



APPLICATION FOR PREAPPROVAL SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

APPLICATION NO.
OSP – 0131-10

Check whether application is: NEW RENEWAL

1.0	Stored Energy Systems	Doug Kaewert
	<i>Manufacturer</i>	<i>Manufacturer's Technical Representative</i>
	Mailing Address	
	<i>Mailing Address</i>	
	650-714-4612	dougk@sens-usa.com
	<i>Telephone</i>	<i>E-mail Address</i>

2.0	Battery Chargers	Battery chargers for Genset Batteries
	<i>Product Name</i>	<i>Product Type</i>
	LC, FCA, NRG, Q120 & BBS	
	<i>Product model No (List all unique product identification numbers and/or serial numbers)</i>	

General Description: Wall mounted battery chargers that are connected to AC power and invert to DC to maintain a charge for batteries on Generator Sets.

3.0	The VMC Group	John P. Giuliano, PE
	<i>Applicant Company Name</i>	<i>Contact Person</i>
	113 Main St, Bloomington NJ, 07403	
	<i>Mailing Address</i>	
	973-838-1780	john.giuliano@thevmcgroup.com
	<i>Telephone</i>	<i>E-mail Address</i>

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

	11/14/2010
<i>Signature of Applicant</i>	<i>Date</i>
President	The VMC Group
<i>Title</i>	<i>Company Name</i>

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Registered Design Professional Preparing the Report

4.0 The VMC Group
Company Name

Mark A. Thompson, PE C60437
Contact Name *California License Number*

113 Main Street, Bloomingdale, NJ 07403
Mailing Address

973-838-1780 mark.thompson@thevmcgroup.com
Telephone *E-mail Address*

California Licensed Structural Engineer Review and Acceptance of the Report

5.0 The VMC Group
Company Name

Samantha Kersting, SE S-4642
Contact Name *California License Number*

980 9th Street, Sacramento, CA 95814
Mailing Address

973-838-1780 samantha.kersting@thevmcgroup.com
Telephone *E-mail Address*

Anchorage Pre-Approval

6.0 Anchorage is pre-approved under OPA-
 (Separate application for anchorage pre-approval is required)

Anchorage is not Pre-approved

Certification Method

7.0 Testing in accordance with: ICC-ES AC-156 Other (Please Specify):

Analysis

Experience data

Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0 Clark Dynamic Test Lab John Antenucci
Company Name *Contact Name*

1801 Route 51 S, Jefferson Hills, PA 15025
Mailing Address

412-382-7173 jra.andi@comcast.net
Telephone *E-mail:*

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Approval Parameters

9.0

Design in accordance with ASCE 7-05 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = 1.64g

S_{DS} (Spectral response acceleration at short period) = 2.28g

a_p (In-structure equipment or component amplification factor) = 1.0

R_p (Equipment or component response modification factor) = 2.5

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = N/A

Building period limits (if any) = N/A

Overall dimensions and weight (or range thereof) = See Attachment

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: Yes No

Design Basis of Equipment or Components (V/W) =

S_{DS} (Spectral response acceleration at short period) =

S_1 (Spectral response acceleration at 1 second period) =

R (Response modification coefficient) = 1.0

Ω_0 (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

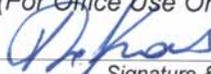
Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: Yes No

10.0 List of attachments supporting the special seismic certification of equipment or components:

- Test Report
- Drawings
- Manufacturer's Catalog
- Calculations
- Others (Please Specify):

11.0 OSHPD Approval (For Office Use Only)

<p style="text-align: center;">  Signature & Date Chris Tokas, SHFR Name & Title </p>	<p style="text-align: center;">11/15/2010</p>	<p style="text-align: center;">December 31, 2016</p> <p style="text-align: center;">Approval Expiration Date</p>
<p>Condition of Approval (if any):</p>	<p>S_{DS} (g) = 2.28 z/h = 1.0</p> <p style="text-align: center;">Special Seismic Certification Valid Up to</p>	

SENS Battery Chargers, DC Power Supplies and Best Battery Selectors

Unit Model	Test Unit				Resonant Frequencies			UUT
	Weight	Width	Depth	Height	X-X	Y-Y	Z-Z	
LC24-500-2	6	5.18	4.5	11.25	N/A	N/A	N/A	1
FCA24-10-2416U	21	11	5	11	N/A	N/A	N/A	2
NRG22-10-RC	25	7.66	6.5	12.5	N/A	N/A	N/A	3
NRG22-20-RCLS	40	13.93	7.43	13.1	N/A	N/A	N/A	4
Q120-025-TL-514B	210	19.4	13	17.6	N/A	N/A	N/A	5
Q120-050-SL-514B	375	23.6	16.1	27.8	N/A	N/A	N/A	6
BBS-1600	30	12.3	8.6	16.3	N/A	N/A	N/A	7
BBS-4800	75	19.4	13	17.6	N/A	N/A	N/A	8

LC series - Engine Start Battery Chargers

Model Designation	Unit Weight (lbs)	Output Voltage	Output Current	Input Voltage Frequency	Dimensions (Inches)
LC24-500-2	8	24DC	3.5A	120VAC, 60 Hz	5.2w X 4.5d X 11.25h
LC24-501-2	8	24DC			

Note: -501 is identical to -500, except for a pre-attached power cord.

FC/FCA Series - Engine Start Battery Chargers

Model Designation	Unit Weight (lbs)	Output Voltage	Output Current	Input Voltage Frequency	Dimensions (Inches)
FCA32-10-2411	28	32DC	10A	120VAC, 60 Hz 230VAC, 50/60 HZ	11w X 5d X 11h
FCA24-10-2416U	21	24DC	10A		
FCA24-10-2411U	26	24DC	10A		
FCA24-6-2411U	24	24DC	6A		
FC24-10-2011U	26	24DC	10A		
FC24-6-2011U	24	24DC	6A		

NRG Series - Battery Chargers

Model Designation	Unit Weight (lbs)	Output Voltage	Output Current	Input Voltage Frequency	Dimensions (Inches)
NRG22-10	25	24	10	H-120/208-240V,50/60Hz	7.7w X 6.5d X 12.5h
NRG24-10		24	10	R-120/208-240V,60Hz	
NRG22-20	40	24	20	H-120/208-240V,50/60Hz	13.9w X 7.4d X 13.1h
NRG24-20		24	20	R-120/208-240V,60Hz	

BBS Series - Best Battery Selectors

Model Designation	Unit Weight (lbs)	Output Voltage	Output Current	Duty Cycle	Dimensions (Inches)
BBS-1600	30	12-120	1600A	90 sec.	12.3w X 8.6d X 16.3h
BBS-4800	75	12-120	4800A	90 sec.	19.4w X 13d X 17.6h

SENS Battery Chargers, DC Power Supplies and Best Battery Selectors

EnerGenius IQ Series - Automatic DC Power Supply / Charger With Intelligent Battery Monitoring and Data Logging					
Model Designation	Unit Weight (lbs)	Output Voltage	Output Current	AC Input	Dimensions (Inches)
Q024-006	92	24	6	P-115-120/208/230-240V,50/60Hz S-240V,60Hz(>3.4kw output power) T-115-120/208/230-240V,60Hz V-400V,50/60Hz 3-208V,60Hz(>3.4kw output power) 4-230V,50/60Hz (>3.4kw output power) 8-480V,60Hz	19.4w X 13d X 17.6h
Q012-012	92	12	12		
Q048-006	96	48	6		
Q024-012	96	24	12		
Q012-025	96	12	25		
Q024-016	104	24	16		
Q048-012	108	48	12		
Q024-025	119	24	25		
Q012-050	120	12	50		
Q048-016	122	48	16		
Q024-035	129	24	35		
Q120-006	130	110-120	6		
Q024-050	134	24	50		
Q048-025	148	48	25		
Q240-006	150	220-240	6		
Q120-012	152	110-120	12		
Q048-035	167	48	35		
Q120-016	186	110-120	16		
Q048-050	190	48	50		
Q240-012	210	220-240	12		
Q120-025	210	110-120	25		
Q012-100	298	12	100		
Q024-075	308	24	75	P-115-120/208/230-240V,50/60Hz S-240V,60Hz(>3.4kw output power) T-115-120/208/230-240V,60Hz V-400V,50/60Hz 3-208V,60Hz(>3.4kw output power) 4-230V,50/60Hz (>3.4kw output	23.6w X 16.1d X 27.8h
Q240-016	320	220-240	16		
Q024-100	320	24	100		
Q120-035	322	110-120	35		
Q048-075	335	48	75		
Q024-150	354	24	150		
Q048-100	360	48	100		
Q240-025	375	220-240	25		
Q120-050	375	110-120	50		