



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-0855

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☒ New ☐ Renewal

Manufacturer Information

Manufacturer: Transformer Technology Inc.

Manufacturer's Technical Representative: Joshua Plitnick

Mailing Address: 60 Commerce Circle, Durham, CT 06422

Telephone: (860) 349-1061

Email: jplitnick@transformertechnologyinc.com

Product Information

Product Name: Transformers

Product Model Number(s): Enclosed Power Transformers

Product Category: Transformers

Product Sub-Category: Transformers – Dry Type

General Description: NEMA 1 Carbon Steel Enclosure, 3-phase, Copper Wound Transformers

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates

Contact Person: Victoria Ahrens

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

Telephone: (541) 292-5820

Email: vahrens@structint.com

Title: Certification Engineer



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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): _____

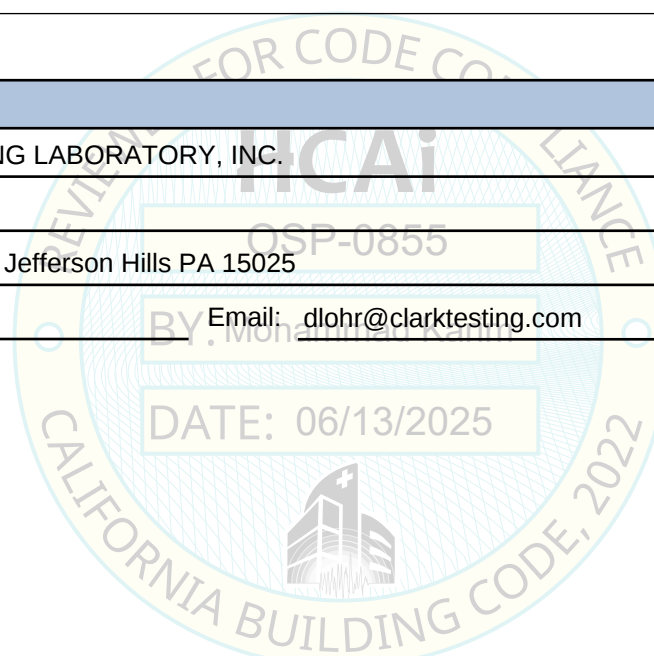
Testing Laboratory

Company Name: 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) = 1.44 (SDS=2.0 @ $z/h=1$); 1.125 (SDS=2.5 @ $z/h=0$)

SDs (Design spectral response acceleration at short period, g) = 2.00 ($z/h = 1$); 2.50 ($z/h = 0$)

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 06/12/2031

Date: 6/13/2025

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 2.0

z/h = 1

Condition of Approval (if applicable):

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

2400044-CR-001-R1

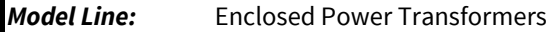


Manufacturer: Transformer Technology Inc.								TABLE 1		
Model Line: Enclosed Power Transformers										
Certified Product Construction Summary: NEMA 1 Carbon Steel Enclosure.										
Certified Options Summary: 3 Phase. Copper Wound.										
Mounting Configuration: Base mounted - rigid Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.										
Building Code: CBC 2022				Seismic Certification Limits:				$S_{DS}= 2.0\ g\ \ z/h=1.0$ $S_{DS}= 2.5\ g\ \ z/h=0.0$		$I_P= 1.5$
Model Line	Model	kVA	Enclosure	Dimensions (in)			Weight (lbs.)	Notes	UUT	
				Depth	Width	Height				
Power Transformers	TTI-24355UH2	19.5	A	16.0	19.0	22.0	130	Step Down	Interp.	
	TTI-24352UH2	19.5	A	16.0	19.0	22.0	195	Step Up	Interp.	
	TTI-23873UH2	20	A	16.0	19.0	22.0	142	Step Down	Interp.	
	TTI-23875UH2	20	A	16.0	19.0	22.0	200	Step Up	Interp.	
	TTI-24356UH2	26	A	16.0	19.0	22.0	158	Step Down	Interp.	
	TTI-24353UH2	26	A	16.0	19.0	22.0	215	Step Up	Interp.	
	TTI-23858UH2	32	A	16.0	19.0	22.0	167	Step Down	Interp.	
	TTI-24136UH2	32	A	16.0	19.0	22.0	234	Step Up	1	
	TTI-23968UH2	40	B	17.0	22.0	25.0	199	Step Down	Interp.	
	TTI-24130UH2	40	B	17.0	22.0	25.0	270	Step Up	Interp.	
	TTI-24358UH2	50	B	17.0	22.0	25.0	225	Step Down	Interp.	
	TTI-24354UH2	50	B	17.0	22.0	25.0	320	Step Up	Interp.	
	TTI-24423UH2	60	C	18.5	25.0	28.0	284	Step Down	Interp.	
	TTI-24253UH2	60	C	18.5	25.0	28.0	417	Step Up	Interp.	
	TTI-24360UH2	70	C	18.5	25.0	28.0	294	Step Down	Interp.	
	TTI-24359UH2	70	C	18.5	25.0	28.0	442	Step Up	Interp.	
	TTI-24201UH2	100	D	23.0	27.0	30.9	471	Step Down	Interp.	
	TTI-24319UH2	100	D	23.0	27.0	30.9	637	Step Up	Interp.	
	TTI-24235UH2	180	E	25.5	33.0	42.0	725	Step Down	Interp.	
	TTI-24550UH2	180	E	25.5	33.0	42.0	956	Step Up	2	

TRU Compliance, by Structural Integrity Associates, Inc.

844-TRU-0200 | info@trucompliance.com

2400044-CR-001-R1



Notes:

UNIT UNDER TEST (UUT) SUMMARY SHEET

2400044-CR-001-R1



Manufacturer: Transformer Technology Inc. Model Line: Enclosed Power Transformers Model Number: 32kVA Transformer: TTI-24136UH2 Serial Number: 013025 S/N 10						UUT 1			
Test Report: JID 25-00040, Rev.1 (EUT1)									
UUT Properties									
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
234	16.0	19.0	22.0	14.00	23.57	>33.33			
UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						
Product Construction Summary: Enclosure A, NEMA 1 Carbon Steel Enclosure. 3 Phase. Copper Wound.					Test Mounting Details:				
Options/Subcomponent Summary:									
Description	Part Number								
N/A	N/A								
UUT1 was base mounted - rigid to the test fixture using four (4) 5/8"-11 SAE Grade 5 hex bolts with washers and lock washers torqued to 120 ft.-lbs. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.									

UNIT UNDER TEST (UUT) SUMMARY SHEET

2400044-CR-001-R1



Manufacturer: Transformer Technology Inc. Model Line: Enclosed Power Transformers Model Number: 180kVA Transformer: TTI-24550UH2 Serial Number: 021925 S/N 01						UUT 2			
Test Report: JID 25-00040, Rev.1 (EUT2)									
UUT Properties									
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)					
	Depth	Width	Height	Front-Back	Side-Side	Vertical			
956	25.5	33.0	42.0	14.25	19.34	28.40			
UUT Highest Passed Seismic Run Information									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	2.0	1.0	1.5	3.20	2.40	1.67	0.67	
		2.5	0.0						
Product Construction Summary: Enclosure E, NEMA 1 Carbon Steel Enclosure. 3 Phase. Copper Wound.					Test Mounting Details:				
Options/Subcomponent Summary:									
Description		Part Number							
N/A		N/A							
UUT2 was base mounted - rigid to the test fixture using four (4) 5/8"-11 SAE Grade 5 hex bolts with washers and lock washers torqued to 120 ft.-lbs. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.									