

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ

Compression lugs for Source 1 & 2 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)
SOURCE 1 & 2 INPUT PHASES	(2) X 500 MCM (3) X 300-400 MCM PER PHASE	(3) X 400-500 MCM PER PHASE	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
OUTPUT PHASES	(2) X 500 MCM (3) X 300-400 MCM PER PHASE	(3) X 400-500 MCM PER PHASE	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
GROUND BUS (COMBINED SOURCE INPUT & OUTPUT)	4/0 AWG - 300 MCM UP TO (9)	300-400 MCM UP TO (9)	NEMA 2-HOLE (1/2" DIA) ON 1-3/4" CENTER BUS LANDING
CONTROL WIRE	16-20 AWG STRANDED	N/A	NOT REQUIRED

- NOTES:
1. Unit is designed to pass ICC ES-ACI56 Seismic Standards with:
(Sds) Design Spectral Response, short period of 2.0
(Fp/wP) Design Basis of Equipment of 1.6
(Ip) Importance Factor of 1.5
(Z/h) Height Factor Ratio of 1
- 2.) Front access only required for operation and servicing. Use nominal clearances for back and sides of cabinet.
- 3.) Natural convection heat flow. Inlet and outlet locations as specified. 16,700Btu/Hr heat rejection at 208VAC / 800A.
- 4.) Standard forklift or floor jack openings available at bottom of the cabinet.
- 5.) Cable terminal connections are shown in auxilliary views on the following sheets. Top or bottom cable entry is available for all Circuit Breakers, Output and Signal Connections.
- 6.) See Table I for recommended power cable sizes, lugs. All phase cables are designed for up to three compression type lugs, arranged back to back. Tongue type connections per NEMA 2-Hole Standard (1-3/4 in spacing, 1/2 in dia hdw).
- 7.) Standard 18IN junction box supplied for top cable entry to be field assembled as shown on Sheet5. A removable front cover is supplied for cable pull and intermittent thermal testing..
8. If rear clearance unavailable to anchor rear Seismic Feet to floor Seismic Cleats are required to mount to the floor and slide the unit underneath for Seismic Compliance. See Sheet 6 for option to order.
- 9.) See One-Line Electrical Diagram for additional detail.

Copyright © 2021, 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
Series 70 eSTS,
2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR

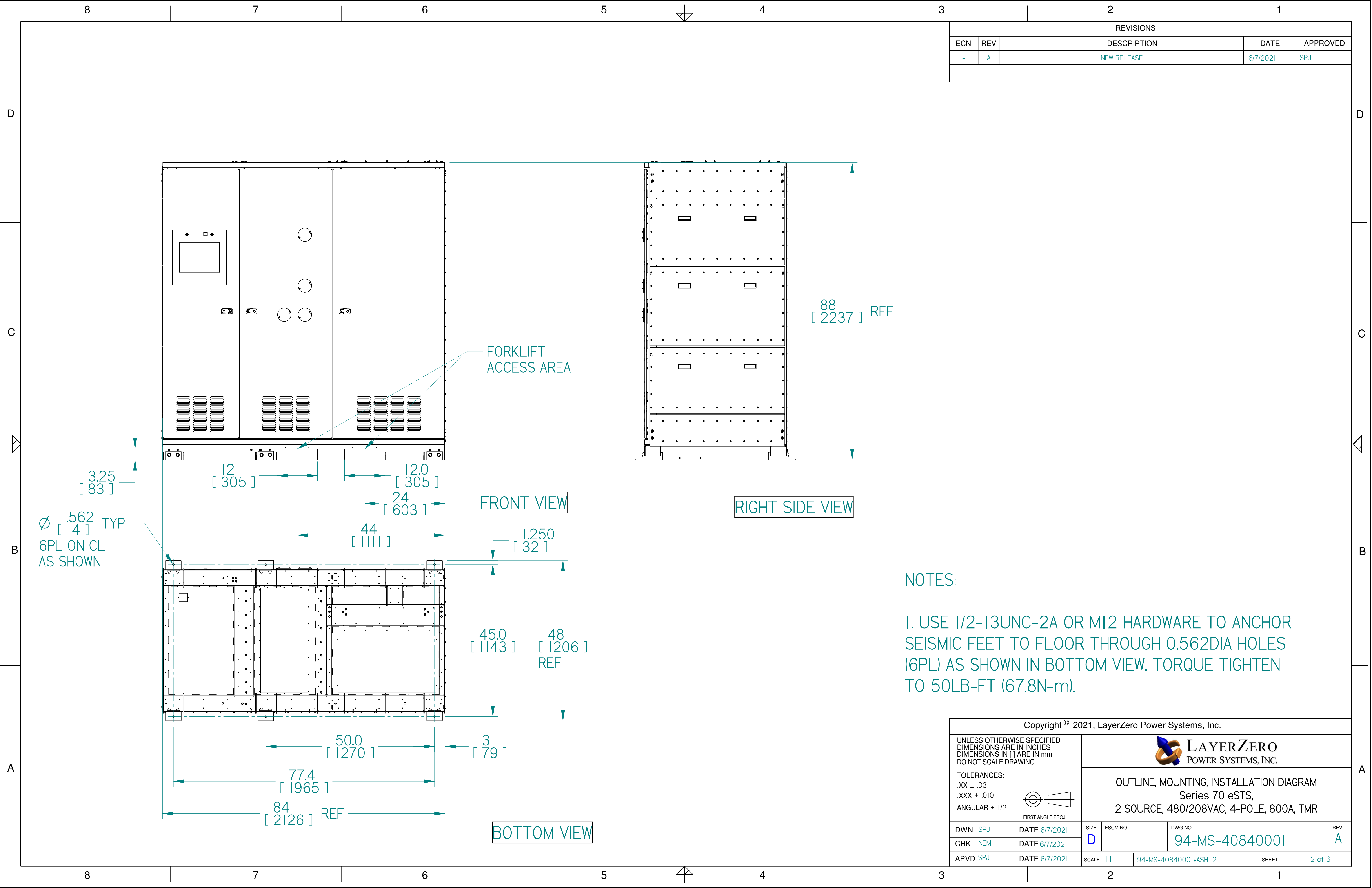
DWN SPJ
CHK NEM
APVD SPJ

DATE 6/7/2021
DATE 6/7/2021
DATE 6/7/2021

SIZE D
SCALE 1:12.5

FSCM NO.
DWG NO. 94-MS-40840001
94-MS-40840001-ASHTI

REV A
SHEET 1 of 6



REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ

NOTES:

1. USE 1/2-13UNC-2A OR M12 HARDWARE TO ANCHOR SEISMIC FEET TO FLOOR THROUGH 0.562DIA HOLES (6PL) AS SHOWN IN BOTTOM VIEW. TORQUE TIGHTEN TO 50LB-FT (67.8N-m).

Copyright © 2021, LayerZero Power Systems, Inc.

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

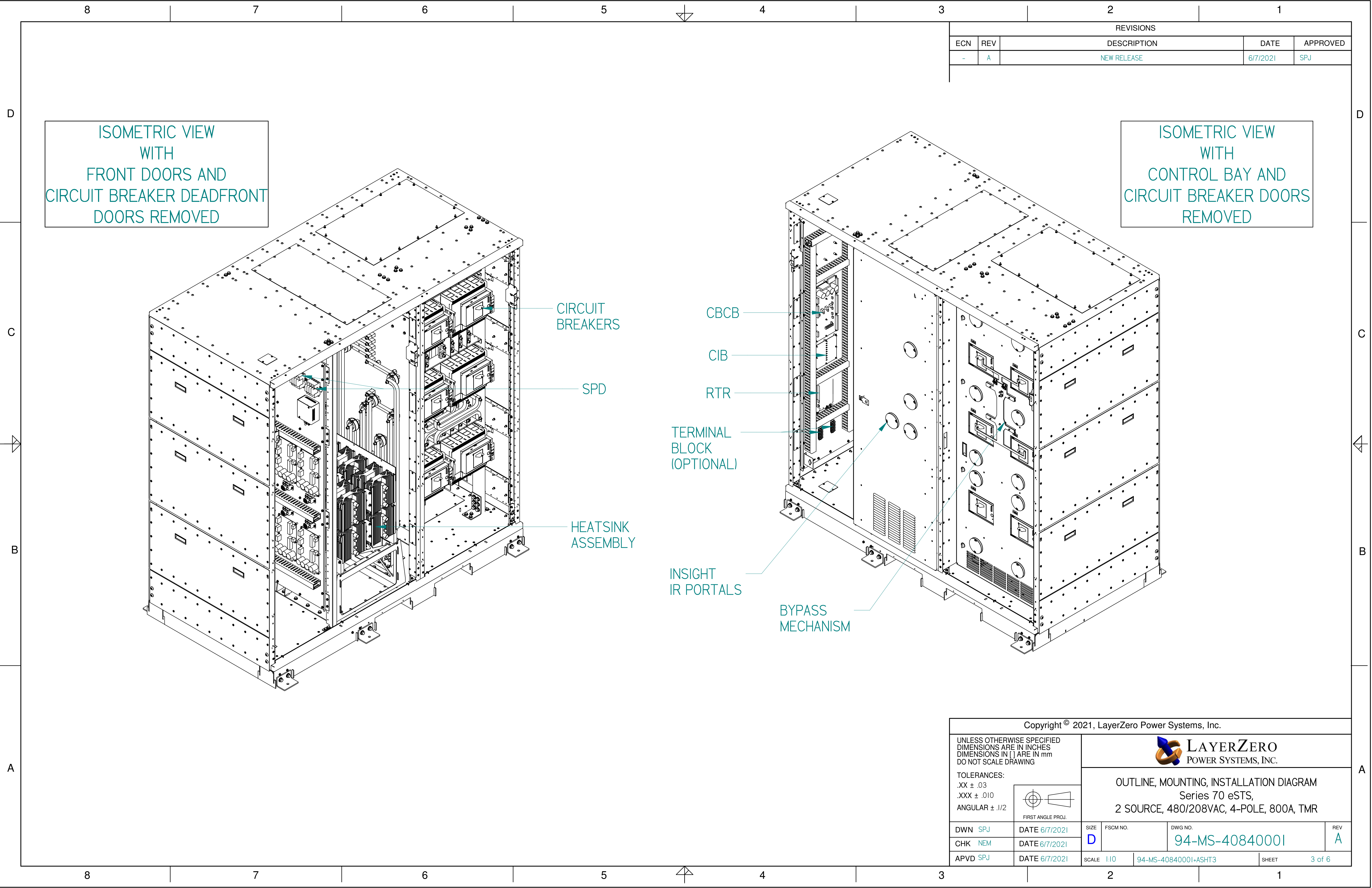
TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
Series 70 eSTS,
2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR

DWN SPJ	DATE 6/7/2021	SIZE D	FSCM NO.	DWG NO. 94-MS-40840001	REV A
CHK NEM	DATE 6/7/2021	SCALE 1:1	94-MS-40840001+ASHT2	SHEET 2 of 6	
APVD SPJ	DATE 6/7/2021				



ISOMETRIC VIEW
WITH
FRONT DOORS AND
CIRCUIT BREAKER DEADFRONT
DOORS REMOVED

ISOMETRIC VIEW
WITH
CONTROL BAY AND
CIRCUIT BREAKER DOORS
REMOVED

CIRCUIT
BREAKERS

SPD

HEATSINK
ASSEMBLY

CBCB

CIB

RTR

TERMINAL
BLOCK
(OPTIONAL)

INSIGHT
IR PORTALS

BYPASS
MECHANISM

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ

Copyright © 2021, LayerZero Power Systems, Inc.

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

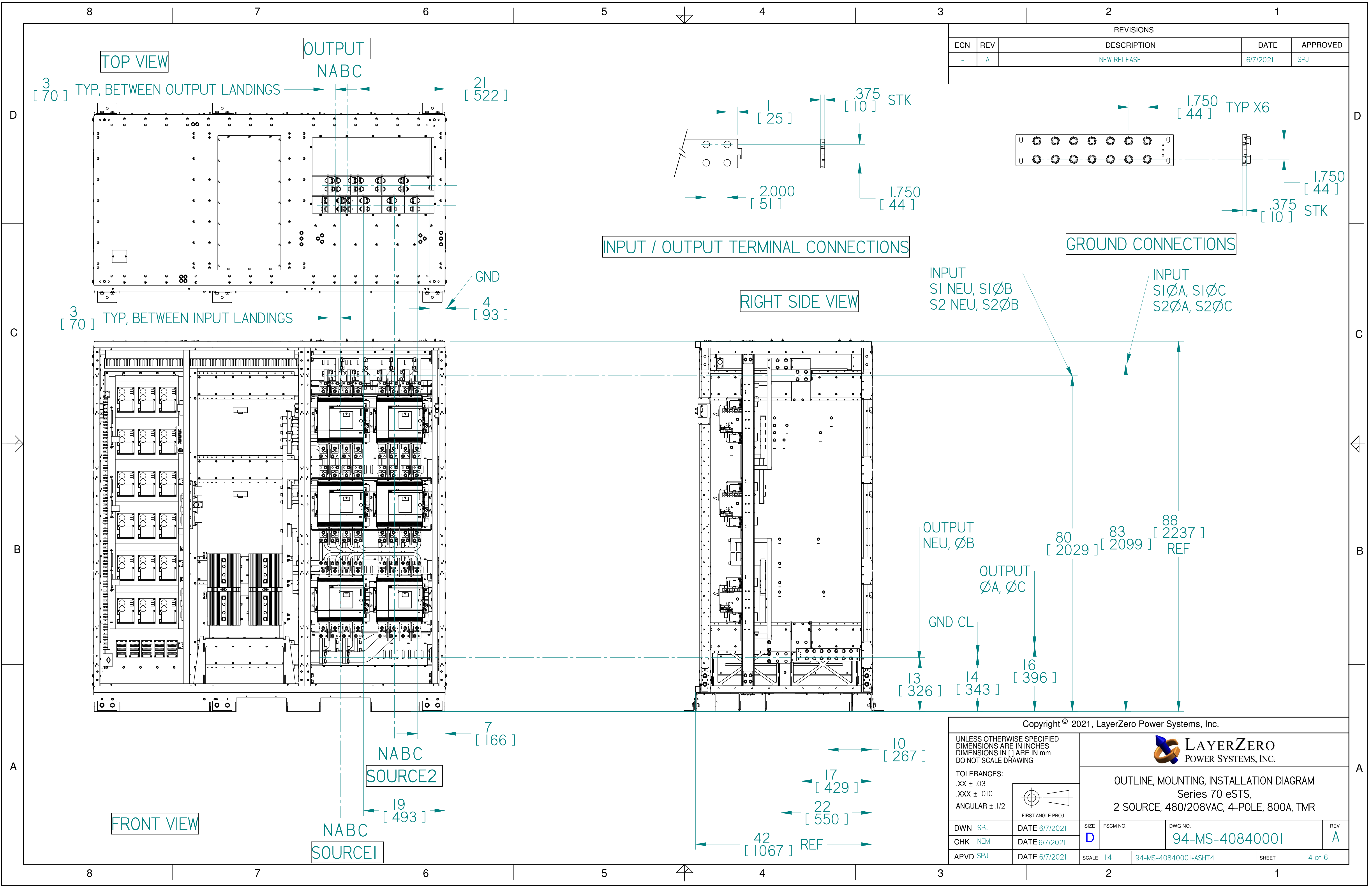
TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
Series 70 eSTS,
2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR

DWN SPJ	DATE 6/7/2021	SIZE D	FSCM NO.	DWG NO. 94-MS-40840001	REV A
CHK NEM	DATE 6/7/2021	SCALE 1:10		94-MS-40840001+ASHT3	SHEET 3 of 6
APVD SPJ	DATE 6/7/2021				



REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ

Copyright © 2021, LayerZero Power Systems, Inc.

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

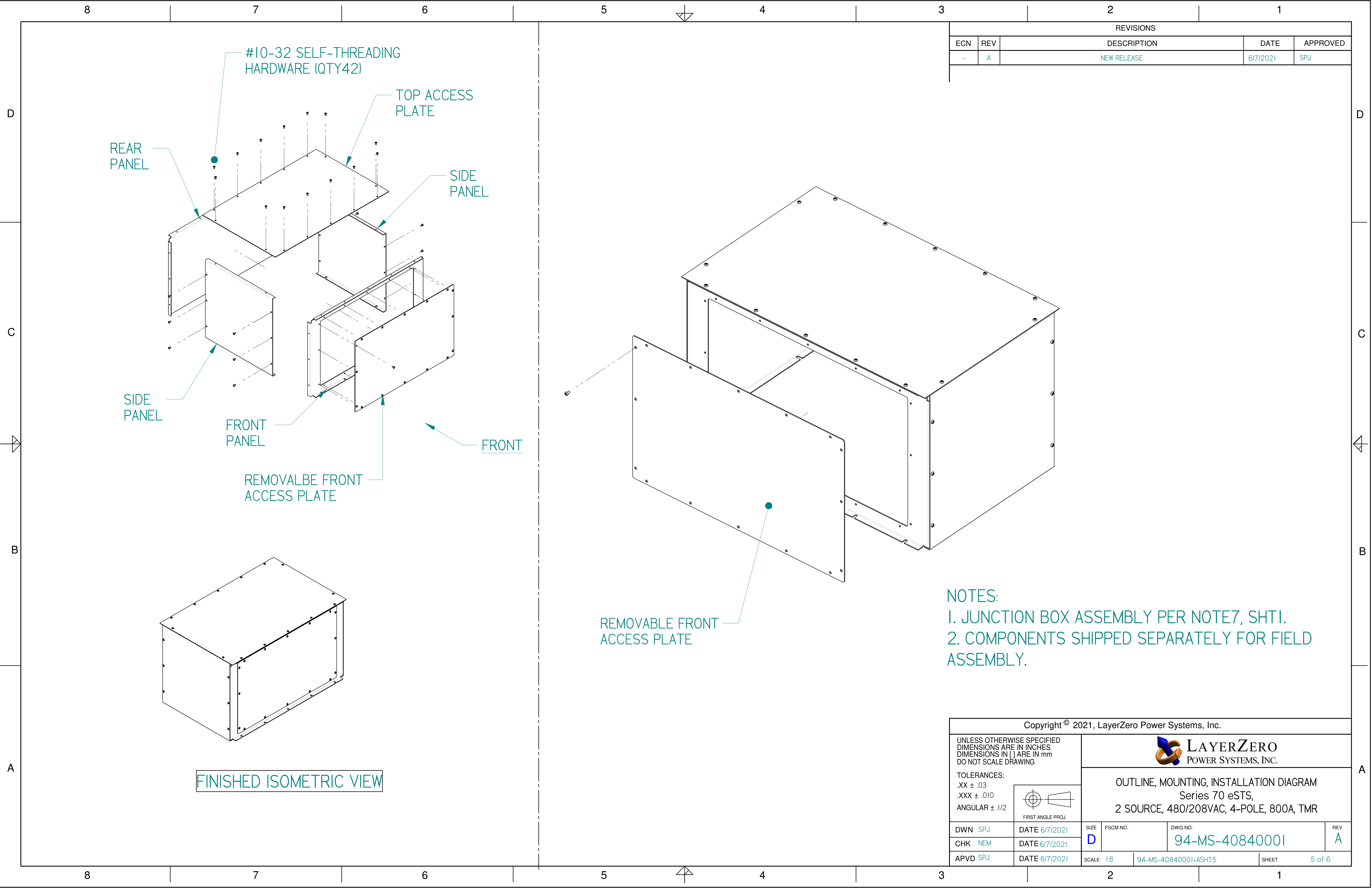
TOLERANCES:
.XX ± .03
.XXX ± .010
ANGULAR ± .1/2

FIRST ANGLE PROJ.

LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
Series 70 eSTS,
2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR

DWN SPJ	DATE 6/7/2021	SIZE D	FSCM NO.	DWG NO. 94-MS-40840001	REV A
CHK NEM	DATE 6/7/2021	SCALE 1:4	94-MS-40840001-ASHT4	SHEET 4 of 6	
APVD SPJ	DATE 6/7/2021				



REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ

- NOTES:
- 1. JUNCTION BOX ASSEMBLY PER NOTE 7, SHT 1.
 - 2. COMPONENTS SHIPPED SEPARATELY FOR FIELD ASSEMBLY.

Copyright © 2021, 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.

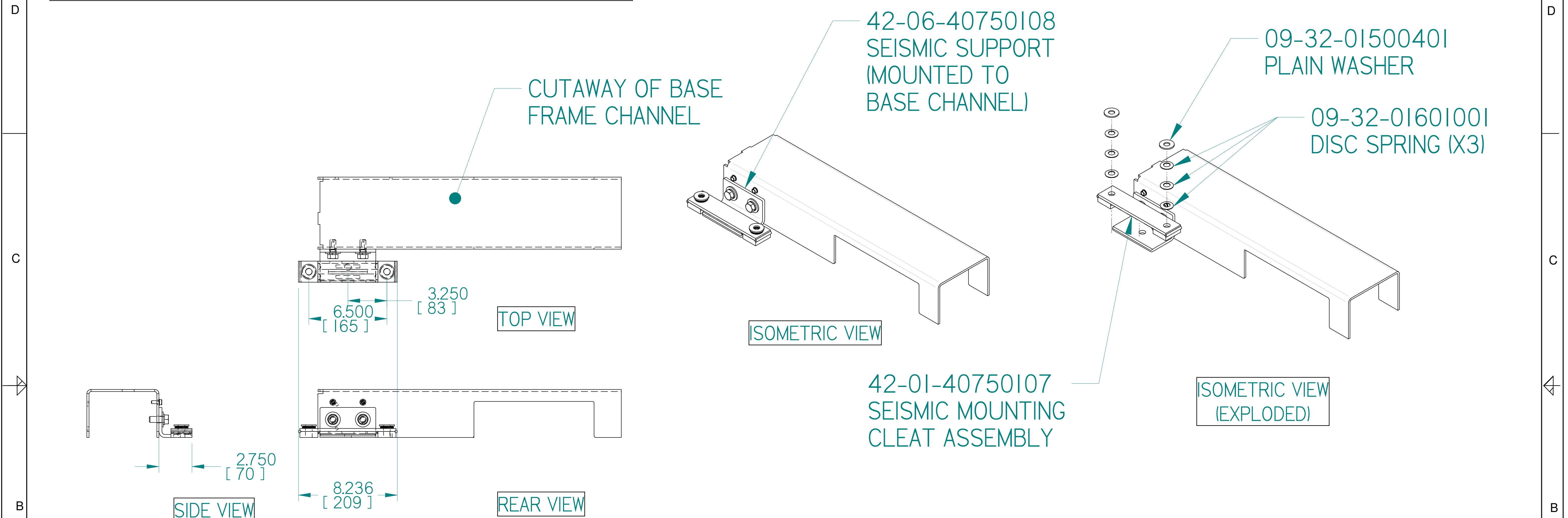
LAYERZERO
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM
Series 70 eSTS,
2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR

DWN	SPJ	DATE	6/7/2021	SIZE	FSCM NO.	DWG NO.	REV
CHK	NEM	DATE	6/7/2021	D		94-MS-40840001	A
APVD	SPJ	DATE	6/7/2021	SCALE	1:8	94-MS-40840001+ASHT5	SHEET 5 of 6

42-00-40750107 SEISMIC MOUNTING CLEAT ASSEMBLY INSTRUCTION

REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	A	NEW RELEASE	6/7/2021	SPJ



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 UNAVAILABLE 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.

Copyright © 2021, LayerZero Power Systems, Inc.				
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [] ARE IN mm DO NOT SCALE DRAWING		 LAYERZERO POWER SYSTEMS, INC.		
TOLERANCES: .XX ± .03 .XXX ± .010 ANGULAR ± 1/2		OUTLINE, MOUNTING, INSTALLATION DIAGRAM Series 70 eSTS, 2 SOURCE, 480/208VAC, 4-POLE, 800A, TMR		
DWN SPJ	DATE 6/7/2021	SIZE D	FSCM NO.	DWG NO. 94-MS-40840001
CHK NEM	DATE 6/7/2021	SCALE 1:1	94-MS-40840001+ASHT6	REV A
APVD SPJ	DATE 6/7/2021	SHEET 6 of 6		