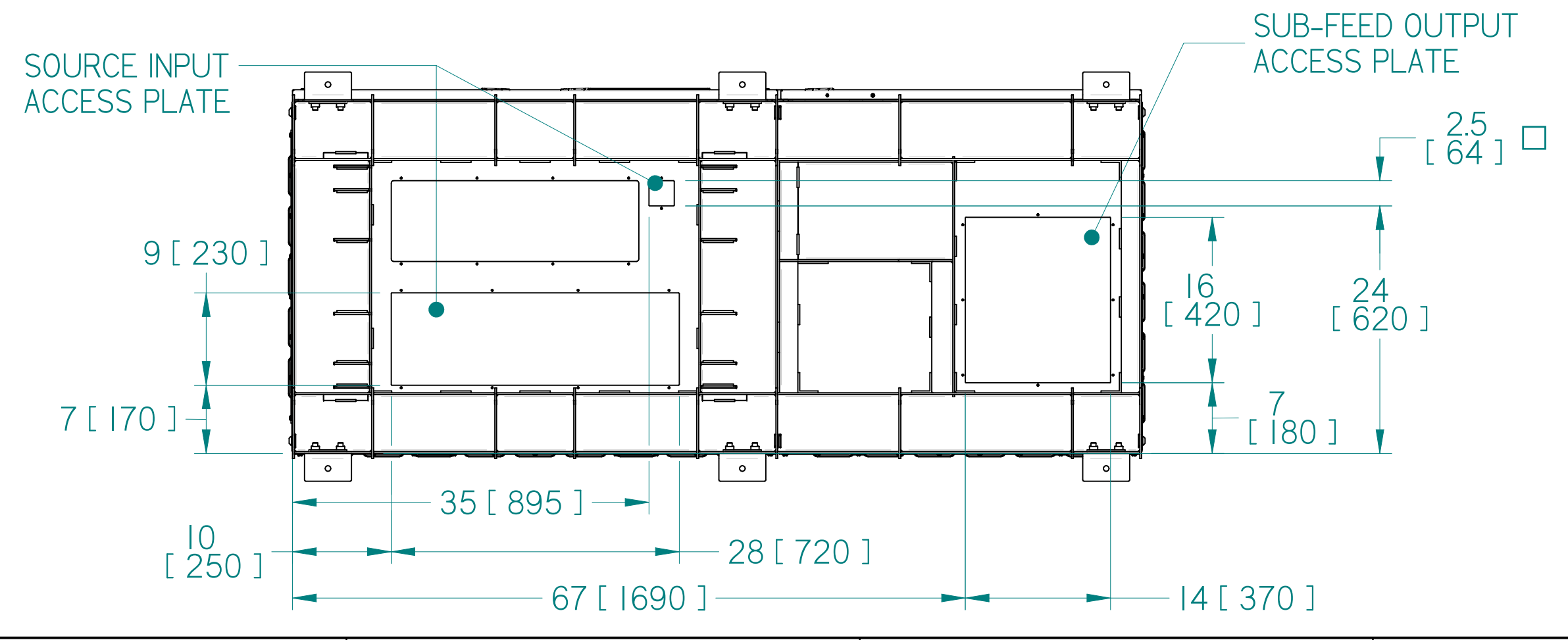
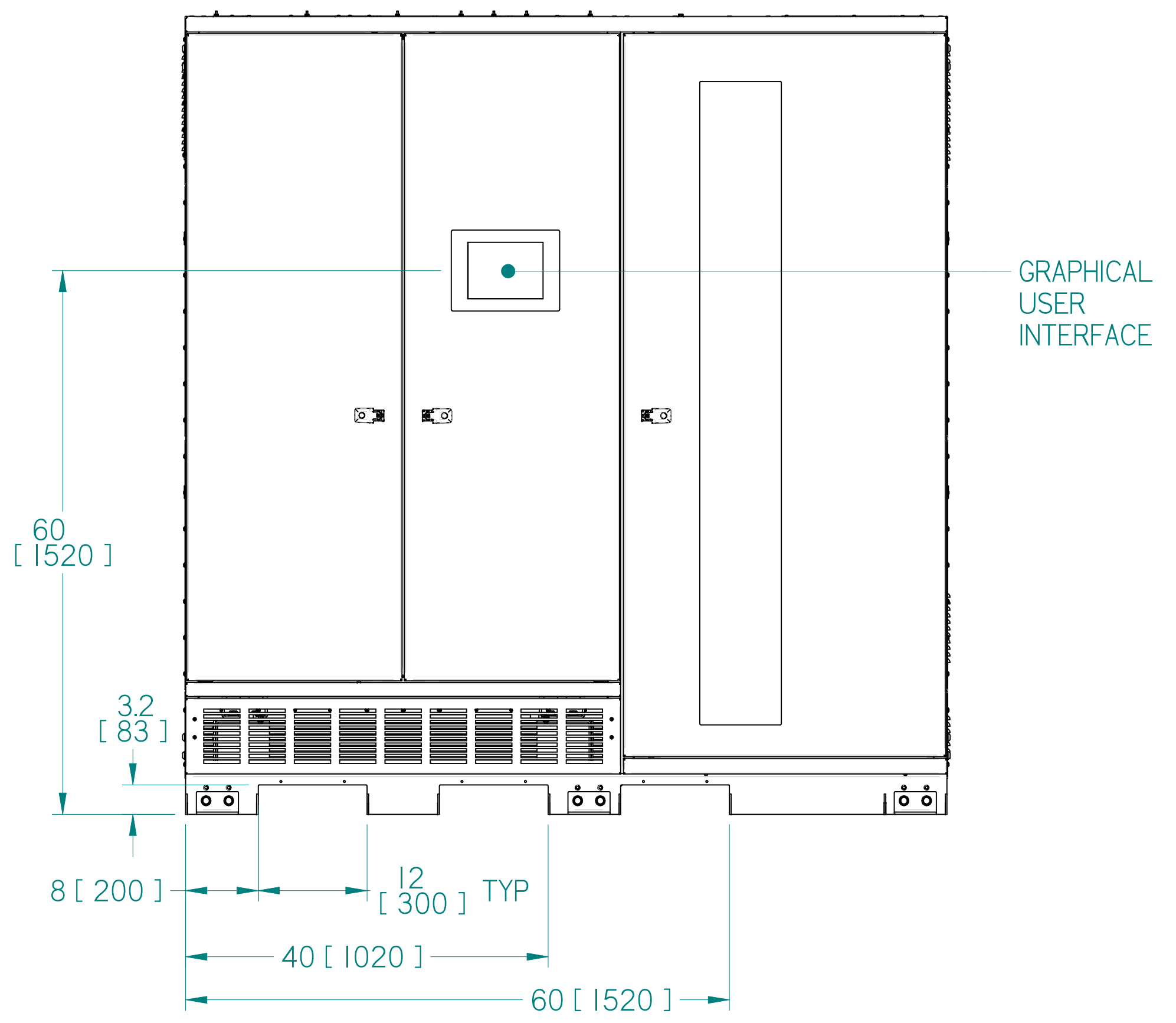
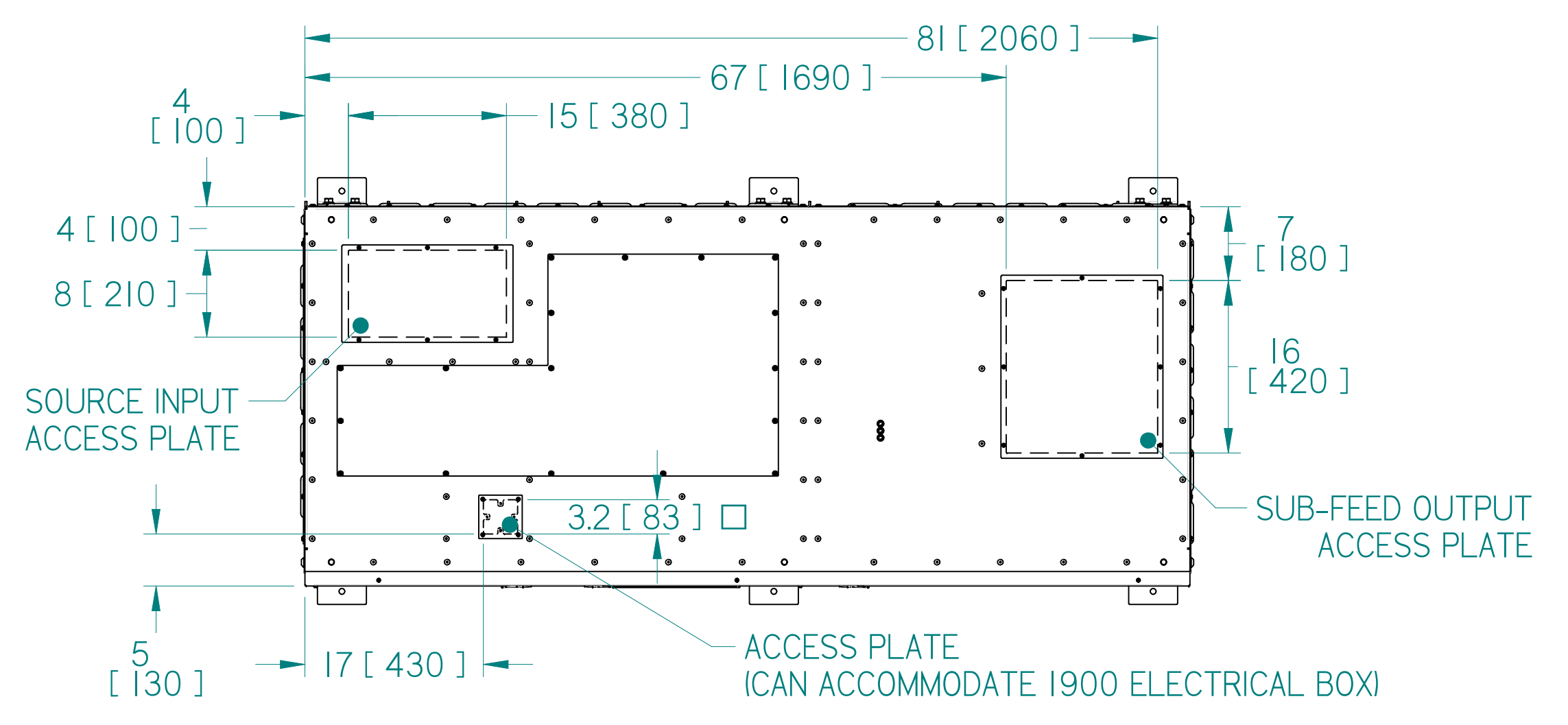
3

2

1



REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM



Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING

TOLERANCES:
 .XX ± .03
 .XXX ± .010
 ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
 /500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED
 CIRCUIT BREAKERS 1200A SAFE PANEL SUB-FEED
 DISTRIBUTION TYPE XEPD

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO. 94-MS-01111901	REV A
CHK SPJ	DATE 1/5/2022	SCALE 1:12.5		94-MS-01111901-ASHT3	SHEET 3 of 6
APVD NEM	DATE 1/5/2022				

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM

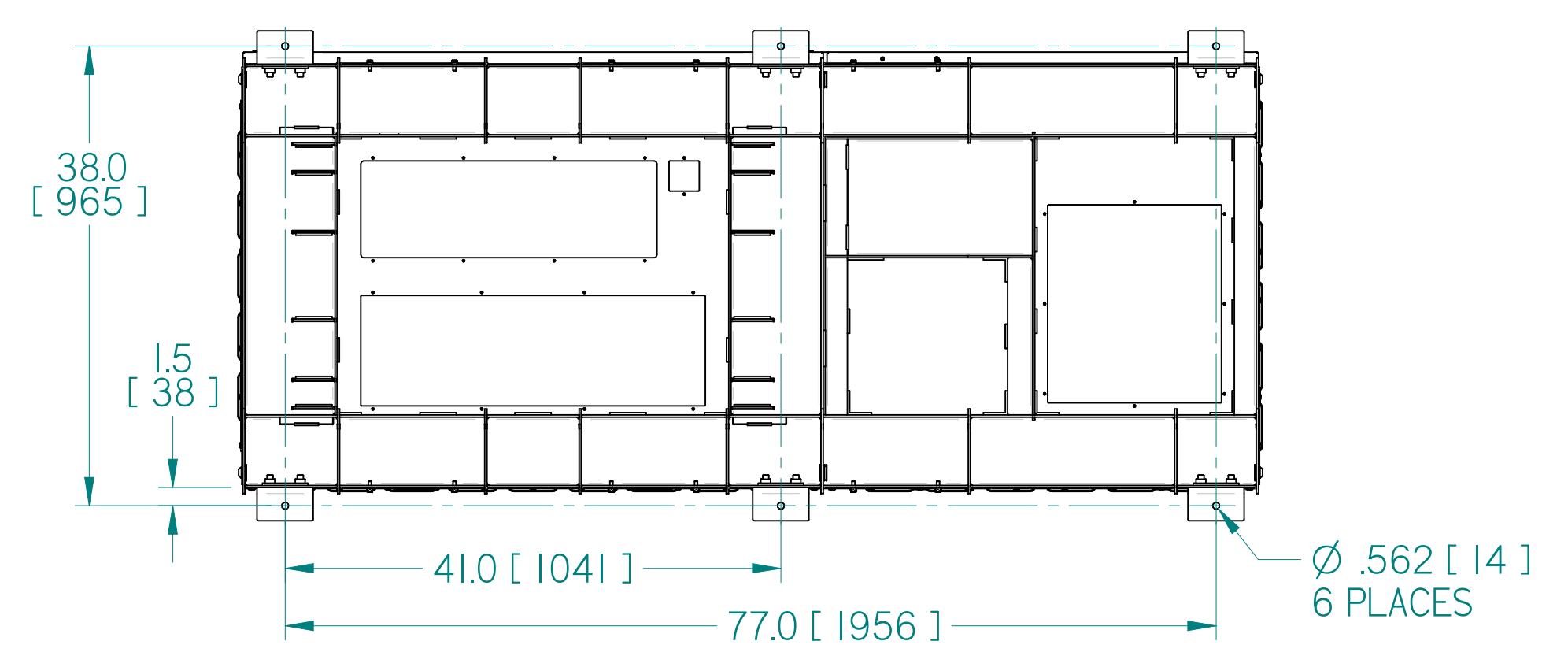
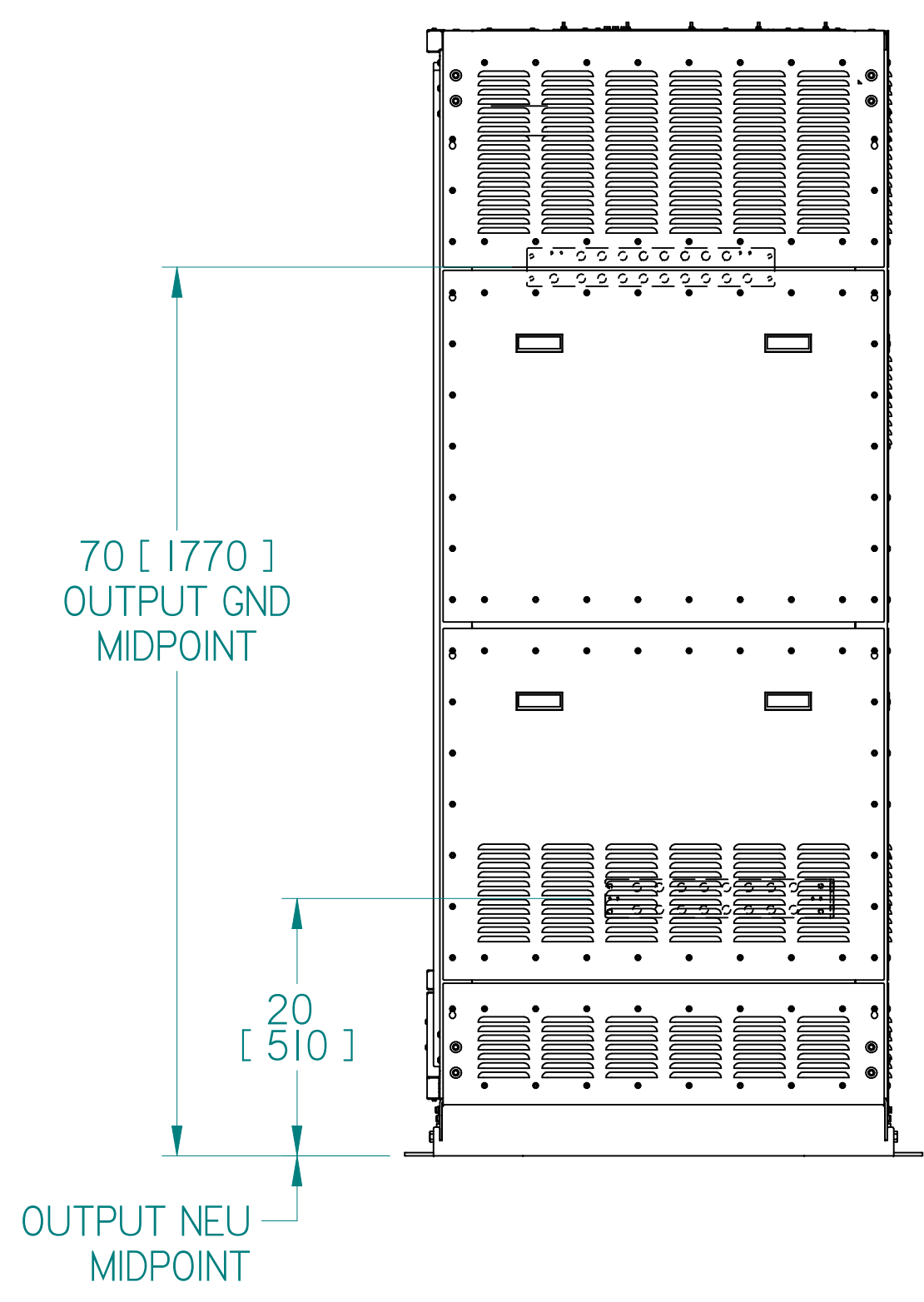
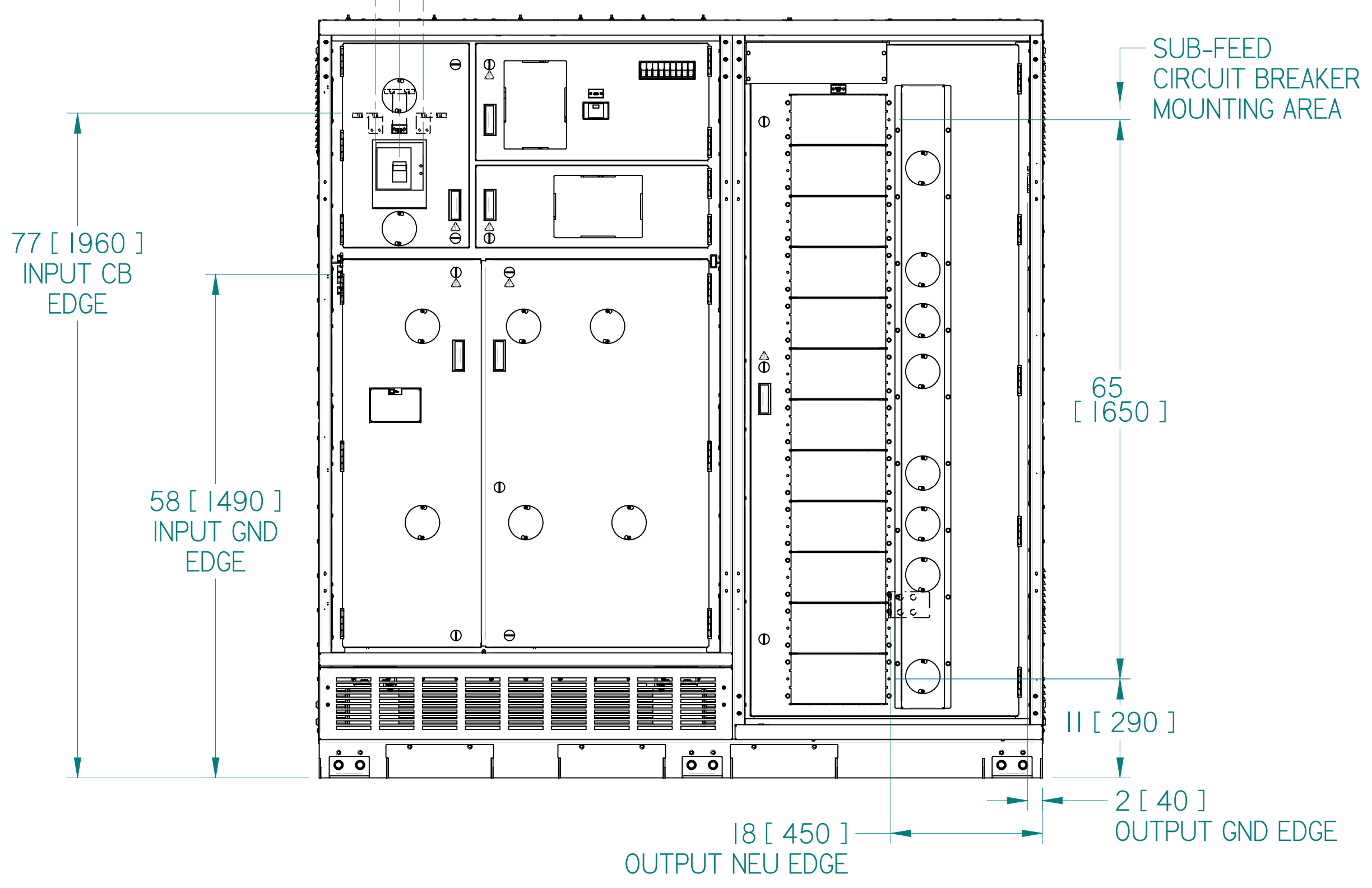
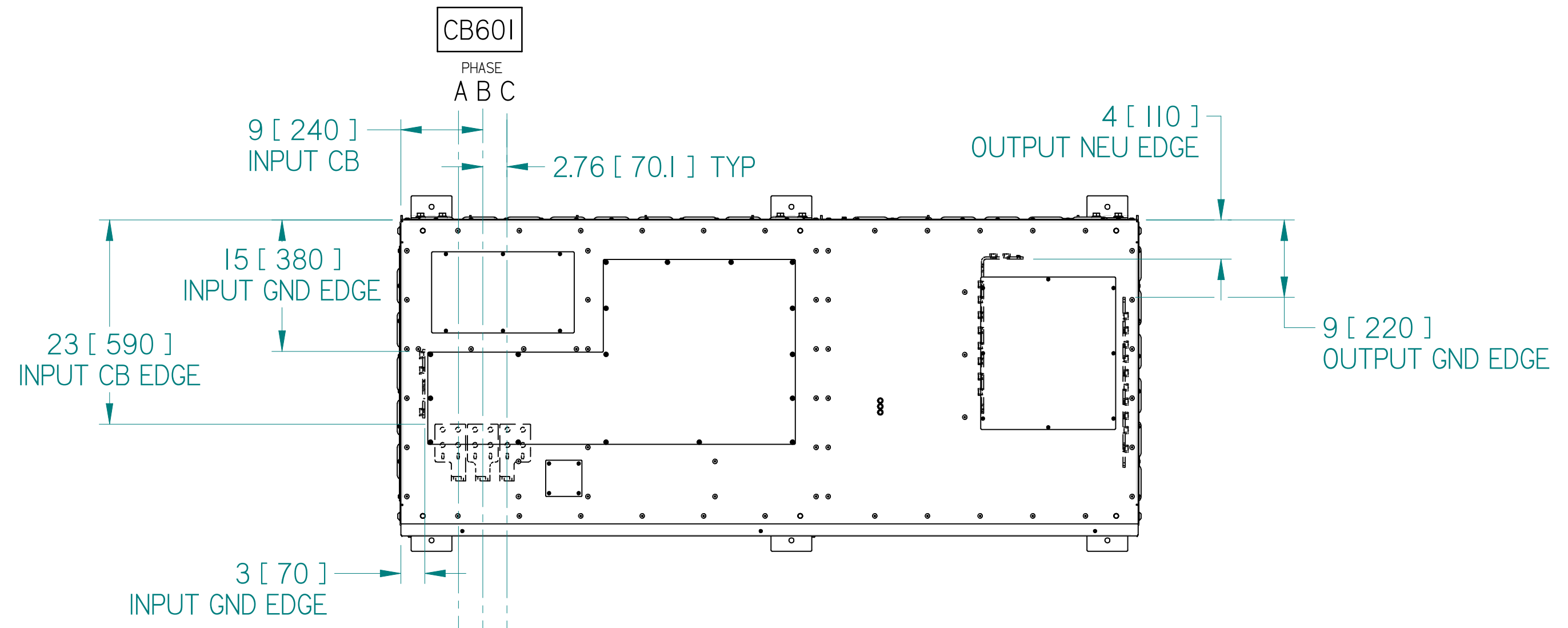


TABLE I
1200A SAFEPANEL CONFIGURATION OPTIONS FOR 36 ROWS

Frame Size (AF)	Percent Ratings (%)	Rows	Cover Plate(s)
125A XT	80, 100	2	QTY1 42-01-40405534
250A XT	80, 100	3	QTY1 42-01-40405535
400A	80	3	QTY1 42-01-40405506
400A	100	6	QTY1 42-01-40405506 + QTY1 42-01-40405523
800A	80, 100	6	QTY1 42-01-40405507
BLANK -1ROW	N/A	1	QTY1 42-01-40405501
BLANK -2ROWS	N/A	2	QTY1 42-01-40405502
BLANK -3ROWS	N/A	3	QTY1 42-01-40405503

Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING

TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
/500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED
CIRCUIT BREAKERS 1200A SAFEPANEL SUB-FEED
DISTRIBUTION TYPE XEPD

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO.	REV A
CHK SPJ	DATE 1/5/2022	94-MS-01111901			
APVD NEM	DATE 1/5/2022	SCALE 1:2.5	94-MS-01111901-ASHT4	SHEET	4 of 6

8

7

6

5

4

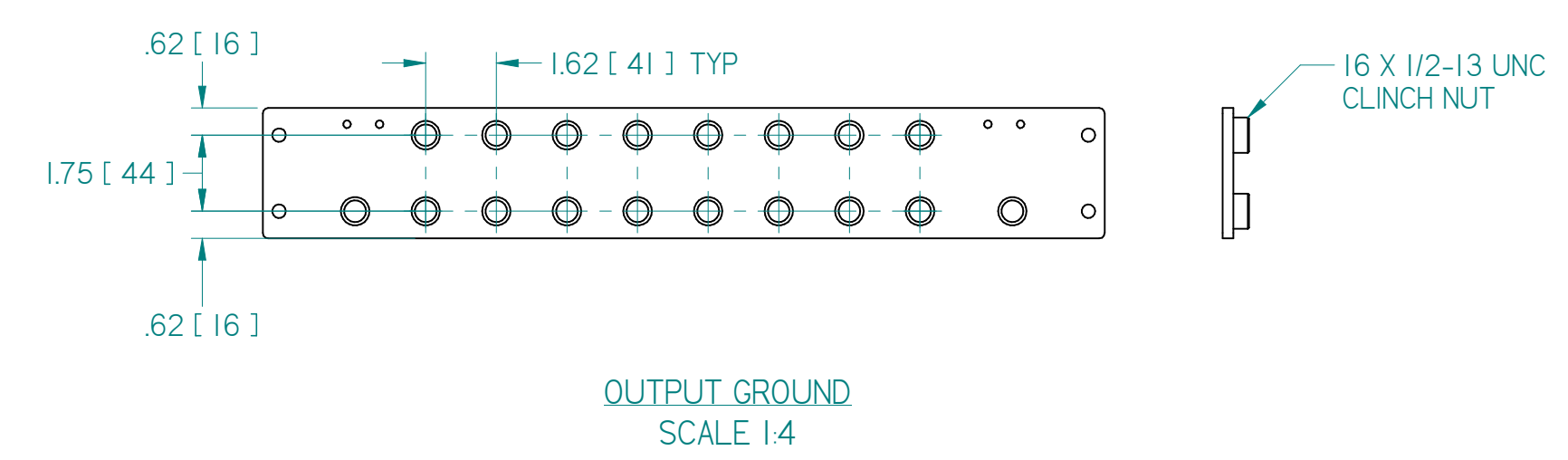
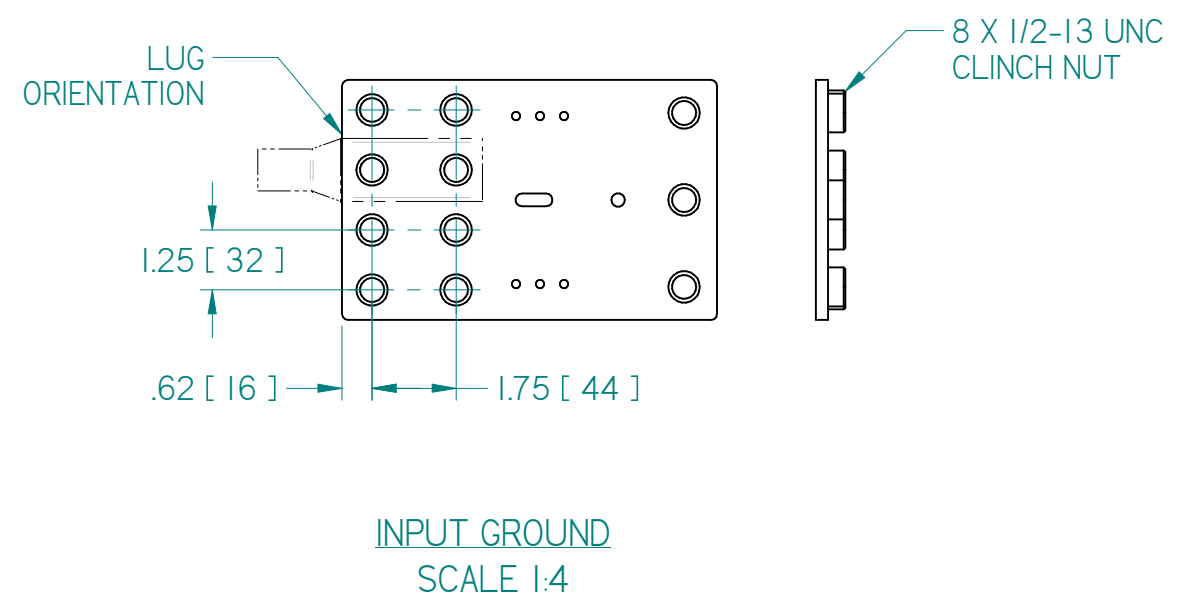
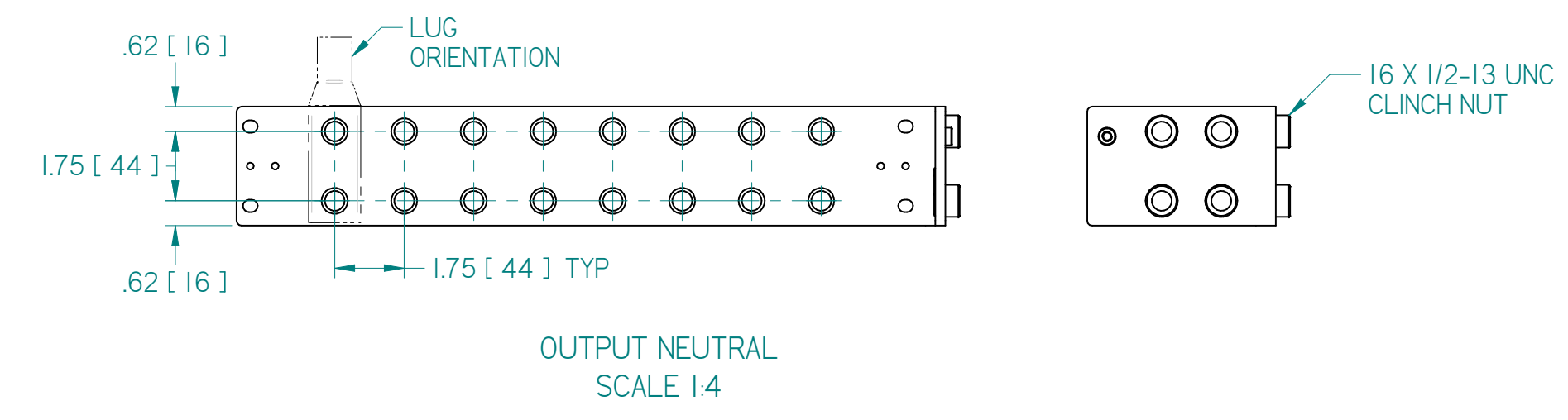
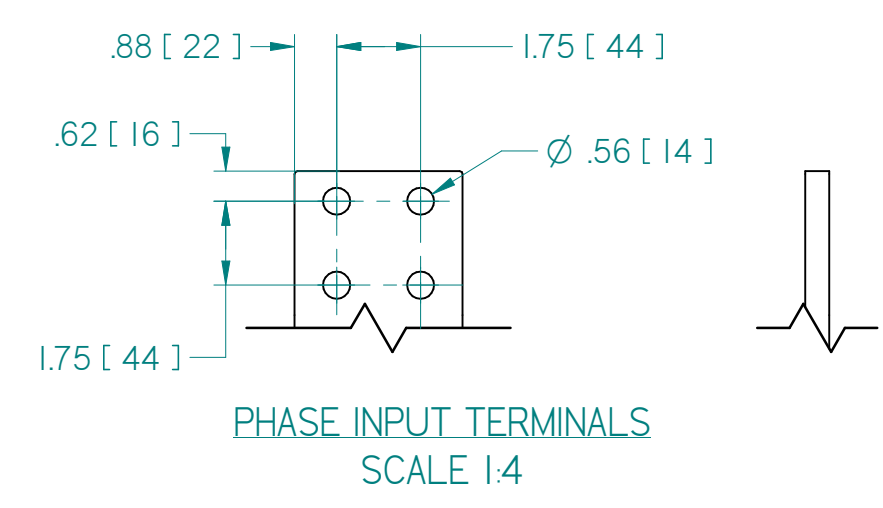
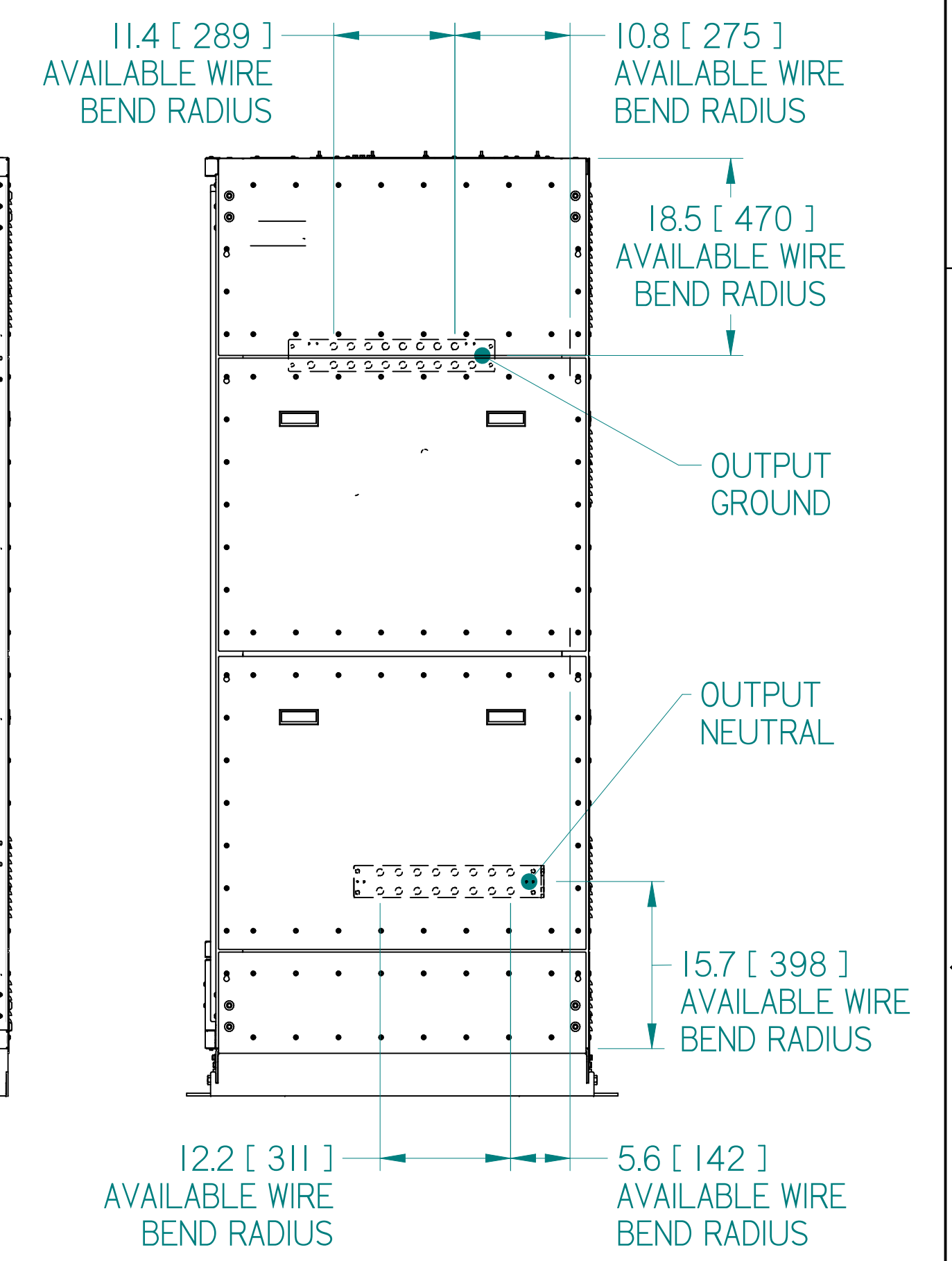
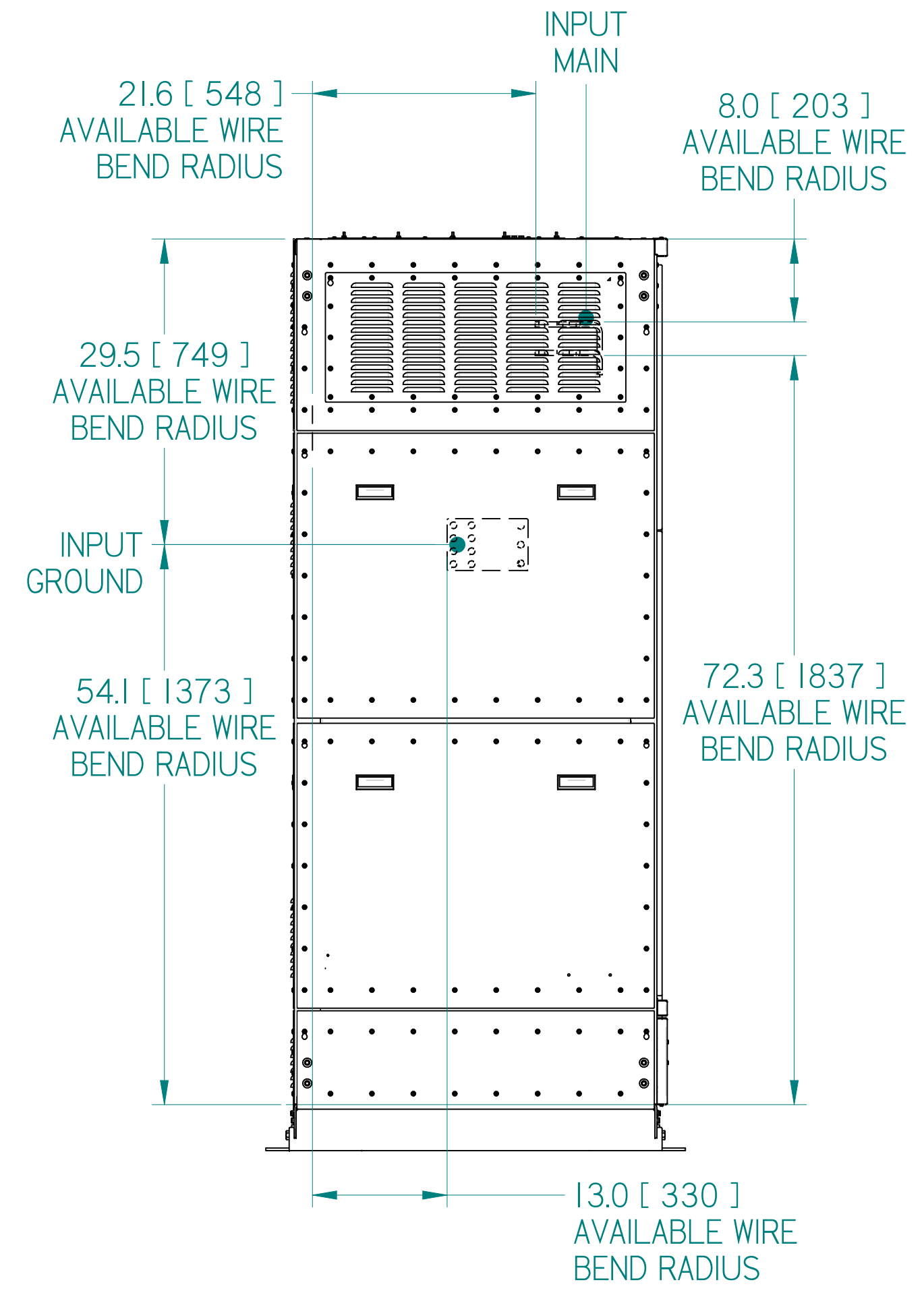
3

2

1

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM

TABLE 2			
Compression lugs for Input Phases and Ground lugs provided by others			
DESCRIPTION	CABLE SIZE AND LUGS		
	RECOMMENDED COPPER CONNECTION (75 °C WIRE MIN)	RECOMMENDED ALUMINUM CONNECTION (75 °C WIRE MIN)	LUG TYPE & SIZE (75 °C WIRE MIN)
INPUT PHASES (WITHOUT JUNCTION BOX) TOP ENTRY	(2) X 350-500 MCM (3) X 250 MCM PER PHASE	(2) X 500 MCM (3) X 300 MCM PER PHASE	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
INPUT PHASES (WITHOUT JUNCTION BOX) BOTTOM ENTRY	(2) X 350-600 MCM (3) X 250-600 MCM (4) X 250-500 MCM PER PHASE	(2) X 500-600 MCM (3) X 300-600 MCM (4) X 250-500 MCM PER PHASE	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
INPUT PHASES (WITH 8" JUNCTION BOX) TOP ENTRY	(2) X 350-600 MCM (3) X 250-600 MCM (4) X 250-500 MCM PER PHASE	(2) X 500-600 MCM (3) X 300-600 MCM (4) X 250-500 MCM PER PHASE	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
INPUT GROUND	500 MCM MAX	500 MCM MAX	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
OUTPUT GROUND	500 MCM MAX	500 MCM MAX	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
OUTPUT NEUTRAL	600 MCM MAX	600 MCM MAX	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
CONTROL WIRE	16-20 AWG STRANDED	N/A	NOT REQUIRED



Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING

TOLERANCES:
 .XX ± .03
 .XXX ± .010
 ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
 /500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED
 CIRCUIT BREAKERS 1200A SAFEPANEL SUB-FEED
 DISTRIBUTION TYPE XEP0D

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO.	REV A
CHK SPJ	DATE 1/5/2022	94-MS-01111901			
APVD NEM	DATE 1/5/2022	SCALE 1:12.5	94-MS-01111901-ASHT5	SHEET	5 of 6

8

7

6

5

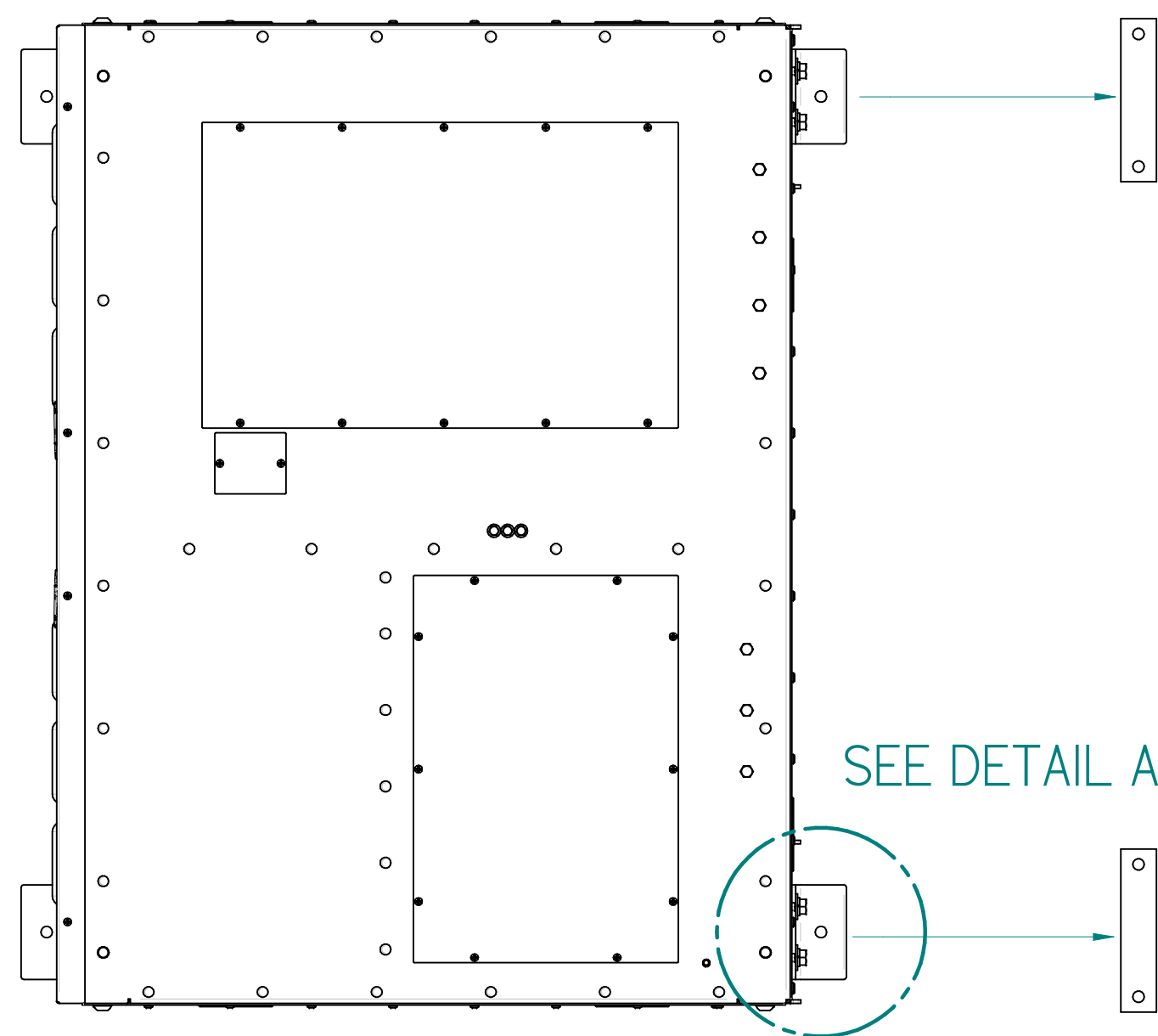
4

3

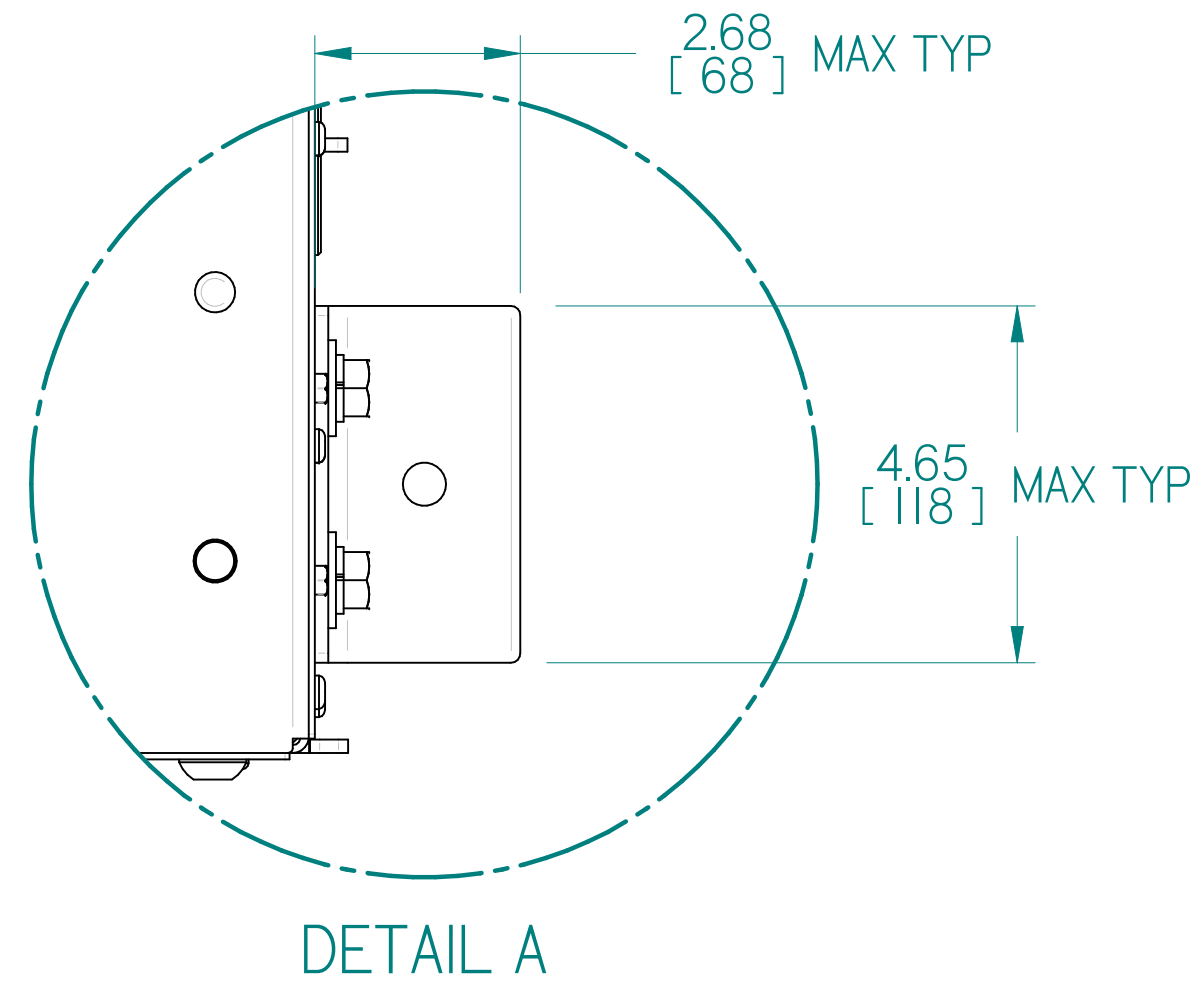
2

1

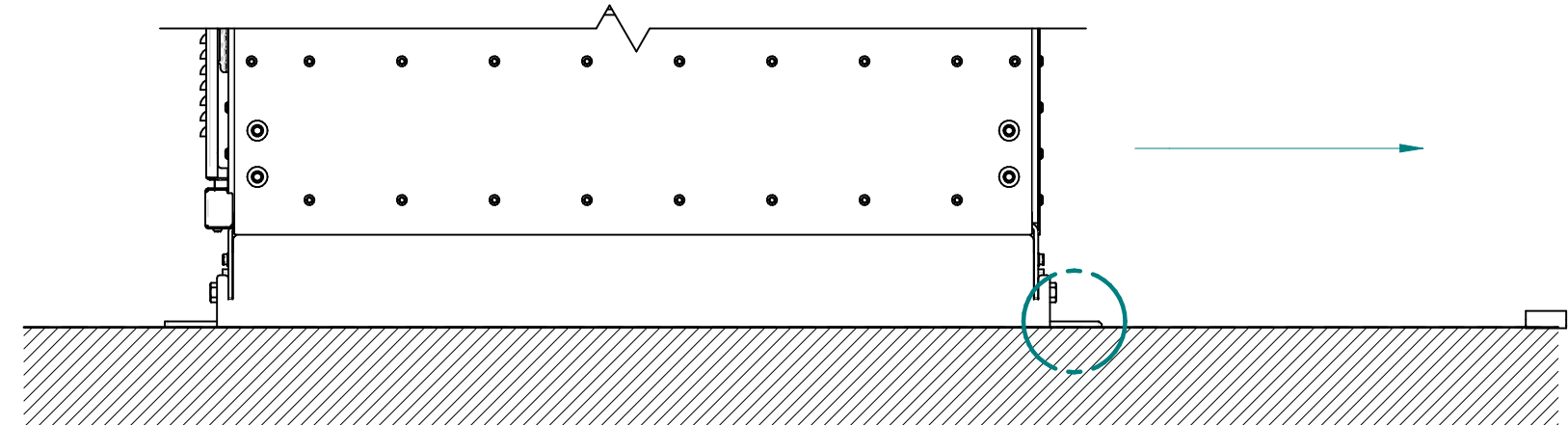
TOP VIEW OF REFERENCE CABINET



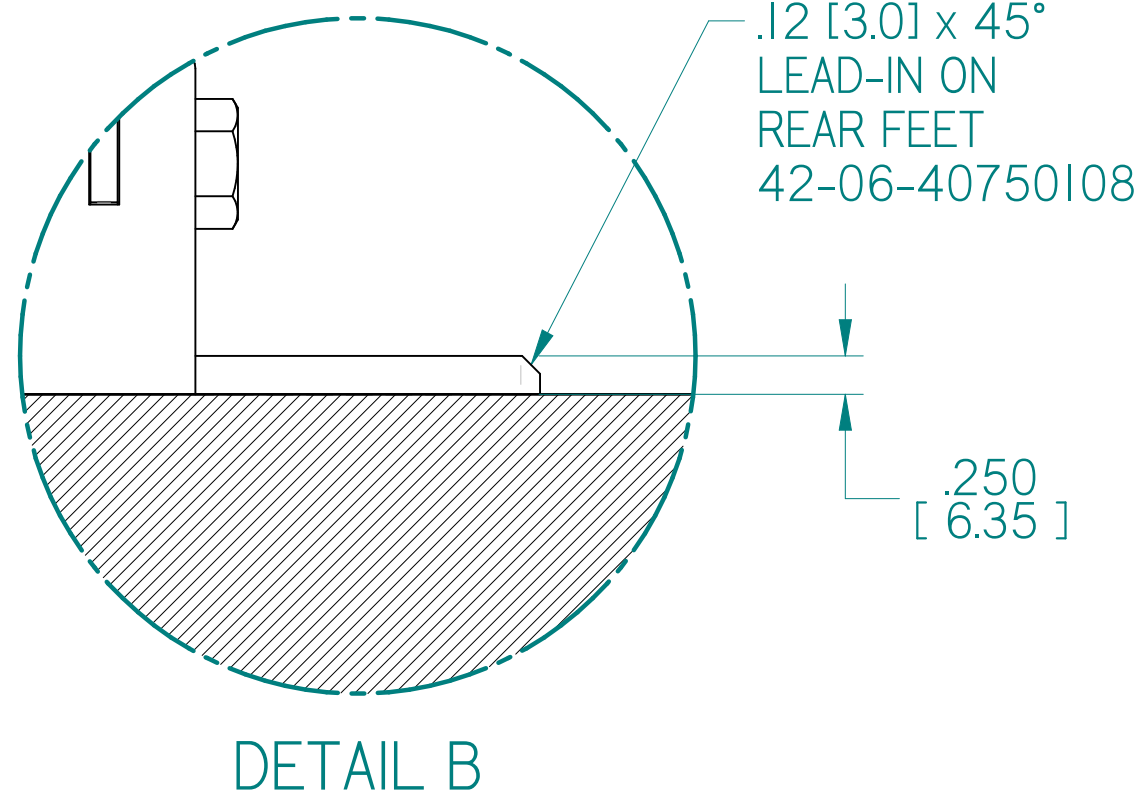
SEE DETAIL A



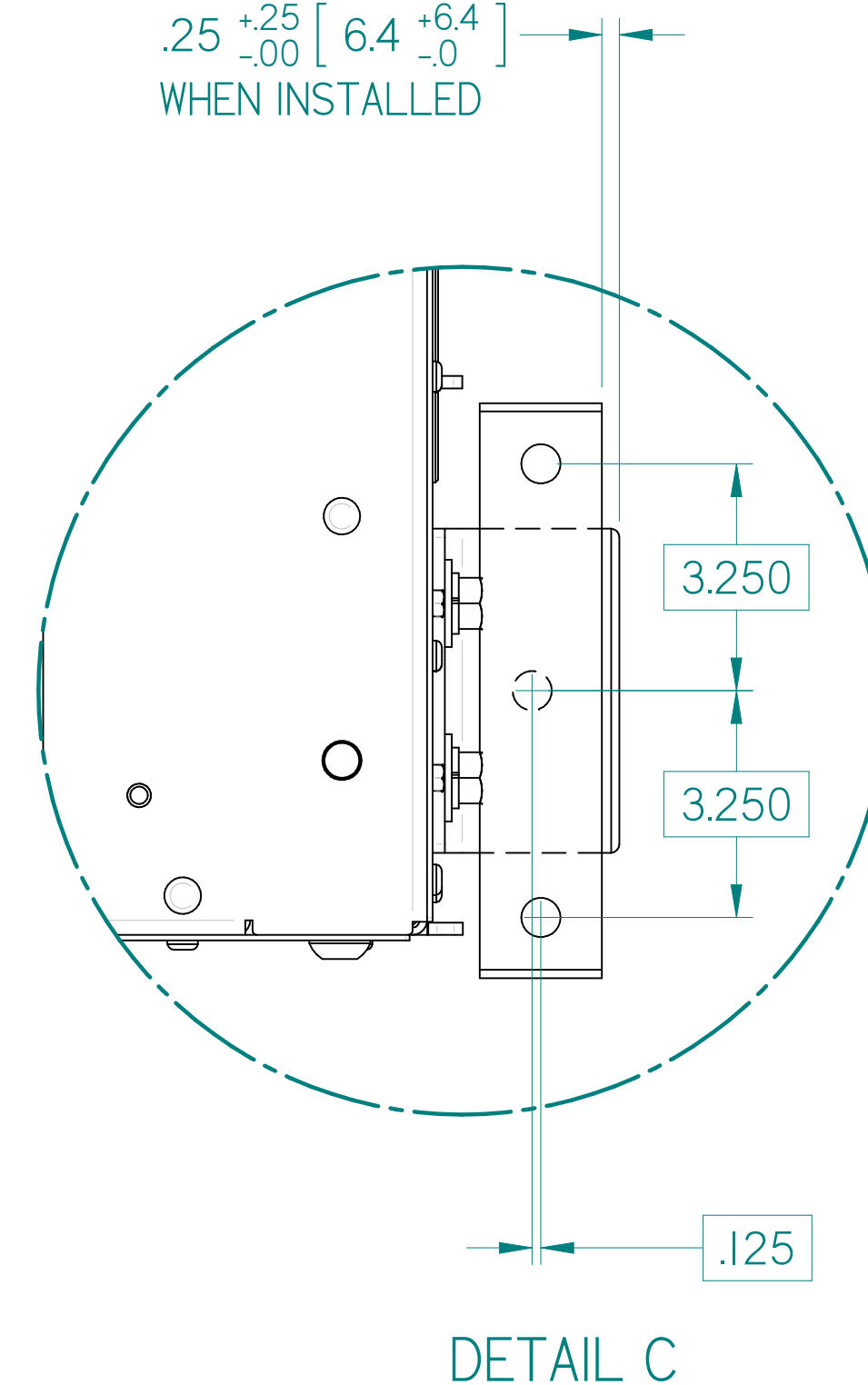
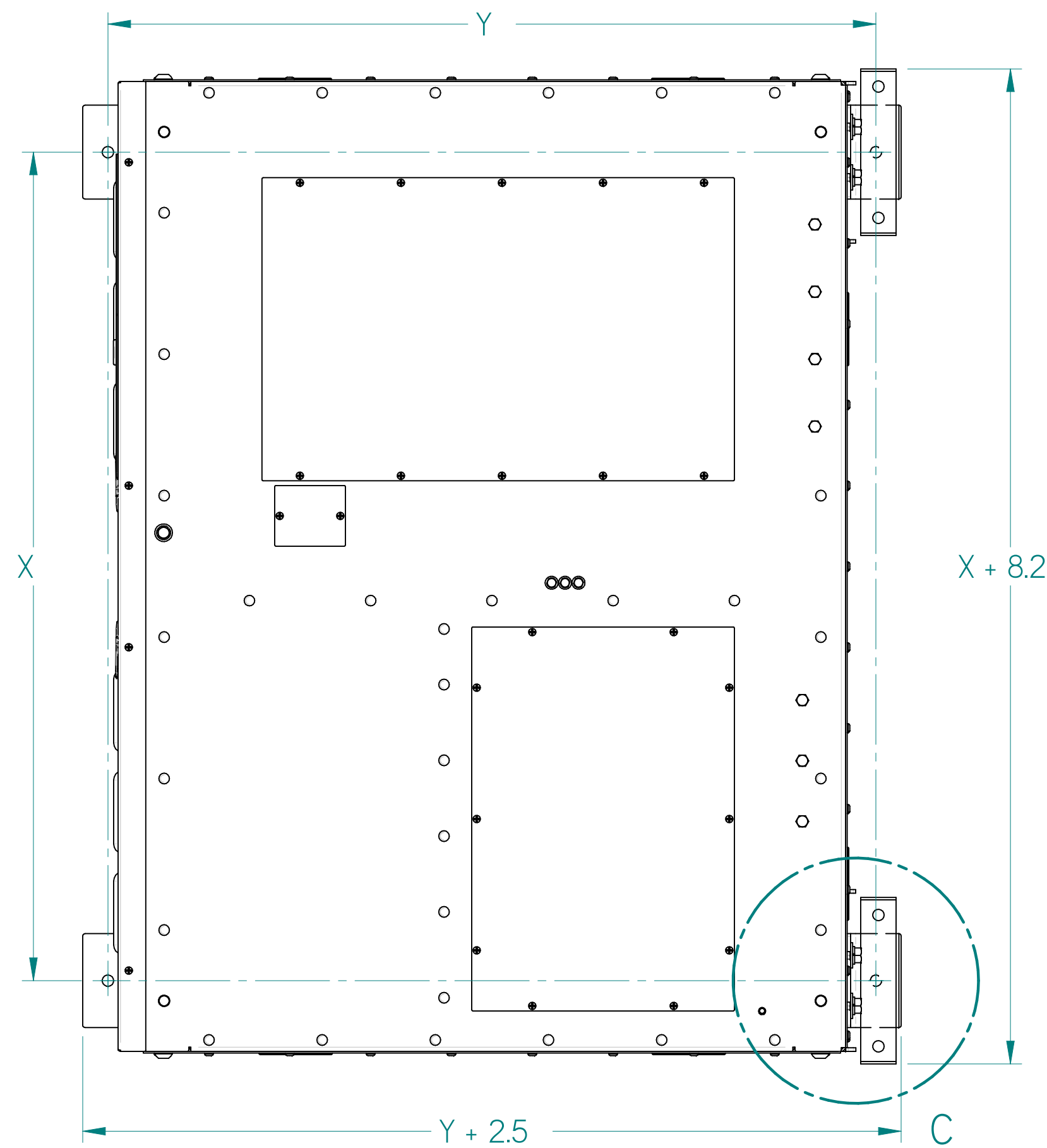
SIDE VIEW OF REFERENCE CABINET



SEE DETAIL B



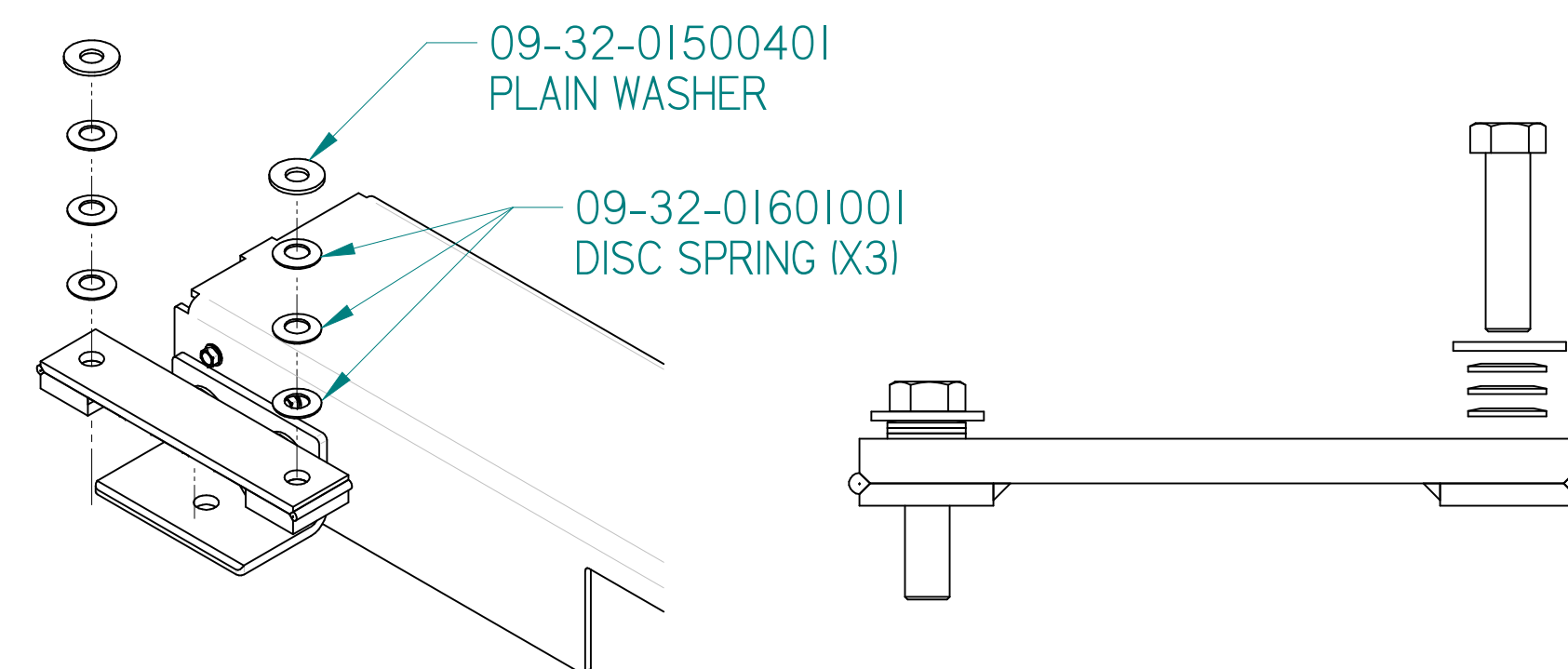
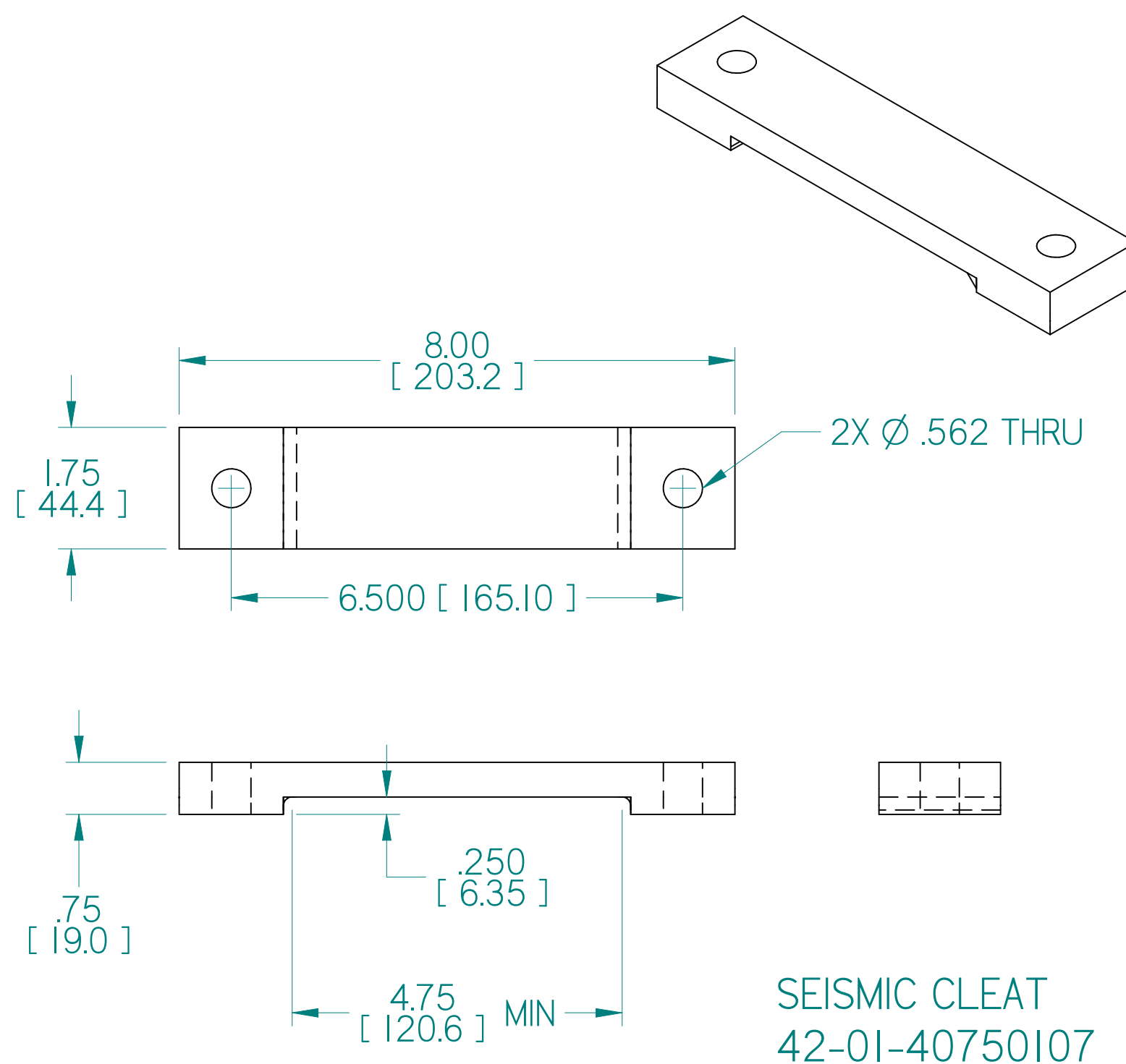
TOP VIEW OF REFERENCE CABINET INSTALLED INTO CLEATS



REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	1/5/2022	NEM

NOTES:

1. THE FOLLOWING IS TO BE USED AS A GUIDE TO INSTALL SEISMIC MOUNTING CLEATS ON LAYERZERO CABINETS. THE CLEATS ARE USED WHERE REAR ACCESS IS UNAVAILBL AFTER FINAL INSTALLATION.
2. CLEATS WILL BE PROVIDED FOR ALL REAR SEISMIC SUPPORTS.
3. THE SEISMIC ENGINEER AT THE SITE WILL DETERMINE THE TYPES OF ANCHORS TO BE USED AND 2 ANCHORS ARE NEEDED PER CLEAT.
4. THE CLEATS ARE SIZED FOR 1/2IN (12mm) SEISMIC ANCHORS WITH A REQUIRED TORQUE FO 50LB-FT (67.69Nm).
5. LOCATE THE CLEATS OFF OF THE CENTERLINE OF THE 42-06-40750108 SEISMIC SUPPORTS ON THE BASE CHANNEL AS SHOWN IN THE TOP AND SIDE VIEWS.
6. AFTER ANCHOR STUDS OR WELLS ARE INSTALLED INTO THE FLOOR MOUNT THE 42-01-40750107 SEISMIC MOUNTING CLEAT ASSEMBLY WITH DISC SPRINGS AND PLAIN WASHERS AS SHOWN IN THE EPLoded ISOMETRIC VIEW.
7. TORQUE TIGHTEN ANCHORAGE TO 50LB-FT (67.79Nm) OF TORQUE.
8. INSTALL CABINET BY SLIDING THE UNIT IN WITH THE SEISMIC SUPPORTS UNDERNEATH THE SEISMIC CLEATS. COMPLETE INSTALLATION WITH ANCHORAGE OF THE FRONT SEISMIC SUPPORTS TO THE GROUND.

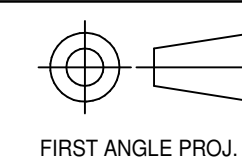


HARDWARE SELECTION FOR CLEATS

Copyright © 2022, LayerZero Power Systems, Inc.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING

TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2



OUTLINE, MOUNTING, INSTALLATION DIAGRAM
/500 KVA TRANSFORMER / QTY36 ROWS FOR SUB-FEED
CIRCUIT BREAKERS 1200A SAFE-PANEL SUB-FEED
DISTRIBUTION TYPE XEPD

DWN NEM	DATE 1/5/2022	SIZE D	FSCM NO.	DWG NO. 94-MS-01111901	REV A
CHK SPJ	DATE 1/5/2022	SCALE 1:1	94-MS-01111901-ASHT6	SHEET 6 of 6	
APVD NEM	DATE 1/5/2022				