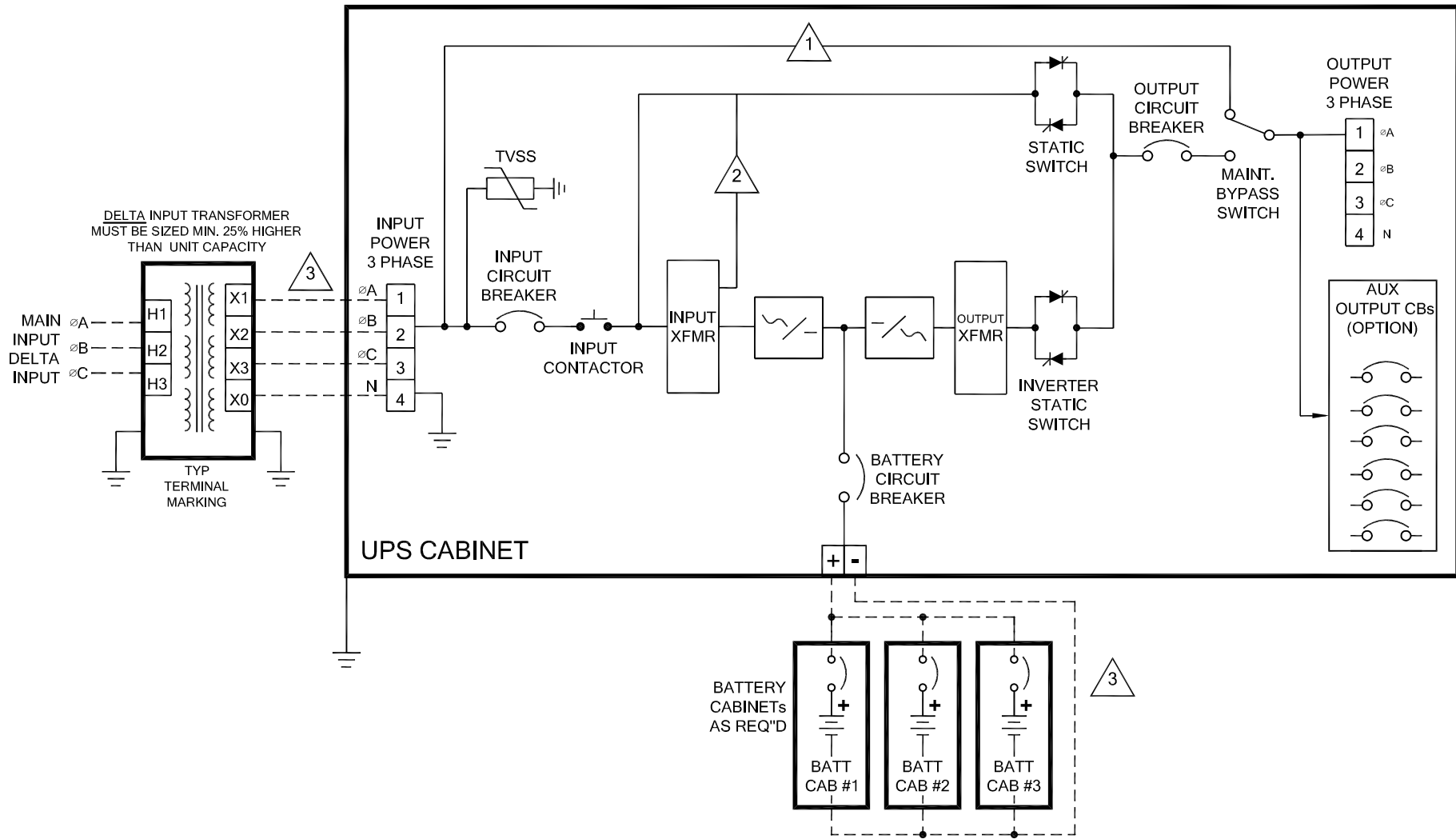


--- Optional
 ▲ Line removed when External Reserve Input Power is in use.
 ▲ Use for different Input and Output Voltage unit.

NOTE: Optional External Wrap-around Bypass Switch is available.

3 Phase Inverter Functional Block Diagram	
Single Input	CPP4604B

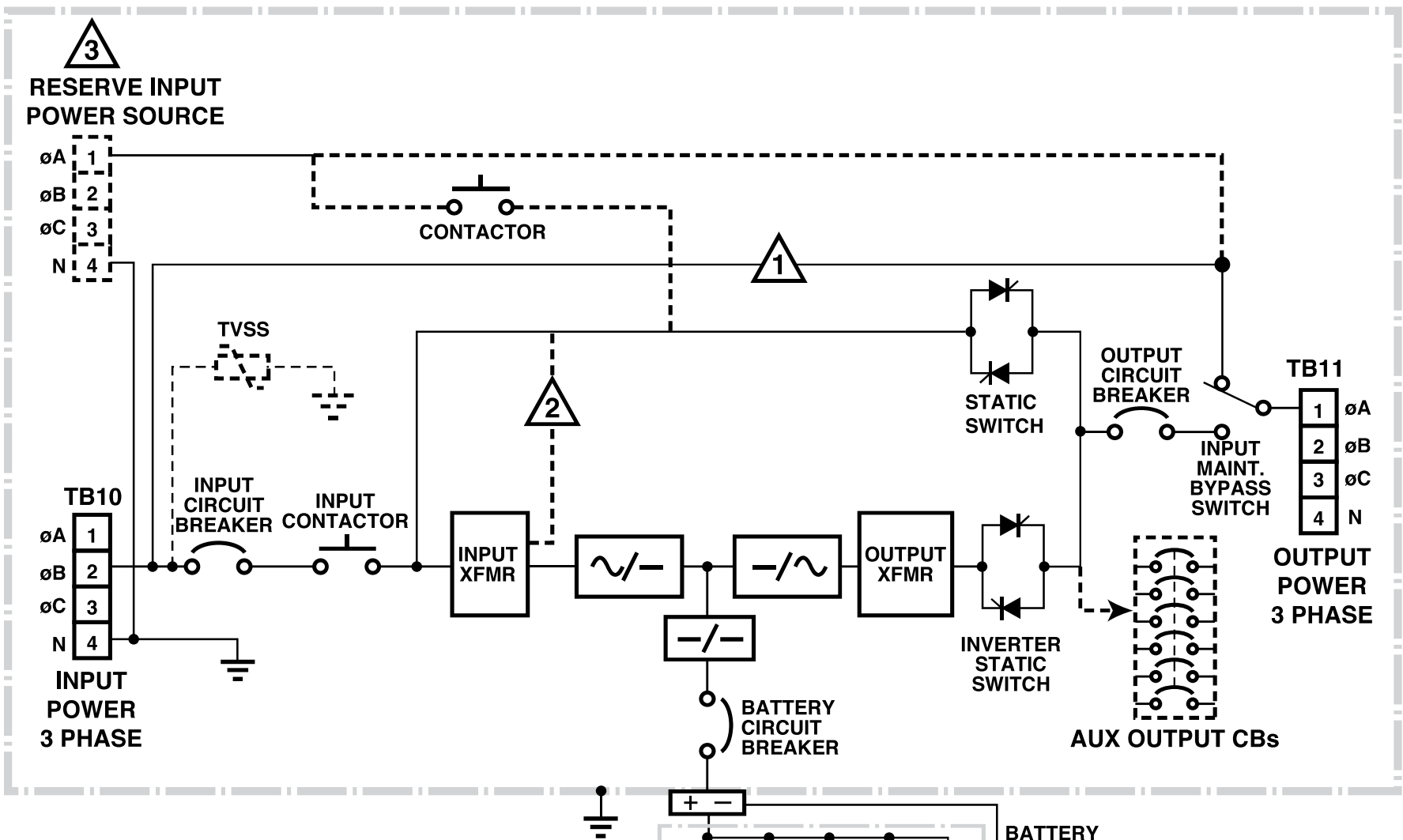
REVISION				
REV	ECO	DESCRIPTION	DATE	APPROVED
A	11595	NEW RELEASE	08/21/17	H.B.



- ① LINE REMOVED WHEN EXTERNAL RESERVE INPUT POWER IS IN USE.
- ② USE FOR DIFFERENT INPUT AND OUTPUT VOLTAGE UNITS.
- ③ ALL DASH LINES ARE CUSTOMER CONNECTION AND MUST COMPLY TO ALL APPLICABLE CODES.

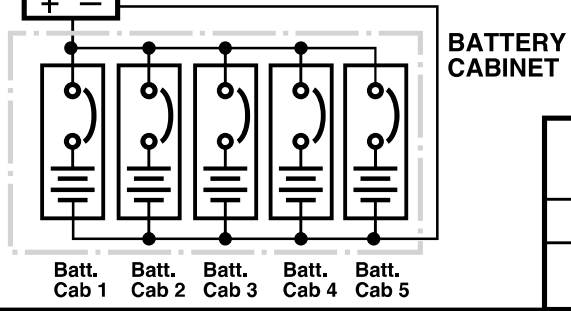
CRUCIAL POWER PRODUCTS LOS ANGELES, CA		TITLE	
		THREE PHASE CENTRAL LIGHTING INVERTER DELTA INPUT FUNCTIONAL DIAGRAM	
CADD: S.SHAHSAVARI	08/21/17	SIZE	DWG
CHKD: S.S.	08/21/17	A	6001-405C
APPVD: H.BAIK	08/21/17	SCALE:	EST. WT:
			SHT 1 OF 1

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

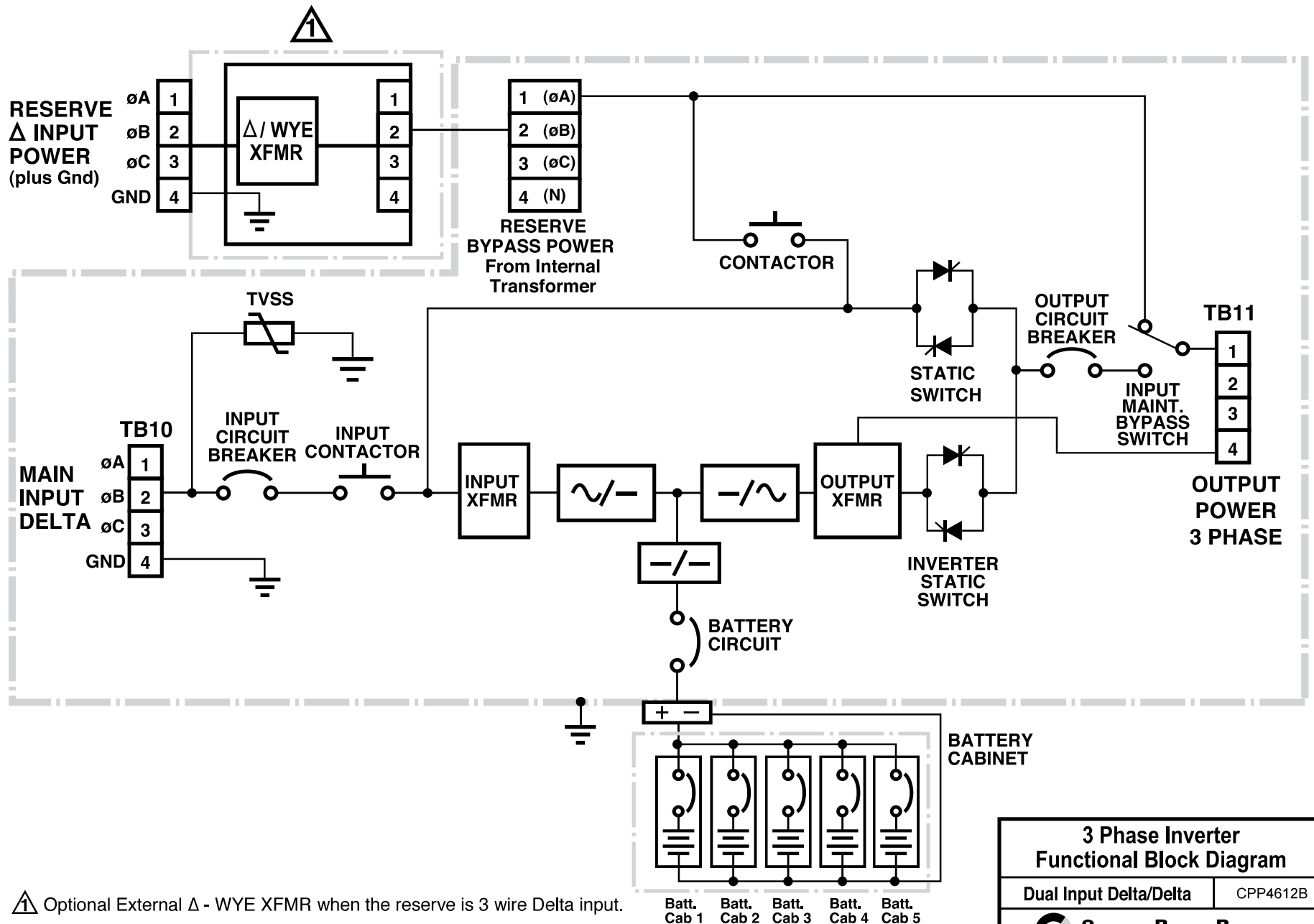


- Optional
- ⚠ Line removed when External Reserve Input Power is in use.
- ⚠ Use for different Input and Output Voltage unit.
- ⚠ Reserve input voltage must be same as Inverter output voltage.

NOTE: Optional External Wrap-around Bypass Switch is available.

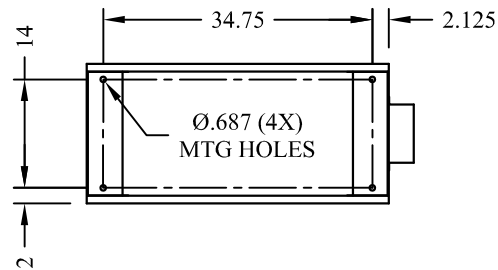
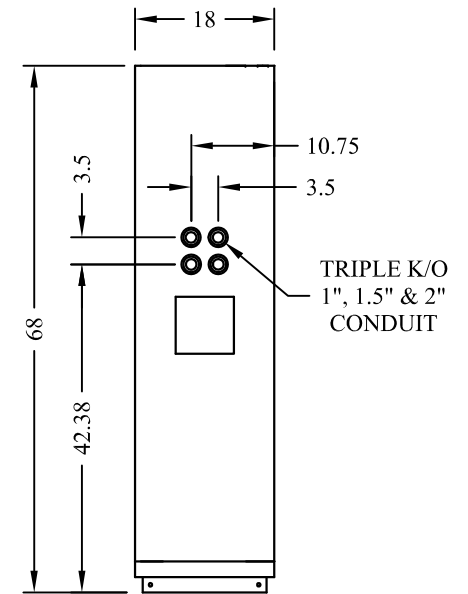
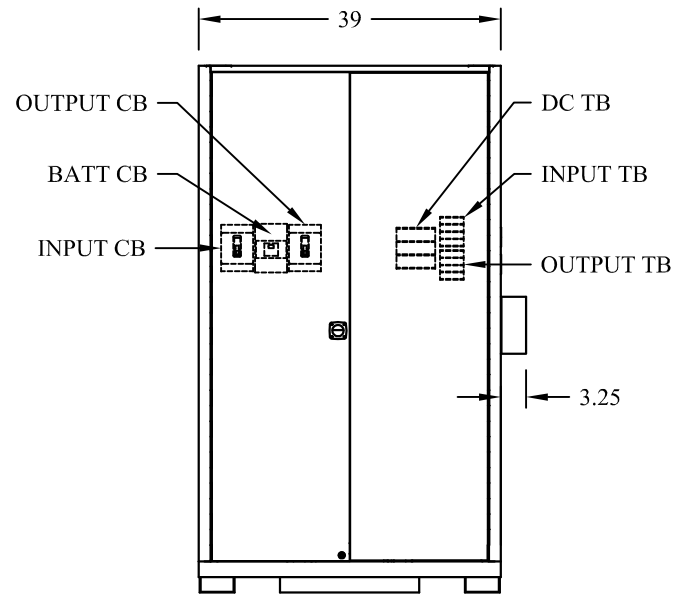
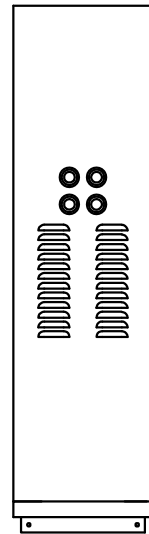
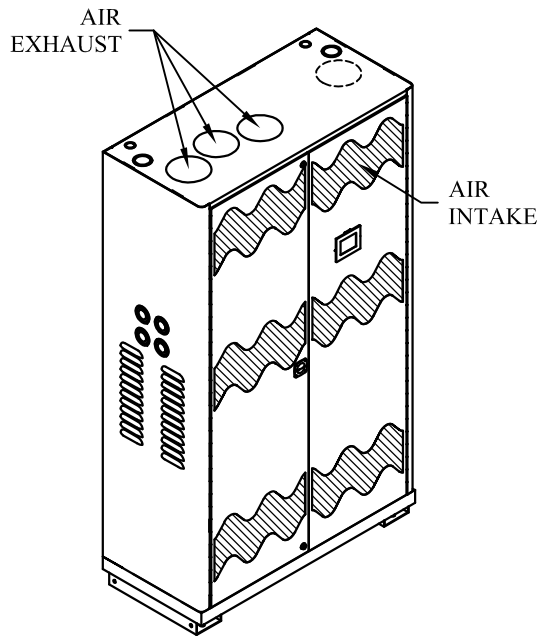
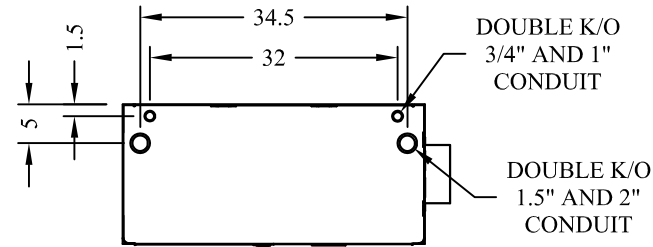


3 Phase Inverter Functional Block Diagram	
Dual Input Wye/Wye	CPP4605C
CPP CRUCIAL POWER PRODUCTS	



⚠ Optional External Δ - WYE XFMR when the reserve is 3 wire Delta input.

3 Phase Inverter Functional Block Diagram	
Dual Input Delta/Delta	CPP4612B
CPP CRUCIAL POWER PRODUCTS	



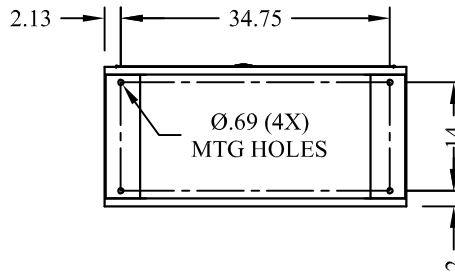
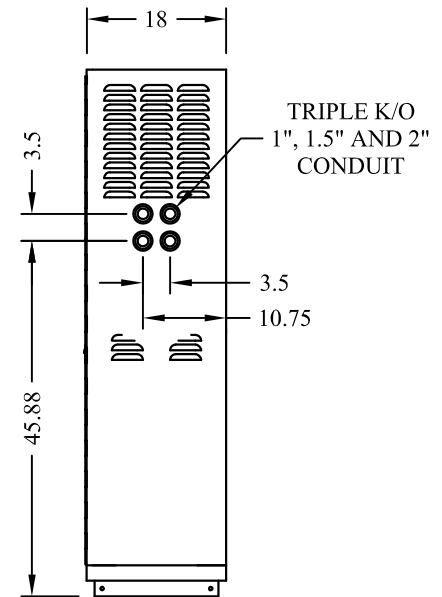
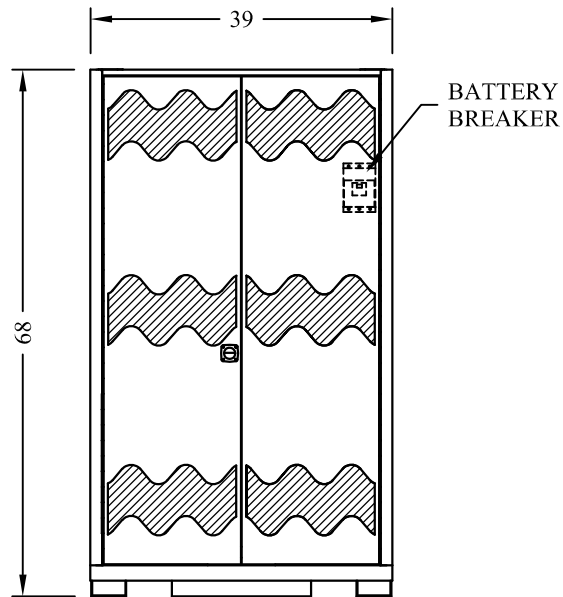
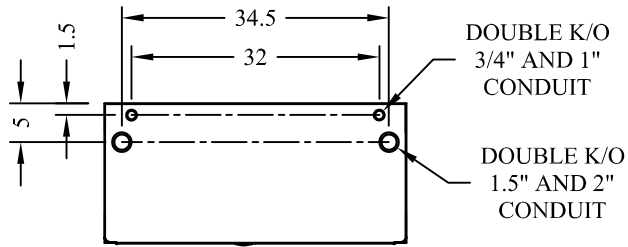
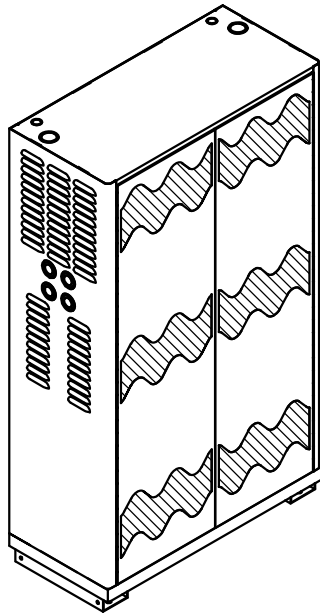
NOTES:

- 1) CONSTRUCTION: NEMA1 INDOOR.
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE (P/N 9100-1317-02)
- 3) ANCHORING HARDWARE TO BE SUPPLIED BY CUSTOMER.

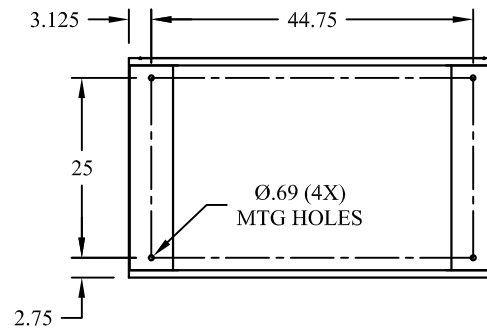
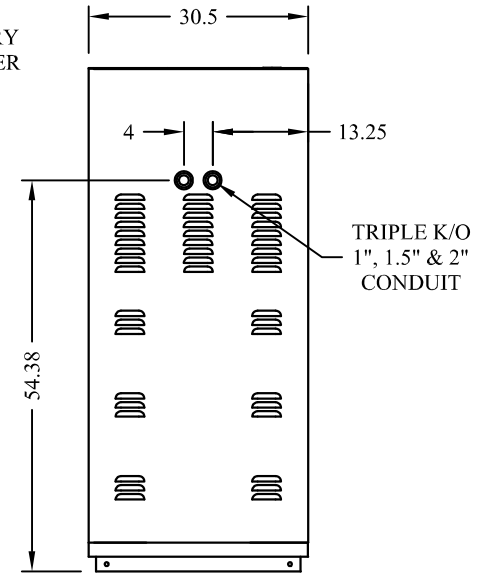
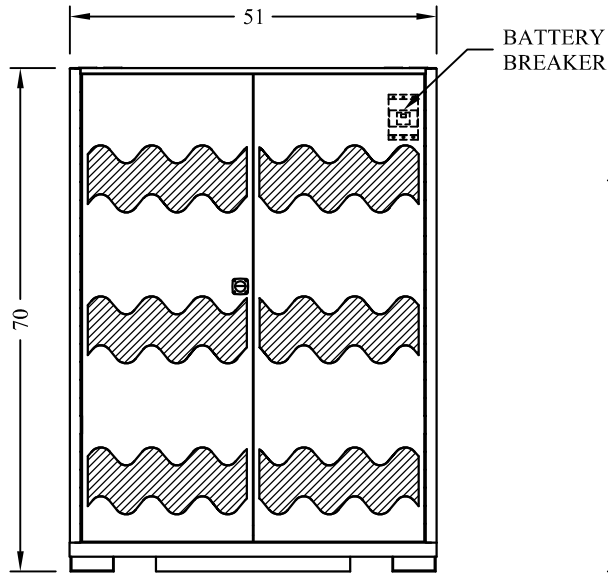
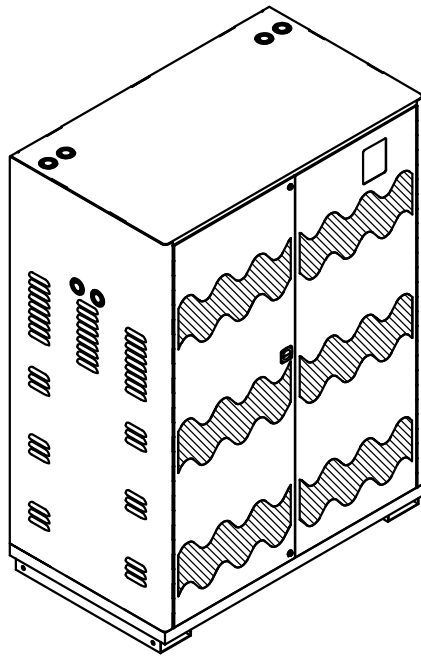
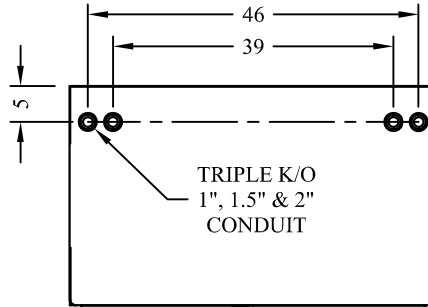
CRUCIAL POWER PRODUCTS			
WAVE RIDER 3 CENTRAL LIGHTING INVERTER			
DRAWN:	SHERRI	7/12/18	415-TD-A
APPVD:	HENRY	7/12/18	
			REV A

NOTES:

- 1) CONSTRUCTION: NEMA1 INDOOR.
- 2) OPTIONAL SEISMIC BRACKETS AVAILABLE (P/N 9100-1317-02)
- 3) OPTIONAL RACKS AVAILABLE (P/N 9100-1429)
- 4) ANCHORING HARDWARE TO BE SUPPLIED BY CUSTOMER.

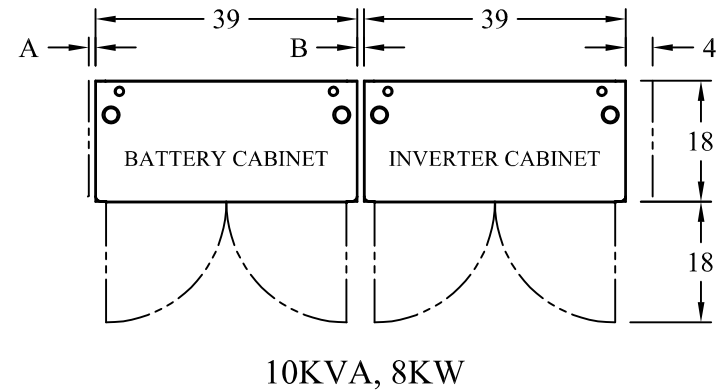
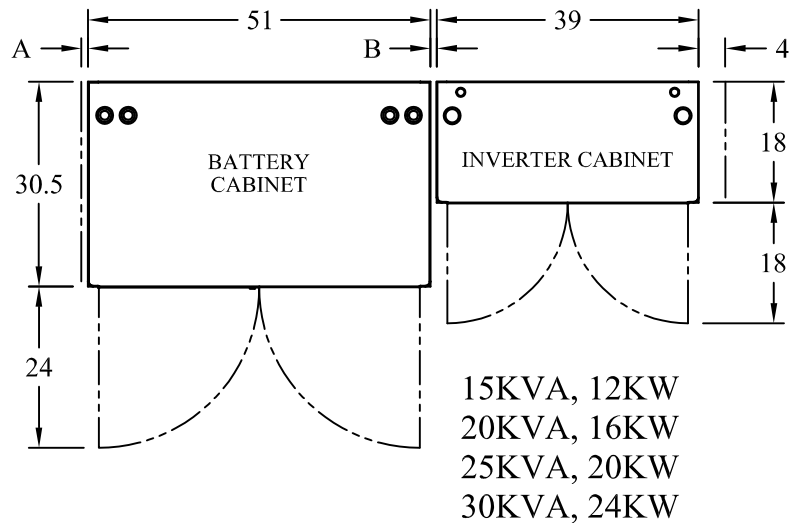
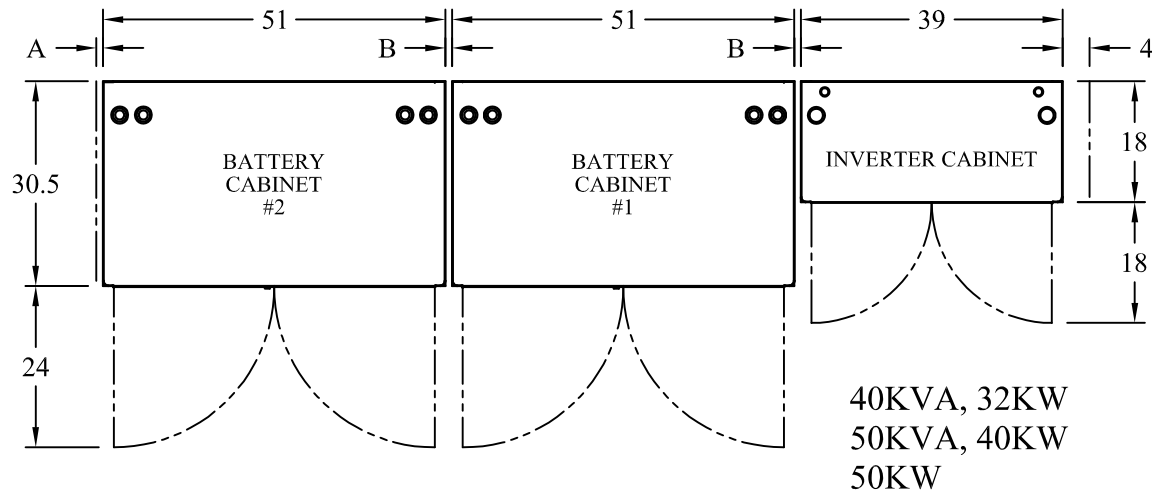


CRUCIAL POWER PRODUCTS			
WAVE RIDER 3			
BATTERY CABINET, 39" WIDE			
DRAWN:	SHERRI	7/12/18	415-TD-B
APPVD:	HENRY	7/12/18	
			REV A



CRUCIAL POWER PRODUCTS			
WAVE RIDER 3			
BATTERY CABINET, 51" WIDE			
DRAWN:	SHERRI	7/12/18	415-TD-C
APPVD:	HENRY	7/12/18	
			REV A

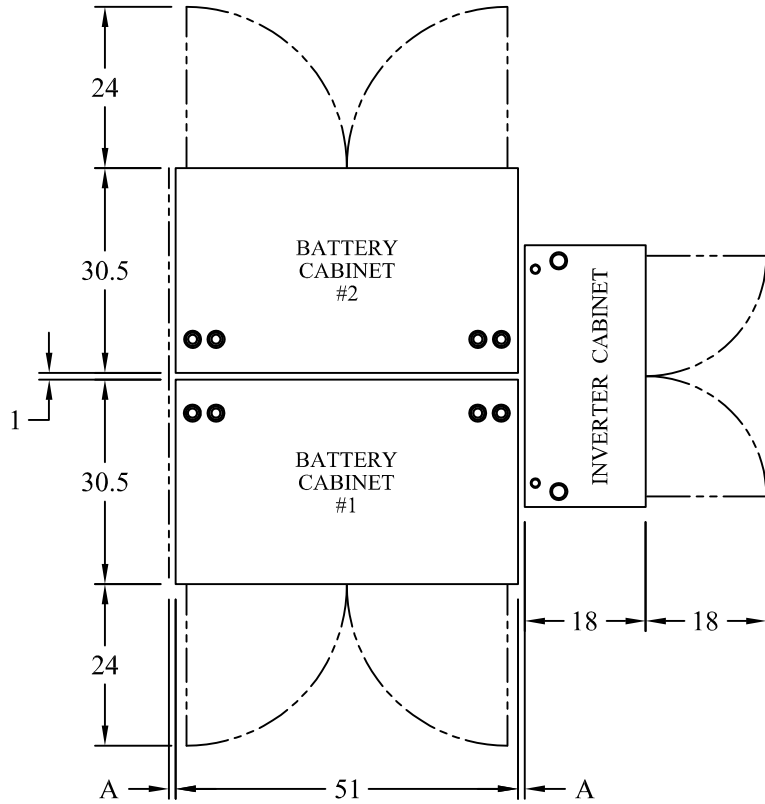
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC
A	1.0"	4.0"
B	1.0"	8.0"



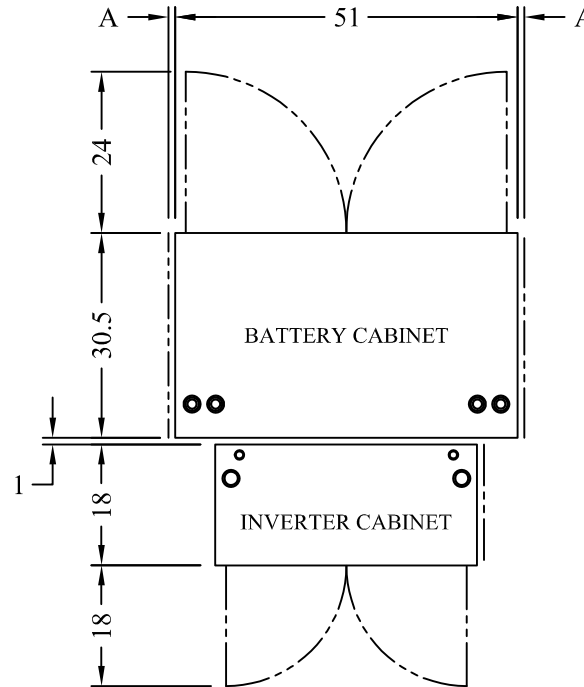
STD VRLA
BATTERY

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3 LAYOUT CONF. #1			
DRAWN:	SHERRI	7/10/18	415-TD-D
APPVD:	HENRY	7/10/18	
			REV A

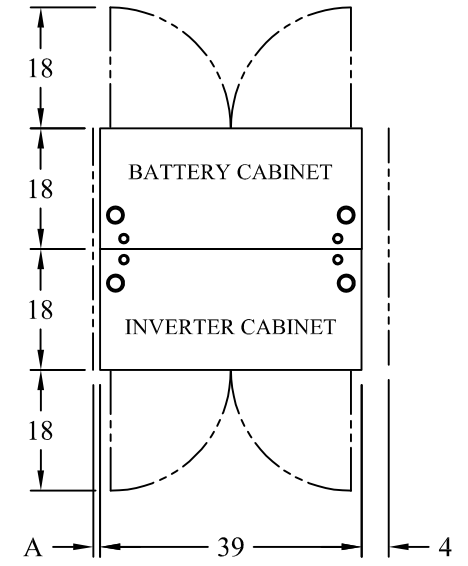
DIM "A"	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC
		1.0"



40KVA, 32KW
 50KVA, 40KW
 50KW



15KVA, 12KW
 20KVA, 16KW
 25KVA, 20KW
 30KVA, 24KW

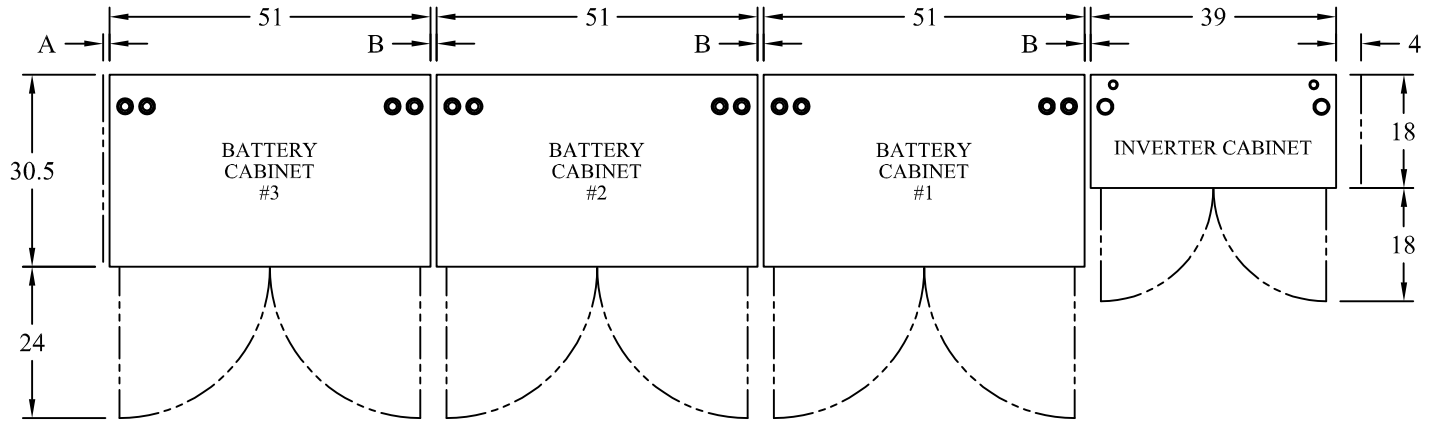


10KVA, 8KW

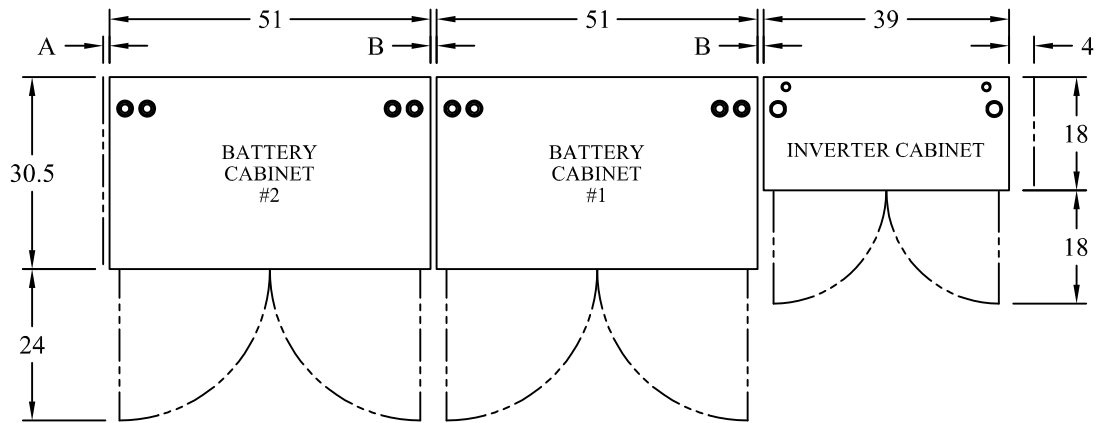
STD VRLA BATTERY

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3 LAYOUT CONF. #2			
DRAWN:	SHERRI	7/10/18	415-TD-E
APPVD:	HENRY	7/10/18	
			REV A

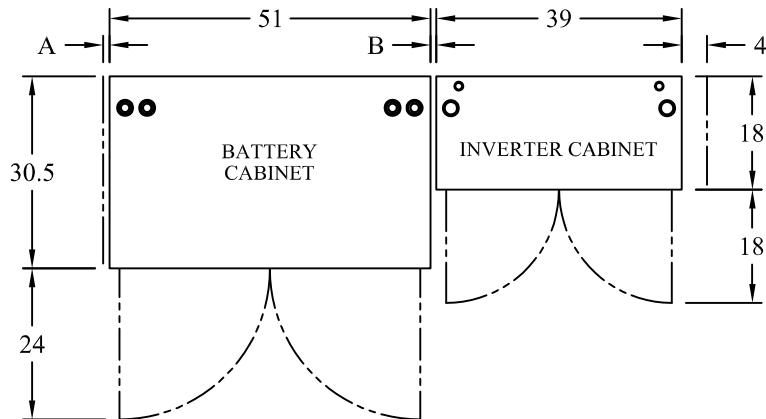
50KW



40KVA, 32KW
50KVA, 40KW



10KVA, 8KW
15KVA, 12KW
20KVA, 16KW
25KVA, 20KW
30KVA, 24KW



LONG LIFE
BATTERY

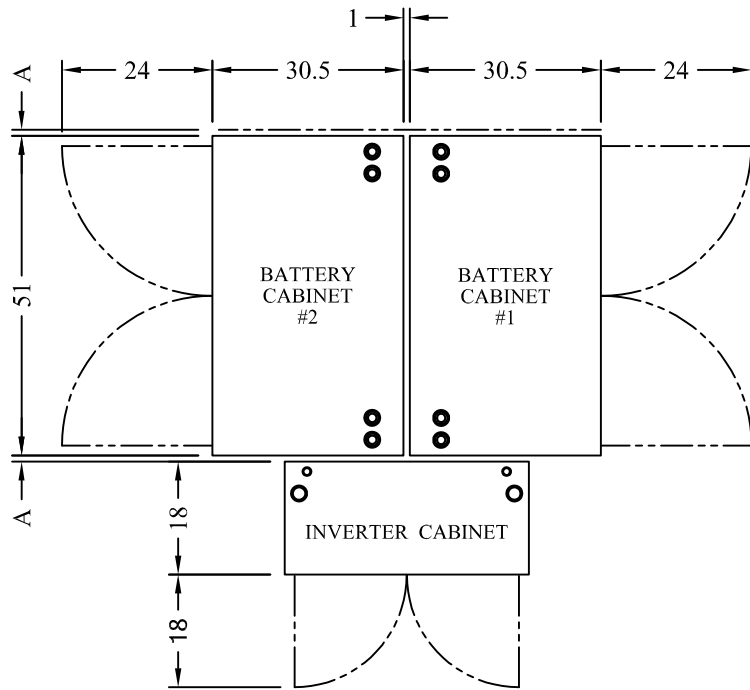
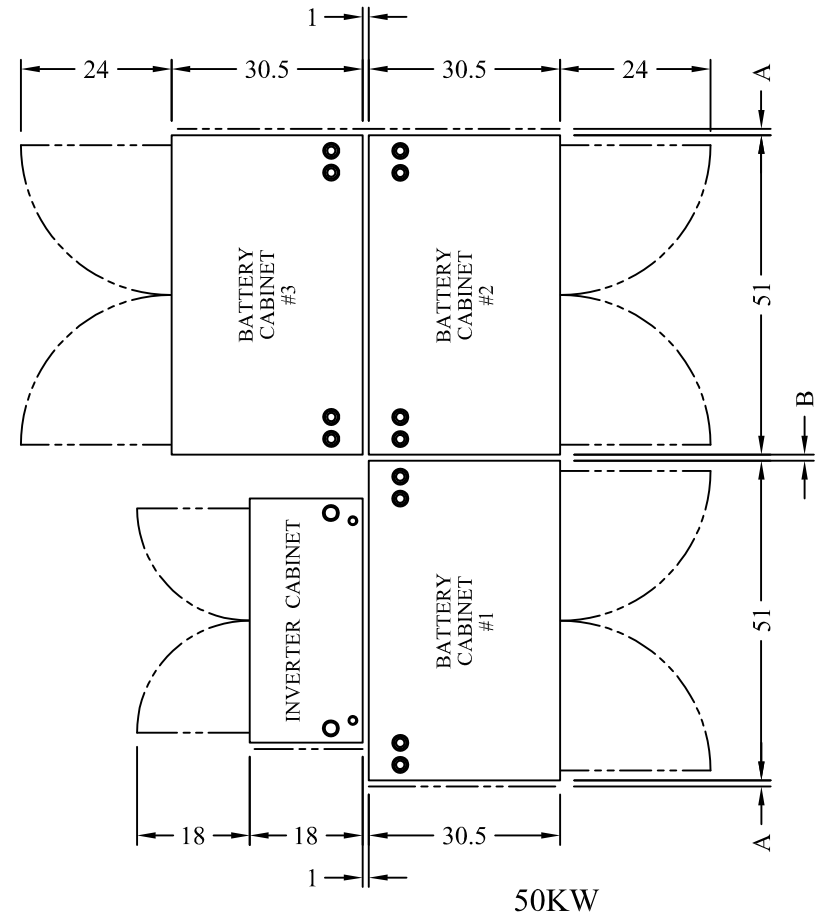
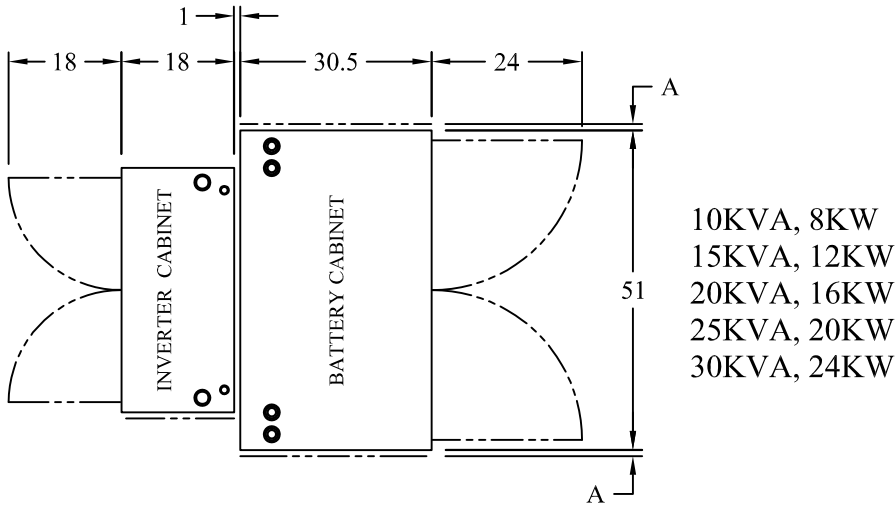
CRUCIAL POWER PRODUCTS

WAVE RIDER 3
LAYOUT CONF. #1

DRAWN:	SHERRI	7/10/18	415-TD-F	REV
APPVD:	HENRY	7/10/18		A

B	1.0"	8.0"
A	1.0"	4.0"
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC

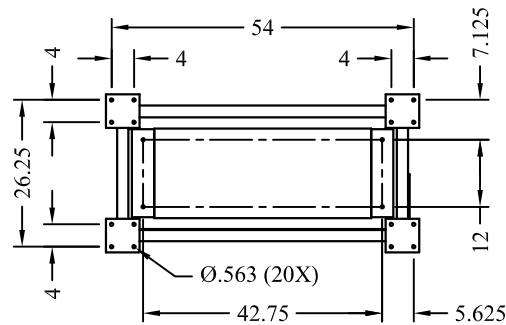
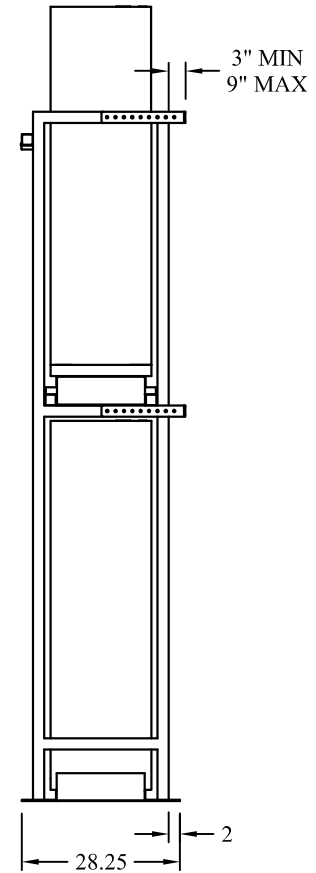
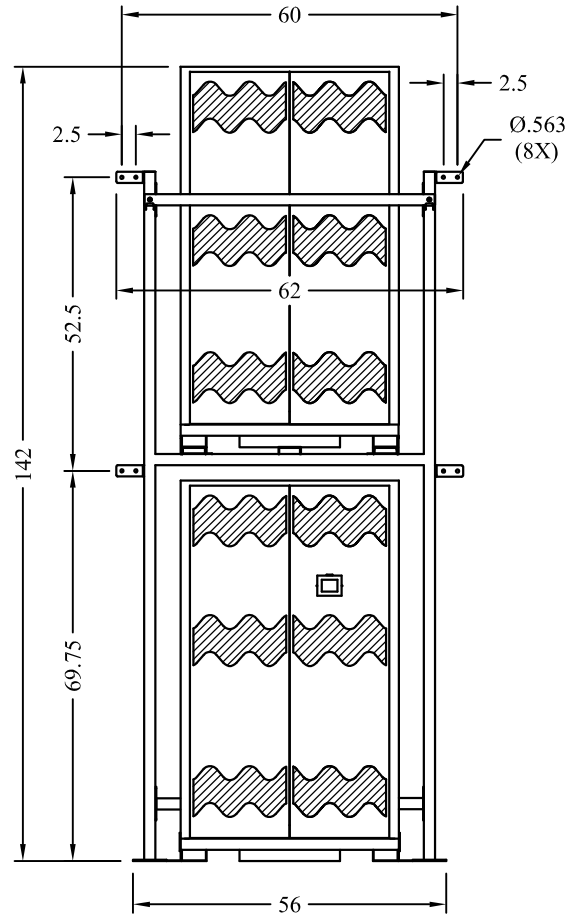
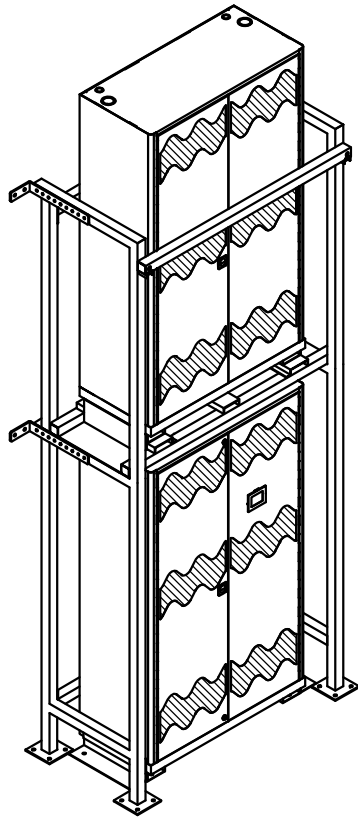
DIM	WITHOUT EXTERNAL SEISMIC	WITH EXTERNAL SEISMIC
A	1.0"	4.0"
B	1.0"	8.0"



40KVA, 32KW
 50KVA, 40KW

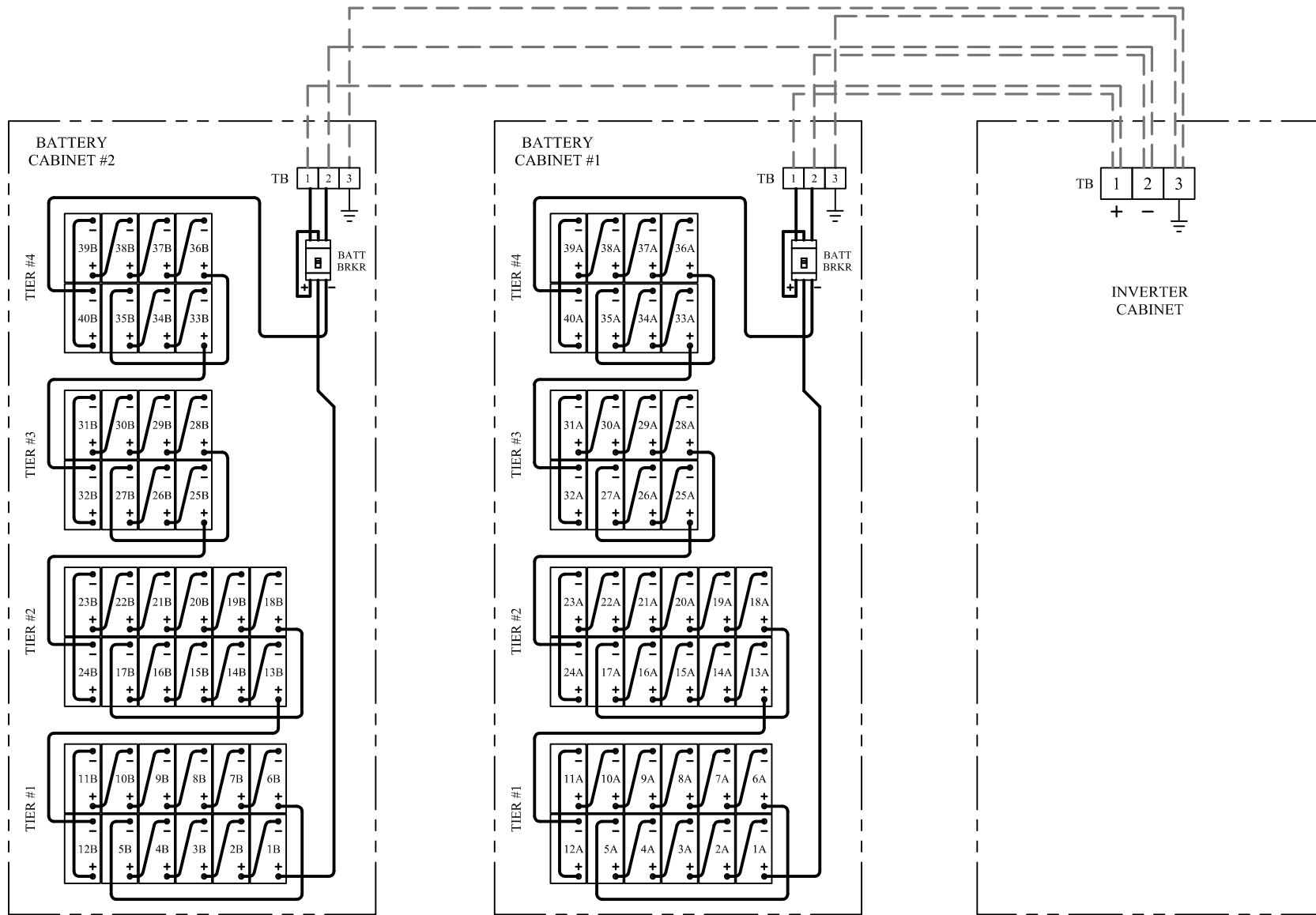
LONG LIFE
 BATTERY

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3 LAYOUT CONF. #2			
DRAWN:	SHERRI	7/10/18	415-TD-G
APPVD:	HENRY	7/10/18	
			REV A



STD VRLA BATTERY
10KVA, 8KW

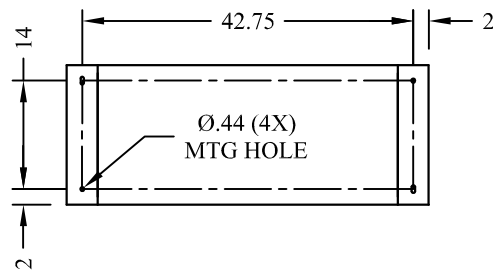
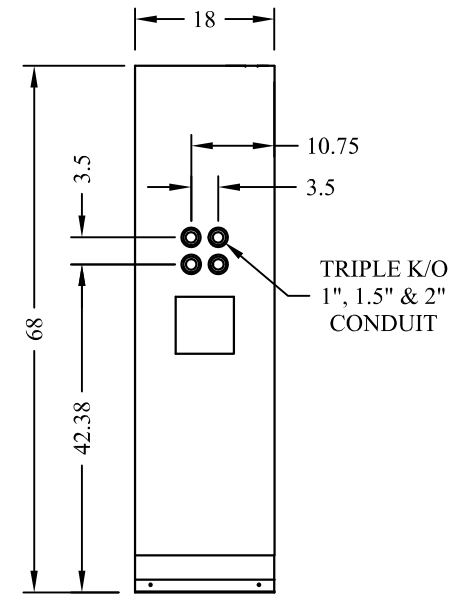
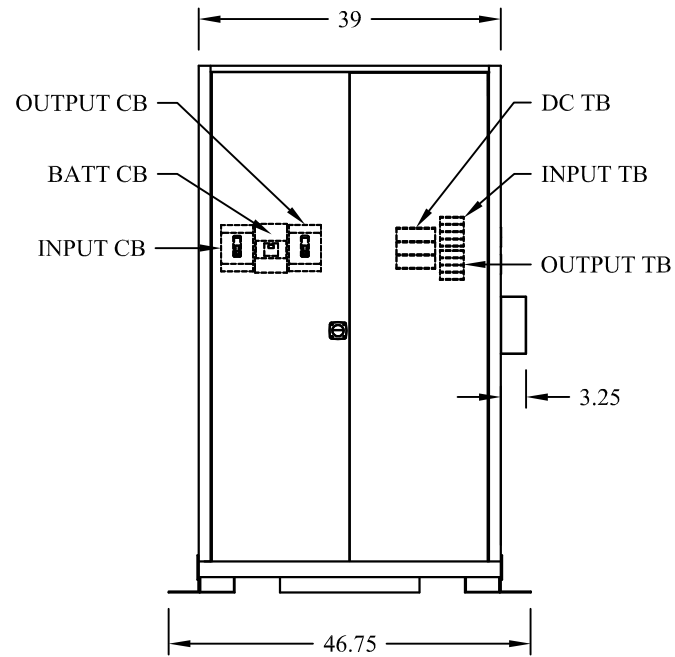
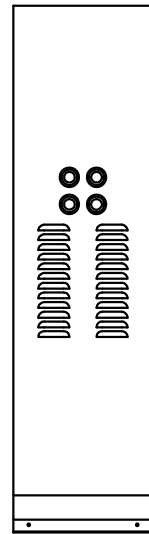
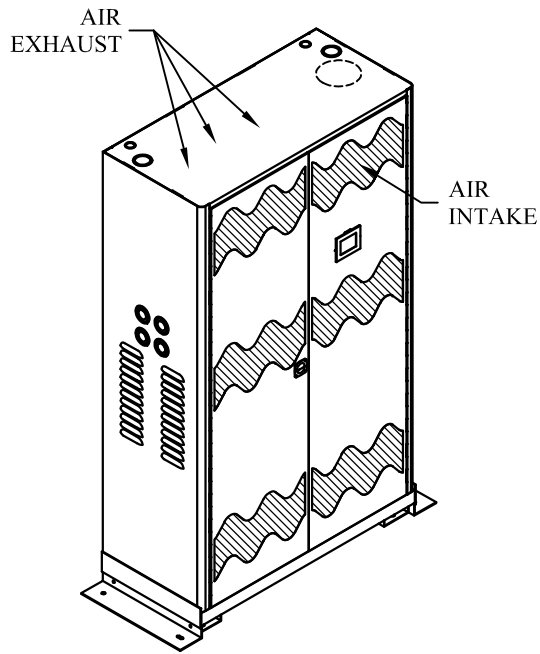
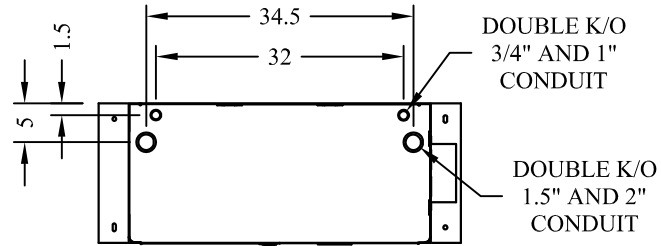
CRUCIAL POWER PRODUCTS			
WAVE RIDER 3 LAYOUT CONFIGURATION #3			
DRAWN:	SHERRI	7/12/18	415-TD-H
APPVD:	HENRY	7/12/18	
			REV A



CONNECTION SHOWN IN DOTTED LINES
TO BE PROVIDED BY CUSTOMER.

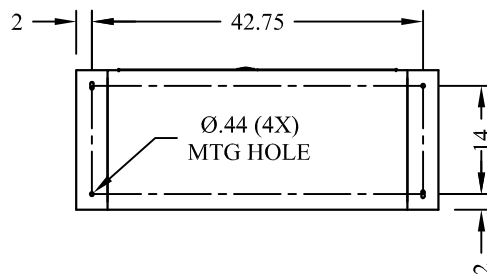
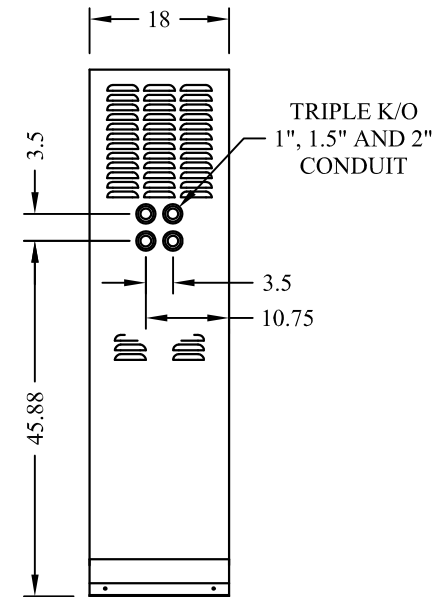
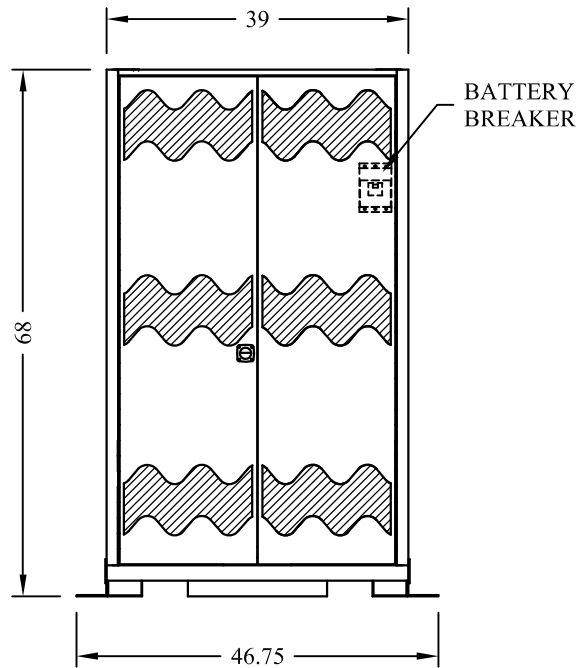
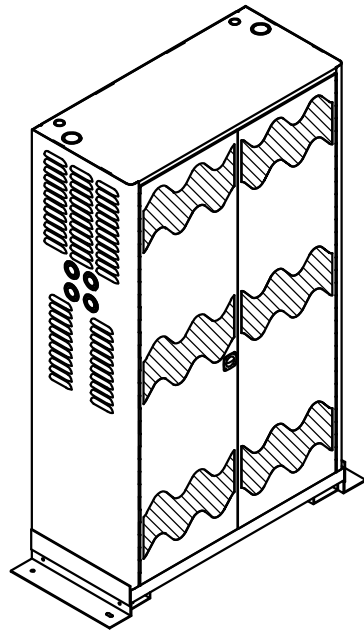
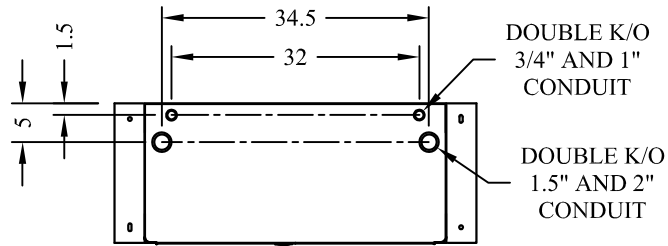
SHOWING
2 STRINGS
OF 40 EA.

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3			
Typical Battery Connection Diagram			
DRAWN:	SHERRI	7/13/18	415-TD-I
APPVD:	HENRY	7/13/18	
			REV A



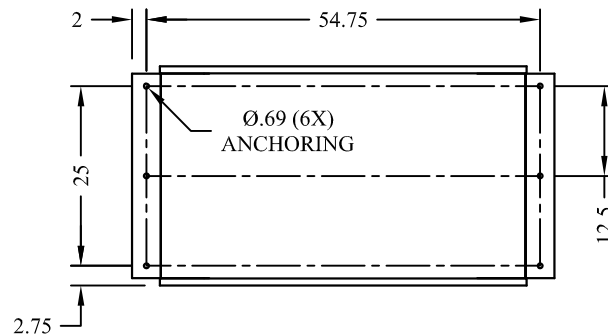
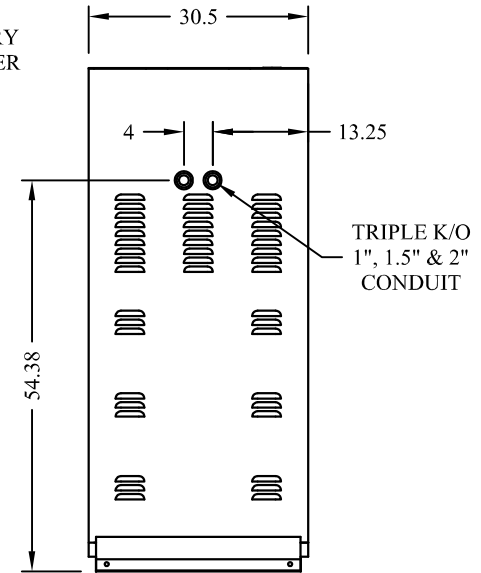
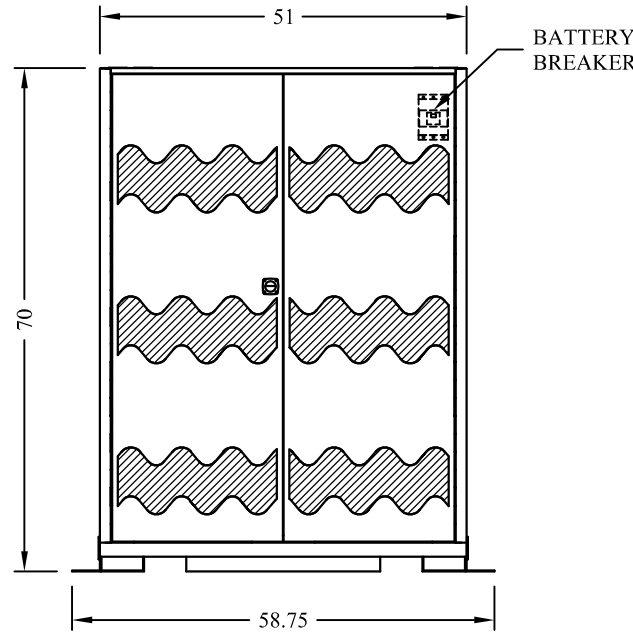
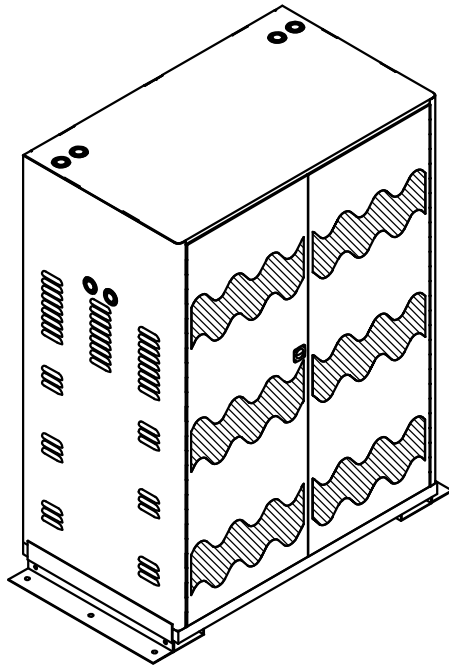
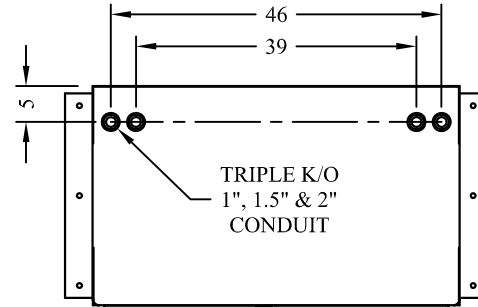
INVERTER WITH SEISMIC BRACKET

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3			
CENTRAL LIGHTING INVERTER			
DRAWN:	SHERRI	9/30/19	415-TD-J
APPVD:	HENRY	9/30/19	
			REV A



BATTERY CABINET, 39" WIDE
WITH SEISMIC BRACKET

CRUCIAL POWER PRODUCTS				
WAVE RIDER 3				
DRAWN:	SHERRI	9/30/19	415-TD-K	REV
APPVD:	HENRY	9/30/19		A

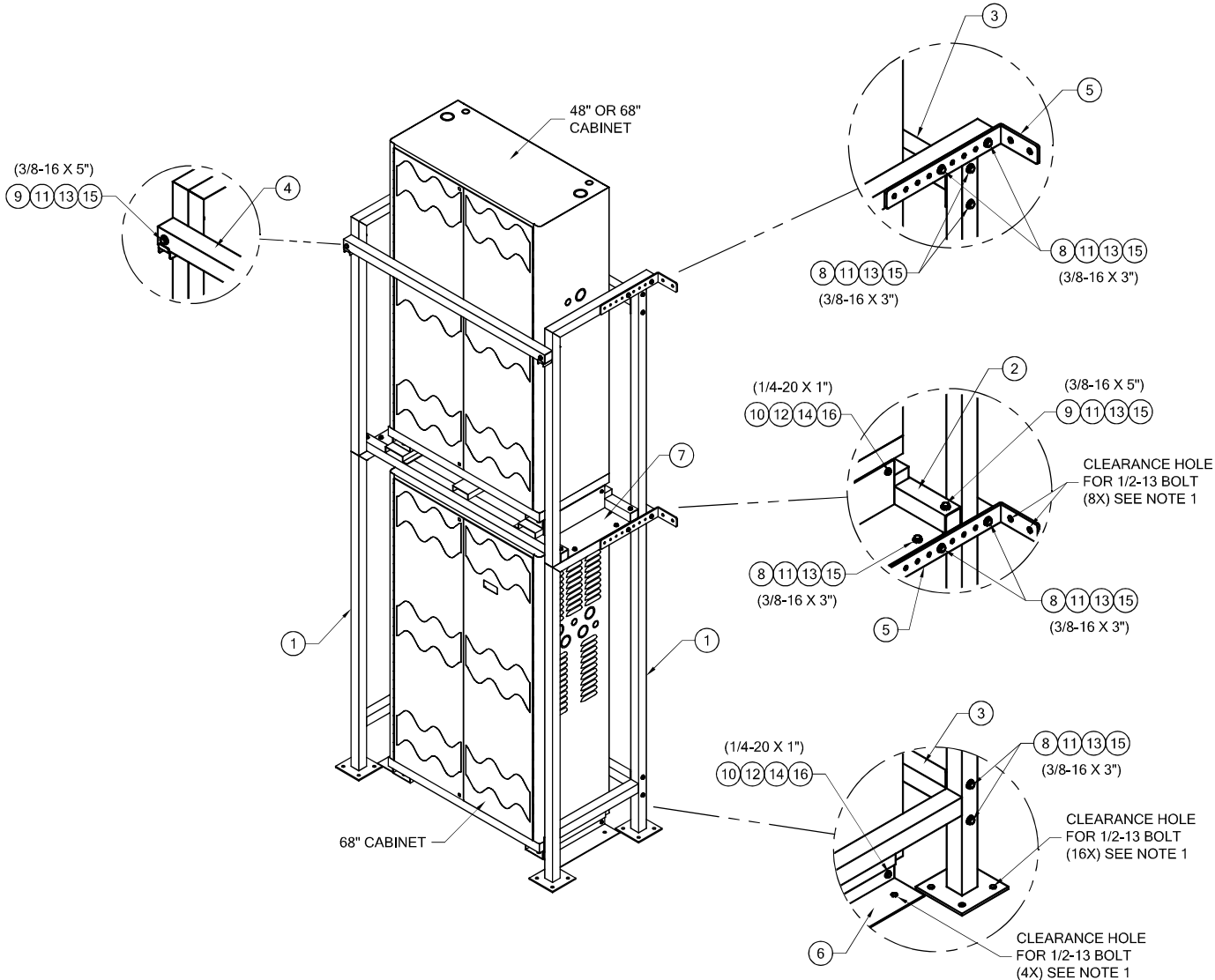


BATTERY CABINET, 51" WIDE WITH SEISMIC BRACKET

CRUCIAL POWER PRODUCTS			
WAVE RIDER 3			
DRAWN:	SHERRI	10/1/19	415-TD-L
APPVD:	HENRY	10/1/19	
			REV A

CRUCIAL POWER PROPRIETARY
CONFIDENTIAL INFORMATION

REVISION				
REV	ECO	DESCRIPTION	DATE	APPROVED
A	7622	INITIAL RELEASE	2/8/05	H. BAIK
B	9045	UPDATED TO REFLECT REVISED FRAME	11/18/09	H. BAIK



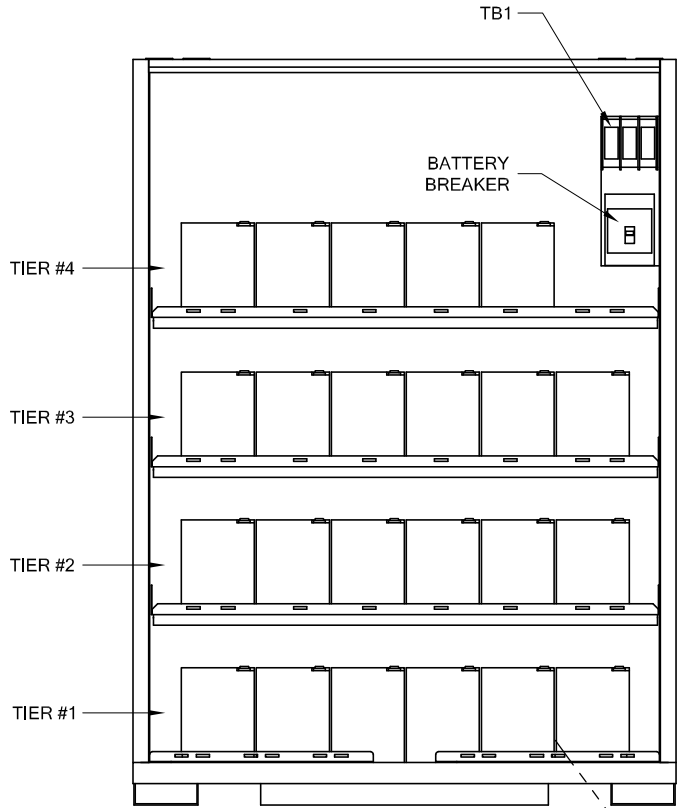
NOTES: (UNLESS OTHERWISE SPECIFIED)
1) INDICATED MOUNTING HARDWARES TO BE SUPPLIED BY CUSTOMER. REFER TO LOCAL CODES FOR SCREWS TYPE AND LENGTH.

ITEM	PART NO	DESCRIPTION	QTY
16		1/4" HEX NUT	8
15		3/8" HEX NUT	26
14		1/4" SPLIT LOCK WASHER	8
13		3/8" SPLIT LOCK WASHER	26
12		1/4" FLAT WASHER	16
11		3/8" FLAT WASHER	52
10		1/4-20 X 1" HEX BOLT	8
9		3/8-16 X 5" HEX BOLT	6
8		3/8-16 X 3" HEX BOLT	20
7	5006-316	UPPER SEISMIC BRACKET	2
6	5006-315	LOWER SEISMIC BRACKET	2
5	5006-318	WALL MOUNT BRACKET	4
4	5006-317	FRONT CROSS BAR	1
3	5006-319	REAR CROSS BAR	2
2	5006-322	BASE	1
1	5006-321	SIDE FRAME	2

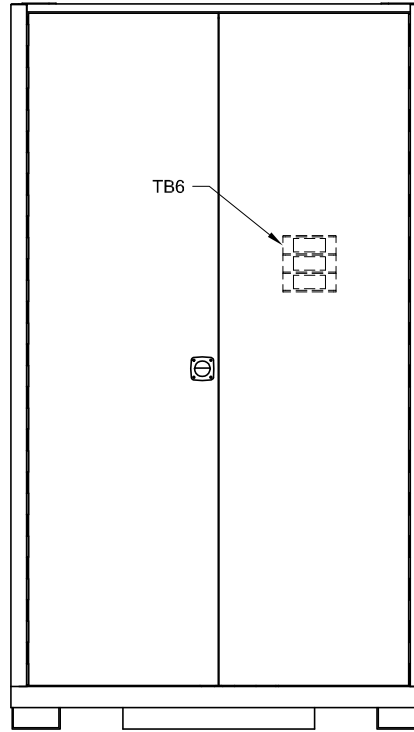
PARTS LIST

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. TOLERANCES ARE: DECIMALS FRACTIONS ANGLES .XX ±.03 ± 1/64 ± 1/2° XXX ± .010		RACK ASSEMBLY (48/68 OR 68/68)		9100-1429-11C	
CADD:	HAI NGUYEN	2/7/05	CPP CRUCIAL POWER PRODUCTS		
CHKD:	HAI NGUYEN	2/7/05			
APPVD:	H. BAIK	2/7/05			
SCALE:	EST. WT:	SHT 1 OF 1			

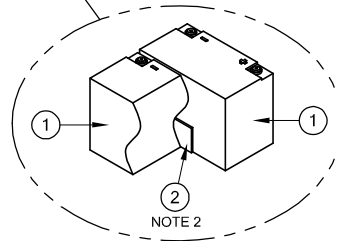
REVISION			DATE	APPVD
REV	ECO	DESCRIPTION		
A	11078	RELEASE	2/18/16	



BATTERY CABINET
#1 AND #2



INVERTER CABINET



NOTES:

- 1) POSITION ALL BATTERIES AS SHOWN.
- 2) PLACE SPACER (ITEM 2) IN BETWEEN THE LONG SIDE OF BATTERIES.
- 3) CAREFULLY OBSERVE BATT POLARITY WHEN MAKING BATTERY CONNECTION.
- 4) ALL CONNECTIONS SHOWN IN DOTTED LINES TO BE PROVIDED BY CUSTOMER.
- 5) MAX. DC CURRENT: 150 AMPS
- 6) BATTERY STRINGS:
STRING A = BATTERY 1A THRU 46A
STRING B = BATTERY 1B THRU 46B
- 7) LABEL BATTERY NUMBERS AS SHOWN.
- 8) BATTERY TORQUE: 100 IN-LBS.

ITEM 3 THRU ITEM 10 ARE NOT BEING USED				
2	5008-806	BATTERY SPACER		76
1	UNA12-420	BATTERY		92
ITEM	PART NO	DESCRIPTION		QTY

PARTS LIST				
TITLE				
BATTERY CONNECTION DIAGRAM 2 STRINGS OF 46 EACH				

CADD:	HN	2/18/16	SEE DWG		REV
CHKD:	HN	2/18/16	B	6005-400	A
APPVD:	H. BAIK	2/18/16	SCALE:	EST. WT:	SHT 1 OF 2