CERTIFICATION PREAPPROVAL (OSP) APPLICATION #: OSP - 0443
OSHPD Special Seismic Certification Preapproval (OSP)
Type: ☐ New ⊠ Renewal
Manufacturer Information
Manufacturer: Rypos, Inc.
Manufacturer's Technical Representative: Gerry Maynard
Mailing Address: 40 Kenwood Circle, Franklin, MA 02038
Telephone: (508) 429-4552 Email: gmaynard@rypos.com
Product Information
Product Name: ISLN Transformers OSTIP
Product Type: Transformer OSP-0443
Product Model Number: Varies (see attachment) (List all unique product identification numbers and/or part numbers) hammad Aliaari General Description: Copper winding transformers inside 12 GA. painted carbon steel enclosure.
Copper winding transformers inside 12 GA, painted carbon steer enclosure.
Mounting Description: Rigid – wall mounted
Z. Zo
Applicant Information
Applicant Company Name: _TRU Compliance, by Structural Integrity Associates, Inc
Contact Person: Galen Reid
Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702
Telephone: 844-878-0200 Email: greid@structint.com
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.
Signature of Applicant: Date: Date:
Title: Program Manager Company Name: TRU Compliance, by Structural Integrity Associates, Inc

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)
Company Name: TRU Compliance, by Structural Integrity Associates, Inc
Name: Andy Coughlin, SE California License Number: S6082
Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702
Telephone: 844-878-0200 Email: acoughlin@structint.com
Supports and Attachments Preapproval
Supports and attachments are preapproved under OPM- (Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
Supports and attachments are not preapproved
Certification Method
 ✓ Testing in accordance with: ✓ ICC-ES AC156 ✓ OSP-0443
BY: Mohammad Aliaari
Testing Laboratory DATE: 11/02/2020
Company Name: National Technical Systems - Boxborough
Contact Name: Don Bennet
Mailing Address: 1146 Massachusetts Ave., Boxborough, MA 01719
Telephone: (562) 659-0865 Email: don.bennet@nts.com





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11/02/2020 OSP-0443



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

Seismic Parameters
Design in accordance with ASCE 7-10 Chapter 13: ⊠ Yes ☐ No
Design Basis of Equipment or Components $(F_p/W_p) = 1.44 (S_{DS}=2.00g, z/h=1.0), 1.44 (S_{DS}=3.20g, z/h=0.0)$
S _{DS} (Design spectral response acceleration at short period, g) = 2.00g (z/h=1.0). 3.20g (z/h=0.0)
a _p (In-structure equipment or component amplification factor) =1.0
R _p (Equipment or component response modification factor) =2.5
Ω_0 (System overstrength factor) = 2.0
I _p (Importance factor) = 1.5
z/h (Height factor ratio) =1.0 (S _{DS} =2.00g), 0.0 (S _{DS} =3.20g)
Equipment or Component Natural Frequencies (Hz) = (See Attachment)
Overall dimensions and weight (or range thereof) = (See Attachment)
Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: Yes No
Design Basis of Equipment or Components (V/W) =
S _{DS} (Design spectral response acceleration at short period, g) =
S _{D1} (Design spectral response acceleration at 1 second period, g) =
R (Response modification coefficient) =
Ω ₀ (System overstrength factor) = By: Mohammad Aliaari
C _d (Deflection amplificati <mark>on fa</mark> ctor) =
I_P (Importance factor) = 1.5 DATE: 11/02/2020
Height to Center of Gravity above base =
Equipment or Component Natural Frequencies (Hz) =
Overall dimensions and weight (or range thereof) =
Tank(s) designed in accordance with ASME BPVC, 2015: ☐ Yes ☒ No
List of Attachments Supporting Special Seismic Certification
Other(s) (Please Specify): Product Matrices
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2025
M Min
Signature: Date: November 02, 2020
Print Name: Mohammad Aliaari Title: Senior Structural Engineer
Special Seismic Certification Valid Up to : S _{DS} (g) = <u>See Above</u> z/h = <u>See Above</u>
Condition of Approval (if applicable):

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX



1901111-CR-001 R0

Manufacturer:	Rypos, Inc.	TABLE 1
Model Line:	ISLN Transformers	IADLET

Certified Product Construction Summary:

12 GA. carbon steel enclosure. Copper windings.

Certified Options Summary:

Transformer range: 4.125 - 12.5 kVA, Input: 208-510 VAC, Output: 12 - 200 VDC.

Mounting Configuration:

Wall mounted - rigid

Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2019

Seismic Certification Limits:

 S_{DS} = 2.0 g z/h=1.0 S_{DS} = 3.2 g z/h=0.0

/_P= 1.5

	/ 4 / /				- DS	3.2 6 2/11-0.0		
Model Line	Model	Dimensions (in)			Weight	Notes	UUT	
Model Line	Model	Depth	Width	Height	(lb)	Notes	001	
	175-003 <mark>1-00-</mark> 01	BY15 M	h 49,2m	ad 18.9a	188	UUT: 4.125kVA Transformer	1	
	175-003 <mark>1-00-0</mark> 2	15	19.2	18.9	180	O	Interp.	
	175-0031-00-03	15	19.2	18.9	215		Interp.	
ISLN Transformers	175-0031 <mark>-00-04</mark>	15	19.2	18.9	256		Interp.	
istin transformers	175-0031-00-05	15	19.2	18.9	215	*/	Interp.	
	175-0031-00-06	15	19.2	18.9	256	UUT: 12.5kVA Transformer	2	
	175-0031-00-07	15	19.2	18.9	215		Interp.	
	175-0031-00-08	15/	19.2	18.9	192		Interp.	
			BUIL	JIMO				

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

RYPOS

1901111-CR-001 R0

Manufacturer: Rypos, Inc. Table Description: Electrical Components

Model Line: ISLN Transformers

TABLE 2

Building Code: CBC 2019 Seismic Certification Limits: $S_{DS} = 2.0 \text{ g} \quad \text{z/h} = 1.0$ $S_{DS} = 2.0 \text{ g} \quad \text{z/h} = 0.0$

bunung coue. cbc 20		Seisinic Cer (incati	$S_{DS} = 3.2 g z/h = 0.0$	7 p = 1.3	
Component Type	Manufacturer	Model	OR CODE Description	Notes	υυτ
		23758	4.125kVA, In: 208VAC, Out: 72/12VDC		Extrap.
		23757	4.125kVA, In: 480VAC, Out: 72/12VDC		1
		23753	6 kVA, In: 480 VAC, Out: 100/72VDC		Interp.
Transformer	TT1	23759	8kVA, In: 208VAC, Out: 140/72/12VDC		Interp.
ransiormer	TTI	23761	8kVA, In: 480VAC, Out: 140/72/12VDC		Interp.
		23763 _{BV} . \	8kVA, In: 510VAC, Out: 135/72/12VDC		Interp.
		23760	12.5kVA, In: 208VAC, Out: 200/72/12VDC		Interp.
		23762	12.5kVA, In: 480VAC, Out: 200/72/12VDC		2
Fuse	Bussmann	LP-CC-8	8A, UL class CC		1,2
Fuse Holder	Bussmann	H25030-1C	Single pole, UL class RK250		1,2
AC/DC Converter	CUI Inc.	VSK-S20-12U-T	12V, 20W		1,2
Fan	Orion Fans	OA109AP-11-1TB	120x38, 115V, 110CFM	(2) Installed	1,2
Heat Sink	Wakefield	394-2AB	101x139mm, 1.51 C/W, 0.6 C/W@500LFM		1,2
Resistor	Panasonic	ERG-3SJ203	20K, 3W, Axial lead	(2) installed	1,2
D+::f:	Vishay	VS-160MT80KPBF	Bridge rectifier MOD 3PH, 160A, 800V		1,2
Rectifier	IXYS	VUO25-08N08	FWB rectifier, single phase		1,2
	Marrathan	985 GP 04	4 pole		1,2
Terminal Block	Marathon	986 GP 05	5 pole		1,2
	TE Connectivity	1546306-2	2 pole		1,2
Lamp	Jameco Valuepro	2181378	7mm, 12V, incandescent green		1,2

UNIT UNDER TEST (UUT) SUMMARY SHEET



1901111-CR-001 R0

UUT	Unit Description	Report Number	S _{DS}	z/h	Ι _Ρ	
1	4.125kVA ISLN Transformer	PR036285 Rev. 1	National Technical	2.0	1.0	1.5
	1.125KW/Clock Transformer	1 11030203 11eV. 1	Systems - Boxborough	3.2	0.0	1.0
2 12.	12.5kVA ISLN Transformer	PR036285 Rev. 1	National Technical	2.0	1.0	1.5
			Systems - Boxborough	3.2	0.0	
		EDFOR CODE C	OMO			
	<u> </u>	OSHPE	T STATE OF THE STA			
	RE	OSP-0443	(R)			
		BY: Mohammad Al	iaari			
		DATE: 11/02/2026				
	C	DATE: 11/02/2020	2			
		Op	OF			
	,	NIA BUILDING	CO			
tes:	1	<u> </u>	<u>I</u>		<u> </u>	

TRU Compliance, by Structural Integrity Associates, Inc. 844-TRU-0200 | info@trucompliance.com

UNIT UNDER TEST (UUT) SUMMARY SHEET



UUT 1

1901111-CR-001 R0

Manufacturer: Rypos, Inc.

Model Line: ISLN Transformers

Model Number: 175-0031-00-01 **Serial Number:** N/A

Product Construction Summary:

12 GA. Carbon steel enclosure. Copper windings.

Options/Subcomponent Summary:

Transformer: TTI - 23757; 4.125kVA, Input - 480 VAC, Output - 72/12 VDC.

See Table 2 for a list of subcomponents.

		4,7	IIIIT	Properties						
Weight		Dimension (in		Properties		Lowes	t Natural	Frequen	cy (Hz)	
(lb)			Fron	t-Back	1	-Side	T	tical		
188	15.0	19.2		18.9		M/A/M/N/A		/A	N/A	
		UUT Highe.	st Passed	Seismic Rur	Inform	ation			,	
Buildi	ng Code	Test Crit	teria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g
CDC 2010		ICC ESM	ICC-ES AC156 11/0 2/2.0		1.0	1.5	2.20	2.40	2.12	0.05
CBC	CBC 2019				0.0 1.5 3.20		3.20	2.40 2.13		0.85

Test Mounting Details:





TRU Compliance, by Structural Integrity Associates, Inc.

Rigid wall mounted with (4) 3/8" grade 5 bolts. 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



UUT 2

1901111-CR-001 R0

Manufacturer: Rypos, Inc.

Model Line: ISLN Transformers

Model Number: 175-0031-00-06 *Serial Number:* N/A

Product Construction Summary:

12 GA. Carbon steel enclosure. Copper windings.

Options/Subcomponent Summary:

Transformer: TTI - 23762; 12.5 kVA, Input - 480 VAC, Output - 200/72/12 VDC.

See Table 2 for a list of subcomponents.

			UUT P	roperties		T					
Weight		Dimension (in	Dimension (in)				Lowest Natural Frequency (Hz)				
(lb)	(lb) Depth Width Sheight		eight443	Front-Back		Side-Side		Vertical			
256	15.0	19.2	11111	8.9	M/A N/A		N/A		N/A		
		UUT Highe:	st Passed S	eismic Run	Inform	ation					
Buildi	ing Code	Test Crit	eria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CD	CBC 2019		C1EC 11/0	2,900	1.0	1.5	3.20	2.40	2.13	0.85	
CDO	C 2019	ICC-ES/AC156) Z 			3.20	2.40	2.13	0.85	

Test Mounting Details:





TRU Compliance, by Structural Integrity Associates, Inc.

Rigid wall mounted with (4) 3/8" grade 5 bolts. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.