



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP – 0443 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Rypos, Inc.

Manufacturer's Technical Representative: Bachir Kharraja

Mailing Address: 150 Hopping Brook Road, Holliston, MA 01746

Telephone: (774) 233-1027

Email: bkharraja@rypos.com

Product Information

Product Name: ISLN Transformers

Product Type: Transformer

Product Model Number: Various (see Certified Product Matrix)

(List all unique product identification numbers and/or part numbers)

General Description: Copper winding transformers inside 12 GA. painted carbon steel enclosure.

Mounting Description: Rigid wall mounted.

Applicant Information

Applicant Company Name: TRU Compliance, LLC – A Tobolski Watkins Affiliate

Contact Person: Matthew J. Tobolski, Ph.D., S.E.

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844-878-0200

Email: mtobolski@trucomplince.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

Signature of Applicant: _____

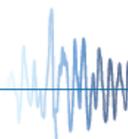
Date: 07/29/2015

Title: President & CEO

Company Name: TRU Compliance, LLC

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

STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY
OSH-FD-759 (REV 10/21/14)



OSHPD

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

Company Name: TRU Compliance, LLC – A Tobolski Watkins Affiliate

Name: Matthew J. Tobolski, Ph.D., S.E. California License Number: S5648

Mailing Address: 960 SW Disk Dr., Suite 104, Bend, OR 97702

Telephone: 844-878-0200 Email: mtobolski@trucomplince.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
- Other (Please Specify): _____
- _____
- _____

Testing Laboratory

Company Name: National Technical Systems

Contact Name: Kenneth Lesage

Mailing Address: 1146 Massachusetts Ave., Boxborough, MA 01719

Telephone: (978) 266-1001 Email: Ken.lesage@nts.com

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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: [X] Yes [] No

Design Basis of Equipment or Components (Fp/Wp) = 1.44

Sds (Design spectral response acceleration at short period, g) = 2.0g for z/h = 1.0, 3.2 for z/h = 0.0

ap (In-structure equipment or component amplification factor) = 1

Rp (Equipment or component response modification factor) = 2.5

Omega_0 (System overstrength factor) = 2.5

Ip (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0 for Sds = 2.0; 0.0 for Sds = 3.2

Equipment or Component Natural Frequencies (Hz) = See Attachment A

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

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15: [] Yes [X] No

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

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

Sd1 (Design spectral response acceleration at 1 second period, g) =

R (Response modification coefficient) =

Omega_0 (System overstrength factor) =

Cd (Deflection amplification factor) =

Ip (Importance factor) = 1.5

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, 2010: [] Yes [X] No

List of Attachments Supporting Special Seismic Certification

[X] Test Report(s) [X] Drawings [] Calculations [] Manufacturer's Catalog

[X] Other(s) (Please Specify): Attachment A

OSHPD Approval (For Office Use Only) - Approval Expires on December 31, 2019

Signature: [Signature] Date: September 29, 2015

Print Name: Timothy J. Piland Title: SSE

Special Seismic Certification Valid Up to : Sds (g) = See Above z/h = See Above

Condition of Approval (if applicable):



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 15015



Manufacturer: Rypos, Inc.		Table Description: Electrical Components			TABLE 2	
Model Line: ISLN Transformers						
Building Code: CBC 2013		Seismic Certification Limits:				
		$S_{DS} = 2.0$ $z/h = 1.0$			$I_p = 1.5$	
		$S_{DS} = 3.2$ $z/h = 0.0$				
Component Type	Manufacturer	Model	Description	Notes	UUT	
Transformer	TTI	23758	4.125kVA, In: 208VAC, Out: 72/12VDC			
		23757	4.125kVA, In: 480VAC, Out: 72/12VDC		1	
		23753	6 kVA, In: 480 VAC, Out: 100/72VDC			
		23759	8kVA, In: 208VAC, Out: 140/72/12VDC			
		23761	8kVA, In: 480VAC, Out: 140/72/12VDC			
		23763	8kVA, In: 510VAC, Out: 135/72/12VDC			
		23760	12.5kVA, In: 208VAC, Out: 200/72/12VDC			
		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	
Rectifier	Vishay	VS-160MT80KPBF	Bridge rectifier MOD 3PH, 160A, 800V		1,2	
	IXYS	VUO25-08N08	FWB rectifier, single phase		1,2	
Terminal Block	Marathon	985 GP 04	4 pole		1,2	
		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

TRU PROJECT NO. 15015



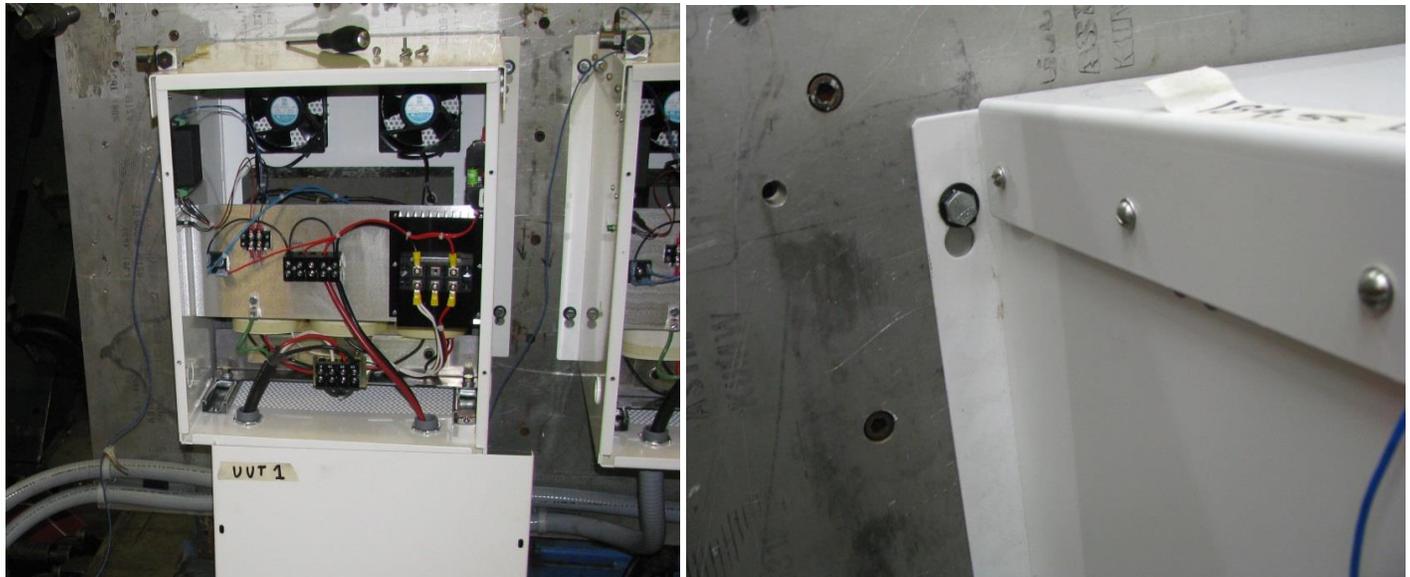
Manufacturer: Rypos, Inc.	UUT 1
Model Line: ISLN Transformers	
Model Number: 175-0031-00-01	
Serial Number: N/A	

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.

<i>UUT Properties</i>										
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)						
	Depth	Width	Height	Front-Back	Side-Side	Vertical				
188	15.0	19.2	18.9	N/A	N/A	N/A				
<i>UUT Highest Passed Seismic Run Information</i>										
Building Code		Test Criteria		S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013		ICC-ES AC156		2.0	1.0	1.5	3.20	2.40	1.33	0.53
				3.2	0.0	1.5	3.20	1.28	2.13	0.85

Test Mounting Details:



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

UNIT UNDER TEST (UUT) SUMMARY SHEET



TRU PROJECT NO. 15015

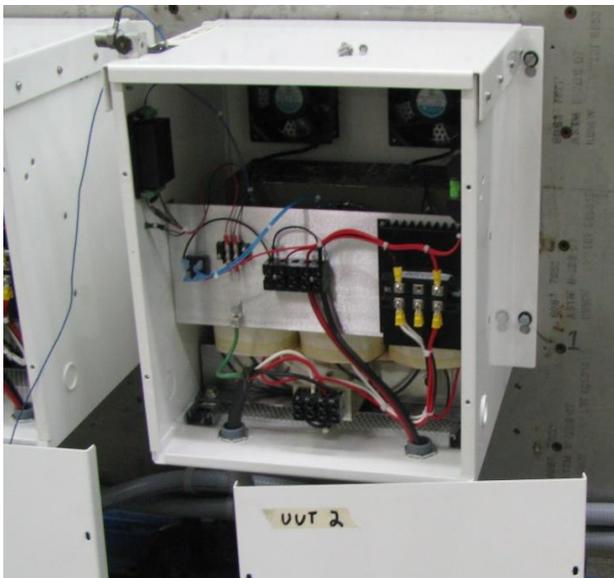
Manufacturer: Rypos, Inc.	UUT 2
Model Line: ISLN Transformers	
Model Number: 175-0031-00-06 Serial Number: N/A	

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.

<i>UUT Properties</i>										
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)						
	Depth	Width	Height	Front-Back	Side-Side	Vertical				
256	15.0	19.2	18.9	N/A	N/A	N/A				
<i>UUT Highest Passed Seismic Run Information</i>										
Building Code		Test Criteria		S _{DS}	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013		ICC-ES AC156		2.0	1.0	1.5	3.20	2.40	1.33	0.53
				3.2	0.0	1.5	3.20	1.28	2.13	0.85

Test Mounting Details:



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