



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-0318**

**HCAI Special Seismic Certification Preapproval (OSP)**

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: Powersmiths International Corp

Manufacturer's Technical Representative: Des Faria

Mailing Address: 201 Westcreek Blvd., Brampton, ON L6T0G8

Telephone: (905) 791-1493 Email: dfaria@powersmiths.com

**Product Information**

Product Name: See Attachment

Product Model Number(s): See Attachment

Product Category: Transformers

Product Sub-Category: Transformers – Dry Type

General Description: Dry-Type transformer family with copper windings and no internal bracing. Including a range of materials and enclosure types. See attachment.

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: TRU Compliance, by Structural Integrity Associates

Contact Person: Daniel Zentner

Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702

Telephone: (541) 292-5839 Email: dzentner@structint.com

Title: Program Manager

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION  
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**California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)**

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.

Name: LACHEZAR HANDZHIYSKI California License Number: S6515

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

Telephone: (669) 437-0200 Email: Lhandzhiyski@StructInt.com

**Certification Method**

GR-63-Core  ICC-ES AC156  IEEE 344  IEEE 693  NEBS 3

Other (Please Specify): \_\_\_\_\_

**Testing Laboratory**

Company Name: UNIVERSITY OF BUFFALO (SEESL)

Contact Person: Yushan Fu

Mailing Address: 212 Ketter Hall, Buffalo NY 14260

Telephone: (716) 645-4377 Email: yushanfu@buffalo.edu

BY: Mohammad Karim

DATE: 01/22/2026

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**Seismic Parameters**

Certified Response Spectral Acceleration Factors: (F<sub>p</sub>/W<sub>p</sub>)

Horizontal	(A Flx-H), g=	2.88	(A Rig-H), g=	1.94
Vertical	(A Flx-V), g=	1.20	(A Rig-V), g=	0.48

SDS (Design spectral response acceleration at short period, g) = 1.8

H<sub>f</sub> (Force amplification height factor) = 1 @ z/h = 0; 3.5 @ z/h = 1

R<sub>u</sub> (Structure ductility reduction factor) = 1 @ z/h = 0; 1.3 @ z/h = 1

I<sub>p</sub> (Importance factor) = 1.5

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

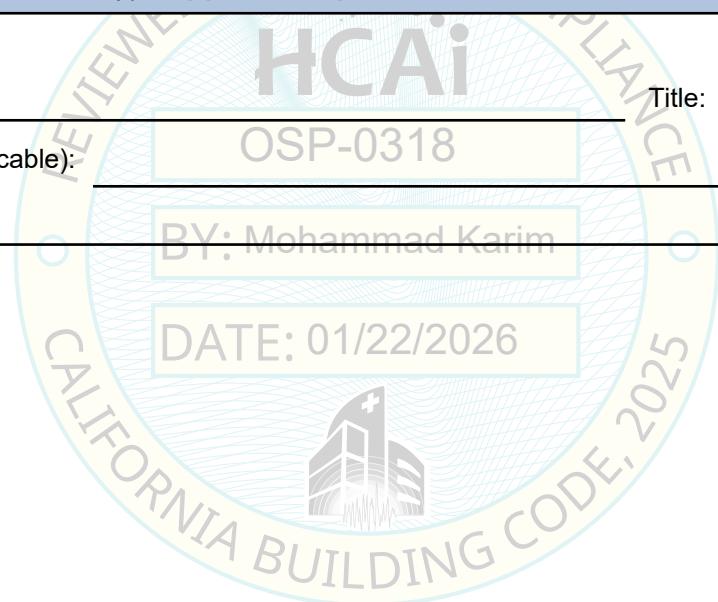
**HCAi Approval (For Office Use Only) - Approval Expires on 01/22/2032**

Date: 1/22/2026

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Condition of Approval (if applicable):



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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY

# SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2000448-CR-001-R1



<b>Manufacturer:</b>	Powersmiths International Corp.					<b>TABLE 1</b>					
<b>Model Line:</b>	Dry-Type Transformer										
<b>Certified Product Construction Summary:</b>											
Dry-Type transformers without internal seismic bracing, NEMA 1, 2 and 3R enclosures.											
<b>Certified Options Summary:</b>											
Copper and Aluminum Windings.											
<b>Mounting Configuration:</b>											
Base mounted - rigid											
Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.											
<b>Building Code:</b>	<b>CBC 2025</b>	<b>Seismic Certification Limits:</b>			$S_{DS} = 1.8g$	$R_{\mu} = 1.3; H_f = 3.5; z/h = 1; I_p = 1.5$					
					$S_{DS} = 1.8g$	$R_{\mu} = 1.0; H_f = 1.0; z/h = 0;$					
Model Line <sup>1</sup>	Model	Dimensions (in)			Weight (lbs.) <sup>2</sup>	Notes					
		Depth	Width	Height		UUT					
OPAL Series	15 kVA	17	18	27.5	308	E-Saver-25H-15-480-208					
	20 kVA	18	26	30	380	Interp.					
	25 kVA	18	26	30	420	Interp.					
	30 kVA	18	26	30	470	Interp.					
	45 kVA	18	26	30	590	Interp.					
	50 kVA	22	32	40	600	Interp.					
	63 kVA	22	32	40	720	Interp.					
	75 kVA	22	32	40	800	Interp.					
	100 kVA	22	32	40	975	Interp.					
	112.5 kVA	22	32	40	1100	Interp.					
	125 kVA	27	38	48	1250	Interp.					
	150 kVA	27	38	48	1400	Interp.					
	175 kVA	27	38	48	1500	Interp.					
	200 kVA	27	38	48	1600	Interp.					
	225 kVA	32	38	52	1750	Interp.					
	250 kVA	32	38	52	1850	Interp.					
	300 kVA	32	38	52	2150	Interp.					
	400 kVA	38	52	61	2650	Interp.					
	450 kVA	38	52	61	2900	Interp.					
	500 kVA	38	52	61	3030	E-Saver-25H-500-480-208					
						5					
<b>Additional Notes:</b>											
1. Efficiency Classification - See model number nomenclature in Table 1.1.											
2. Maximum weights shown.											

# SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2000448-CR-001-R1

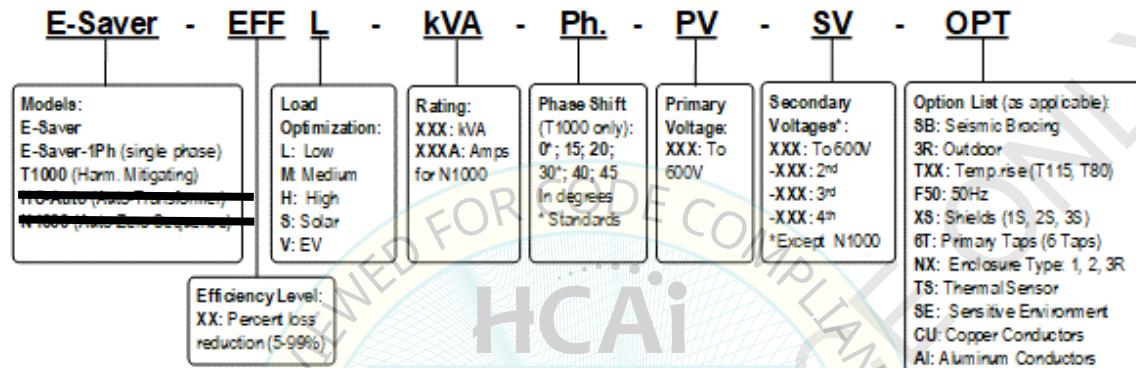


**Manufacturer:** Powersmiths International Corp.  
**Model Line:** Dry-Type Transformer

## TABLE 1.1

*For Reference Only*

OPAL Transformer Nomenclature:



### Model Descriptions:

E-Saver: A 3-phase isolation distribution transformer available in the range of 15kVA to 1,000kVA. They are either Copper, Aluminium or a combination of either. The efficiency optimization in the part number is defined by the 2 letter numeric numberers followed by an alpha character following the model name. E-Saver-1PH is a single-phase version. The T1000 is a harmonic mitigating transformer with a model name that has been maintained due to existing branding for harmonic applications. The HC-AUTO is a auto transformer where the secondary is electrically connected to the primary for voltage ratio applications.

Model numbers are described following:

- E-Saver-80R-kVA-PV-SV Aluminum wound, efficiency optimized for lower loading applications
- E-Saver-81R-kVA-PV-SV Copper wound, efficiency optimized for lower loading applications
- E-Saver-10L-kVA-PV-SV Aluminum wound, efficiency optimized for low loading applications
- E-Saver-33L-kVA-PV-SV Copper wound, efficiency optimized for low loading applications
- E-Saver-10M-kVA-PV-SV Aluminum wound, efficiency optimized for average loading applications
- E-Saver-20M-kVA-PV-SV Copper wound, efficiency optimized for average loading applications
- E-Saver-10H-kVA-PV-SV Aluminum wound, efficiency optimized for high loading applications
- E-Saver-20H-kVA-PV-SV Aluminum wound, efficiency optimized for high loading applications
- E-Saver-25H-kVA-PV-SV Copper/Aluminum wound, efficiency optimized for high loading applications
- E-Saver-35H-kVA-PV-SV Copper/Aluminum wound, efficiency optimized for higher loading applications
- E-Saver-50H-kVA-PV-SV Copper/Aluminum wound, efficiency optimized for very high loading applications
- E-Saver-25S-kVA-PV-SV Aluminum wound, efficiency optimized for solar applications
- E-Saver-35S-kVA-PV-SV Copper wound, highly efficiency optimized for solar applications
- E-Saver-25V-kVA-PV-SV Copper/Aluminum wound, efficiency optimized for EV Charging applications
- T1000-30H-kVA-PV-SV Copper wound, efficiency optimized for Harmonic Mitigation applications
- HC-AUTO-kVA-PV-SV Copper or Aluminum wound voltage ratio transformer

Note: The Aluminum or Copper/Aluminum wound transformers are available as all copper versions with CU added in the options section of the nomenclature

# SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2000448-CR-001-R1



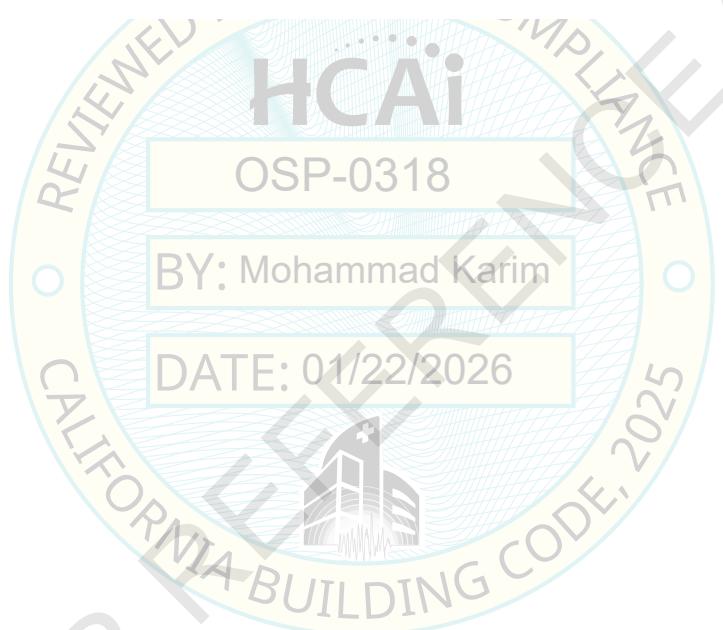
<b>Manufacturer:</b> Powersmiths International Corp.	<b>TABLE 1.1</b>
<b>Model Line:</b> Dry-Type Transformer	

*For Reference Only*

E-Saver-1Ph is the single-phase model

T1000: A 3-phase copper wound isolation transformer available from 15 to 1,000kVA optimized for harmonic mitigation applications. Typical model numbers include as follows but not limited to:

- E-Saver-35H-kVA-PV-SV...: Copper wound, efficiency optimized for higher loading harmonic mitigation applications



# UNIT UNDER TEST (UUT) SUMMARY SHEET

**2000448-CR-001-R1**



**Manufacturer:** Powersmiths International Corp.

**Model Line:** Dry-Type Transformer

### *Notes:*

1. Structural and Earthquake Engineering and Simulation Laboratory (SEESL)

# UNIT UNDER TEST (UUT) SUMMARY SHEET

2000448-CR-001-R1



**Manufacturer:** Powersmiths International Corp.  
**Model Line:** Dry-Type Transformer  
**Product Function:** Dry-Type Transformer  
**Model Number:** E-Saver-25H-15-480-208 (15kVA)  
**Serial Number:** 60608

**Test Report:** 2000448-TR-001-R0 (UUT4)

**UUT 4**

## UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
308	17.0	17.5	27.5	9.2	19.8	15.1

## UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	$S_{DS}$ (g)	$R_{\mu}$	$H_f$	$I_p$	$A_{FLX-H}$ (g)	$A_{RIG-H}$ (g)	$A_{FLX-V}$ (g)	$A_{RIG-V}$ (g)
CBC 2025	ICC-ES AC156	1.80	1.3	3.5	1.5	2.88	1.94	1.20	0.48
		1.80	1.0	1.0					

## Product Construction Summary:

NEMA 3R enclosure, without internal seismic bracing.  
 Aluminum and copper windings.

## Test Mounting Details:



UUT4 was base mounted-rigid using four (4) 1/2"-13 Grade 5 bolts with flat washers and lock washers.  
 Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

TRU Compliance, by Structural Integrity Associates, Inc.

844-TRU-0200 | info@trucompliance.com

# UNIT UNDER TEST (UUT) SUMMARY SHEET

2000448-CR-001-R1



**Manufacturer:** Powersmiths International Corp.  
**Model Line:** Dry-Type Transformer  
**Product Function:** Dry-Type Transformer  
**Model Number:** E-Saver-25H-500-480-208 (500kVA)  
**Serial Number:** N/A

**Test Report:** 2000448-TR-002-R0 (UUT5)

**UUT 5**

## UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
3,030	38.0	52.0	61.0	11.5	16.4	20.4

## UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	$S_{DS}$ (g)	$R_\mu$	$H_f$	$I_p$	$A_{FLX-H}$ (g)	$A_{RIG-H}$ (g)	$A_{FLX-V}$ (g)	$A_{RIG-V}$ (g)
CBC 2025	ICC-ES AC156	1.80	1.3	3.5	1.5	2.88	1.94	1.20	0.48
		1.80	1.0	1.0					

## Product Construction Summary:

NEMA 3R enclosure, without internal seismic bracing.  
 Aluminum and copper windings.

## Test Mounting Details:



UUT5 was base mounted-rigid using eight (8) 1/2"-13 Grade 5 bolts with flat washers and lock washers.

Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.