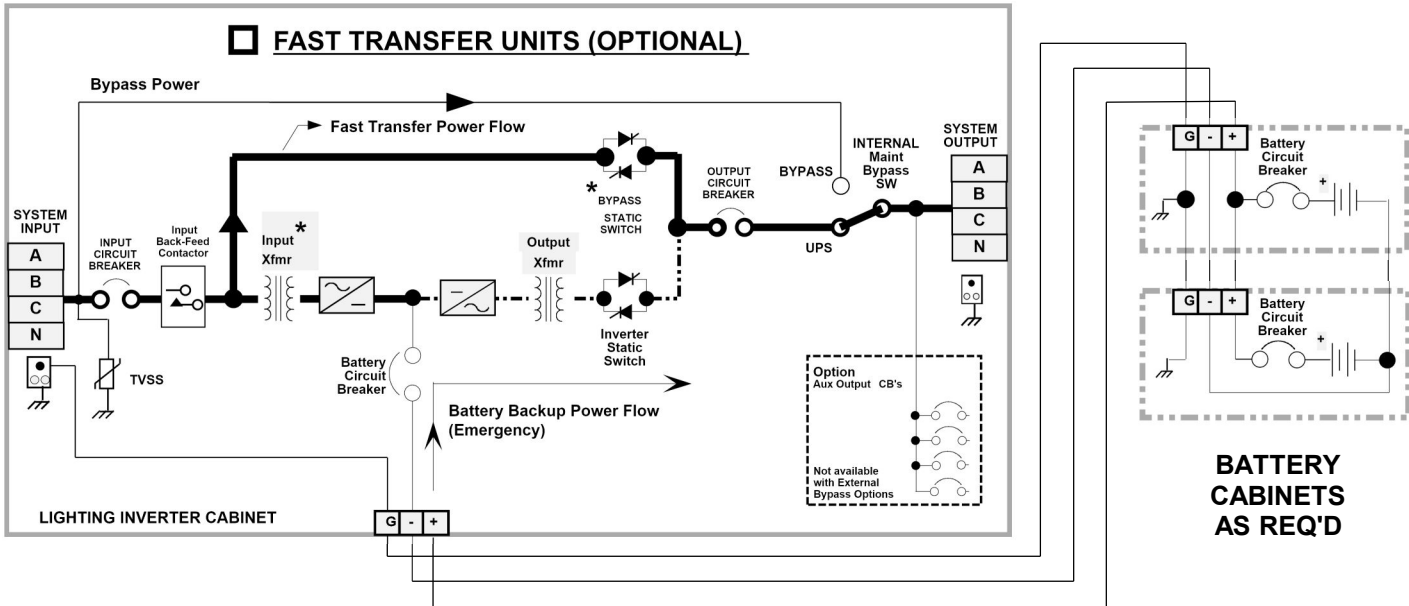
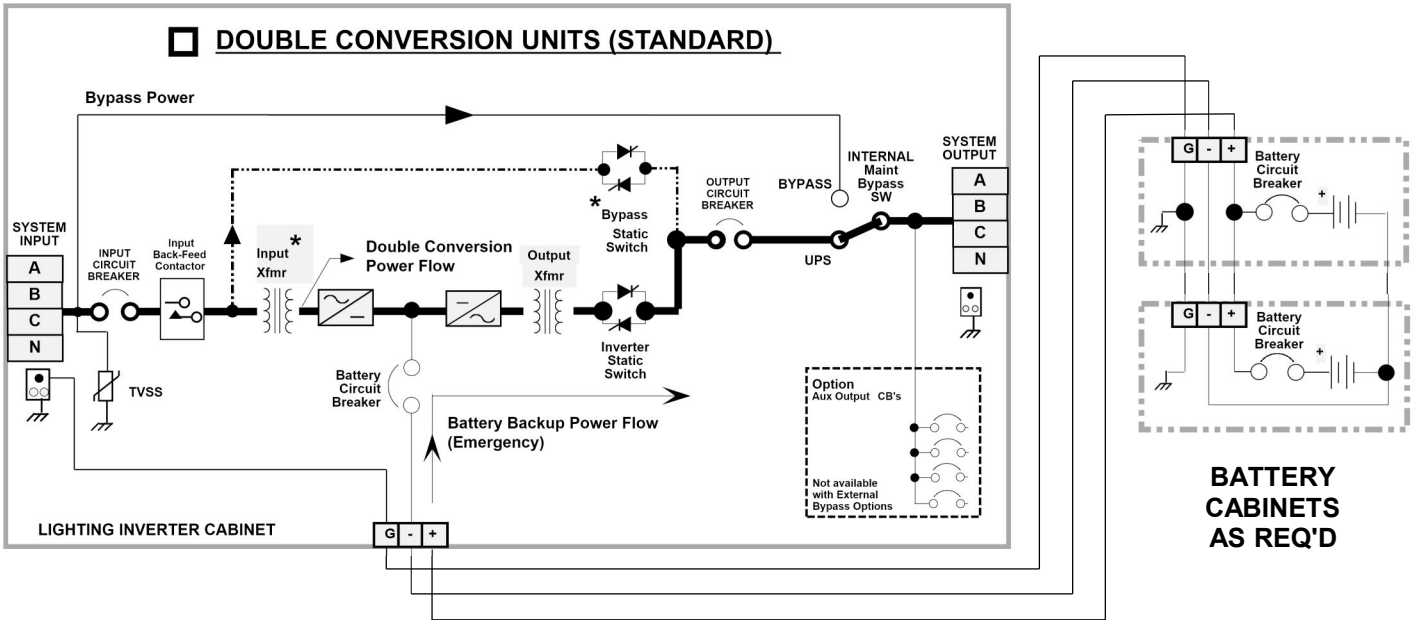


3 PHASE LIGHTING INVERTER TYPICAL SINGLE LINE DIAGRAM



NOTES:

- * Bypass and Inverter Static Switches will be powered from the Input Transformer for different input and output voltage configurations.
- Delta Input Power is available using External Transformer (transformer must be sized min 25% larger than UPS capacity)
- Battery Cabinet Quantity might vary depending on the Battery type.



TYPICAL 3-PH LIGHTING INVERTER SINGLE LINE DIAGRAM

SDR : SS
CHKD : BC
APPVD : BC

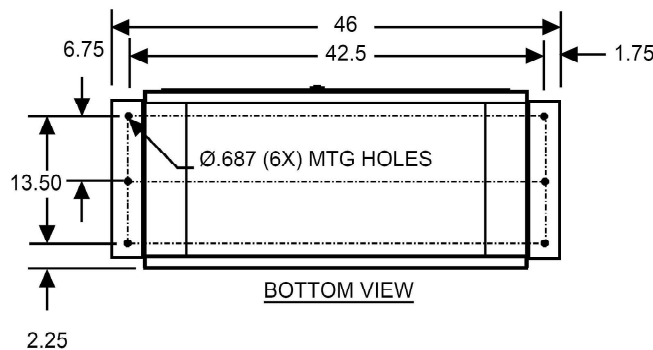
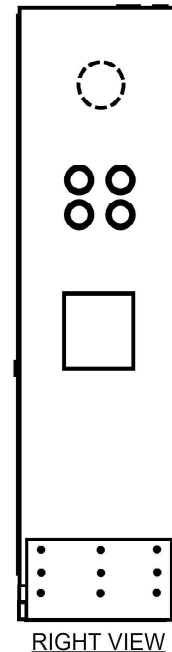
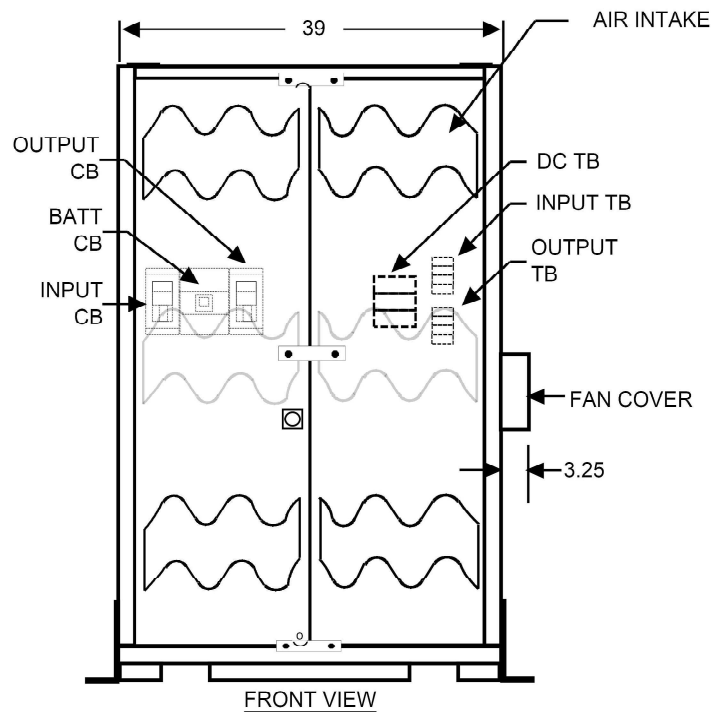
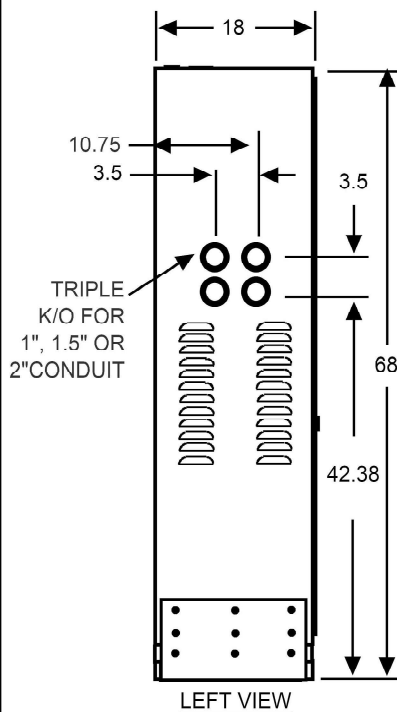
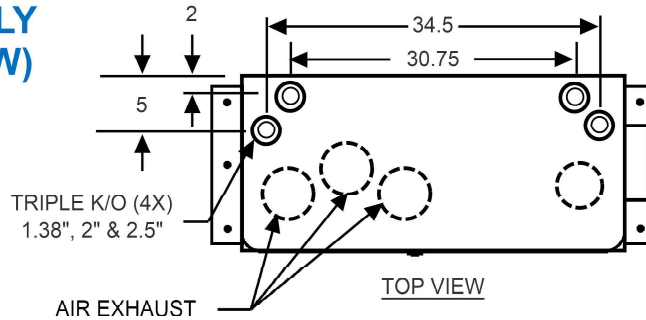
DWG NO.: 115-TD-010

REV.: B
SHT 1 OF 1

SUBJECT TO CHANGE WITHOUT NOTICE


POWER WAVE 3 CENTRAL LIGHTING INVERTER SHAKER TABLE TEST CERTIFIED BY (HCAI)

**ELECTRONIC
CABINET ONLY
(8 KW - 50 KW)**

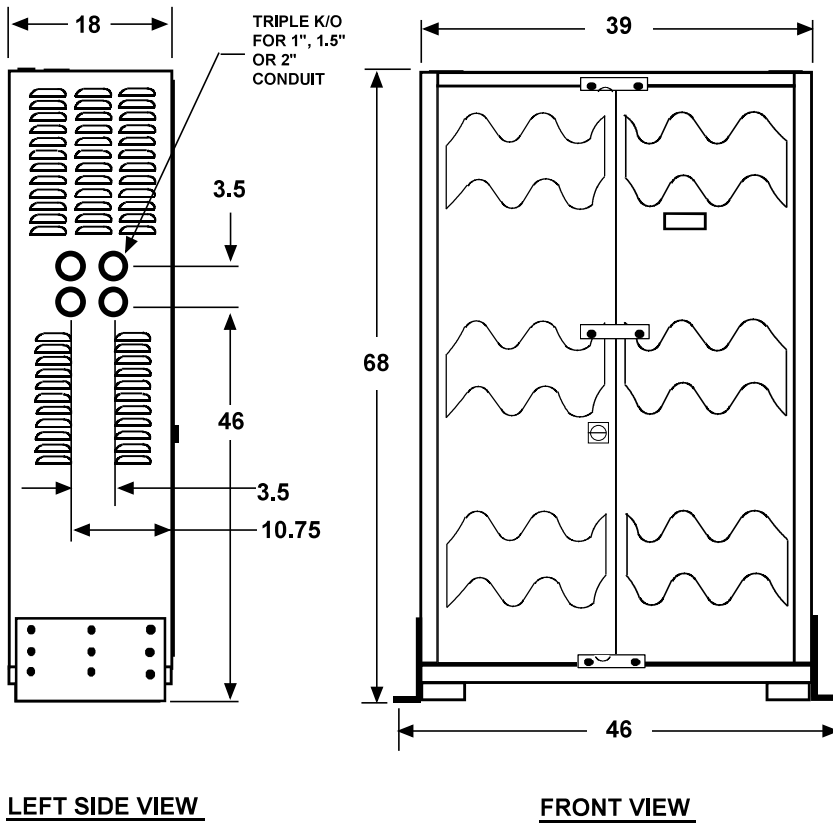
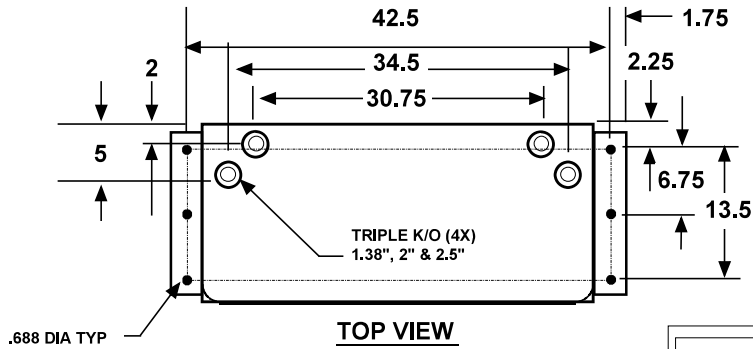


NOTES:

- 1) CONSTRUCTION: NEMA1 INDOOR.
- 2) SHAKE TABLE TESTED.

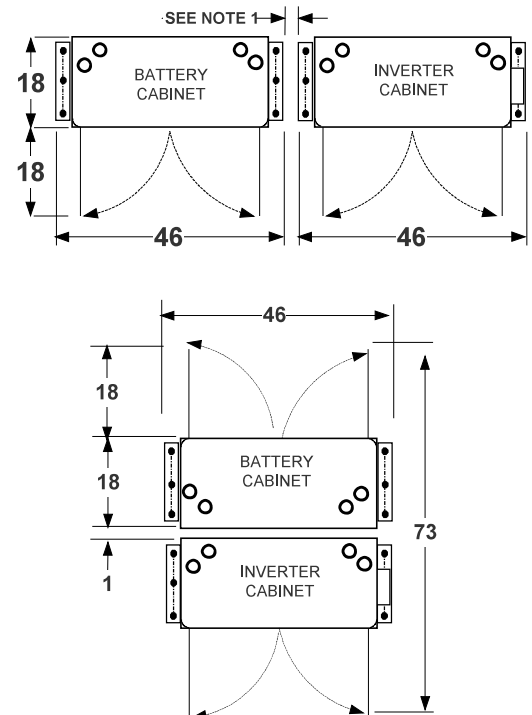
			
POWER WAVE 3 SHAKER TABLE TESTED CENTRAL LIGHTING INVERTER			
SDR : SHERRIS.	12/26/22	DWG NO.: 115-SV-TD-011	REV.: A
CHKD : BC	12/26/22		SHT 1 OF 1
APPVD : HN	12/26/22	SUBJECT TO CHANGE WITHOUT NOTICE	

BATTERY CABINET (12KVA/8KW), STANDARD VRLA BATTERY SHAKER TABLE TEST CERTIFIED BY (HCAI)



RECOMMENDED SYSTEM LAYOUT

STANDARD VRLA BATTERY		
KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
10KVA/8KW	1	1



NOTES:

- 1) SPACING IS OPTIONAL NOT REQUIRED BY MFR.
- 2) CONSTRUCTION: NEMA1 INDOOR.
- 3) SHAKE TABLE TESTED.



POWER WAVE 3
SHAKER TABLE TESTED
BATT CAB 39" WIDE

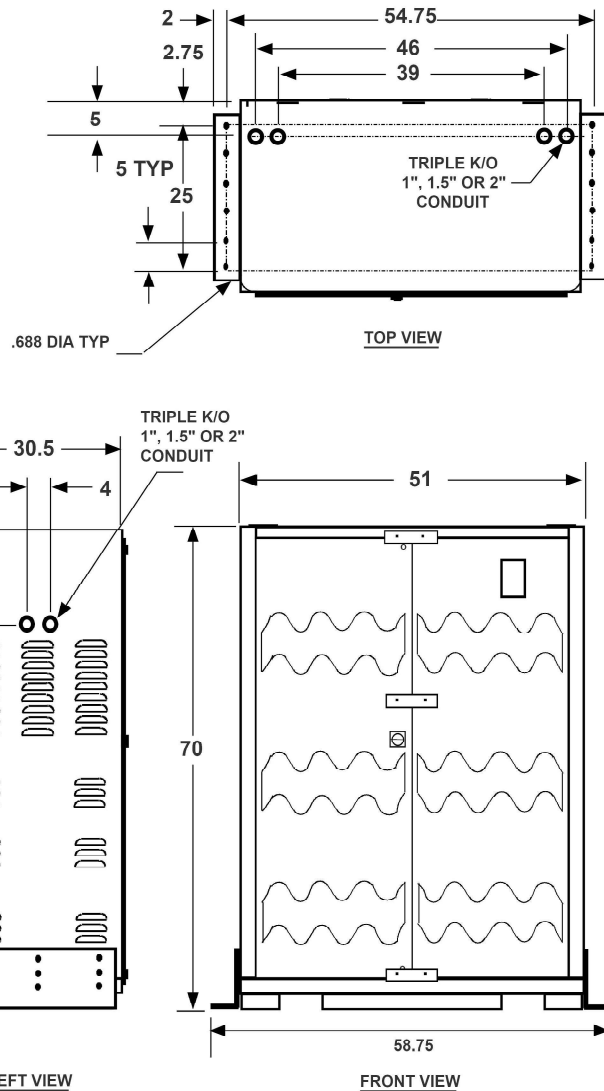
SDR : SS	12/26/22
CHKD : BC	12/26/22
APPVD : HN	12/26/22

DWG NO.:
115-SV-TD-012

REV.: A
SHT 1 OF 1

SUBJECT TO CHANGE WITHOUT NOTICE

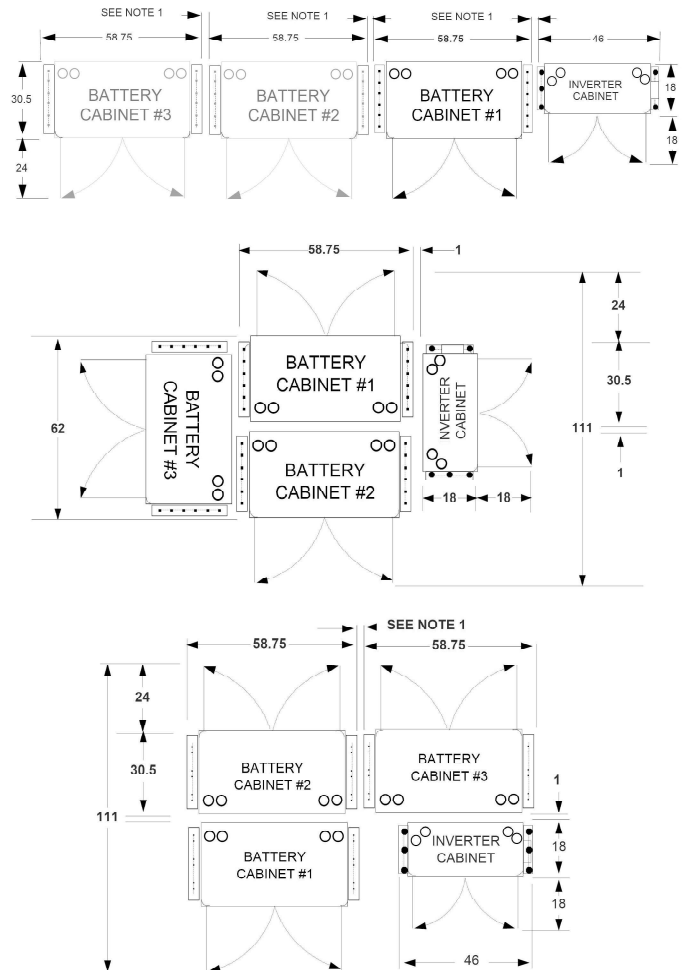
BATTERY CABINET (12 KW - 50 KW) STANDARD VRLA BATTERY SHAKER TABLE TEST CERTIFIED BY (HCAI)



RECOMMENDED SYSTEM LAYOUT

STANDARD VRLA BATTERY

KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
15KVA/12KW	1	1
20KVA/16KW	1	1
25KVA/20KW	1	1
30KVA/24KW	1	2
40KVA/32KW	2	2
50KVA/40KW	2	2
50KW	2	3



NOTES:

- 1) SPACING IS OPTIONAL NOT REQUIRED BY MFR.
- 2) CONSTRUCTION: NEMA1 INDOOR.
- 3) SHAKE TABLE TESTED.



POWER WAVE 3
SHAKER TABLE TESTED
BATT CABINET 51" WIDE

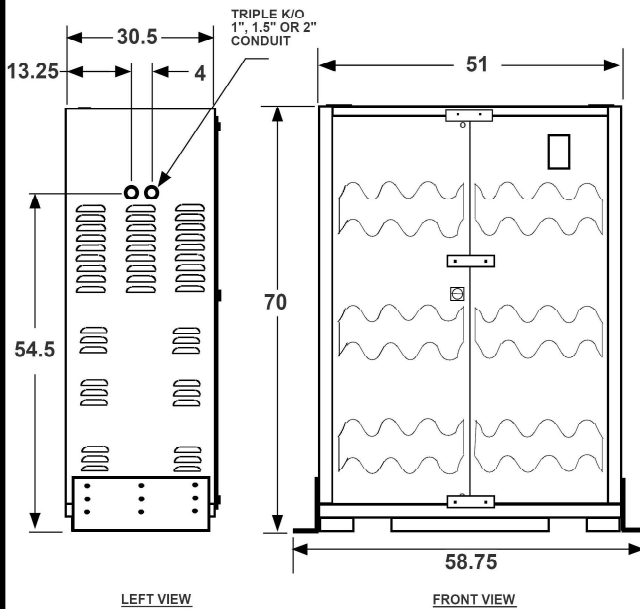
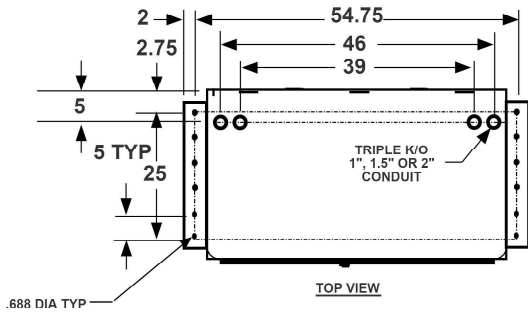
SDR : SHERRIS 12/26/22
CHKD : BC 12/26/22
APPVD : HN 12/26/22

DWG NO.:
115-SV-TD-013

REV.: A
SHT 1 OF 1

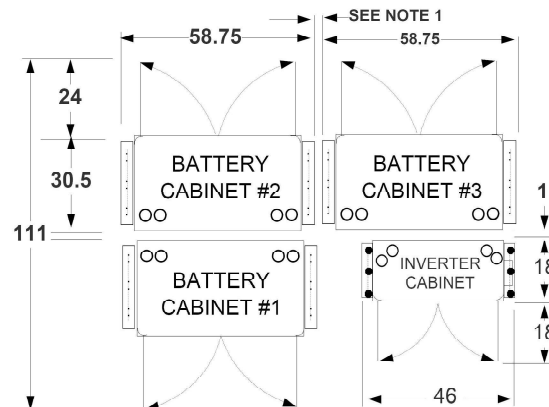
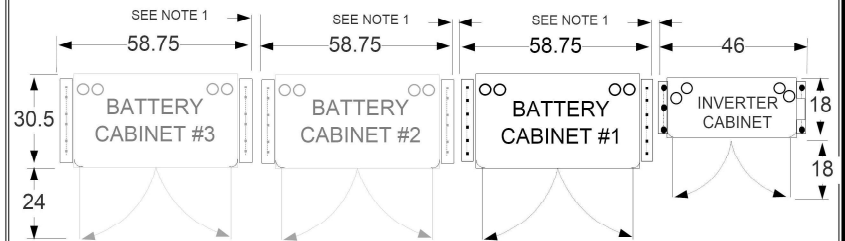
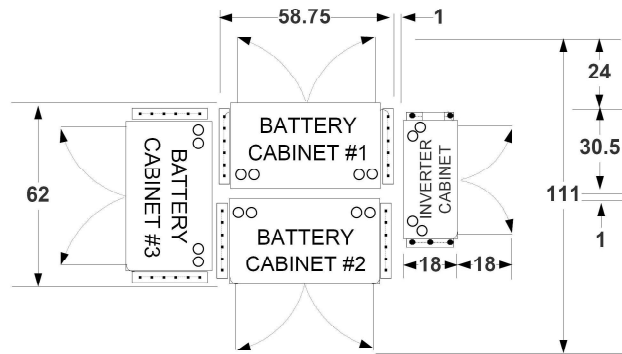
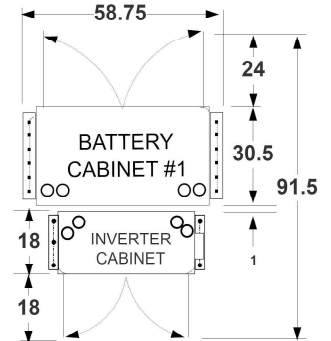
SUBJECT TO CHANGE WITHOUT NOTICE

BATTERY CABINET (8 KW - 50 KW) **LONG LIFE BATTERY** SHAKER TABLE TEST CERTIFIED BY (HCAI)



RECOMMENDED SYSTEM LAYOUT

LONG LIFE BATTERY		
KVA/KW	BATTERY CABINET QTY 90 MIN.	BATTERY CABINET QTY 120 MIN.
10KVA/8KW	1	1
15KVA/12KW	1	1
20KVA/16KW	1	1
25KVA/20KW	1	1
30KVA/24KW	1	2
40KVA/32KW	2	2
50KVA/40KW	2	3
50KW	3	3



NOTES:

- 1) SPACING IS OPTIONAL NOT REQUIRED BY MFR.
- 2) CONSTRUCTION: NEMA1 INDOOR.
- 3) SHAKE TABLE TESTED.



**POWER WAVE 3
SHAKER TABLE TESTED
LONG LIFE BATT CAB 51"WIDE**

SDR: SHERRIS 12/26/22
CHKD: BC 12/26/22
APPVD: HN 12/26/22

DWG NO.:
115-SV-TD-014

REV.: A
SHT 1 OF 1

SUBJECT TO CHANGE WITHOUT NOTICE

REMOTE STATUS PANEL

SIDE
MOUNT
PROVISION

BACK
MOUNT
PROVISION

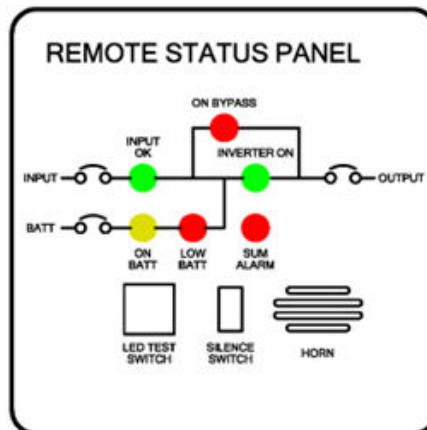


TO UPS P100 TERMINAL
BLOCK
SEE INSTALLATION
INSTRUCTION SHIPPED
WITH THE ASSEMBLY

USE
BUMPER
FOR
CONSOLE
INSTALL

Remote Status Panel displays the following:

INPUT OK:	Input power is within acceptable range
INVERTER ON:	Inverter is on
ON BYPASS:	Unit is on Bypass Mode
ON BATT:	Unit is running from Battery
LOW BATT:	Battery voltage is at low voltage before shutdown
SUM ALARM:	Unit is on critical alarm such as: Over temperature, DC OV/UV
HORN:	Audible warning for alarm condition
SILENCE WATCH:	Silences the audible warning
LED TEST:	Tests the LED's by push in



REMOTE STATUS PANEL ASSEMBLY

SDR : MT 12/28/22
APPVD : HAI 12/28/22
CHKD : MT 12/28/22

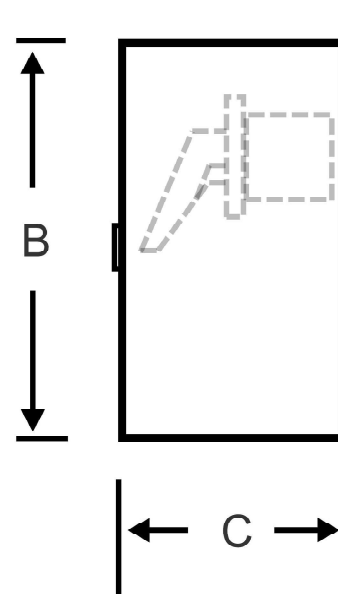
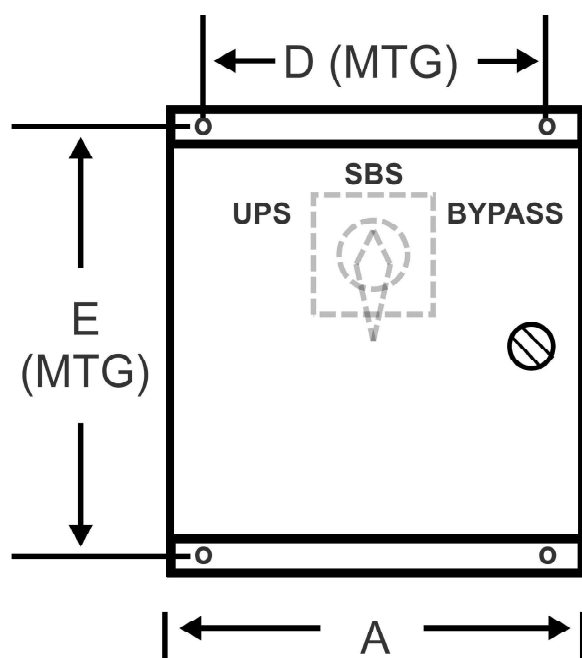
DWG NO.:
110-SV-TD-014

REV.: A
SHT 1 OF 1

SUBJECT TO CHANGE WITHOUT NOTICE

MAKE BEFORE BREAK EXTERNAL WRAP AROUND BY-PASS SWITCH

350 AMPS	600V	30	36	16	28.5	34.5
240 AMPS	600V	30	30	12	28.5	28.5
175 AMPS	600V	20	20	12	18.5	18.5
110 AMPS	600V	14	16	10	12	16.75
55 AMPS	600V	14	16	8	12	16.75
RATING	VOLTAGE	DIM A	DIM B	DIM C	DIM D (MTG)	DIM E (MTG)



NOTES:

- 1) SWITCH CONTACTS ARE THREE PHASE L-NEUTRAL "MAKE BEFORE-BREAK"
- 2) CONTACTS MARKED "UPS" ARE CLOSED IN THE "UPS" POSITION
- 3) CONTACTS MARKED "BYPASS" ARE CLOSED IN THE "BYPASS" POSITION
- 4) CONTACTS MARKED "SBS" ARE CLOSED IN THE "SBS" POSITION
- 5) WRAP AROUND BY-PASS SWITCH IS FOR SAME INPUT/OUTPUT VOLTAGES ONLY
- 6) WRAP AROUND BY-PASS SWITCH CAN ONLY BE USED WITHOUT ANY BUILT-IN SECONDARY DISTRIBUTION CIRCUIT BREAKERS IN UPS

Line POWER		POWER WAVE 3 / 4 EXTERNAL WRAP AROUND BYPASS SWITCH	
SDR : SS	10/11/22	DWG NO.: 115-TD-016	REV.: A
CHKD : BC	10/11/22		SHT 1 OF 1
APPVD : HN	10/11/22	SUBJECT TO CHANGE WITHOUT NOTICE	



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0500

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: OnLine Power

Manufacturer's Technical Representative: Sherri Shahsavari

Mailing Address: 14000 S Broadway, Los Angeles, CA 90061

Telephone: (323) 721-5017

Email: sherris@onlinepower.com

Product Information

Product Name: UPS and Batteries

Product Type: Lighting Inverter Systems

Product Model Number: See Attachment

General Description: Single phase or three phase emergency lighting inverter with battery backup inside of a carbon steel electrical cabinet enclosure.

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

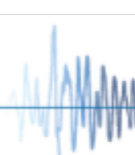
Contact Person: Galen Reid

Mailing Address: 5215 Hellyer Ave. Suite 210, San Jose, CA 95138

Telephone: (541) 604-7225

Email: greid@structint.com

Title: Director, TRU Compliance





**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION**

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.

Name: Andrew Coughlin

California License Number: S6082

Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 95138-1025

Telephone: (415) 635-8461

Email: acoughlin@structint.com

Certification Method

☐ GR-63-Core

☒ ICC-ES AC156

☐ IEEE 344

☐ IEEE 693

☐ NEBS 3

☐ Other (Please Specify): _____

Testing Laboratory

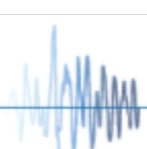
Company Name: Pacific Earthquake Engineering Research Center (PEER)

Contact Person: Clement B Barthes

Mailing Address: 1301 South 46th St., Bldg. 420, Richmond CA 94804

Telephone: (510) 642-3437

Email: peer_center@berkeley.edu





DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.44 (SDS = 2.0g); 1.35 (SDS = 3.0g)

SDS (Design spectral response acceleration at short period, g) = 2.0 ($z/h = 1.0$); 3.0 ($z/h = 0.0$)

a_p (Amplification factor) = 1.0

R_p (Response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1 and 0

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 05/04/2028

Date: 5/4/2022

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = See Above

z/h = See Above

Condition of Approval (if applicable):

