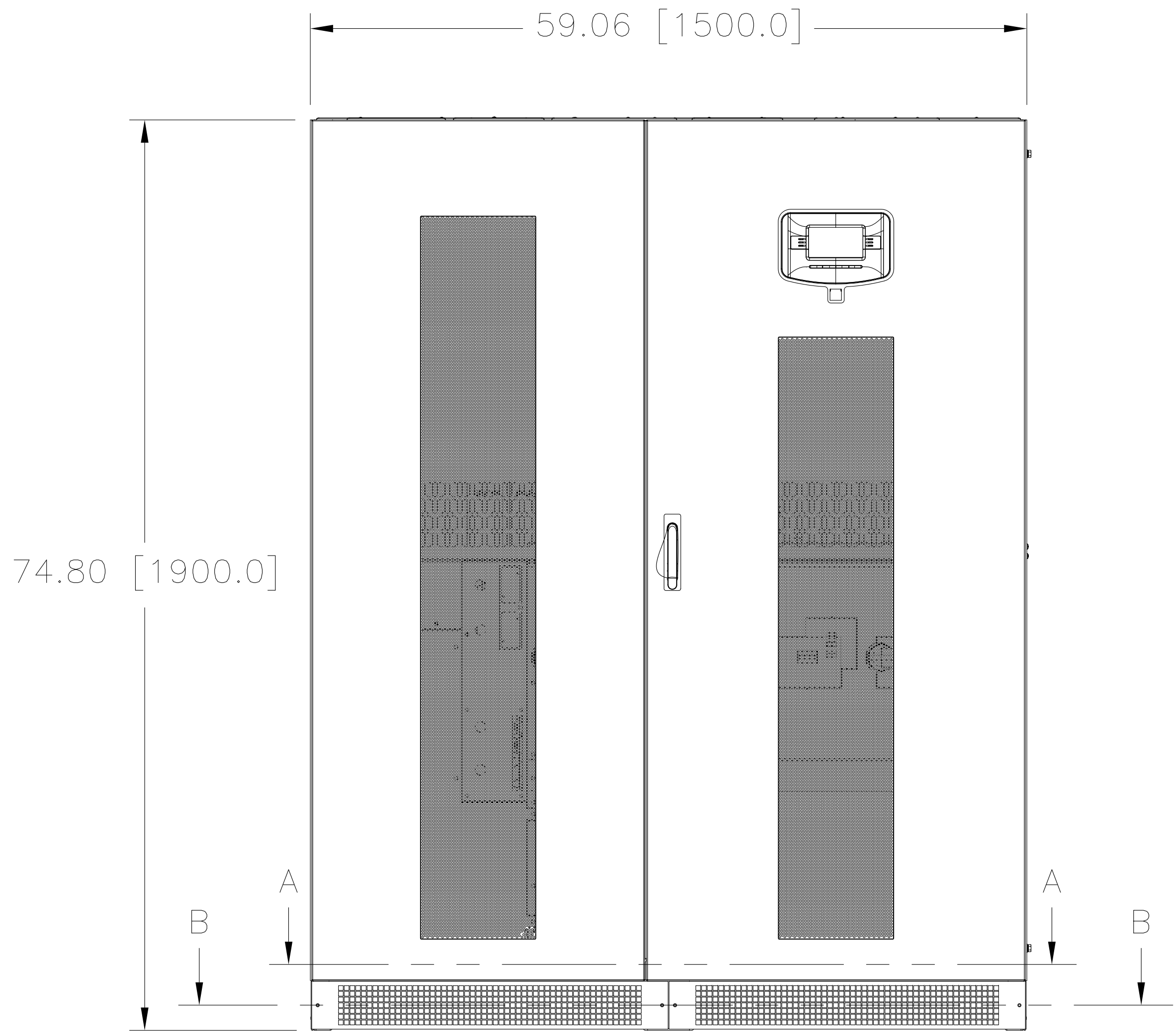
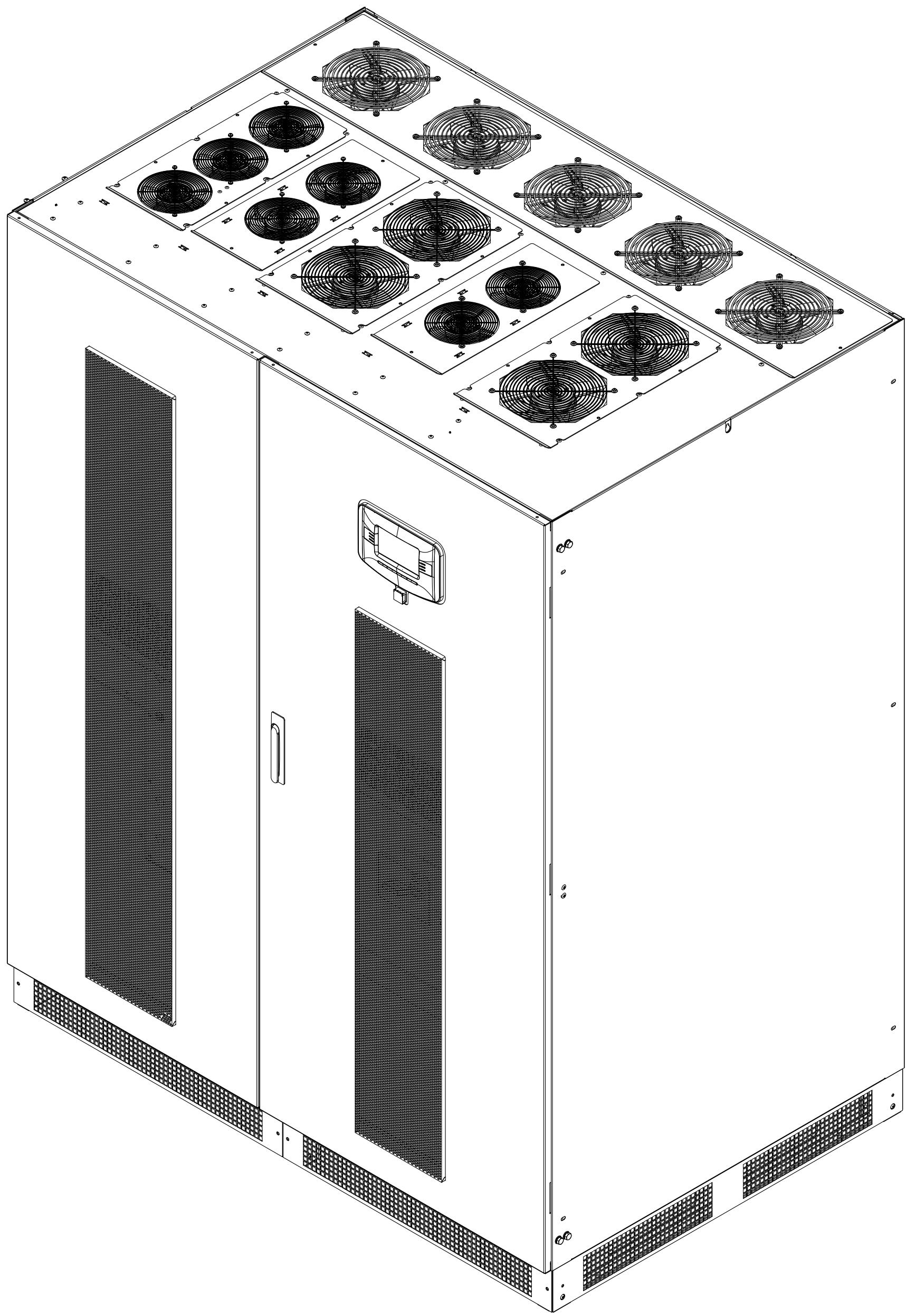




FRONT VIEW



SUMMARY OF EQUIPMENT

THE FIRSTLINE P UNINTERRUPTIBLE POWER SUPPLY (UPS) IS A TRUE ON-LINE, DOUBLE CONVERSION, PARALLELABLE, THREE PHASE SYSTEM THAT CAN PREVENT THE LOSS OF ELECTRONIC INFORMATION AND MINIMIZE EQUIPMENT DOWN TIME.

THE FIRSTLINE P UPS CONSTANTLY MONITORS THE INCOMING ELECTRICAL POWER AND PROTECTS THE CONNECTED LOAD BY REMOVING VOLTAGE SPIKES, SAGS, TRANSIENTS, AND OTHER DAMAGING IRREGULARITIES THAT ARE COMMON IN COMMERCIAL UTILITY POWER. THE UPS SUPPLIES THE CLEAN, CONSISTENT POWER THAT SENSITIVE ELECTRONIC EQUIPMENT REQUIRES FOR RELIABLE OPERATION. DURING BROWNOUTS, BLACKOUTS, AND OTHER POWER INTERRUPTIONS, THE BATTERIES PROVIDE EMERGENCY POWER TO SAFEGUARD OPERATION.

THE FRONT DISPLAY PANEL PROVIDES ACCESS TO DETAILED INFORMATION REGARDING THE STATUS OF THE UTILITY, LOAD, AND FIRSTLINE UPS.

THE AC THREE PHASE UTILITY SUPPLY IS RECTIFIED TO PROVIDE DIRECT CURRENT, THE INVERTER WHICH PROVIDES THE THREE PHASE OUTPUT, AND ELECTRONIC STATIC SWITCH.

PROVIDED THE UTILITY IS WITHIN LIMITS, THE INVERTER WILL MATCH THE OUTPUT FREQUENCY WITH THE UTILITY FREQUENCY. THE INVERTER HAS ITS OWN INTERNAL CONTROL TO STABILIZE THE OUTPUT FREQUENCY IF THE UTILITY FREQUENCY IS OUT OF LIMITS. THE ELECTRONIC STATIC SWITCH SWITCHES THE OUTPUT FROM THE INVERTER TO THE UTILITY, WITHOUT INTERRUPTION, TO MEET ANY LOAD CURRENT SURGES.

UPS CAN BE CONFIGURED FOR WYE-WYE OR DELTA-DELTA APPLICATIONS. DELTA-WYE APPLICATIONS REQUIRE EXTERNAL TRANSFORMER.

ENVIRONMENTAL

OPERATING TEMPERATURE: 0°C TO 40°C
ALTITUDE: 0-3300 FEET [1000 METERS]
RELATIVE HUMIDITY: (WITHOUT DERATING) 0-95%, NON-CONDENSING

SERVICE/VENTILATION CLEARANCES

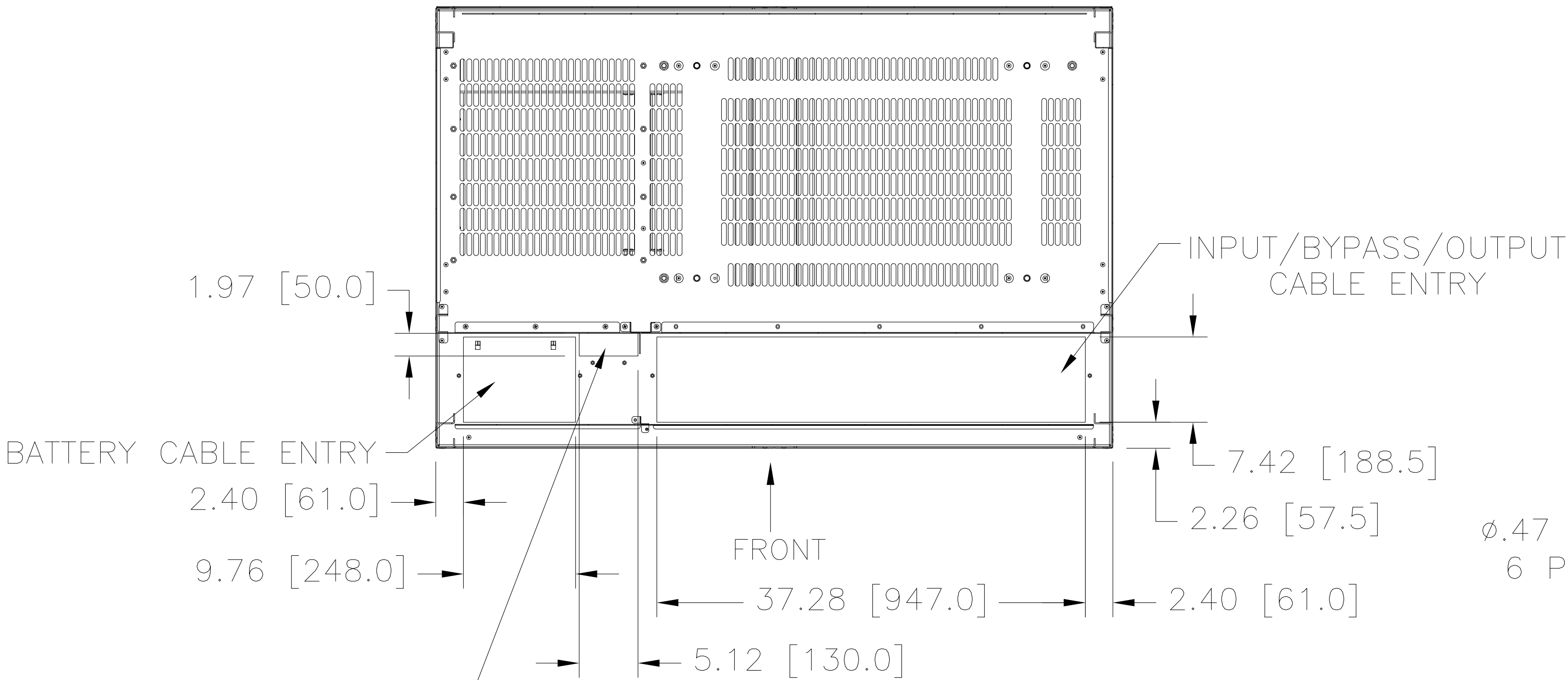
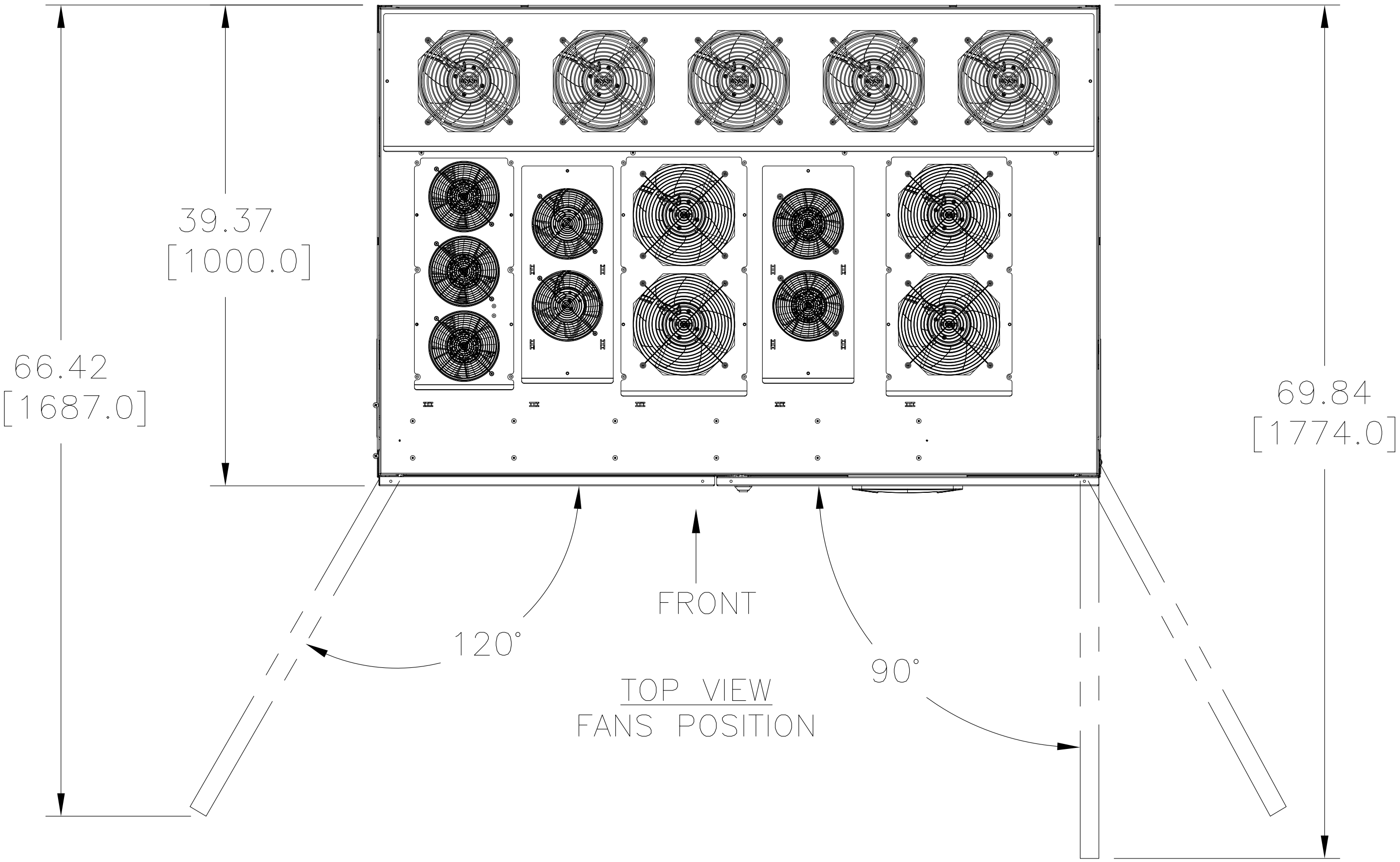
FROM TOP OF CABINET: 23.62 [600]
FROM FRONT OF CABINET: 39.37 [1000]
*AT LEAST ONE SIDE OR REAR MUST HAVE CLEARANCE OF 19.69 [500]

UL LISTED TO UL 1778, FILE NO.: E191175

MODEL	KVA	INPUT VOLTAGE 60HZ	OUTPUT VOLTAGE 60HZ	MAXIMUM INPUT CURRENT (AMPS)	NOMINAL OUTPUT CURRENT (AMPS)	WEIGHT APPROX. LBS (KG)
FLU-400-00	400	480Y/277	480Y/278	640	481	4741 (2150)
FLU-400-T						4751 (2155)
FLU-500-00	500	480Y/277	480Y/278	640	601	4741 (2150)
FLU-500-T						4751 (2155)

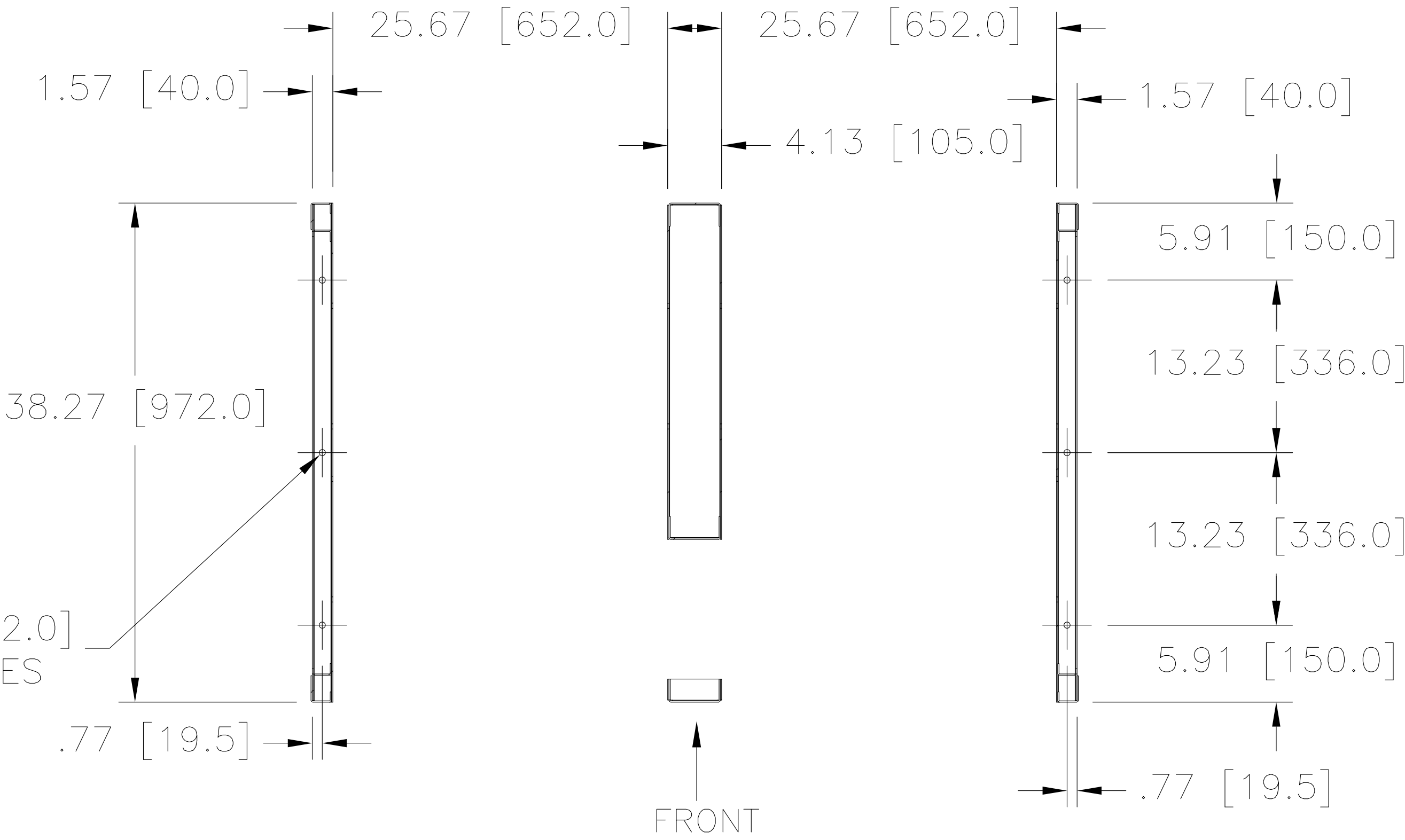
UNLESS OTHERWISE SPECIFIED, TOLERANCE IS: DECIMALS Holes ANGLES DRAFT XX .010 .005 1° 1-1/2° MATERIAL: ALL DIMENSIONS APPLY AFTER FINISHING		TITLE: SPEC. CONTROL DRAWING FIRSTLINE P 400/500KVA	DRAWN BY: SLB DATE: 7/20/16 FIRST USED ON: DO NOT SCALE THIS DATE: 10/27/16 WEIGHT APPROX: CASE CODE: 83008		DWG. NO.: 096-6077
ENGINEER: B.FOX DATE: 10/27/16 SCALE: 1/8 SHEET 1 OF 2		STACO ENERGY PRODUCTS CO. A Corporation of American Electric Company 501 South Main Street Dayton, Ohio 45402 USA © 2016			

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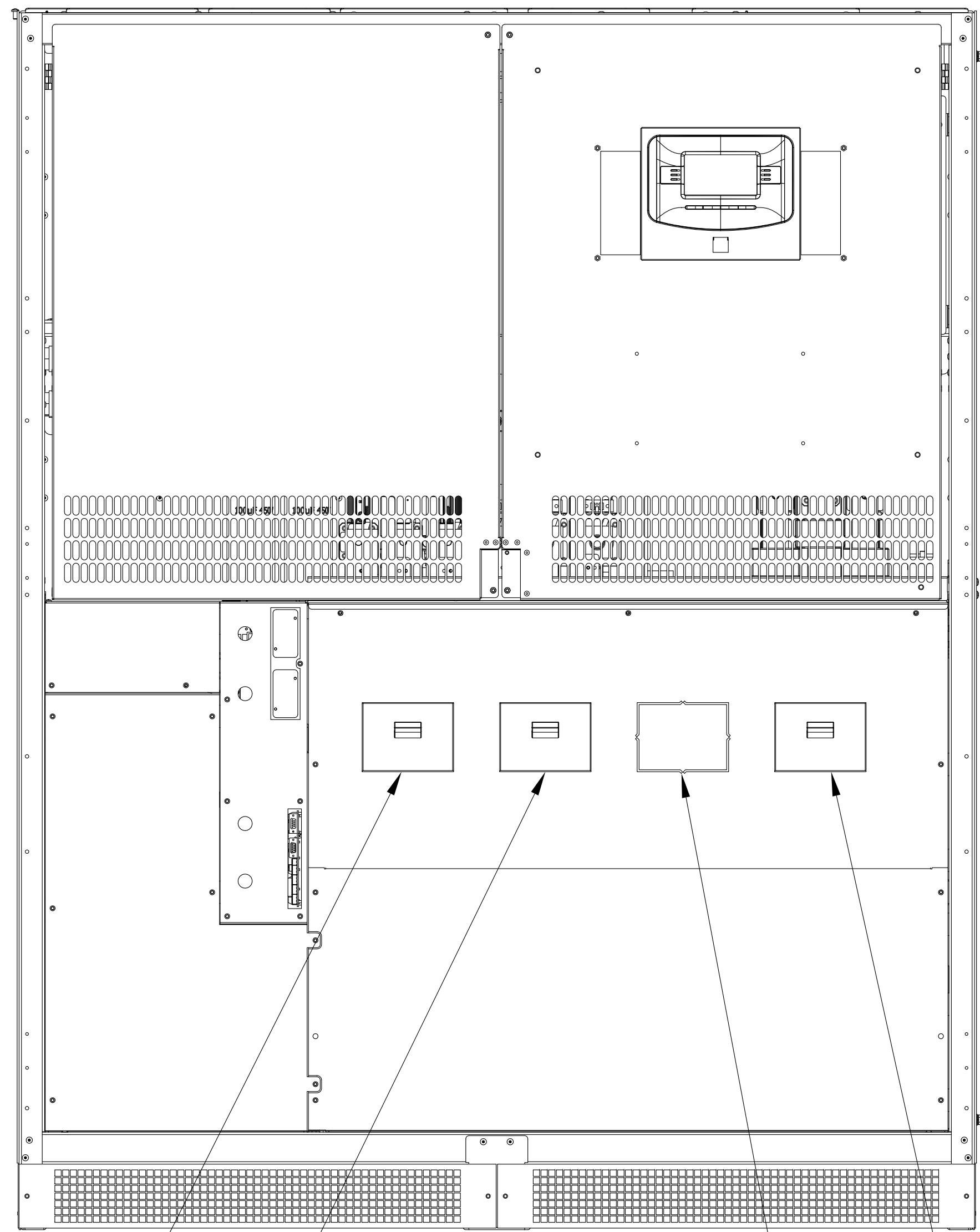


LOW VOLTAGE CONTROL CABLE ENTRY

BOTTOM VIEW SECTION A-A W/O DOOR AND PANEL BEARING SURFACE OF CABINET

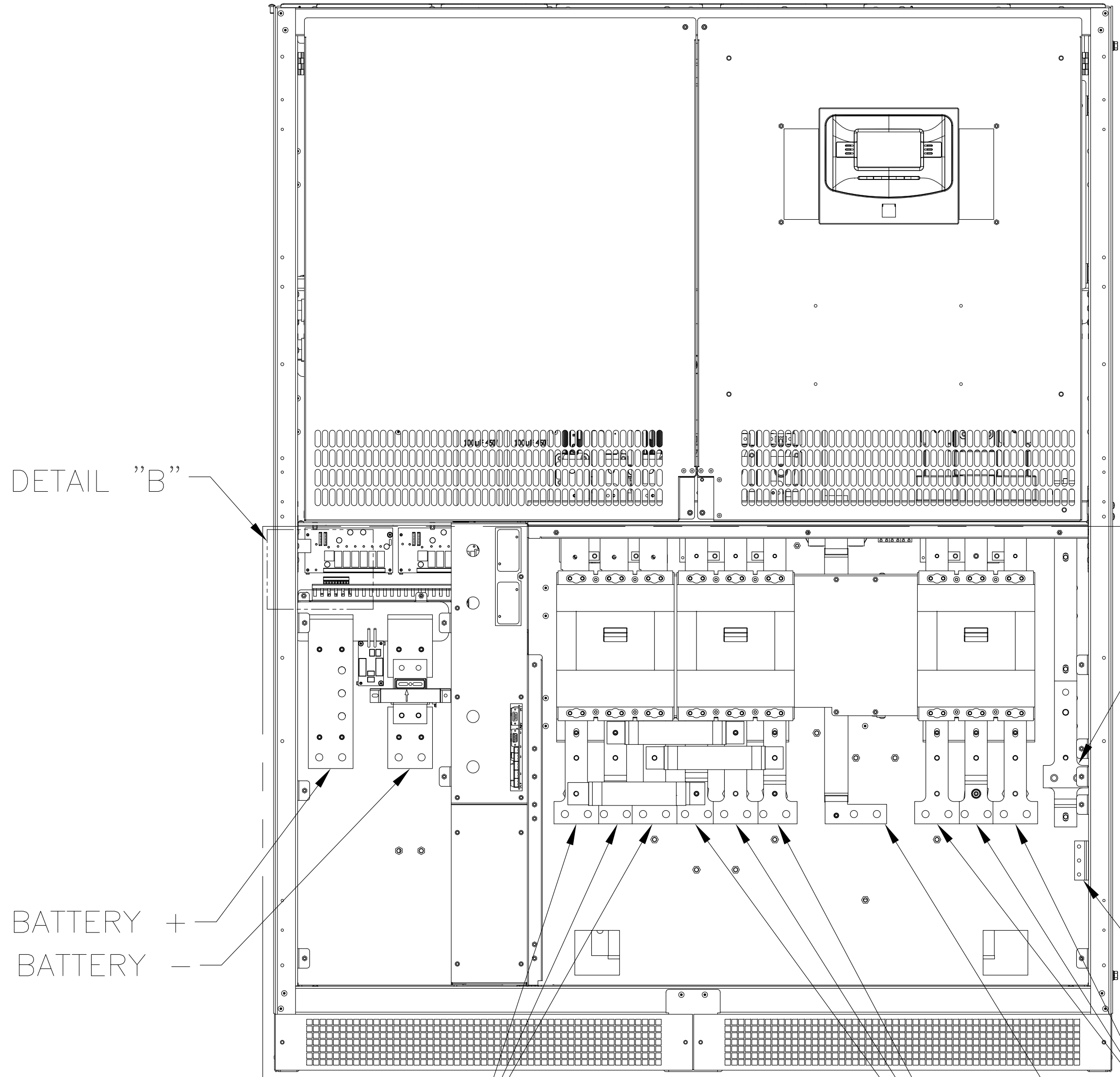


BOTTOM VIEW SECTION B-B



FRONT VIEW
DOORS REMOVED

SWIN
SWBY
SWMB (OPTIONAL)
SWOUT



FRONT VIEW
PANELS REMOVED

DETAIL "B"

BATTERY +
BATTERY -

INPUT

OUTPUT NEUTRAL

GROUND

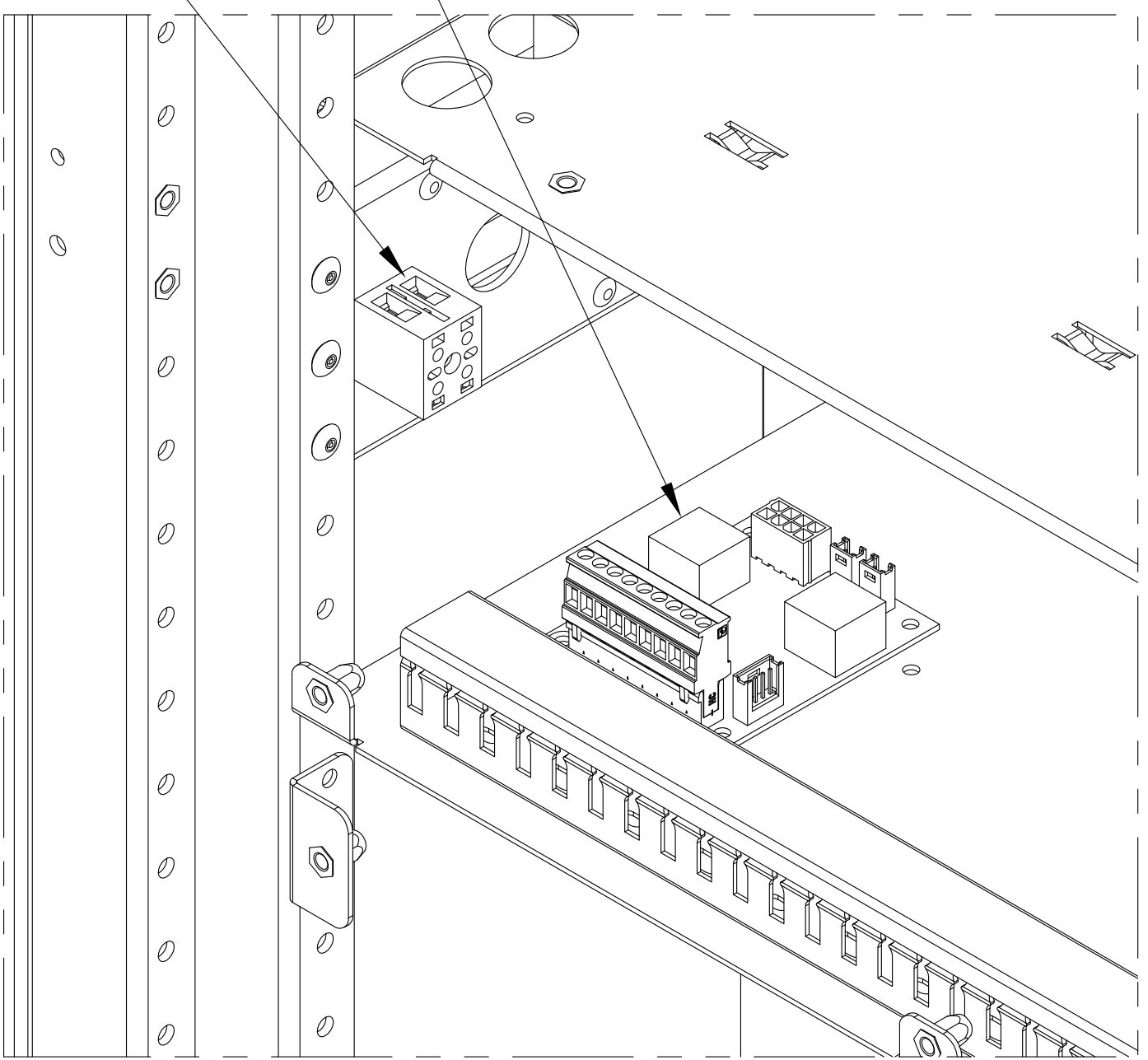
OUTPUT BYPASS INPUT NEUTRAL

DETAIL "A"

BYPASS

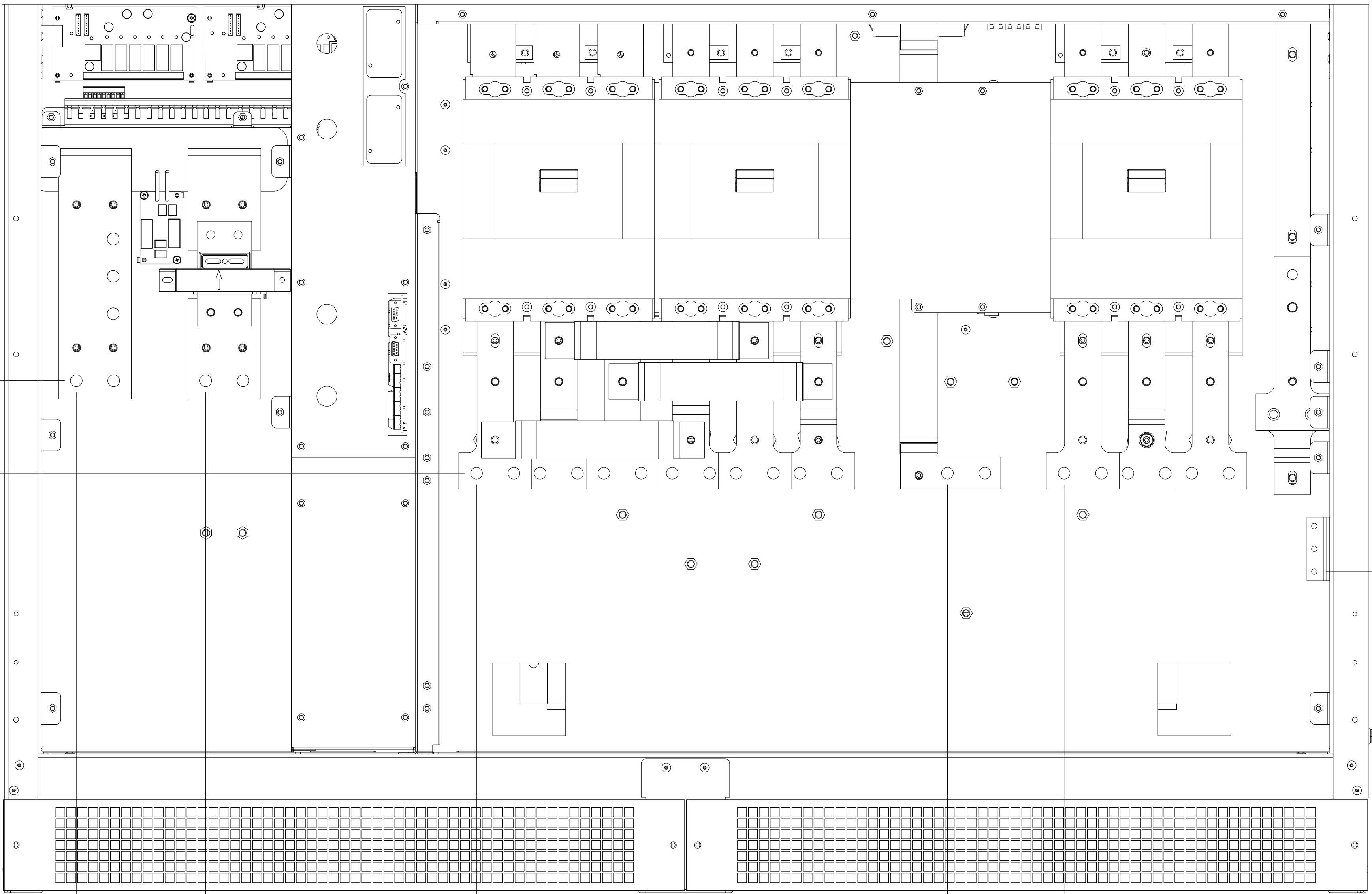
AUX SIGNALS ISOLATION BOARD

TERMINAL BLOCK



DETAIL "B"
AUX CONNECTIONS

DETAIL "A"



22.13 [562.0]

18.13 [460.5]

3.09 [78.5]

8.68 [220.5]

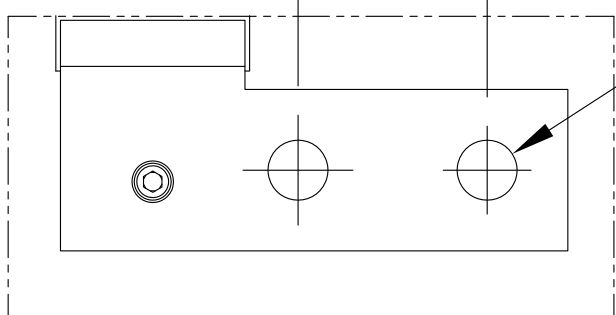
20.38 [517.7]

40.73 [1034.5]

45.77 [1162.5]

13.88 [352.5]

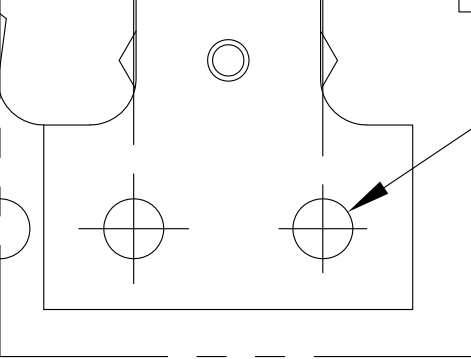
1.61 [41.0]



BYPASS NEUTRAL

Ø.51 [Ø13.0]

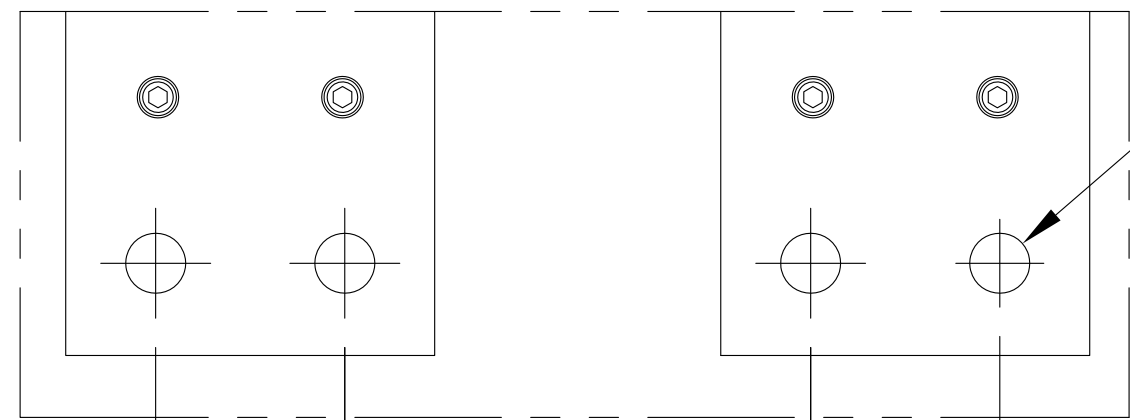
1.61 [41.0]



INPUT/OUTPUT/BYPASS

Ø.51 [Ø13.0]

BATTERY



Ø.51 [Ø13.0]

1.61 [41.0]

1.61 [41.0]

3.98 [101.0]

UNLESS OTHERWISE SPECIFIED, TOLERANCE IS: DECIMALS .005 Holes .005 ANGLES 1° DRAFT 1:1/2° MATERIAL: ALL DIMENSIONS APPLY AFTER PAINTING	UNITS IN [mm]
---	------------------

TITLE: SPEC. CONTROL DRAWING FIRSTLINE P 400/500KVA			
DRAWN BY: SLB	DATE: 7/20/16	FIRST USED ON:	DO NOT SCALE DWG.
CHECKED BY: S.A.SMITH	DATE: 10/27/16	WEIGHT APPROX. 8300B	CASE CODE
ENGINEER: B.FOX	DATE: 10/27/16	SCALE: .15	SHEET 2 OF 2

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DWG. NO.
096-6077

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