APPLICATION FOR OSHPD SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY	
APPLICATION #:	OSP – 0095 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Schneider Electric Inc.

Manufacturer's Technical Representative: Ruslan Drofyak, Engineer

Mailing Address: 4050 Fairview Industrial Dr SE #100, Salem, OR 97302 USA

Telephone: (503) 566-4063 Email: russdrofyak@schneider-electric.com

Product Information

Product Name: AccuSine+ Power Correction System

Product Type: Power Correction System

Product Model Number: See Certified Product Listing Tables attached
(List all unique product identification numbers and/or part numbers)

General Description: The AccuSine+ Power Correction System (PCS) is an Active Harmonic Filter (AHF) which actively injects opposite harmonic current on the source side of the load. Seismic enhancements made to the test units and modifications required to address the anomalies observed during the tests shall be incorporated into the production units.

Mounting Description: Rigid wall mounted and rigid wall/floor mounted.

Applicant Information

Applicant Company Name: Schneider Electric Inc.

Contact Person: Ruslan Drofyak, Engineer

Mailing Address: 4050 Fairview Industrial Dr SE #100, Salem, OR 97302 USA

Telephone: (503) 566-4063 Email: russdrofyak@schneider-electric.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: Ruslan Drofyak Date: January 7, 2016

Title: Certification Engineer Company Name: Schneider Electric Inc.

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

Company Name: Forell/Elsesser Engineers, Inc.

Name: Marco Scanu, SE California License Number: S4454

Mailing Address: 160 Pine St., 6th Flr., San Francisco, CA 94111

Telephone: (415) 837-0700 Email: m.scanu@forell.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: Dynamic Certification Laboratories

Contact Name: Kelly Laplace

Mailing Address: 1315 Greg Street, Suite 109 Sparks, Nevada 89431

Telephone: (775) 358-5085 Email: kelly@shaketest.com

Seismic Parameters

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

Design Basis of Equipment or Components (F_p/W_p) = See Certified Product Listing Tables

S_{DS} (Design spectral response acceleration at short period, g) = See Certified Product Listing Tables

a_p (In-structure equipment or component amplification factor) = 2.5

R_p (Equipment or component response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Equipment or Component Natural Frequencies (Hz) = See attachment, UUT Summary Sheets

Overall dimensions and weight (or range thereof) = See attachment, Certified Product Listing Tables

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) =

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): Certified Products Listing Tables, Certified Major Subcomponents Listing Tables, UUT Summary Sheets

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

Signature:  Date: 2/24/16

Print Name: M. R. Karim Title: SHFR

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

Condition of Approval (if applicable):

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1 Enclosures with Ampacity ratings from 60A to 300A and Voltage rating from 208A to 480A. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Wall Mount

AccuSine Power Correction System												
Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208 – 480	60A	PCSP060D5N1	17	15	60.5	233	1	DCL No. 94002-1501, UUT-1	3.06	1.38	2.84	2.13
		EVCP060D5N1, PCSP060D5IP20, EVCP060D5IP20, PCSP060D2N1, EVCP060D2N1, PCSP060D2IP20, EVCP060D2IP20	17	15	60.5	233	1	Interpolated	3.06	1.38	2.84	2.13
	120A	PCSP120D5N1, EVCP120D5N1, PCSP120D5IP20, EVCP120D5IP20, PCSP120D2N1, EVCP120D2N1, PCSP120D2IP20, EVCP120D2IP20	17	15.5	64.5	255	1	Interpolated	3.06	1.38	2.84	2.13
	200A	PCSP200D5N1, EVCP200D5N1, PCSP200D5IP20, EVCP200D5IP20, PCSP200D2N1, EVCP200D2N1, PCSP200D2IP20, EVCP200D2IP20	23	17.5	63	382	1	Interpolated	3.06	1.38	2.84	2.13

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal sub-components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1 Enclosures with Ampacity ratings from 60A to 300A and Voltage rating from 208A to 480A. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Wall Mount

AccuSine Power Correction System												
Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208-480	300A	EVCP300D5N1, PCSP300D5IP20, EVCP300D5IP20, PCSP300D2N1, EVCP300D2N1, PCSP300D2IP20, EVCP300D2IP20	23	18	72.5	556	1	Interpolated	3.06	1.38	2.84	2.13
		PCSP300D5N1	23	18	72.5	504	1	DCL No. 94002-1501, UUT-2	3.06	1.38	2.84	2.13

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System												
Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208 – 480	60A	PCSP060D5N2, EVCP060D5N2, PCSP060D5IP31, EVCP060D5IP31, PCSP060D5N12, EVCP060D5N12, PCSP060D5IP54, EVCP060D5IP54	31.5	20	82.5	616	2,12	Extrapolated	3.18	1.43	2.75	2.06
		PCSP060D2N2, EVCP060D2N2, PCSP060D2IP31, EVCP060D2IP31, PCSP060D2N12, EVCP060D2N12, PCSP060D2IP54, EVCP060D2IP54	31.5	22	82.5	616	2,12	Extrapolated	3.18	1.43	2.75	2.06
	120A	PCSP120D5N2, EVCP120D5N2, PCSP120D5IP31, EVCP120D5IP31, PCSP120D5N12, EVCP120D5N12, PCSP120D5IP54, EVCP120D5IP54	31.5	20	82.5	650	2,12	Extrapolated	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System

Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208 – 480	120A	PCSP120D2N2, EVCP120D2N2, PCSP120D2IP31, EVCP120D2IP31, PCSP120D2N12, EVCP120D2N12, PCSP120D2IP54, EVCP120D2IP54	31.5	22	82.5	650	2,12	Extrapolated	3.18	1.43	2.75	2.06
	200A	PCSP200D5N1, EVCP200D5N1, PCSP200D5IP10, EVCP200D5IP10	24	20	82.5	830	1	Extrapolated	3.18	1.43	2.75	2.06
		PCSP200D2N1, EVCP200D2N1, PCSP200D2IP10, EVCP200D2IP10	31.5	22	82.5	830	1	Extrapolated	3.18	1.43	2.75	2.06
		PCSP200D5N2, EVCP200D5N2, PCSP200D5IP31, EVCP200D5IP31, PCSP200D5N12, EVCP200D5N12, PCSP200D5IP54, EVCP200D5IP54	35.5	24	82.5	882	2	Extrapolated	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System

Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208 – 480	200A	PCSP200D2N2, EVCP200D2N2, PCSP200D2IP31, EVCP200D2IP31, PCSP200D2N12, EVCP200D2N12, PCSP200D2IP54, EVCP200D2IP54,	35.5	26	82.5	882	2	Extrapolated	3.18	1.43	2.75	2.06
	300A	PCSP300D5N1, EVCP300D5N1, PCSP300D5IP10, EVCP300D5IP10	24	20	82.5	915	1	Extrapolated	3.18	1.43	2.75	2.06
		PCSP300D2N1, EVCP300D2N1, PCSP300D2IP10, EVCP300D2IP10	31.5	22	82.5	915	1	Extrapolated	3.18	1.43	2.75	2.06
		PCSP300D5N2, EVCP300D5N2, PCSP300D5IP31, EVCP300D5IP31, PCSP300D5N12, EVCP300D5N12, PCSP300D5IP54, EVCP300D5IP54	35.5	24	82.5	962	2,12	Extrapolated	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System

Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
208 – 480	300A	PCSP300D2N2, EVCP300D2N2, PCSP300D2IP31, EVCP300D2IP31, PCSP300D2N12, EVCP300D2N12, PCSP300D2IP54, EVCP300D2IP54	35.5	26	82.5	962	2,12	Extrapolated	3.18	1.43	2.75	2.06
600-690	47A	PCSP047D6N12	51.5	20	82.5	940	12	DCL No. 94002-1501, UUT-3	3.18	1.43	2.75	2.06
		PCSP047D6N2, EVCP047D6N2, PCSP047D6IP31, EVCP047D6IP31, EVCP047D6N12, PCSP047D6IP54, EVCP047D6IP54	51.5	20	82.5	1015	2,12	Interpolated	3.18	1.43	2.75	2.06
	40A	PCSP040D7N2, EVCP040D7N2, PCSP040D7IP31, EVCP040D7IP31, PCSP040D7N12, EVCP040D7N12, PCSP040D7IP54, EVCP040D7IP54	51.5	20	82.5	1080	2,12	Interpolated	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System

Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
600-690	94A	PCSP094D6N2, EVCP094D6N2, PCSP094D6IP31, EVCP094D6IP31, PCSP094D6N12, EVCP094D6N12, PCSP094D6IP54, EVCP094D6IP54	51.5	20	82.5	1098	2,12	Interpolated	3.18	1.43	2.75	2.06
	80A	PCSP080D7N2, EVCP080D7N2, PCSP080D7IP31, EVCP080D7IP31, PCSP080D7N12, EVCP080D7N12, PCSP080D7IP54, EVCP080D7IP54	51.5	20	82.5	1175	2,12	Interpolated	3.18	1.43	2.75	2.06
	157A	PCSP157D6N2, EVCP157D6N2, PCSP157D6IP31, EVCP157D6IP31, PCSP157D6N12, EVCP157D6N12, PCSP157D6IP54, EVCP157D6IP54	55	24	82.5	1440	2,12	Interpolated	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

Certified Product Listing
AccuSine+ Power Correction System

Manufacturer: Schneider Electric Inc.

Product Category: Power Correction System

Product Line Models: AccuSine+

Product Options: AccuSine+ Power Correction Systems in NEMA Type 1, 2 and 12 Enclosures with Ampacity ratings from 40A to 300A and Voltage from 208V to 690V. Components consist of circuit breakers, transformers, contactors and filters (see Certified Major Sub-Components table).

Product Mounting: Rigid Floor Mount with Wall Restraint

AccuSine Power Correction System												
Voltage Rating (V)	Ampacity Rating (A)	Commercial Reference[1]	Width (in.)	Depth (in.)	Height (in.)	Weight (lbs)	NEMA Enclosure Type[2]	Test Status	Certification Level[3]			
									z/h = 0		z/h = 1	
									S_{DS}	F_p/W_p	S_{DS}	F_p/W_p
600-690	133A	PCSP133D7N2, EVCP133D7N2, PCSP133D7IP31, EVCP133D7IP31, PCSP133D7N12, EVCP133D7N12, PCSP133D7IP54, EVCP133D7IP54	55	24	82.5	1561	2,12	Interpolated	3.18	1.43	2.75	2.06
	235A	PCSP235D6N2, EVCP235D6N2, PCSP235D6IP31, EVCP235D6IP31, PCSP235D6N12, EVCP235D6N12, PCSP235D6IP54, EVCP235D6IP54	55	24	82.5	1670	2,12	Interpolated	3.18	1.43	2.75	2.06
	200A	PCSP200D7N2, EVCP200D7N2, PCSP200D7IP31, EVCP200D7IP31, EVCP200D7N12, PCSP200D7IP54, EVCP200D7IP54	55	24	82.5	1821	2,12	Interpolated	3.18	1.43	2.75	2.06
		PCSP200D7N12	56	26	82.5	1810	12	DCL No. 94002-1501, UUT-4	3.18	1.43	2.75	2.06

Notes:
1. See attached nomenclature sheet for reference.
2. Enclosure types are constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. Certification level is limited to the lower rating of either the Certified Product Listing, as listed here, or the internal components, as listed on the Certified Major Sub-Components table

AccuSine PCS+ and AccuSine PFV+ MODEL NUMBER NOMENCLATURE:

Example

PCSP	xxx	D5	yy
I	II	III	IV

I. Basic Model Series
xxxx = any 4 letters representing the brand designator
PCPS = PCSP is a harmonic reduction device with available Power factor correction capability
EVCP = Power factor correction device only, Harmonic reduction is disabled in FW.
Difference is with software only.

II. Maximum Current Rating, A rms

Ampere Rating	Construction
40 = 40 Amps	Enclosed rated 690 V (with autotransformer)
80 = 80 Amps	Enclosed rated 690 V (with autotransformer)
133 = 133 Amps	Enclosed rated 690 V (with autotransformer)
200 = 200 Amps	Enclosed rated 690 V (with autotransformer)
47 = 47 Amps	Enclosed rated 600 V (with autotransformer)
94 = 94 Amps	Enclosed rated 600 V (with autotransformer)
157 = 157 Amps	Enclosed rated 600 V (with autotransformer)
235 = 235 Amps	Enclosed rated 600 V (with autotransformer)
60 = 60 Amps	Open/Enclosed rated 480 V
120 = 120 Amps	Open/Enclosed rated 480 V
200 = 200 Amps	Open/Enclosed rated 480 V
300 = 300 Amps	Open/Enclosed rated 480 V

III. D = delta input
2 = 240VAC max input
5 = 480VAC max input
6 = 600VAC max input (includes autotransformer)
7 = 690VAC max input (includes autotransformer)

IV. Enclosure

IP00 = open type , all chassis wall mounted
N1 or IP20 = UL Type 1, all wall mounted
N1 or IP10 = UL Type 1, 200-300A floor standing units only
N2 or IP31 = UL Type 2, all floor standing units
N12 or IP54 = UL Type 12, all floor standing units

IP enclosure designation is for European and Asian Markets

IP20 Enclosure Extensions (terminal kit)								
Option Type	Manufacturer	Description / Identifier	Notes	Test Status[2]	Certification Level[2]			
					z/h = 0		z/h = 1	
					S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
Bottom Extension	Schneider Electric	PCSPWMKIT60A	1	DCL No. 94002-1501, UUT-1	3.06	1.38	2.84	2.13
	Schneider Electric	PCSPWMKIT120A	1	Interpolated	3.06	1.38	2.84	2.13
	Schneider Electric	PCSPWMKIT300A	1	DCL No. 94002-1501, UUT-2	3.06	1.38	2.84	2.13

Notes:
1. Enclosure extensions are constructed of carbon steel sheet, with powder-coated finish grill.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Circuit Breakers										
Rated Voltage (V)	Interrupting Current (kA)	Rated Current (A)	Manufacturer	Part No. / Identifier	Notes	Test Status[1]	Certification Level[2]			
							z/h = 0		z/h = 1	
							S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
600	200	150	Schneider Electric	HRL36150U31X		DCL No. 94002-1501, UUT-3	3.18	1.43	2.75	2.06
800	100	100	Schneider Electric	NSX100HB2		Interpolated	3.18	1.43	2.75	2.06
600	200	400	Schneider Electric	LRF36400U31X		Interpolated	3.18	1.43	2.75	2.06
800	100	400	Schneider Electric	NSX400HB2		DCL No. 94002-1501, UUT-4	3.18	1.43	2.75	2.06

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Contactor									
Rated Voltage (VAC)	Class	Rated Current (A)	Manufacturer	Part No. / Identifier	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
600	Class T	160	Schneider Electric	LC1D115	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
600	Class T	200	Schneider Electric	LC1D115004	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Filter									
Rated Voltage (V)	Temp (deg C)	Rated Current (A)	Manufacturer	Part No. / Identifier	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
600	120	60	Schneider Electric	60A Filter	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
600	120	120	Schneider Electric	120A Filter	Interpolated	3.18	1.43	2.84	2.13
600	120	200	Schneider Electric	200A Filter	Interpolated	3.18	1.43	2.84	2.13
600	120	300	Schneider Electric	300A Filter	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Pre Charge Resistor

Rated Voltage (VAC)	Resistance (Ω)	Power (W)	Manufacturer	Part No. / Identifier	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
600	10	220	Ohmite	10Ω, 220W	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
600	5	300	Ohmite	5Ω, 300W	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:

1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

DC Bus

Rated Voltage (V)	Capacitance (uF)	Temp (deg C)	Manufacturer	Part No. / Identifier	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
450	2700	85	United/Nippon	E82F451VNT272MCA5T	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
450	10000	85	Cornell Dublier	500CE1447	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:

1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

AccuSine+ Power Correction System
Certified Major Sub-Components Listing

Inductor									
Inductance (uH)	Rated Voltage (V)	Manufacturer	Part No. / Identifier	Class R (deg C)	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
200	480	Tamura	61116	220	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
100	480	Tamura	61117	220	Interpolated	3.18	1.43	2.84	2.13
60	480	Tamura	61115	220	Interpolated	3.18	1.43	2.84	2.13
40	480	Tamura	61114	220	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

IGBT									
Rated Current (A)	Rated Voltage (V)	Manufacturer	Part No. / Identifier	Class T (deg C)	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
100	1200	FUJI ELECTRIC	12MBI100VX-120-85	80	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
300	1200	FUJI ELECTRIC	4MBI300VG-120R-85	80	Interpolated	3.18	1.43	2.84	2.13
450	1200	FUJI ELECTRIC	4MBI450VB-120R1-85	80	Interpolated	3.18	1.43	2.84	2.13
650	1200	FUJI ELECTRIC	4MBI650VB-120R1-85	80	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

MOV

Rated Voltage (VAC)	Current Surge (kA)	Temp (deg C)	Manufacturer	Part No. / Identifier	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
620	20	85	Littelfuse	TMOV25SP385M	DCL No. 94002-1501, UUT-1,2,3,4	3.18	1.43	2.84	2.13

Notes:

1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Impeller

Voltage (V)	Current (A)	Manufacturer	Part No. / Identifier	Temperature (deg C)	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
480	.25	ROSENBERG	2RREut25	75	DCL No. 94002-1501, UUT-1 & 3	3.18	1.43	2.84	2.13
240	.25	ROSENBERG	2RREu25	75	Interpolated	3.18	1.43	2.84	2.13
480	.5	ROSENBERG	2RREut15	75	Interpolated	3.18	1.43	2.84	2.13
240	.5	ROSENBERG	2RREu15	75	Interpolated	3.18	1.43	2.84	2.13
480	2	ROSENBERG	DD 80-55-2	75	DCL No. 94002-1501, UUT-2 & 4	3.18	1.43	2.84	2.13

Notes:

1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

AccuSine+ Power Correction System
Certified Major Sub-Components Listing

Step Down Transformer									
Primary Voltage (V)	Secondary Voltage (V)	Manufacturer	Part No. / Identifier	Rated Current (A)	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
600	470	Tamura	60410	47	DCL No. 94002-1501, UUT-3	3.18	1.43	2.75	2.06
600	470	Tamura	60412	94	Interpolated	3.18	1.43	2.75	2.06
600	470	Tamura	60414	157	Interpolated	3.18	1.43	2.75	2.06
600	470	Tamura	60416	235	Interpolated	3.18	1.43	2.75	2.06
690	460	Tamura	60411	40	Interpolated	3.18	1.43	2.75	2.06
690	460	Tamura	60413	80	Interpolated	3.18	1.43	2.75	2.06
690	460	Tamura	60415	133	Interpolated	3.18	1.43	2.75	2.06
690	460	Tamura	60417	200	DCL No. 94002-1501, UUT-4	3.18	1.43	2.75	2.06

Notes:
1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

Power Board									
Rated Voltage (V)	Current (A)	Temp (deg C)	Manufacturer	Part No. / Identifier	Test Status	Certification Level[1]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
480	2	85	Schneider Electric	60-200 Power	DCL No. 94002-1501, UUT-1&3	3.18	1.43	2.84	2.13
480	3	85	Schneider Electric	300 Power	DCL No. 94002-1501, UUT-2&4	3.18	1.43	2.84	2.13

Notes:
1. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

AccuSine+ Power Correction System
Certified Major Sub-Components Listing

Gate Drive Board									
Voltage (V)	Current (A)	Manufacturer	Part No. / Identifier	Temp (deg C)	Test Status[1]	Certification Level[2]			
						z/h = 0		z/h = 1	
						S_{DS} (g)	F_p/W_p	S_{DS} (g)	F_p/W_p
480	.25	Schneider Electric	60 Gate Drive	75	DCL No. 94002-1501, UUT-1 & 3	3.18	1.43	2.84	2.13
480	.25	Schneider Electric	120 Gate drive	75	Interpolated	3.18	1.43	2.84	2.13
480	.25	Schneider Electric	200/300 Gate Drive	75	DCL No. 94002-1501, UUT-2 & 4	3.18	1.43	2.84	2.13

Notes:

1. The sub-components listed here include part numbers which provided identify configuration, manufacturer, and materials. Tested sub-components and interpolated items have the same manufacturer and materials and have similar configuration and construction as the tested units.
2. Certification level is limited to the lower rating of either the Certified Major Sub-Components Listing, as listed here, or the product section, as listed on the Certified Product Listing table.

UUT Summary
AccuSine+ Power Correction System

UUT Product Information			
Manufacturer	**Product Category**	**Product Line Model**	**Model Number**
Schneider Electric Inc.	Power Correction System	AccuSine Plus	PCSP060D5N1

UUT Test Report Association				
Test Lab	**Report No.**	**Report Date**	**Test Run No.**	**UUT Designation**
Dynamic Certification Laboratories	DCL No. 94002-1501	11/30/2015	1	UUT-1

UUT Notes / Description

1. The UUT is a wall mounted power correction system (system ratings here if applicable) with Terminal kit packaged in a NEMA Type 1 enclosure.
2. The NEMA Type 1 enclosure is constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. UUT full of contents.

UUT Properties (As Tested)

Weight (lbs.)	Dimensions (in.)			Lowest Natural Frequency (Hz)			Shake-Table Attachment	
	Height	Width	Depth	F-B	S-S	V	Type	Anchorage
233	60	17	15	N/A	N/A	N/A	Rigid wall mounted	(7) 3/8" diameter Grade 5 bolts at 40 ft-lbs torque.

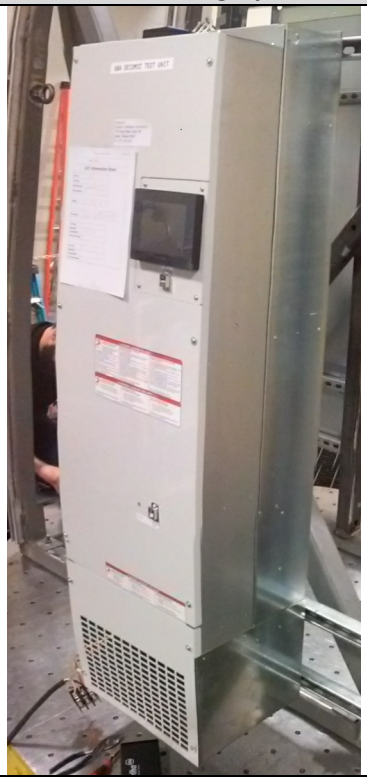
UUT Seismic Test Parameters

Building Codes	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 2016	ICC-ES AC156	3.06	0	1.5	3.06	1.22	2.05	0.83
		2.84	1	1.5	4.54	3.41	1.90	0.77

UUT Seismic Test Results

✓ The UUT maintained structural integrity and functionality as confirmed in post test inspection and active operation validation checks

UUT Photograph



UUT Major Components

Description	Manufacturer	Part No. / Identifier
Enclosure – NEMA Type 1, Carbon Steel Sheet	Schneider Electric	60H x 17W x 15D
Bottom Extension	Schneider Electric	PCSPWMKIT60A
Contactor	Schneider Electric	LC1D115, 600 Vac
Filter	Schneider Electric	60A filter board
Precharge resistor	Ohmite	10Ω, 220W
Inductor	Tamura	61116, 200 uH, 60A
IGBT	Fuji	12MBI100VX-120-85
DC BUS	United/Nippon Chemi-con	E82F451VNT272MCA5T
Impeller	ROSENBERG	2RREut25
Power board	Schneider Electric	60-200A Power Board
MOV	Littelfuse	TMOV25SP385M
Gate drive board	Schneider Electric	60A gate drive board

UUT Summary
AccuSine+ Power Correction System

UUT Product Information			
Manufacturer	**Product Category**	**Product Line Model**	**Model Number**
Schneider Electric Inc.	Power Correction System	AccuSine Plus	PCSP300D5N1

UUT Test Report Association				
Test Lab	**Report No.**	**Report Date**	**Test Run No.**	**UUT Designation**
Dynamic Certification Laboratories	DCL No. 94002-1501	11/30/2015	1	UUT-2

UUT Notes / Description

1. The UUT is a wall mounted power correction system (system ratings here if applicable) with Terminal kit packaged in a NEMA Type 1 enclosure.
2. The NEMA Type 1 enclosure is constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. UUT full of contents.

UUT Properties (As Tested)

Weight (lbs.)	Dimensions (in.)			Lowest Natural Frequency (Hz)			Shake-Table Attachment	
	Height	Width	Depth	F-B	S-S	V	Type	Anchorage
504	72	23	18	N/A	N/A	N/A	Rigid wall mounted	(8) 3/8" diameter Grade 5 bolts at 40 ft-lbs torque.

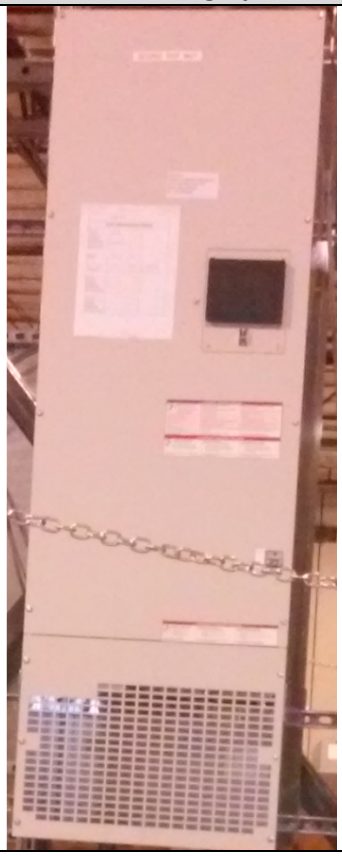
UUT Seismic Test Parameters

Building Codes	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 2016	ICC-ES AC156	3.06	0	1.5	3.06	1.22	2.05	0.83
		2.84	1	1.5	4.54	3.41	1.90	0.77

UUT Seismic Test Results

✓ The UUT maintained structural integrity and functionality as confirmed in post test inspection and active operation validation checks

UUT Photograph



UUT Major Components

Description	Manufacturer	Part No. / Identifier
Enclosure – NEMA Type 1, Carbon Steel Sheet	Schneider Electric	72H x 23W x 18D
Bottom Extension	Schneider Electric	PCSPWMKIT300A
Contactor	Schneider Electric	LC1D115004, 600 Vac,
Filter	Schneider Electric	300A filter board
Precharge resistor	Ohmite	5Ω, 300W
Inductor	Tamura	61114, 40 uH, 300A
IGBT	Fuji	4MBI650VB-120R1-85
DC BUS	CORNELL DUBILIER ELECTRONICS	500CE1447
Impeller	ROSENBERG	DD 80-55-2
Power board	Schneider Electric	300A Power Board
MOV	Littelfuse	TMOV25SP385M
Gate drive board	Schneider Electric	300A gate drive board

UUT Summary
AccuSine Power Correction System

UUT Product Information			
Manufacturer	**Product Category**	**Product Line Model**	**Model Number**
Schneider Electric Inc.	Power Correction System	AccuSine Plus	PCSP047D6N12

UUT Test Report Association				
Test Lab	**Report No.**	**Report Date**	**Test Run No.**	**UUT Designation**
Dynamic Certification Laboratories	DCL No. 94002-1501	11/30/2015	1	UUT-3

UUT Notes / Description

1. The UUT is a wall/floor mounted power correction system (system ratings here if applicable) with Terminal kit packaged in a NEMA Type 1 enclosure.
2. The NEMA Type 12 enclosure is constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. UUT full of contents.

UUT Properties (As Tested)

Weight (lbs.)	Dimensions (in.)			Lowest Natural Frequency (Hz)			Shake-Table Attachment	
	Height	Width	Depth	F-B	S-S	V	Type	Anchorage
940	82	52	20	10.3	13.5	31.8	Rigid floor mounted w/ wall restraint	Unit base: (8) 1/2" diameter Grade 5 bolts Unit back: (2) brackets at the top of the unit; Brackets attached to unit with (2) M12 bolts and to the fixture with (2) 3/8" diameter Grade 5 bolts at 40 ft-lbs

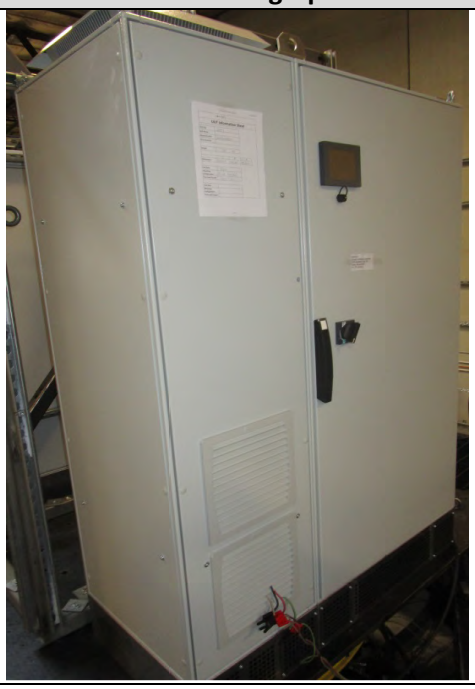
UUT Seismic Test Parameters

Building Codes	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 2016	ICC-ES AC156	3.18	0	1.5	3.18	1.27	2.13	0.86
		2.75	1	1.5	4.40	3.30	1.84	0.74

UUT Seismic Test Results

✓ The UUT maintained structural integrity and functionality as confirmed in post test inspection and active operation validation checks

UUT Photograph



UUT Major Components

Description	Manufacturer	Part No. / Identifier
Enclosure – NEMA Type 12, Carbon Steel Sheet	Schneider Electric	82H x 52W x 20D
CIRCUIT BREAKER	Schneider Electric	HRL36150U31X
Step Down Transformer	Tamura	60410
Contactor	Schneider Electric	LC1D115, 600 Vac
Filter	Schneider Electric	60A filter board
Precharge resistor	Ohmite	10Ω, 220W
Inductor	Tamura	61116, 200 uH, 60A
IGBT	Fuji	12MBI100VX-120-85
DC BUS	United/Nippon Chemi-con	E82F451VNT272MCA5T
Impeller	ROSENBERG	2RREut25
Power board	Schneider Electric	60-200A Power Board
MOV	Littelfuse	TMOV25SP385M
Gate drive board	Schneider Electric	60A gate drive board

UUT Summary
AccuSine Power Correction System

UUT Product Information			
Manufacturer	**Product Category**	**Product Line Model**	**Model Number**
Schneider Electric Inc.	Power Correction System	AccuSine Plus	PCSP200D7N12

UUT Test Report Association				
Test Lab	**Report No.**	**Report Date**	**Test Run No.**	**UUT Designation**
Dynamic Certification Laboratories	DCL No. 94002-1501	11/30/2015	1	UUT-4

UUT Notes / Description

1. The UUT is a wall/floor mounted power correction system (system ratings here if applicable) with Terminal kit packaged as a NEMA Type 1 enclosure.
2. The NEMA Type 12 enclosure is constructed of galvanized carbon steel sheet with powder-coated finished front cover.
3. UUT full of contents.

UUT Properties (As Tested)

Weight (lbs.)	Dimensions (in.)			Lowest Natural Frequency (Hz)			Shake-Table Attachment	
	Height	Width	Depth	F-B	S-S	V	Type	Anchorage
1810	82	56	26	10.8	14.3	26.5	Rigid floor mounted w/ wall restraint	(8) 1/2" diameter Grade 5 bolts at 40 ft-lbs torque. (2) brackets at the top of the unit Brackets attached to unit with (2) M12 bolts and to the fixture with (2) 3/8" diameter Grade 5 bolts

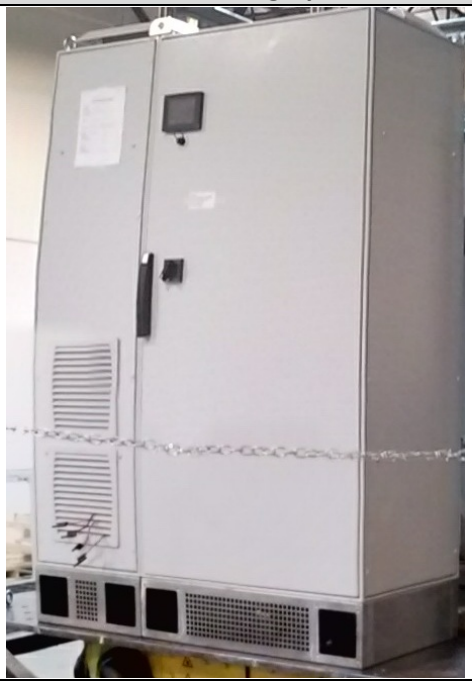
UUT Seismic Test Parameters

Building Codes	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 2016	ICC-ES AC156	3.18	0	1.5	3.18	1.27	2.13	0.86
		2.75	1	1.5	4.40	3.30	1.84	0.74

UUT Seismic Test Results

✓ The UUT maintained structural integrity and functionality as confirmed in post test inspection and active operation validation checks

UUT Photograph



UUT Major Components

Description	Manufacturer	Part No. / Identifier
Enclosure – NEMA Type 12, Carbon Steel Sheet	Schneider Electric	82H x 56W x 26D
CIRCUIT BREAKER	Schneider Electric	NSX400HB2
Step Down Transformer	Tamura	60417
Contactor	Schneider Electric	LC1D115004, 600 Vac,
Filter	Schneider Electric	300A filter board
Precharge resistor	Ohmite	5Ω, 300W
Inductor	Tamura	61114, 40 uH, 300A
IGBT	Fuji	4MBI650VB-120R1-85
DC BUS	CORNELL DUBILIER ELECTRONICS	500CE1447
Impeller	ROSENBERG	DD 80-55-2
Power board	Schneider Electric	300A Power Board
MOV	Littelfuse	TMOV25SP385M
Gate drive board	Schneider Electric	300A gate drive board