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VOLUME 1 Technical Proposal
LCLS II Magnet Controls Instrument Racks
RFP #275153

TECHNICAL DESCRIPTION **P/N A843137F-V4-2** **Revision A, 7/18/17**

Singlewide 48U 19" Rackmount XL Cabinet Assembly, SLAC (Version 4)

- Extra Wide and Deep Sealed Cabinet
- Includes Large SLAC Heat Exchanger
- Steel Lexan Full Height, Partial Width Front Door
- Solid Steel Partial Height, Partial Width Rear Door (centered in rack)
- 5U Blank Panel at top & bottom rear
- Cable Entry Door at top RH side
- External Duplex Convenience Outlets at lower RH front & lower RH rear
- Internal Duplex Outlets at lower & upper rear

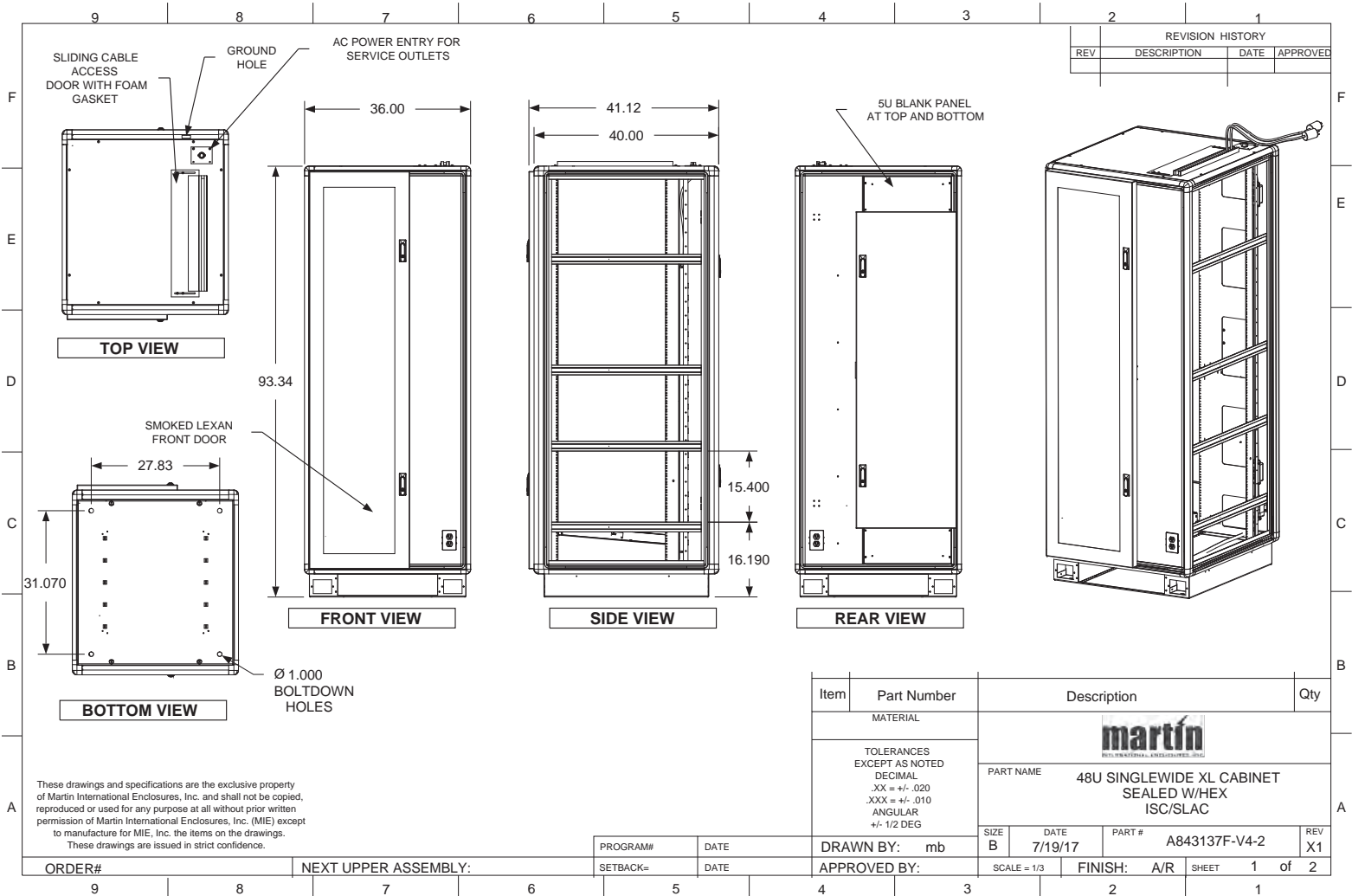
Overall Height: 93.34
Overall Width: 36.00
Overall Depth: 40.00 (frame)

- (1) 843137 RUGGED Frame Assembly including:
 - Solid FORKLIFT Base, front access, w/front & rear dress covers. 1" dia Bolt-down Holes at the corners of the base, externally accessible front & rear Hat Sections provided for HEX support
 - GROUND HOLE, 3/8" DIA, DRILLED THRU BOTH WALLS OF EXTRUSION ON TOP OF FRAME, RH REAR CORNER AND MASKED ON TOP SURFACE FOR GROUND HARDWARE. INSERTS INSTALLED TOP OF FRAME FOR LIFTING EYES (3/8-16 THD)
 - (8) Welded Front to Rear Stiffeners NOTE SPECIAL STIFFENER LOCATIONS
 - (20) Welded Joint Supports at front, rear, side and top corners
 - (2) each of 48U "L" Shaped 10-32 Tapped Vertical .84 Rails
 - Rails are Clear Zinc Plated (mounted on LH side)
 - (2) each of 48U "L" Shaped 10-32 Tapped Vertical 13.46 Rails
 - Rails are Clear Zinc Plated W/ACCESS CUTOUTS (mounted on RH side)
 - Front Rails recessed 1" from front (3" from inside of front door)
 - Rear Rails spaced 29 1/4" from front rails
 - Rackmount area justified to the LH side, leaving approx 10" cable management space on right
 - Frame is masked on both sides at mounting rail locations; top, middle & bottom
 - Base is Galvanized material, masked at ground studs
- (1) U-LABEL-4B Mounted at front and rear, on sides of bezels, not on rails
- (1) SP8437-GRD Externally Removable Side Panels, (set of 2)
 - Material is Galvaneal, masked at ground studs

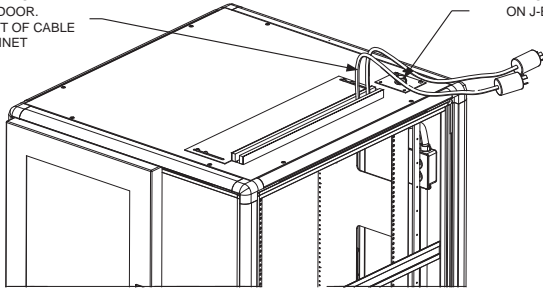
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- (1) SLD8420LH-G DEEP Formed Steel Lexan Front Door,
 - LH hinged, with (2) locking swing handles. Ground wire to frame. Key #333
 - DOOR PROTRUDES FROM FRONT OF FRAME BY approx 1 1/8"
 - USES UL 'VO' STYLE SMOKED LEXAN, bolted inside of door
- (1) SD6620RH-GRD 38U Solid Short Rear Door, RH Hinged, with (2) locking swing handles. Door centered. Key #333. Ground Stud at lower hinge side corner
- (2) FBP20-5U-BLANK 5U Formed Steel Blank Panel above & below Rear Door.
Ground Stud
- (1) FT3137-G-ISC1 Solid one-piece Top Panel, externally removable
 - (1) Approx 4" X 25" Cable Access Door with Foam on LH Side over cable area
 - Material is Galvaneal, masked at ground stud
 - Includes Ground Stud; (1) in RH rear corner, masked; Includes Ground Wire from Top Panel to Frame
 - Integrated J-Box with Cover Plate for Duplex Circuit Connection
- (1) J-BOXKIT-4-SLAC1 Integrated Convenience Outlet Circuit with (4) 2X4 J-BOXES, Duplex Outlets and Cover Plates, wired on one circuit using 12 AWG wire in 1/2" Sealtite Flex Conduit
 - (1) at lower RH front (1) lower RH rear (2) internally rear top & bottom
- (2) PSM6220-20-ISC3 Power Strip recessed ~6-8" from rear, facing rear
Each includes 10ft Olflex 190 12/3 Cord with L5-20P plug. Exits thru top Cable Door
- (1) HEX Rackmounted Heat Exchanger, with front air deflector.
Manufactured & Assembled per SLAC SA-376-553-70.
Coolant connections are made on site
- (1) EB-4 Lifting Eyebolts with Hexnuts (Set of 4)
- (1) HWSPS1032-40 Starter Point Screw Kit (Pack of 40)
- (1) BB84-SLAC1 48U Vertical Copper Busbar with 10-32 tapped holes
- (1) FOAMKIT-2 Foam Sealing Kit on external doors and panels
- All Doors and appropriate removable Panels include ground wires to frame
- Color: Powdercoat Blue BL210



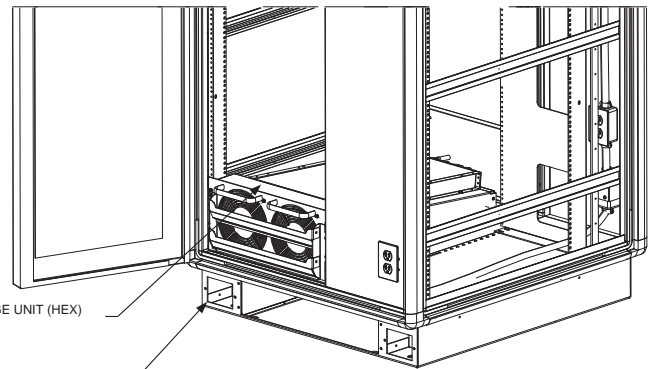
POWER STRIP CORDS EXIT
THRU CABLE DOOR.
APPROXIMATELY 6FT OF CABLE
ABOVE CABINET



UPPER FRONT VIEW

MATING SEALTITE CONNECTOR PROVIDED
ON J-BOX COVER PLATE FOR SERVICE
OUTLET POWER

REVISION HISTORY			
REV	DESCRIPTION	DATE	APPROVED

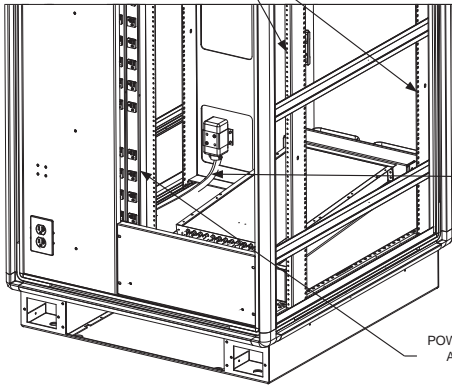


HEAT EXCHANGE UNIT (HEX)

FORKLIFT HOLES
(COVER PLATES NOT SHOWN)

LOWER FRONT VIEW, DOOR OPEN

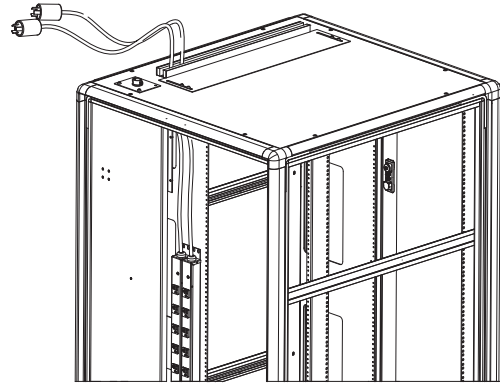
FRONT RAILS ARE 3" FROM INSIDE OF FRONT DOOR
REAR RAILS ARE 29 1/4" FROM FRONT RAILS



INSIDE VIEW OF BOTTOM FROM REAR

1/2" SEALTITE FLEX
CONDUIT USED FOR
CABLE ROUTING TO
ALL SERVICE OUTLETS

POWER STRIPS ARE RECESSED
APPROX 6-8 INCHES FROM
REAR OF CABINET



VIEW OF TOP FROM REAR

SIZE B	CAGE CODE	DWG NO A843137F-V4-2	REV X1
SCALE			SHEET 2 OF 2