



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

APPLICATION FOR HCAI SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0837

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: SAI Advanced Power Solutions, Inc.

Manufacturer's Technical Representative: Bethel Johnson

Mailing Address: 11333 Addison Ave., Franklin Park, IL 60131

Telephone: (708) 450-0990 Email: bethel.johnson@sai-aps.com

Product Information

Product Name: Switchgear Assemblies

Product Model Number(s): UL 1558 (SAI APS-XXXX) & UL 891 (SAI PSB-XXXX)

Product Category: Switchgear/Switchboards

Product Sub-Category: Switchgear - Low Voltage

General Description: Metal-Enclosed Low-Voltage Power Circuit Breaker Switchgear

Mounting Description: Base Mounted Rigid -

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: SAI Advanced Power Solutions, Inc.

Contact Person: Bethel Johnson

Mailing Address: 11333 Addison Ave., Franklin Park, IL 60131

Telephone: (708) 450-0990 Email: bethel.johnson@sai-aps.com

Title: CTO





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

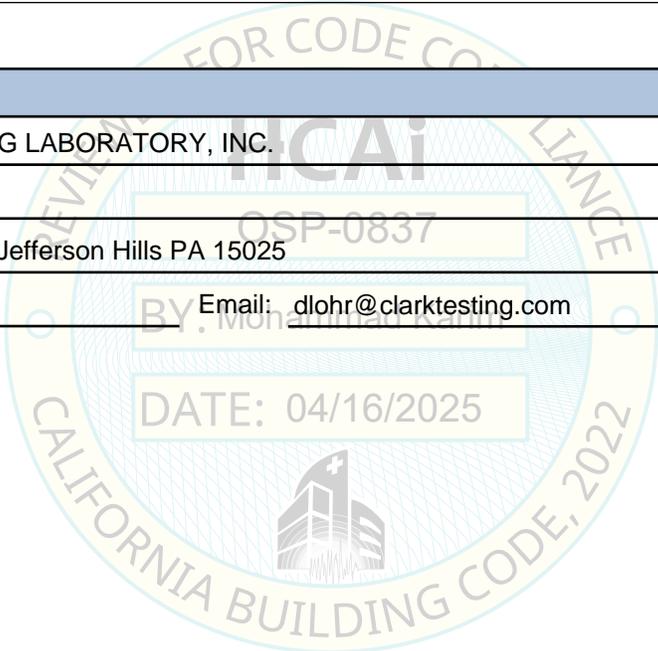
Company Name: JUNKER ENGINEERING GROUP
Name: Dan Junker California License Number: S6178
Mailing Address: 8950 Jefferson Ave, La Mesa, CA 91941
Telephone: (619) 606-5058 Email: dan@junkereng.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: CLARK TESTING LABORATORY, INC.
Contact Person: Devon Lohr
Mailing Address: 1801 Route 51, Jefferson Hills PA 15025
Telephone: (412) 387-1001 Email: dlohr@clarktesting.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.26 @ z/h=1; 1.01 @z/h=0.0

SDS (Design spectral response acceleration at short period, g) = 1.68 @z/h =1; 2.25 @z/h =0

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

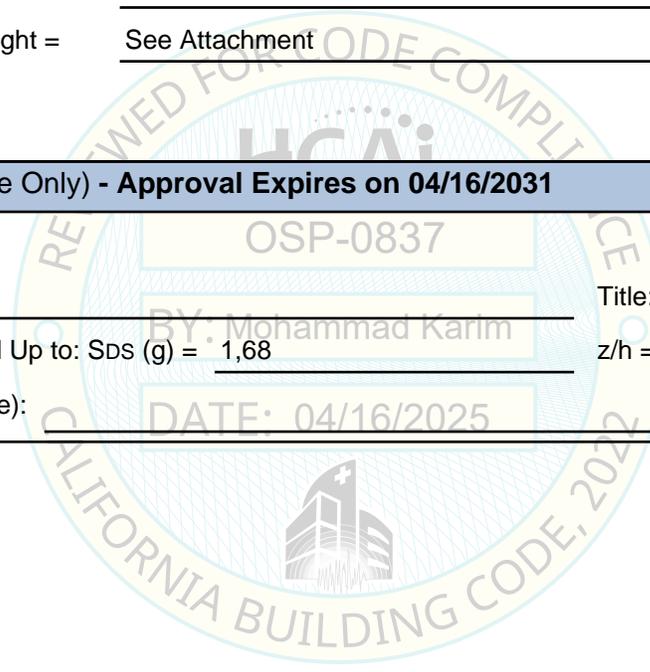
HCAI Approval (For Office Use Only) - Approval Expires on 04/16/2031

Date: 4/16/2025

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1,68 z/h = 1

Condition of Approval (if applicable): DATE: 04/16/2025



SPECIAL SEISMIC CERTIFICATION UNIT UNDER TEST (UUT) DESCRIPTION

Manufacturer: SAI Advanced Power Solutions, Inc.

Model Line: UL 1558 (SAI APS-xxxx) & UL 891 (PSB -xxxx) Type, 1200A to 6000A

UUT **1A**

Model Number: Test Prototype: UL891, 4000A, 3PH, 4W, 480/277V, 65KAIC@480V, NEMA 1

Construction Summary:

11 GA. cold rolled steel sheet type A-1008 Type B carbon steel enclosure. Certified component construction shall be identical to construction of UUT's.

Test Parameters:

Building Code: CBC 2022

Component Importance Factor: $I_p = 1.5$

Test Criteria: AC-156

Test Report: Clark Testing Laboratory
ID 18-00847 Rev.0, Dated: 10/18/2018

Options Summary:

Cradle & Circuit Breaker: Schneider Electric CWLEVV9AXAXXXXXXXX & NW12H1 & NW20H1, Siemens GS2312T1XFXXXXN & S2A312QF1CXCZCN, ABB/GE GN12S2S & GN12S1HERXX8AXXL5X2S, LSIS UAL-S20E3-AVFS & UAH-16E3-16A. *All other subcomponents inclusive to above assembly model numbers.*

Mounting Summary:

Rigid floor mounted. Fastened to shake table platen using eight (8) ½-13 grade 8 cap screws, washers, and lock washers torqued to 50ft./lbs.

Notes:

Contents were included in testing per operating conditions.

UUT Image



UUT Properties

Dimensions (in)			Weight (lbs.)	Min. First Natural Frequency (Hz)		
Depth	Width	Height		F-B	S-S	Vert
48.0	48.0	93.0	4,762	13.22	7.62	>33.3

Unit maintained structural integrity and remained operational

per manufacturer requirement when subjected to a shake table test with the following test parameters

S _{DS} (g)	z/h	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
1.68	1.0	2.69	2.02	-	-
2.25	0	-	-	1.50	0.60

SPECIAL SEISMIC CERTIFICATION UNIT UNDER TEST (UUT) DESCRIPTION

Manufacturer: SAI Advanced Power Solutions, Inc.
Model Line: UL 1558 (SAI APS-xxxx) & UL 891 (PSB -xxxx) Type, 1200A to 6000A
Model Number: Test Prototype: UL891, 1800A, 3PH, 3W, 480V, 65KAIC@480V, NEMA 1

UUT **2**

Construction Summary:

11 GA. cold rolled steel sheet type A-1008 Type B carbon steel enclosure. Certified component construction shall be identical to construction of UUT's.

Test Parameters:

Building Code: CBC 2022
Component Importance Factor: $I_p = 1.5$
Test Criteria: AC-156
Test Report: Clark Testing Laboratory
 ID 18-00847 Rev.0, Dated: 10/18/2018

Options Summary:

Circuit Breaker: Schneider Electric HJP36150CU33XYP, JJP36250CU33XYP, LIM36600U33XYP, PJP36120CU33AYP, SAI-CE 1800A. All other subcomponents inclusive to above assembly model numbers.

Mounting Summary:

Rigid floor mounted. Fastened to shake table platen using four (4) ½"-13 grade 5 bolts, lock washers and flat washers torqued to 75ft./lbs.

Notes:

Contents were included in testing per operating conditions.

UUT Image



UUT Properties

Dimensions (in)			Weight (lbs.)	Min. First Natural Frequency (Hz)		
Depth	Width	Height		F-B	S-S	Vert
30.0	38.0	93.0	2,539	16.00	14.70	>33.33

Unit maintained structural integrity and remained operational

per manufacturer requirement when subjected to a shake table test with the following test parameters

S _{DS} (g)	z/h	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
1.94	1.0	3.10	2.33	-	-
2.25	0	-	-	1.50	0.60

SPECIAL SEISMIC CERTIFICATION UNIT UNDER TEST (UUT) DESCRIPTION

Manufacturer: SAI Advanced Power Solutions, Inc.
Model Line: UL 1558 (SAI APS-xxxx) & UL 891 (PSB -xxxx) Type, 1200A to 6000A
Model Number: Test Prototype: UL891, 6000A, 3PH, 4W, 480/277V, 65KAIC@480V, NEMA 1

UUT **3**

Construction Summary:

11 GA. cold rolled steel sheet type A-1008 Type B carbon steel enclosure. Certified component construction shall be identical to construction of UUT's.

Test Parameters:

Building Code: CBC 2022
Component Importance Factor: $I_p = 1.5$
Test Criteria: AC-156
Test Report: Clark Testing Laboratory
 ID 18-00847 Rev.0, Dated: 10/18/2018

Options Summary:

Circuit Breaker: Schneider Electric CYLTGG9AXAXBXXXXXX. **Options Included:** Schneider Electric pilot light ZB4BVG3 & ZB4BVG4, Shallco 2 position rotary switch, Salzer 2 position switch, Mersen 3 pole fusible disconnect, Mersen 1A fuse, ITI voltage transformer, Marathon shorting block, Deif/SAI automatic genset controller, Phoenix terminal block, Tyco/Amp 12 position plug 207017-1 & 207018-1, GE current transformer. *All other subcomponents inclusive to above assembly model numbers.*

Mounting Summary:

Rigid floor mounted. Fastened to shake table platen using four (4) ½"-13 grade 5 bolts, lock washers and flat washers torqued to 75ft./lbs.

Notes:

Contents were included in testing per operating conditions.

UUT Image



UUT Properties

Dimensions (in)			Weight (lbs.)	Min. First Natural Frequency (Hz)		
Depth	Width	Height		F-B	S-S	Vert
48.0	40.0	93.0	2,539	16.43	9.49	>33.33

Unit maintained structural integrity and remained operational

per manufacturer requirement when subjected to a shake table test with the following test parameters

S _{DS} (g)	z/h	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
1.80	1.0	2.88	2.16	-	-
2.25	0	-	-	1.50	0.60