



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP – 0512 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Siemens Industry, Inc.

Manufacturer's Technical Representative: Terrance Woodyard

Mailing Address: 7000 Siemens Road, Wendell, NC 27591

Telephone: (919) 365-2458

Email: Terry.woodyard@siemens.com

Product Information

Product Name: Siemens SIEBREAK Switchgear

Product Type: Metal Enclosed Interrupter Switchgear

Product Model Number: 600A to 1200A Main Bus Sections – See attachment for identification number

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

General Description: SIEBREAK is a metal enclosed interrupter switchgear that provides medium voltage circuit protection.

Mounting Description: Rigid floor mounted

Applicant Information

Applicant Company Name: W.E. Gundy & Associates, Inc.

Contact Person: Travis Soppe, SE

Mailing Address: 250 Bobwhite Ct, Suite 100, Boise, ID 83706

Telephone: (208) 342-5898 Ext. 115

Email: tsoppe@wegai.com

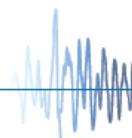
I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2016.

Signature of Applicant:  Date: 12/08/2017

Title: Vice President Company Name: W.E. Gundy & Associates, Inc.

"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 12/16/15)



OSHPD

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OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

Company Name: W.E. Gundy & Associates, Inc.
Name: Travis Soppe, SE California License Number: S6115
Mailing Address: 250 Bobwhite Ct, Suite 100, Boise, ID 83706
Telephone: (208) 342-5898 Ext. 115 Email: tsoppe@wegai.com

Supports and Attachments Preapproval

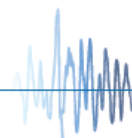
- ☐ Supports and attachments are preapproved under OPM-
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- ☒ Supports and attachments are not preapproved

Certification Method

- ☒ Testing in accordance with: ☒ ICC-ES AC156
- ☐ Other (Please Specify): _____

Testing Laboratory

Company Name: Environmental Testing Laboratory
Contact Name: Jeremy Lange
Mailing Address: 11034 Indian Trail, Dallas, TX 75229-3513
Telephone: (972) 247-9657 Email: Jeremy@etldallas.com





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) = 1.50 (z/h = 1) & 1.13 @ (z/h = 0)

S_{DS} (Design spectral response acceleration at short period, g) = 2.00 @ (z/h = 1) & 2.50 @ (z/h = 0)

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) = 1 and 0

Equipment or Component Natural Frequencies (Hz) = See Attachments

Overall dimensions and weight (or range thereof) = See Attachments

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 Product Matrix, UUT Summary Sheets, Subcomponent Certification Letter

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

Signature: _____

Date: February 23, 2018

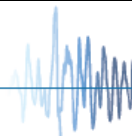
Print Name: Timothy J. Piland

Title: SSE

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

z/h = See Above

Condition of Approval (if applicable): _____



SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR

CERTIFIED PRODUCT LINE MATRIX



ID Number	System Type	Bus Ampre Rating		Enclosure Width (min - max)	Enclosure Depth (min-max)	Enclosure Height (min-max)	Tested NEMA rating Enclosure	Total Weights (lbs)	Representative UUT
		Vert. bus	Horiz. Bus					(min-max)	
NEMA 1, 1A, 2, 3R, 12 - Enclosures									
SIEBREAK-L	Typical L	1200A	N/A	36"	56"	92"	NEMA 1/1A/2	2009	UUT-6
SIEBREAK-C	Typical C	600A/1200A	N/A	36"-54"	72"	92" - 105"		1650-2050	Interpolation
SIEBREAK-A	Typical A	1200A	N/A	36"	56"	92" - 105"	NEMA 1/1A/2	2250	UUT-1
SIEBREAK-N ⁽¹⁾	Typical N	600A/1200A	600A/2000A	36"-54"	56"-82"	92" - 105"		1350-2250	Interpolation
SIEBREAK-Q	Typical Q	600A/1200A	N/A	36"-54"	56"-82"	92" - 105"		1350-2350	Interpolation
SIEBREAK-A	Typical A	1200A	N/A	36"	72"	92"	NEMA 1/1A/2	2633	UUT-4
SIEBREAK-D	Typical D	600A/1200A	N/A	36"-54"	56" to 82"	92" - 105"		1350-2525	Interpolation
SIEBREAK-M ⁽¹⁾	Typical M	600A/1200A	600A/2000A	36"-54"	56" to 82"	92" - 105"		1400-2525	Interpolation
SIEBREAK-A	Typical A	1200A	N/A	36"	72"	92"	NEMA 1/1A/2	2843	UUT-5
SIEBREAK-A	Typical A	600A/1200A	N/A	36"	56" to 82"	92" - 105"		1350-2630	Interpolation
SIEBREAK-N ⁽¹⁾	Typical N	600A	2000A	54"	82"	92"	NEMA 1/1A/2	3150	UUT-2
SIEBREAK-F	Typical F	600A/1200A	N/A	54"	56" to 82"	92" - 105"		2150-3425	Interpolation
SIEBREAK-H	Typical H	600A/1200A	N/A	36"-54"	56" to 82"	92" - 105"		2275-3425	Interpolation
SIEBREAK-K	Typical K	600A/1200A	N/A	36"-54"	56" to 82"	92" - 105"		2375-3425	Interpolation
SIEBREAK-L	Typical L	600A/1200A	600A/2000A	36"-54"	56" to 82"	92" - 105"		2375-3425	Interpolation
SIEBREAK-J	Typical J	600A/1200A	N/A	36"-54"	56" to 82"	92" - 105"		2250-3525	Interpolation
SIEBREAK-B	Typical B	600A	N/A	72"	72"	105"	NEMA 3R/12	5300	UUT-3
SIEBREAK-B	Typical B	600A/1200A	N/A	72"-90"	72"	92" - 105"		3850-5300	Extrapolation

General Notes:

All Enclosure widths have been ranged to include the 18" transition

(1) Typical M and N includes horizontal top bus up to 2000A. UUT-2 was tested with the maximum 2000A feeder bus included.

All switchgear sections that consist vacuume circuit breakers are 1 high breaker configurations.

* Indicates NEMA type 3R

**SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX**



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative
Table 1 - Load Interrupter Switches							
ML-510-000-500	PowerCon	30.88	27.6	25.88	165	15kV/600A, Manual operated	Extrapolated
ML-510-001-500	PowerCon	30.88	27.6	25.88	180	15kV/1200A, Manual operated	UUT-1 / UUT-4 / UUT-6
ML-800-002-007	PowerCon	36	36	29	225	15kV/600A, Motor operated	UUT-2
ML-800-003-007	PowerCon	36	36	29	240	15kV/1200A, Motor operated	UUT-3/UUT-5
Table 2 - Current Limiting Fuses (CL-14)							
15-171-139-007 to 022	Mersen	3	16.81	4.31	11.5		UUT-1
15-171-139-023 to 025	Mersen	3	22.81	7.94	20.5		Interpolated
15-171-140-007 to 016	Mersen	3	19.81	4.31	13.5		UUT-2
15-171-140-017	Mersen	3	22.81	7.94	24.5		Interpolated
15-171-140-018 to 023	Mersen	3	22.81	11.56	35.5		UUT-3
Table 3 - Standard Speed Expulsion Fuses (RBA2, RBA4, RBA8)							
15-171-487-005 to 017	Eaton	1.64	18.8	1.64	19	RBA2 Tested	UUT-1
15-171-487-024 to 036	Eaton	1.64	22.2	1.64	20.1		Interpolated
15-171-487-044 to 059	Eaton	2.2	20	2.2	21.1		Interpolated
15-171-487-064 to 079	Eaton	2.2	23.4	2.2	21.3		Interpolated
15-171-487-090 to 092	Eaton	2.2	20	7.69	42.2	RBA4 Tested	UUT-2
15-171-487-093	Eaton	2.2	23.4	7.69	42.6		Interpolated
15-171-487-094	Eaton	2.2	23.4	7.69	42.6		Interpolated
15-171-487-095	Eaton	2.2	23.4	7.69	42.6	RBA8 Tested	UUT-3
Table 4 - Time Lag Expulsion Fuses (RBT2, RBT4, RBT8)							
15-171-487-100 to 110	Eaton	1.64	18.8	1.64	19	RBT2 Tested	UUT-1
15-171-487-120 to 130	Eaton	1.64	22.2	1.64	19.1		Interpolated
15-171-487-140 to 153	Eaton	2.2	20	2.2	19.1	RBT4 Tested	UUT-2
15-171-487-160 to 173	Eaton	2.2	23.4	2.2	21.3		Interpolated
15-171-487-180 to 185	Eaton	2.2	20	7.69	42.2	RBT8 Tested	UUT-3

**SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX**



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative
Table 5 - Vacuum Circuit Breakers							
3AE5284-2	Siemens	22.5	15.5	25.5	115	17.5kV/25kA/1250A	UUT-4 /UUT-6
3AH3436-2	Siemens	28.75	22	25.5	142	15kV/40kA/1200A	UUT-5
Table 6 - Current Transformers							
62-300-066-101	GE ITI	10.89	3.5	10.89	34	600 V/10kV/100:5 A, Single Ratio	Extrapolated
62-300-066-151	GE ITI	10.89	3.5	10.89	34	600 V/10kV/150:5 A, Single Ratio	Extrapolated
62-300-066-201	GE ITI	10.89	3.5	10.89	34	600 V/10kV/200:5 A, Single Ratio	Extrapolated
62-300-066-251	GE ITI	10.89	3.5	10.89	34	600 V/10kV/250:5 A, Single Ratio	Extrapolated
62-300-066-301	GE ITI	10.89	3.5	10.89	34	600 V/10kV/300:5 A, Single Ratio	Extrapolated
62-300-066-401	GE ITI	10.89	3.5	10.89	34	600 V/10kV/400:5 A, Single Ratio	Extrapolated
62-300-066-501	GE ITI	10.89	3.5	10.89	34	600 V/10kV/500:5 A, Single Ratio	Extrapolated
62-300-066-601	GE ITI	10.89	3.5	10.89	34	600 V/10kV/600:5 A, Single Ratio	Extrapolated
62-300-066-801	GE ITI	10.89	3.5	10.89	34	600 V/10kV/800:5 A, Single Ratio	UUT-1
62-300-066-102	GE ITI	10.89	3.5	10.89	34	600 V/10kV/1000:5 A, Single Ratio	Interpolated
62-300-066-122	GE ITI	10.89	3.5	10.89	34	600 V/10kV/1200:5 A, Single Ratio	UUT-1 / UUT-4 / UUT-5 / UUT-6
62-300-067-601	GE ITI	10.89	3.5	10.89	34	600 V/10kV/600:5 A, Multi Ratio	Interpolated
62-300-067-801	GE ITI	10.89	3.5	10.89	34	600 V/10kV/800:5 A, Multi Ratio	Interpolated
62-300-067-122	GE ITI	10.89	3.5	10.89	34	600 V/10kV/1200:5 A, Multi Ratio	UUT-1
Table 7 - Ground Fault Current Transformers							
61-300-092-500	GE ITI	11.1	6	11.47	60	600 V/10kV/50:5 A, Single Ratio	UUT-4
61-300-078-500	GE ITI	14.52	7.35	7.48	70	600 V/10kV, Single Ratio	Interpolated
15-172-875-500	GE ITI	27.56	5.25	13.58	150	600 V/10kV/50:5A, Single Ratio	UUT-5

**SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX**



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative
Table 8 - Voltage Transformers							
15-172-788-004	GE ITI	6.38	9.31	7.07	34	2400:120V/5.6kV/60kV	Extrapolated
15-172-788-007	GE ITI	6.38	9.35	8	34	2400:120V/5.6kV/60kV	Extrapolated
15-172-788-005	GE ITI	6.38	9.31	7.07	34	4200:120V/5.6kV/60kV	Extrapolated
15-172-788-008	GE ITI	6.38	9.35	8	34	4200:120V/5.6kV/60kV	Extrapolated
15-172-788-006	GE ITI	6.38	9.31	7.07	34	4800:120V/5.6kV/60kV	Extrapolated
15-172-788-009	GE ITI	6.38	9.35	8	34	4800:120V/5.6kV/60kV	UUT-2
15-172-787-017	GE ITI	9.25	15.5	11.31	85	7200:120V/15.5kV/110kV	Interpolated
15-172-787-021	GE ITI	9.25	15.5	12.17	85	7200:120V/15.5kV/110kV	Interpolated
15-172-787-018	GE ITI	9.25	15.5	11.31	85	8400:120V/15.5kV/110kV	Interpolated
15-172-787-022	GE ITI	9.25	15.5	12.17	85	8400:120V/15.5kV/110kV	Interpolated
15-172-787-019	GE ITI	9.25	15.5	11.31	85	12000:120V/15.5kV/110kV	Interpolated
15-172-787-023	GE ITI	9.25	15.5	12.17	85	12000:120V/15.5kV/110kV	Interpolated
15-172-787-020	GE ITI	9.25	15.5	11.31	85	14400:120V/15.5kV/110kV	Interpolated
15-172-787-024	GE ITI	9.25	15.5	12.17	85	14400:120V/15.5kV/110kV	UUT-3/UUT-4
15-172-787-117	Arteche	9.21	13.13	9.85	80	7200:120V/17.5kV/95kV	UUT-3
15-172-787-121	Arteche	9.21	13.13	9.85	80	7200:120V/17.5kV/95kV	Interpolated
15-172-787-118	Arteche	9.21	13.13	9.85	80	8400:120V/17.5kV/95kV	Interpolated
15-172-787-122	Arteche	9.21	13.13	9.85	80	8400:120V/17.5kV/95kV	Interpolated
15-172-787-119	Arteche	9.21	13.13	9.85	80	12000:120V/17.5kV/95kV	Interpolated
15-172-787-123	Arteche	9.21	13.13	9.85	80	12000:120V/17.5kV/95kV	Interpolated
15-172-787-120	Arteche	9.21	13.13	9.85	80	14400:120V/17.5kV/95kV	Interpolated
15-172-787-124	Arteche	9.21	13.13	9.85	80	14400:120V/17.5kV/95kV	UUT-3

SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative
Table 9 - Control Power Transformers							
15-172-867-001	GE ITI	9	17	14.12	165	2400-4800:120V/5kV/60kV	UUT-1
15-172-867-002	GE ITI	9	17	14.12	165	4160:120V/5kV/60kV	Interpolated
15-172-867-003	GE ITI	9	17	14.12	165	4800:120V/5kV/60kV	Interpolated
15-172-867-006	GE ITI	9	17	14.12	165	7200:120V/15kV/95kV	Interpolated
15-172-867-010	GE ITI	9	17	14.12	165	8400:120V/15kV/95kV	Interpolated
15-172-867-011	GE ITI	9	17	14.12	165	12000:120V/15kV/95kV	Interpolated
15-172-867-012	GE ITI	9	17	14.12	165	12470:120V/15kV/95kV	Interpolated
15-172-867-013	GE ITI	9	17	14.12	165	13200:120V/15kV/95kV	Interpolated
15-172-867-014	GE ITI	9	17	14.12	165	13800:120V/15kV/95kV	UUT-5
15-172-867-015	GE ITI	9	17	14.12	165	14400:120V/15kV/95kV	Interpolated
15-172-867-031	GE ITI	11.5	17	15.38	250	2400:120V/5kV/60kV	Interpolated
15-172-867-032	GE ITI	11.5	17	15.38	250	4160:120V/5kV/60kV	Interpolated
15-172-867-033	GE ITI	11.5	17	15.38	250	4800:120V/5kV/60kV	Interpolated
15-172-867-036	GE ITI	11.5	17	15.38	250	7200:120V/15kV/95kV	Interpolated
15-172-867-040	GE ITI	11.5	17	15.38	250	8400:120V/15kV/95kV	Interpolated
15-172-867-041	GE ITI	11.5	17	15.38	250	12000:120V/15kV/95kV	Interpolated
15-172-867-042	GE ITI	11.5	17	15.38	250	12470:120V/15kV/95kV	Interpolated
15-172-867-043	GE ITI	11.5	17	15.38	250	13200:120V/15kV/95kV	Interpolated
15-172-867-044	GE ITI	11.5	17	15.38	250	13800:120V/15kV/95kV	Interpolated
15-172-867-045	GE ITI	11.5	17	15.38	250	14400:120V/15kV/95kV	Interpolated
15-172-867-061	GE ITI	11.5	17	15.38	290	2400:120V/5kV/60kV	Interpolated
15-172-867-062	GE ITI	11.5	17	15.38	290	4160:120V/5kV/60kV	Interpolated
15-172-867-063	GE ITI	11.5	17	15.38	290	4800:120V/5kV/60kV	Interpolated
15-172-867-066	GE ITI	11.5	17	15.38	290	7200:120V/15kV/95kV	Interpolated
15-172-867-070	GE ITI	11.5	17	15.38	290	8400:120V/15kV/95kV	Interpolated
15-172-867-071	GE ITI	11.5	17	15.38	290	12000:120V/15kV/95kV	Interpolated
15-172-867-072	GE ITI	11.5	17	15.38	290	12470:120V/15kV/95kV	Interpolated
15-172-867-073	GE ITI	11.5	17	15.38	290	13200:120V/15kV/95kV	Interpolated

**SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX**



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative
Table 9 cont'd - Control Power Transformers							
15-172-867-074	GE ITI	11.5	17	15.38	290	13800:120V/15kV/95kV	Interpolated
15-172-867-075	GE ITI	11.5	17	15.38	290	14400:120V/15kV/95kV	UUT-2
Table 10 - Surge Arresters							
77-615-001-001	Siemens	4.7	4.7	6.7	3.2	3kV/20kA	UUT-3
77-615-001-002	Siemens	4.7	4.7	6.7	3.5	6kV/20kA	Interpolated
77-615-001-003	Siemens	4.7	4.7	6.7	3.7	9kV/20kA	Interpolated
77-615-001-004	Siemens	4.7	4.7	6.7	3.7	10kV/20kA	Interpolated
77-615-001-005	Siemens	4.7	4.7	7.9	4.3	12kV/20kA	Interpolated
77-615-001-006	Siemens	4.7	4.7	9.4	5.2	15kV/20kA	Interpolated
77-615-001-007	Siemens	4.7	4.7	9.4	5.4	18kV/20kA	Interpolated
77-615-001-020	Siemens	4.7	4.7	7	6	3kV/20kA	Interpolated
77-615-001-022	Siemens	4.7	4.7	7	6	9kV/20kA	Interpolated
77-615-001-023	Siemens	4.7	4.7	7	7	10kV/20kA	Interpolated
77-615-001-024	Siemens	4.7	4.7	8	7	12kV/20kA	UUT-2
77-615-001-025	Siemens	4.7	4.7	8	7	15kV/20kA	Interpolated
77-615-001-026	Siemens	4.7	4.7	9	8	18kV/20kA	Interpolated
77-615-001-040	Siemens	4.7	4.7	12	13	3kV/65kA	Interpolated
77-615-001-041	Siemens	4.7	4.7	12	13	6kV/65kA	Interpolated
77-615-001-042	Siemens	4.7	4.7	12	14	9kV/65kA	Interpolated
77-615-001-043	Siemens	4.7	4.7	12	14	10kV/65kA	Interpolated
77-615-001-044	Siemens	4.7	4.7	12	14	12kV/65kA	Interpolated
77-615-001-045	Siemens	4.7	4.7	12	15	15kV/65kA	Interpolated
77-615-001-046	Siemens	4.7	4.7	12	15	18kV/65kA	UUT-3 / UUT-4 / UUT-5

**SIEMENS - SIEBREAK - 600A - 1200A SWITCHGEAR
CERTIFIED SUB-COMPONENT MATRIX**



Subcomponent ID or Siemens PN	Manufacturer	Width (in)	Depth (in)	Height (in)	Weight (lbs)	Notes	Representative

Table 11 - Meters

PACS – P/N 77615000416	Siemens	3.78	3.23	3.78	1.2		UUT-5
PACS – P/N 77615000413	Siemens	3.78	2.2	3.78	1		UUT-4

Table 12 - Relays

7SJ80	Siemens	2.9	10.45	9.02	8.8		UUT-6
7SJ82	Siemens	5.91	10.55	9.02	10.6		Interpolated
7UT82	Siemens	5.71	10.55	9	10.6		Interpolated
7UT85	Siemens	8.66	10.55	9	17.8		UUT-4
SEL 751	Schweitzer	5.67	7.56	6.92	6		UUT-6
SEL 787	Schweitzer	5.67	7.56	6.92	4.4		UUT-4
Multilin 760	GE	8.52	9.93	8.8	17.4		UUT-5
Multilin 845	GE	8.42	9.9	9.1	19.8		Interpolated
Multilin 735	GE	8.52	9.93	8.8	19.8		Interpolated
Multilin 750	GE	8.52	9.93	8.8	17.4		Interpolated
Multilin 850	GE	8.42	9.9	9.1	19.8		Interpolated
Multilin 745	GE	8.52	9.93	8.8	18.5		UUT-5

Table 13 - Motorized Option (Motor Drive Sytem Unit)

557-1206-5	PowerCon	36	9	10.16	60		UUT-3 / UUT-5

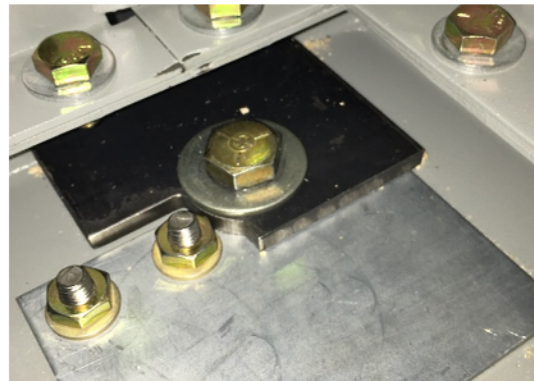
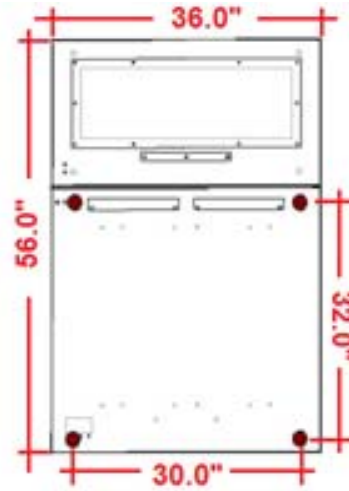
General Notes:

UUT-1

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts (2 bolts in both front and middle) with 1/4" seismic washers.



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebreak Melis Switchgear

Identification Number: SIEBREAK-MELIS-A-1200A

UUT Function: Seibreak Melis Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of three NEMA 1/1A/2 carbon steel enclosures with 1200A feeder bus with fuses and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, (3) fuses, (1) load interrupter switch, (3) current transformers, and (1) control power transformer.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
1,862	36	56	92	9.81	6.44	21.26

SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

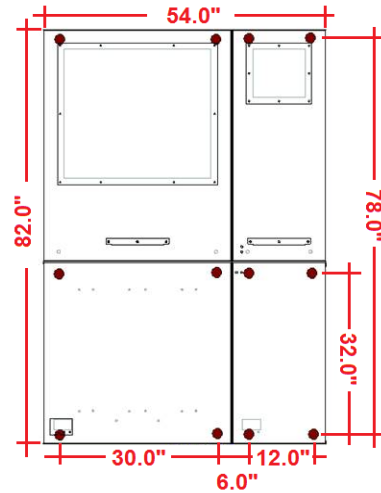
Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-2

UNIT UNDER TEST (UUT) SUMMARY SHEET



Mounting Details: Floor mounted with 12 - 1/2" diameter grade 5 bolts (4 bolts in both front, middle and rear) with 1/4" seismic washers.



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebreak Melis Switchgear

Identification Number: SIEBREAK-MELIS-N-1200A

UUT Function: Seibreak Melis Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of two NEMA 1/1A/2 carbon steel enclosures bolted together that contain 1200A feeder bus, 2000A top bus, fuses, and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, 2000A copper top bus, (3) fuses, (1) load interrupter switch, (3) voltage transformer, (1) control power transformer, and (3) surge arresters.

UUT PROPERTIES

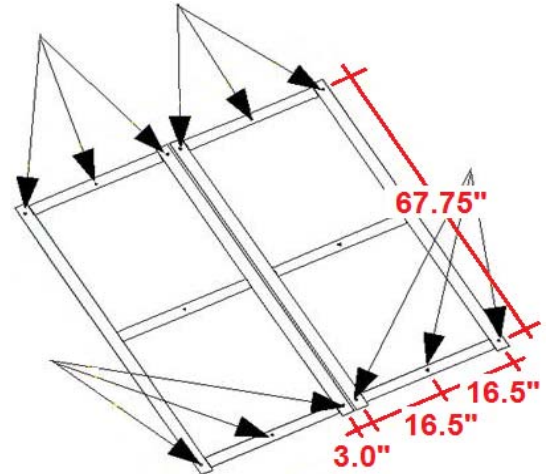
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
2,925	54"	82"	92"	8.92	8.88	7.67

SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

Mounting Details: Floor mounted with 12 - 1/2" diameter grade 5 bolts (6 bolts in both front, and rear).



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebreak Melis Switchgear

Identification Number: SIEBREAK-MELIS-B-1200A

UUT Function: Seibreak Melis Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of two NEMA 3R/12 carbon steel enclosures bolt together containing 1200A feeder bus with fuses and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, (3) fuses, (1) load interrupter switch, (3) voltage transformer, (6) surge arresters, and (1) motor drive system.

UUT PROPERTIES

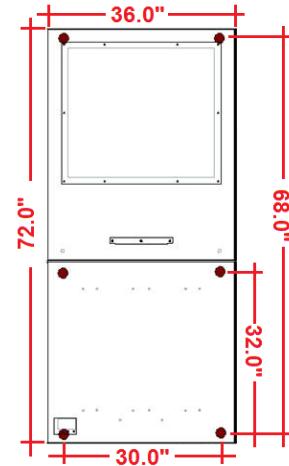
Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
5,330	72"	72"	105"	7.25	6.69	14.49

SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

Mounting Details: Floor mounted with 6 - 1/2" diameter grade 5 bolts (2 bolts in both front, middle and rear) with 1/4" seismic washers.



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebreak Switchgear

Identification Number: SIEBREAK-A

UUT Function: SIEBREAK Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of one NEMA 1/1A/2 carbon steel enclosure containing 1200A feeder bus with vacuum circuit breakers and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, (3) vacuum circuit breaker, (1) load interrupter switch, (6) current transformers, (3) ground fault current transformers, (3) voltage transformers, (6) surge arresters, (1) meter, and (2) relays.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
2,633	36"	72"	92"	11.37	7.32	23.91

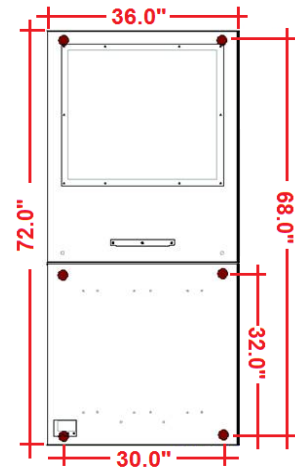
SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-5**UNIT UNDER TEST (UUT)
SUMMARY SHEET**

Mounting Details: Floor mounted with 6 - 1/2" diameter grade 5 bolts (2 bolts in both front, middle and rear) with 1/4" seismic washers.



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebbreak Switchgear

Identification Number: SIEBREAK-A

UUT Function: SIEBREAK Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of one NEMA 1/1A/2 carbon steel enclosure containing 1200A feeder bus with vacuum circuit breakers and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, (3) vacuum circuit breaker, (1) load interrupter switch, (6) current transformers, (3) ground fault current transformers, (1) control power transformers, (6) surge arresters, (1) meter, (2) relays, and (1) motor.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
2,843	36"	72"	92"	9.72	7.29	20.13

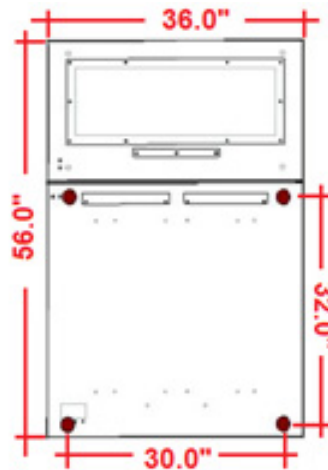
SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.

UUT-6**UNIT UNDER TEST (UUT)
SUMMARY SHEET**

Mounting Details: Floor mounted with 4 - 1/2" diameter grade 5 bolts (2 bolts in both front and middle) with 1/4" seismic washers.



Manufacturer: Siemens Industry, Inc.

Product Line: 600A to 1200A Siebreak Switchgear

Identification Number: SIEBREAK-L

UUT Function: SIEBREAK Switchgear provides medium voltage circuit protection.

UUT Description: The unit is comprised of one NEMA 1/1A/2 carbon steel enclosure containing 1200A feeder bus with vacuum circuit breakers and load interrupter switches.

UUT Component Description: NEMA1 carbon steel enclosure, 1200A copper feeder bus, (3) vacuum circuit breaker, (1) load interrupter switch, (6) current transformers, and (2) relays.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Enclosure Width	Enclosure Depth	Enclosure Height	FB	SS	V
2,009	36"	56"	92"	10.87	6.83	21.34

SEISMIC TEST PARAMETERS

Test Criteria	S _{DS} (g)	z / h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2016 / ICC-ES-AC156	2.00	1	1.5	3.2g	2.4g	-	-
CBC 2016 / ICC-ES-AC156	2.50	0	1.5	-	-	1.67g	0.67g

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 Test.