

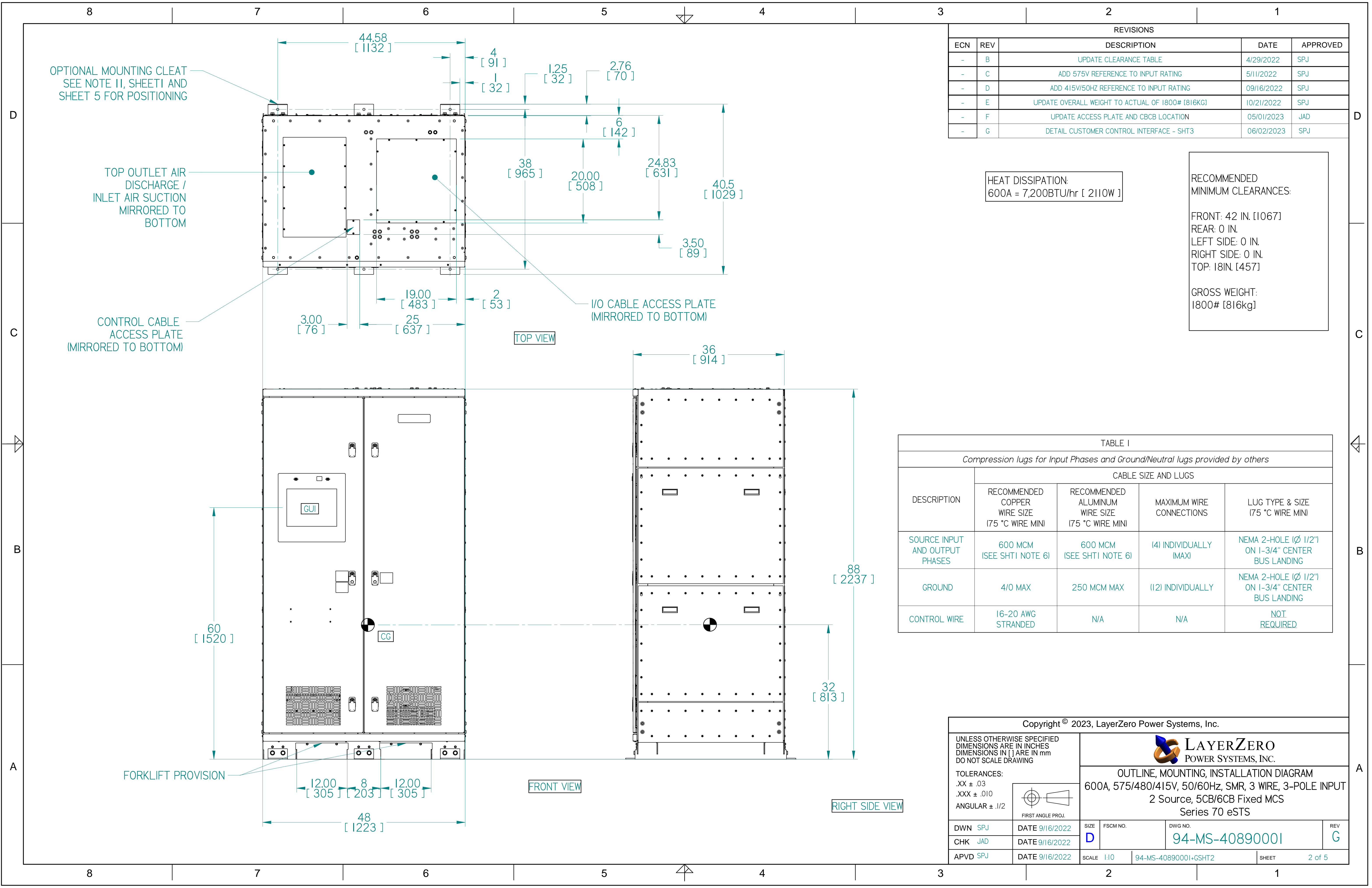
REVISIONS				
ECN	REV	DESCRIPTION	DATE	APPROVED
-	B	UPDATE CLEARANCE TABLE	4/29/2022	SPJ
-	C	ADD 575V REFERENCE TO INPUT RATING	5/11/2022	SPJ
-	D	ADD 415V/50HZ REFERENCE TO INPUT RATING	09/16/2022	SPJ
-	E	UPDATE OVERALL WEIGHT TO ACTUAL OF 1800# [816KG]	10/21/2022	SPJ
-	F	UPDATE ACCESS PLATE AND CBCB LOCATION	05/01/2023	JAD
-	G	DETAIL CUSTOMER CONTROL INTERFACE - SHT3	06/02/2023	SPJ

Notes:

- Front access only required for operation and servicing of the eSTS. Source Inputs and Output load cabling may be wired from either the top or bottom.
- The eSTS is mounted on a common frame with all internal connections factory provided. There are no shipping splits. The unit is provided with forklift provision as shown for maneuvering.
- For the eSTS, with a 575/480V / 600A / 60Hz / SMR / 3-Pole Fixed Circuit Breaker / 3 wire configuration: see Sheet 2 for Cable Access Areas and recommended wire size (Table I).
- See Sheet 2 for anchoring locations of the eSTS. The eSTS is Seismically Qualified per ACI56 to Sds Level 2.00/2.50 with z/h = 1, Ip = 1.5. Torque tighten Seismic Brackets shown to floor Anchors at 50lb-ft (108.5N-m).
- See Sheet 3 for description of internal components. The eSTS can be configured for either 5CB or 6CB as the sixth circuit breaker (CB302) is a redundant Output Circuit Breaker. Customer to specify CB configuration at the time of order. The design will show maximum configuration for (6) circuit breakers with the redundant output circuit breaker. All circuit breakers are Fixed Molded Case Switches.
- See Sheet 4 for Cable I/O landing locations. Maximum QTY4 600MCM Copper cable or QTY4 600MCM Aluminum per phase landing will attach directly to the Access Plates if Entry / Exit from common plate.
- Sheet 3 will show QTY11 Infrared Portals on the Input/Output Bay deadfront door for thermal imaging of customer cable connections. An optional Insight IR thermal imaging system is available for scanning of Input / Output Cable Connections and internal component connections. Please consult factory if this option is desired.
- A optional mechanical Bypass Interlock mechanism is supplied standard as shown on Sheet 3.
- A large 15 inch Touchscreen Graphical User Interface (GUI) is provided on the cabinet exterior for control and monitoring.
- Forklift covers are provided and may be installed after final positioning.
- Optional Seismic Mounting Cleats are available for the rear mounting anchors to slide the unit in from the front if the unit is mounted such that the rear of the cabinet is in close proximity to a wall or other equipment. Please specify option if required at the time of order. See Sheet 5 for detail.
- See One-Line electrical diagram for further detail.
- The customer Input / Output Terminal Landings are configurable for either top or bottom access or exit. Please specify Input / Output orientation at the time of order. If data unavailable consult factory as the terminals are field configurable.

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UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES DIMENSIONS IN [ ] ARE IN mm DO NOT SCALE DRAWING		<b>LAYERZERO</b> POWER SYSTEMS, INC. OUTLINE, MOUNTING, INSTALLATION DIAGRAM 600A, 575/480/415V, 50/60Hz, SMR, 3 WIRE, 3-POLE INPUT 2 Source, 5CB/6CB Fixed MCS Series 70 eSTS			
TOLERANCES: .XX ± .03 .XXX ± .010 ANGULAR ± .1/2					
DWN SPJ	DATE 9/16/2022	SIZE D	FSCM NO.	DWG NO. 94-MS-40890001	REV G
CHK JAD	DATE 9/16/2022	SCALE 1:10		94-MS-40890001+GSHT1	SHEET 1 of 5
APVD SPJ	DATE 9/16/2022				



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HEAT DISSIPATION:  
600A = 7,200BTU/hr [ 2110W ]

RECOMMENDED  
MINIMUM CLEARANCES:

FRONT: 42 IN. [1067]  
 REAR: 0 IN.  
 LEFT SIDE: 0 IN.  
 RIGHT SIDE: 0 IN.  
 TOP: 18 IN. [457]

GROSS WEIGHT:  
1800# [816kg]

TABLE I				
Compression lugs for Input Phases and Ground/Neutral lugs provided by others				
DESCRIPTION	CABLE SIZE AND LUGS			
	RECOMMENDED COPPER WIRE SIZE (75 °C WIRE MIN)	RECOMMENDED ALUMINUM WIRE SIZE (75 °C WIRE MIN)	MAXIMUM WIRE CONNECTIONS	LUG TYPE & SIZE (75 °C WIRE MIN)
SOURCE INPUT AND OUTPUT PHASES	600 MCM (SEE SHT1 NOTE 6)	600 MCM (SEE SHT1 NOTE 6)	(4) INDIVIDUALLY (MAX)	NEMA 2-HOLE (Ø 1/2") ON 1-3/4" CENTER BUS LANDING
GROUND	4/0 MAX	250 MCM MAX	(12) INDIVIDUALLY	NEMA 2-HOLE (Ø 1/2") ON 1-3/4" CENTER BUS LANDING
CONTROL WIRE	16-20 AWG STRANDED	N/A	N/A	NOT REQUIRED

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FIRST ANGLE PROJ.

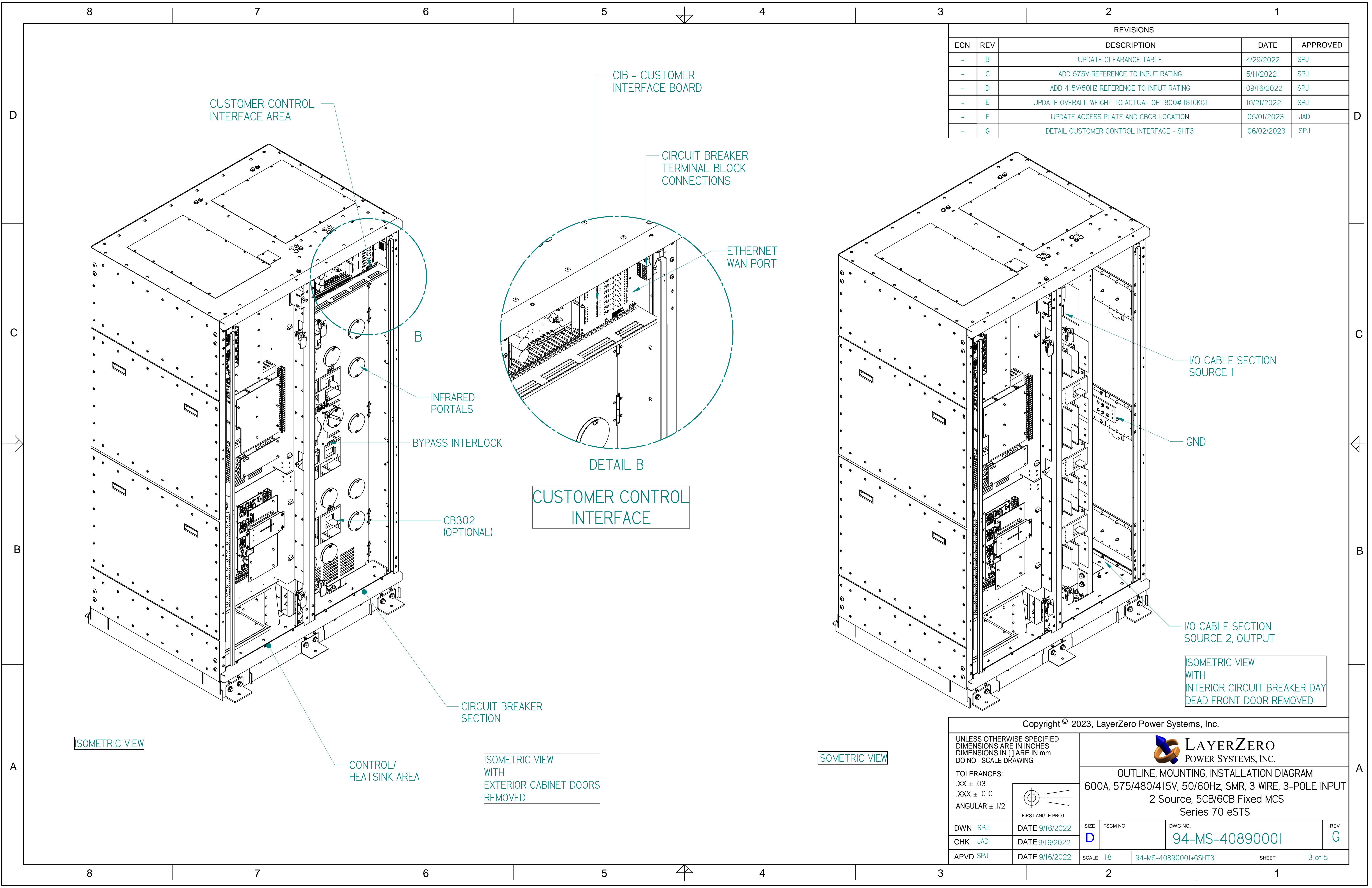
**LAYERZERO**  
POWER SYSTEMS, INC.

OUTLINE, MOUNTING, INSTALLATION DIAGRAM  
 600A, 575/480/415V, 50/60Hz, SMR, 3 WIRE, 3-POLE INPUT  
 2 Source, 5CB/6CB Fixed MCS  
 Series 70 eSTS

DWN SPJ	DATE 9/16/2022	SIZE D	FSCM NO.	DWG NO.	REV G
CHK JAD	DATE 9/16/2022	94-MS-40890001			
APVD SPJ	DATE 9/16/2022	SCALE 1:10	94-MS-40890001+GSH2	SHEET	2 of 5

REVISIONS

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CUSTOMER CONTROL INTERFACE

ISOMETRIC VIEW WITH INTERIOR CIRCUIT BREAKER DAY DEAD FRONT DOOR REMOVED

ISOMETRIC VIEW

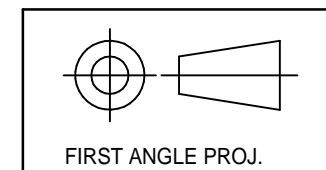
ISOMETRIC VIEW WITH EXTERIOR CABINET DOORS REMOVED

ISOMETRIC VIEW

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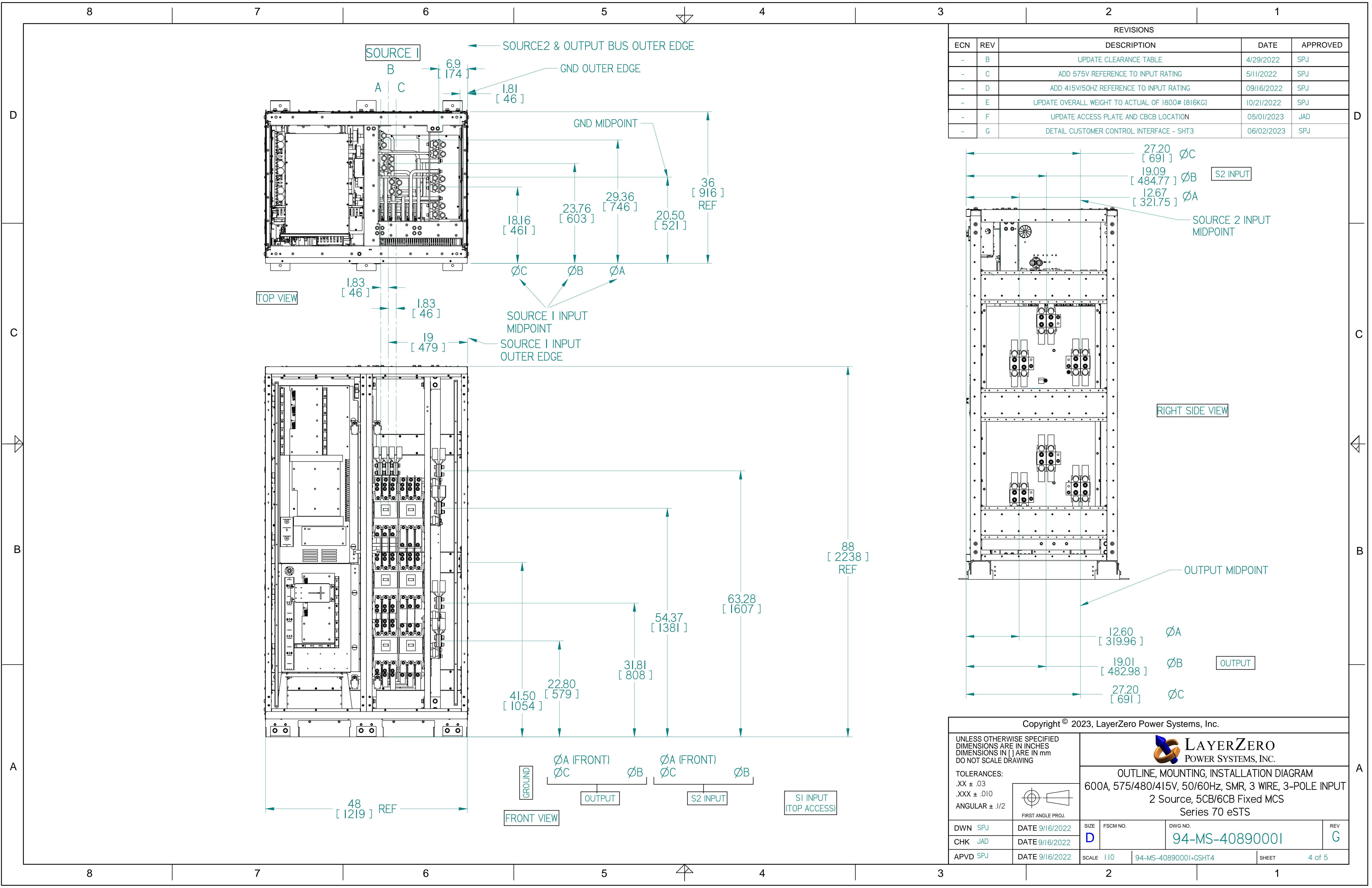
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CHK JAD	DATE 9/16/2022	SCALE 1:8	94-MS-40890001+GSHT3	SHEET	3 of 5
APVD SPJ	DATE 9/16/2022				



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FIRST ANGLE PROJ.

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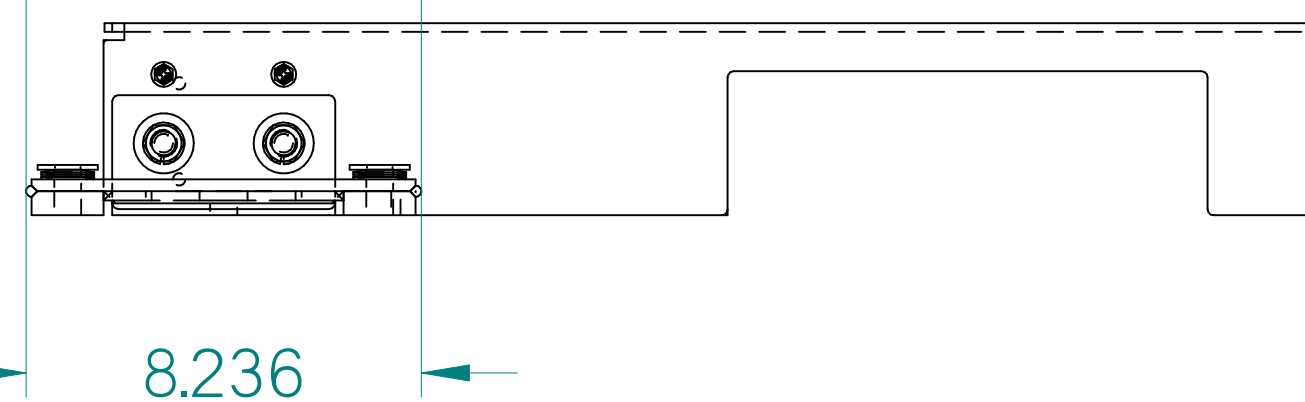
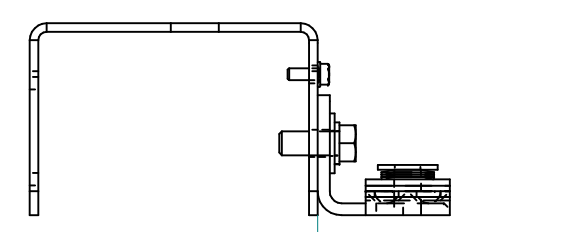
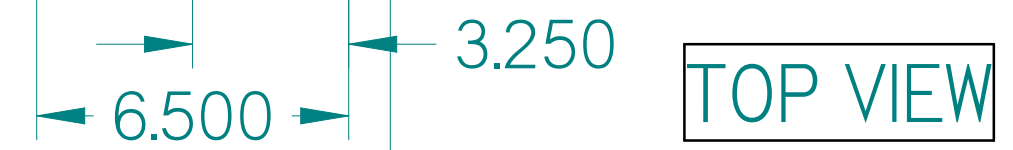
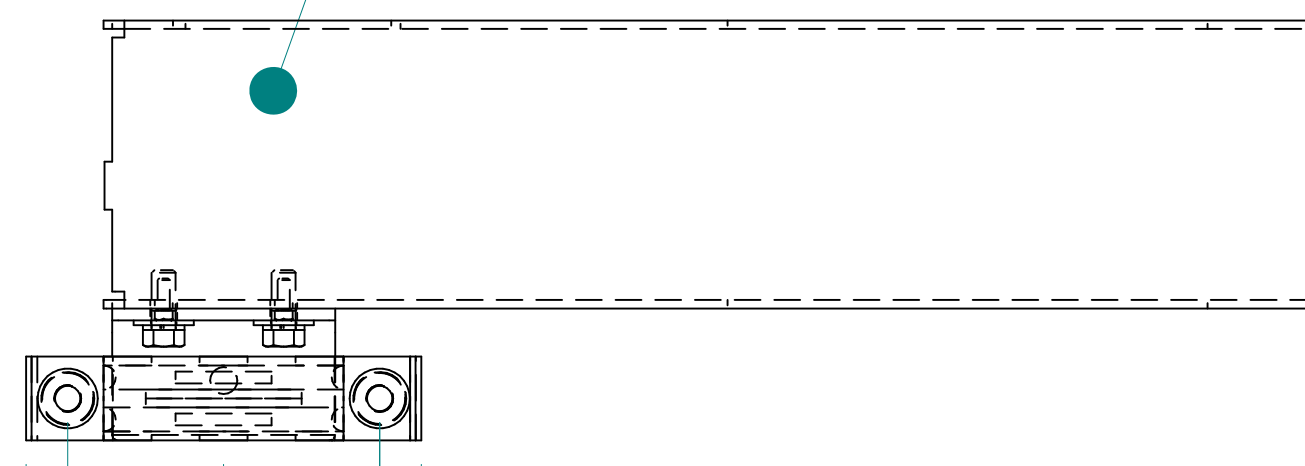
OUTLINE, MOUNTING, INSTALLATION DIAGRAM  
600A, 575/480/415V, 50/60Hz, SMR, 3 WIRE, 3-POLE INPUT  
2 Source, 5CB/6CB Fixed MCS  
Series 70 eSTS

DWN SPJ	DATE 9/16/2022	SIZE D	FSCM NO.	DWG NO.	REV G
CHK JAD	DATE 9/16/2022	94-MS-40890001			
APVD SPJ	DATE 9/16/2022	SCALE 1:10	94-MS-40890001+GSHT4	SHEET	4 of 5

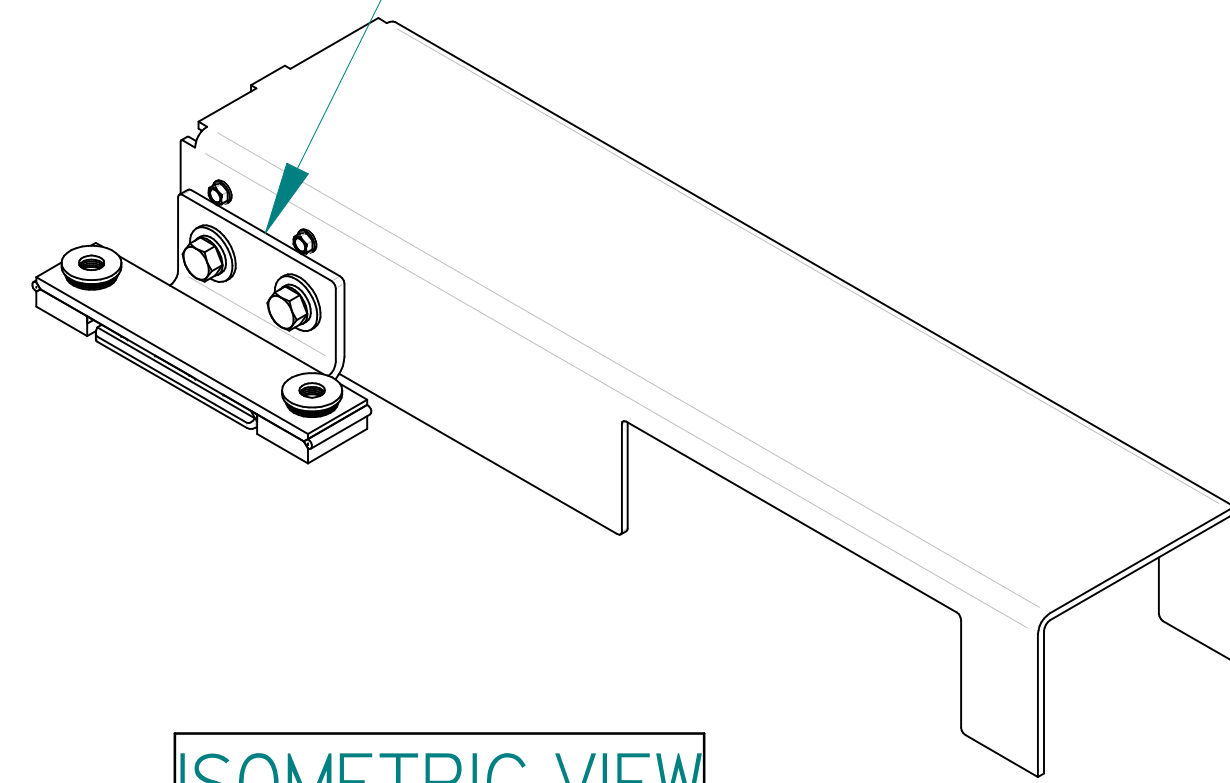
# 42-00-40750107 SEISMIC MOUNTING CLEAT ASSEMBLY INSTRUCTION

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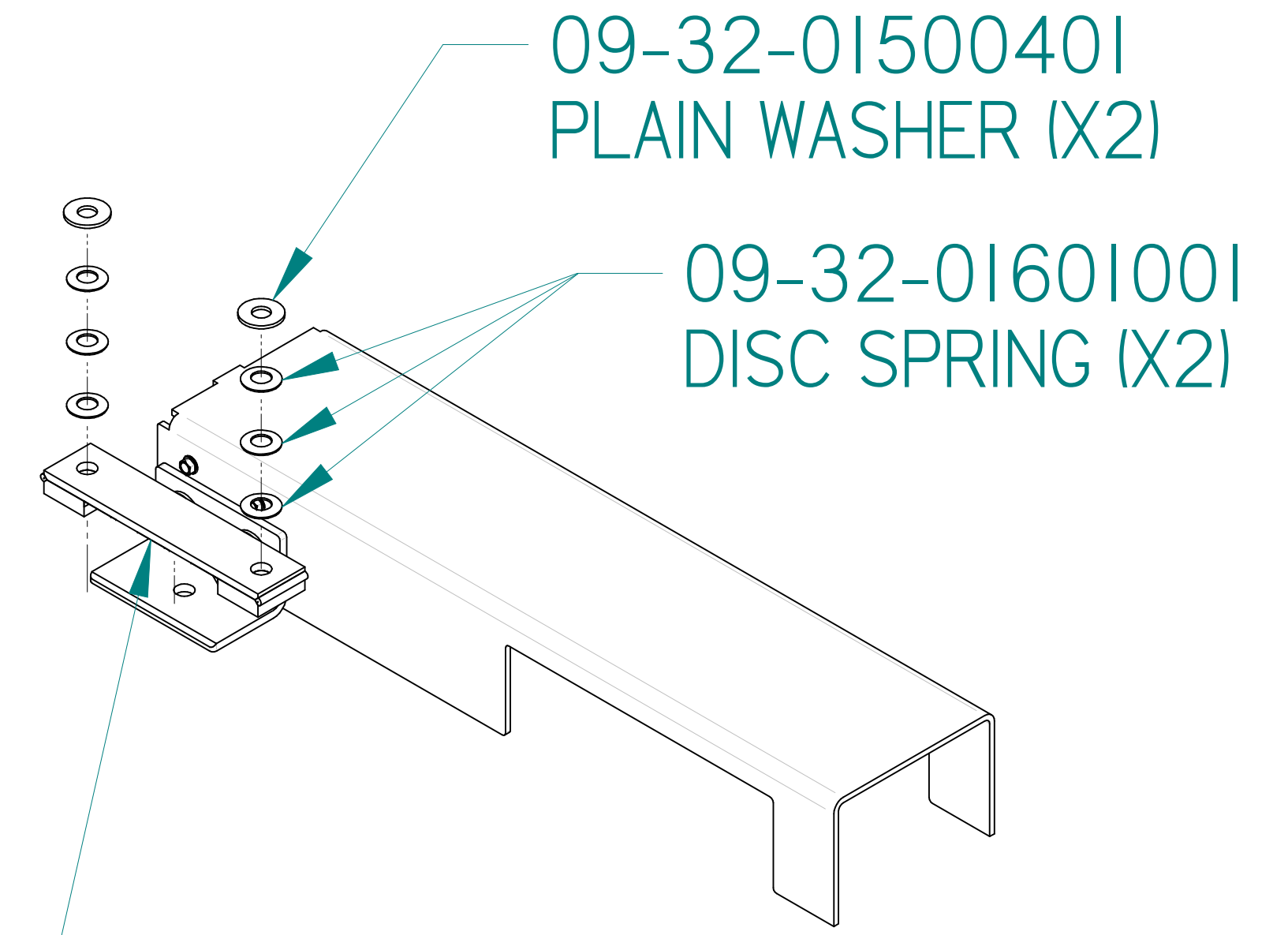
CUTAWAY OF BASE FRAME CHANNEL



42-06-40750108 SEISMIC SUPPORT (MOUNTED TO BASE CHANNEL)



42-01-40750107 SEISMIC MOUNTING CLEAT ASSEMBLY



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 TEH GROUND.

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CHK JAD	DATE 9/16/2022	SCALE 1:4	94-MS-40890001+GSHT5	SHEET	5 of 5
APVD SPJ	DATE 9/16/2022				