



**OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT  
FACILITIES DEVELOPMENT DIVISION**

**APPLICATION FOR OSHPD SPECIAL SEISMIC  
CERTIFICATION PREAPPROVAL (OSP)**

OFFICE USE ONLY

APPLICATION #: **OSP – 0487 – 10**

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

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: Eaton Corporation

Manufacturer's Technical Representative: Mario Perciballi

Mailing Address: 3301 Spring Forest Rd, Raleigh, NC 27616

Telephone: 919-878-1071

Email: [MarioAPerciballi@Eaton.com](mailto:MarioAPerciballi@Eaton.com)

**Product Information**

Product Name: 9390 UPS and Accessories

Product Type: Uninterruptible Power Supplies and Accessories

Product Model Number: 9390 UPS, 9390 IDC, 9390 IAC (see certified product matrices)

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

General Description: Backup power systems constructed of formed carbon steel framing and cabinets with capacity  
Ranging from 40 – 160 kVA. Distribution cabinets and accessory cabinets are also included.

Mounting Description: Base mounted – rigid supported

**Applicant Information**

Applicant Company Name: TRU Compliance, LLC

Contact Person: Matthew Tobolski, PhD, SE

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

Telephone: 844.878.0200

Email: [mtobolski@trucompliance.com](mailto:mtobolski@trucompliance.com)

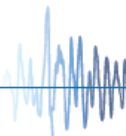
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant: \_\_\_\_\_

Date: 10/15/2016

Title: President

Company Name: TRU Compliance, LLC





## OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT FACILITIES DEVELOPMENT DIVISION

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

Company Name: TRU Compliance, LLC

Name: Matthew Tobolski, PhD, SE California License Number: S5648

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

Telephone: 844.878.0200 Email: mtobolski@trucompliance.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: NTS (formerly Wyle Laboratories)

Contact Name: Tom Boonarkat

Mailing Address: 7800 Highway 20 West, Huntsville, AL 35806

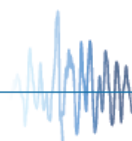
Telephone: (256) 837-4411 Email: [Tom.Boonarkat@nts.com](mailto:Tom.Boonarkat@nts.com)

Company Name: Westinghouse

Contact Name: Allen Mackey

Mailing Address: 1000 Westinghouse D, New Stanton, PA

Telephone: (724) 722-6423 Email: [mackeyag@westinghouse.com](mailto:mackeyag@westinghouse.com)





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**Seismic Parameters**

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

Design Basis of Equipment or Components ( $F_p/W_p$ ) = 1.04

$S_{DS}$  (Design spectral response acceleration at short period, g) = 1.44g @ z/h=1; 2.30g @ z/h=0

$a_p$  (In-structure equipment or component amplification factor) = 1.0

$R_p$  (Equipment or component response modification factor) = 2.5

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0 and 0

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) = \_\_\_\_\_

$\Omega_0$  (System overstrength factor) = \_\_\_\_\_

$C_d$  (Deflection amplification factor) = \_\_\_\_\_

$I_p$  (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, 2015:  Yes  No

**List of Attachments Supporting Special Seismic Certification**

Test Report(s)  Drawings  Calculations  Manufacturer's Catalog

Other(s) (Please Specify): Attachment

**OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022**

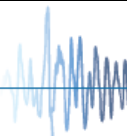
Signature:  Date: May 22, 2017

Print Name: Ali Sumer Title: DSE

Special Seismic Certification Valid Up to :  $S_{DS}$  (g) = See Above z/h = See Above

Condition of Approval (if applicable): \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_







































# UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 16031



<b>Manufacturer:</b> EATON Corporation	<b>UUT 10</b>
<b>Model Line:</b> 9390 UPS	
<b>Model Number:</b> TT16011620000001	

**Product Construction Summary:**  
Formed carbon steel internal framing with carbon steel panelized walls, base and roof.

**Options/Subcomponent Summary:**  
**Frame:** 9390 IAC; **Seismic Kit:** 103004422; **Breakers:** LGE3600FAQ, LGE360033W;

**UUT Properties**

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
490	31	24	74	7.0	7.2	>33

**UUT Highest Passed Seismic Run Information**

Building Code	Test Criteria	S <sub>DS</sub>	z/h	I <sub>p</sub>	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2016	ICC-ES AC156	1.95	1.0	1.5	3.12	2.34	1.31	0.53
		3.62	0.0	1.5	3.62	1.45	2.43	0.98

**Test Mounting Details:**



10 Φ M10, Class 8.8 bolts  
Unit maintained structural integrity and remained functional per manufacturer requirement.  
Contents were included in testing per operating conditions.