



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

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

OFFICE USE ONLY

APPLICATION #: OSP-0834

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Eaton

Manufacturer's Technical Representative: Chris Bridges

Mailing Address: 2210 Highway 72 / 221 East, Greenwood, SC 29649

Telephone: (864) 942-6181

Email: ChristopherHBridges@Eaton.com

Product Information

Product Name: VacClad-W Medium Voltage Switchgear

Product Model Number(s): See attachment

Product Category: Switchgear/Switchboards

Product Sub-Category: Switchgear - Medium Voltage

General Description: Medium Voltage Metal Enclosed Switchgear, 4000A maximum, NEMA 1 and 3R enclosures.

Mounting Description: Base Mounted Rigid -

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

Telephone: (208) 342-5989

Email: tsoppe@wegai.com

Title: President





**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

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

Company Name: W.E. GUNDY & ASSOCIATES INC.
 Name: Travis Soppe California License Number: S6115
 Mailing Address: P.O. Box 9121, Boise, ID 83707
 Telephone: (208) 342-5989 Email: tsoppe@wegai.com

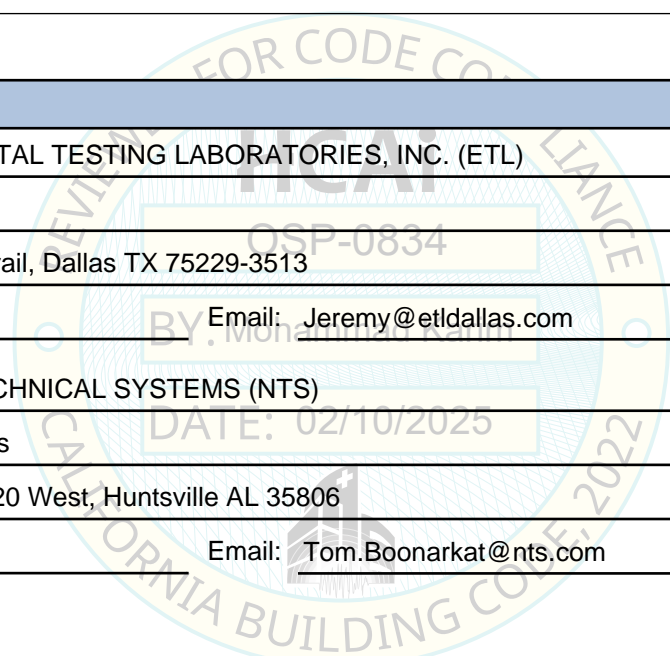
Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3
 Other (Please Specify): _____

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)
 Contact Person: Jeremy Lange
 Mailing Address: 11034 Indian Trail, Dallas TX 75229-3513
 Telephone: (972) 247-9657 Email: Jeremy@etldallas.com

Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)
 Contact Person: Tom Boonarkats
 Mailing Address: 7800 Highway 20 West, Huntsville AL 35806
 Telephone: (256) 837-4411 Email: Tom.Boonarkat@nts.com





**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT**

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.24 for SDS = 1.65 at z/h = 1 and 1.13 for SDS = 2.5 at z/h = 0

SDS (Design spectral response acceleration at short period, g) = 1.65 (z/h = 1.0) and 2.5 (z/h = 0.0)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 02/10/2031

Date: 2/10/2025

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.65 z/h = 1

Condition of Approval (if applicable): DATE: 02/10/2025

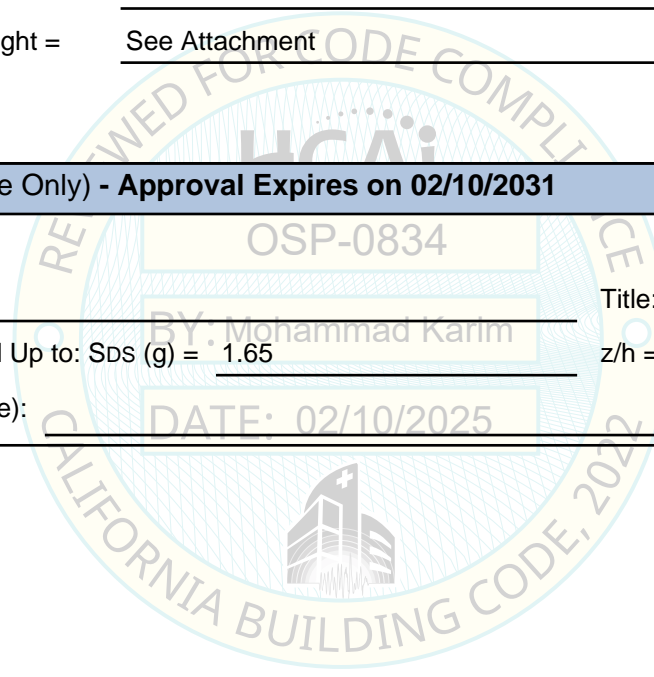


TABLE 1

**EATON VACCLAD-W MV SWITCHGEAR
SEISMIC CERTIFICATION PRODUCT LINE MATRIX**



Seismic Certification Limits: $S_{DS} = 1.65$ at $z/h = 1.0$ and $S_{DS} = 2.5$ at $z/h = 0$

Section Type ^{1,3}	Main Bus Amperage	Rated Voltage	NEMA ²	Enclosure Dimensions (in)			Max Height COG (in)	Weight (lbs)	Representative UUT ⁴
				Width	Depth	Height			
VacClad5-AUX	1200A	5-15kV	1	26	78.5	83.5	36.6	1333	UUT _y -23
VacClad5-1H	1200A	5-15kV	1	26	78.5	83.5	36.0	1612	UUT _y -22
VacClad5-AUX	1200-2000A	5kV	1	26	78.5 - 96	80 - 95	40	1400 - 1800	interpolated
VacClad5-1H	1200-2000A	5kV	1	26	78.5 - 96	80 - 95	42	1800 - 2200	interpolated
VacClad27-AUX	1200 - 2700A	27kV	1	36	96	95	56	2300 - 2600	interpolated
VacClad5-2H	1200-2000A	5kV	1	26	78.5 - 96	80 - 95	43	2700 - 2900	interpolated
VacClad-AUX	1200-4000A	5-15kV	1	36	86 - 120	95	56	2700 - 3000	interpolated
VacClad27-1H	1200 - 2000A	27kV	1	36	96	95	58	2900 - 3100	interpolated
VacClad-AUX	3000A	5-15kV	3R	36	101	115	58.4	3219	UUT _x -1B
VacClad27-AUX	1200 - 2700A	27kV	3R	36	110 - 134	115 - 122	60	2900 - 3400	interpolated
VacClad-AUX	1200-4000A	5-15kV	3R	36	110	115	59	3300 - 3600	interpolated
VacClad27-AUX	2500A	27kV	3R	36	133.6	121.6	60.0	3728	UUT _z -39B
VacClad27-1H	1200 - 2000A	27kV	3R	36	110 - 134	115 - 122	58	3200 - 3900	interpolated
VacClad27-2H	1200 - 2700A	27kV	1	36	108 - 118	100	58	3200 - 3900	interpolated
VacClad27-AUX	1200A	27kV	3R	36	133.6	121.6	61.6	3844	UUT _w -41B
VacClad-1H	1200-4000A	5-15kV	1	36	86 - 120	95	58	3500 - 4100	interpolated
VacClad-2H	1200-4000A	5-15kV	1	36	86 - 120	95	58	3900 - 4600	interpolated
VacClad-1H	1200-4000A	5-15kV	3R	36	110	115	57	4100 - 4700	interpolated
VacClad-1H	3000A	5-15kV	3R	36	101	115	62.5	4828	UUT _x -1A
VacClad-AUX	4000A	5-15kV	1	40	102.8	130.5	56.9	4834	UUT _y -25
VacClad-1H	4000A	5-15kV	1	40	98.5	106	58.1	5215	UUT _y -24
VacClad27-2H	1200A	27kV	3R	36	133.6	121.6	59.7	5250	UUT _w -41A
VacClad-2H	1200-4000A	5-15kV	3R	36	110	115	56	4800 - 5400	interpolated
VacClad27-2H	1200 - 2700A	27kV	3R	36	110 - 134	115 - 122	56	3800 - 5650	interpolated
VacClad27-2H	2500A	27kV	3R	36	133.6	121.6	59.7	5615	UUT _z -39A

General Notes:

- The part numbers listed uniquely identify the type of component, manufacturer, and material of construction for each sub-component with the units.
- NEMA 1 / 3R enclosures are constructed of carbon steel.
- Standalone sections of switchgear are not seismically certified. A minimum of 2 mated sections is required for seismic certification.
- Subscript indicates the test report in which the units were qualified:



w - 17551-Rev 0 / x - 58271R11-4 / y - 71272R13 / z - 17426-Rev 1

TABLE 2	EATON VACCLAD-W MV SWITCHGEAR CERTIFIED SUBCOMPONENT MATRICES			 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING	
ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹	
Power Circuit Breakers					
50 VCP-WND 250	Eaton	1200A	350	UUT _x -22	
50 VCP-W 250-500	Eaton	1200A - 3000A	350 - 575	interpolated	
75 VCP-W 500	Eaton	1200A - 3000A	375 - 525	interpolated	
150 VCP-W 500-1500	Eaton	1200A - 3000A	350 - 575	interpolated	
27VCP-W25	Eaton	1200A	417	UUT _w -41A	
27VCP-W16-40	Eaton	1200A - 2000A	417 - 453	interpolated	
27VCP-W40	Eaton	2000A	453	UUT _w -41A	
270 VCP-W 25	Eaton	1200A	480	UUT _z -39A	
150 VCP-W 750	Eaton	3000A	525	UUT _x -1A	
270 VCP-W 25C-40C	Eaton	1200A - 1600A	545 - 560	interpolated	
150 VCP-W 1500,63C	Eaton	3000A	575	UUT _y -24	
270 VCP-W 16-40	Eaton	1200A - 2000A	480 - 600	interpolated	
270 VCP-W 40	Eaton	2000A	600	UUT _z -39A	
Instrument Transformers - PT / CT / VT					
7525A60*	ABB	700 VA VT VIY-60	36	extrapolated	
7525A61*	ABB	700 VA VT VIY-60	36	extrapolated	
7525A64G08	ABB	1000 VA VT VIZ-11 14400/120V L-L	65	UUT _y -25	
7525A64*	ABB	1000 VA VT VIZ-11	65	interpolated	
7525A65*	ABB	1000 VA VT VIZ-11	65	interpolated	
7525A70*	ABB	1500VA VT VIZ-11 / 1500VA VT VIZ-75	65	interpolated	
7525A70G02	ABB	1500VA VT VIZ-75 4200/120V	65	UUT _y -30	
V22.1	Amran	750 VA VIZ-12G L-G	115	UUT _w -41B	
V22.2	Amran	750 VA VIZ-12 L-L	100	UUT _w -41B	
VIZ-12G L-G	ABB	750 VA VIZ-12G L-G	115	UUT _w -41B	
VIZ-12	ABB	750 VA VIZ-12 L-L	100	UUT _w -41B	
PTW5-1-110-1442S	GE	1500 VA VT PTW5 14400 / 120 L-L	85	UUT _x -1B	

TABLE 2

**EATON VACCLAD-W MV SWITCHGEAR
CERTIFIED SUBCOMPONENT MATRICES**

ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹
Instrument Transformers - PT / CT / VT				
3A39136H*	AFP	CPT 5 KVA 1PH	127	extrapolated
3A39136H*	AFP	CPT 10 KVA 1PH	215	extrapolated
3A39136H*	AFP	CPT 15 KVA 1PH	250	extrapolated
3A39136H07A	AFP	CPT 15 KVA 1PH 4160/240-120V	250	UUT _y -31
4105*	AFP	CPT, AFP, 15KVA, 1-PH	425	interpolated
4105136	AFP	CPT, AFP, 15KVA, 1-PH 24940/240-120	425	UUT _z -39B
4107*	AFP	CPT, AFP, 37.5 KVA 1-PH, 4 TAPS	550	interpolated
460506V	AFP	CPT, AFP, 45 KVA, 3-PH 13800/120-208	655	UUT _y -25
1C19636H*	ITI	750 VA, VT, LL / LG	34	extrapolated
1C19636H21	ITI	750 VA, VT, 2400/120V LG	34	UUT _y -22
1C19636H*	ITI	1500 VA, VT, LL / LG	85	interpolated
3A39136H*	ITI	CPT 5 KVA 1PH	165	interpolated
3A39136H*	ITI	CPT 10 KVA 1PH	250	interpolated
3A39136H*	ITI	CPT 15 KVA 1PH	290	interpolated
3A39136H19C	ITI	CPT 15kVA 1PH 12470/240-120V	290	UUT _x -1B
6353C88H14	ABB	CT, ABB, SCV 2500/5 SR STD	29	UUT _z -39A
6353C88H13	ABB	CT, ABB, SCV 2000/5 SR STD	29	UUT _z -39A
6350C23H01	ABB	CT, ABB, SCV 600/5 MR STD	29	UUT _z -39A
6350C27H01	ABB	CT, ABB, SCV 4000/5 MR STD	29	UUT _z -39A
SCV*	ABB	CT, ABB, SCV, STD	29	interpolated
SCV-D*	ABB	CT, ABB, SCV-D, HI	48	interpolated
6353C89H03	ABB	CT, ABB, SCV-D 100/5 SR HI	48	UUT _z -39A
6436C49H01	ABB	CT, ABB, SCV-D 3000/5 MR HI	48	UUT _z -39A
CT101-101	AMRAN	CT, AMRAN, CT101 100/5 SR STD	30	UUT _w -41A
CT101-201	AMRAN	CT, AMRAN, CT101 200/5 SR STD	30	UUT _w -41A
CT101*	AMRAN	CT, AMRAN, CT101, SR STD	30	interpolated
CT102-122MR	AMRAN	CT, AMRAN, CT102 1200/5 MR STD	31	UUT _w -41A
CT102-202MR	AMRAN	CT, AMRAN, CT102 2000/5 MR STD	31	UUT _w -41A
CT102*	AMRAN	CT, AMRAN, CT102, MR STD	31	interpolated

TABLE 2	EATON VACCLAD-W MV SWITCHGEAR CERTIFIED SUBCOMPONENT MATRICES			 WEGAI <small>W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING</small>	
ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT ¹	
Instrument Transformers - PT / CT / VT					
CT103-122	AMRAN	CT, AMRAN, CT103 1200/5 SR HI	59	UUT _w -41A	
CT103-202	AMRAN	CT, AMRAN, CT103 2000/5 SR HI	59	UUT _w -41A	
CT103*	AMRAN	CT, AMRAN, CT103, SR HI	59	interpolated	
CT104*	AMRAN	CT, AMRAN, CT104, MR HI	59	interpolated	
CT104-122MR	AMRAN	CT, AMRAN, CT104 1200/5 MR HI	59	UUT _w -41A	
CT104-202MR	AMRAN	CT, AMRAN, CT104 2000/5 MR HI	59	UUT _w -41A	
Drawout Fuses					
1A34310H01	COOPER BUSSMANN	36KV 3.15E FUSES AND CLIPS	1	UUT _z -39B	
677C452G29	Eaton	25KV 1.0E FUSES AND CLIPS	2	UUT _z -39B	
677C452G24	Eaton	25KV 0.5E FUSES AND CLIPS	2	interpolated	
677C452G25	Eaton	38KV 0.5E FUSES AND CLIPS	2	UUT _z -39B	
Control Board / Control Components					
1C19582G101	Eaton	MR2 O/C Assembly	14	UUT _z -39A	
<p>DATE: 02/10/2025</p> 					

UUT_x-1A

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



Mounting Details: Rigid floor mounted with (6) 5/8" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: February 2011
Component: VacClad-1H	Report Number: 58271R11-4
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: One-High breaker section, NEMA 3R frame with 3000A main bus and 3000A 150 VCP-W750 circuit breaker.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
4,828	36.0	101.3	115.0	8.7	4.0	18.0

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	1.65	1.0	1.5	2.64	1.98	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_x-1B

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



Mounting Details: Rigid floor mounted with (6) 5/8" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: February 2011
Component: VacClad-AUX	Report Number: 58271R11-4
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Auxiliary section, NEMA 3R frame with 3000A main bus, PTW5-1-110-1442S voltage transformer and 3A39136H19C current potential transformer	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,219	36.0	101.3	115.0	8.7	4.0	18.0

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{AFLX-H} (g)	A _{ARIG-H} (g)	A _{AFLX-V} (g)	A _{ARIG-V} (g)
CBC 2022 / ICC-ES AC156	1.65	1.0	1.5	2.64	1.98	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-22

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



Mounting Details: Rigid floor mounted with (6) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: October 2013
Component: VacClad5-1H	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: One-High breaker section, NEMA 1 frame with 1200A main bus, 50 VCP-WND 250 circuit breaker and 1C19636H21 potential transformer, and SR350/SR750 relays	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,612	26.3	78.5	83.5	17.0	10.5	26.0

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{AFLX-H} (g)	A _{ARIG-H} (g)	A _{AFLX-V} (g)	A _{ARIG-V} (g)
CBC 2022 / ICC-ES AC156	2.40	1.0	1.5	3.84	2.88	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-23

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



Mounting Details: Rigid floor mounted with (6) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: October 2013
Component: VacClad5-AUX	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Auxiliary section, NEMA 1 frame with 1200A main bus and ATC600 automatic transfer relay / controller	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,333	26.3	78.5	83.5	17.0	10.5	26.0

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.40	1.0	1.5	3.84	2.88	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-24

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



Mounting Details: Rigid floor mounted with (6) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: October 2013
Component: VacClad-1H	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: One-High breaker section, NEMA 1 frame with 4000A main bus, 150 VCP-W 1500,63C circuit breaker, EDR3000 / SEL 751A / ABB-SC relays	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
5,215	40.1	98.5	106.0	11.0	5.2	> 33.0

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{AFLX-H} (g)	A _{ARIG-H} (g)	A _{AFLX-V} (g)	A _{ARIG-V} (g)
CBC 2022 / ICC-ES AC156	1.95	1.0	1.5	3.12	2.34	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-25

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



Mounting Details: Rigid floor mounted with (6) 3/8" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: VacClad-W MV Switchgear	Test Date: October 2013
Component: VacClad-AUX	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Auxiliary section, NEMA 1 frame with 4000A main bus, 7525A64G08 voltage transformer, 460506V current potential transformer, and EDR5000 relay	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
4,834	40.1	102.8	130.5	13.0	4.80	24.0

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	1.85	1.0	1.5	2.96	2.22	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-30

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



Mounting Details: Rigid floor mounted with (5) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: Medium Voltage Switchgear	Test Date: October 2013
Component: MVS2-AUX	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Auxiliary section, NEMA 1 frame with 2000A main bus, MVS2 switch and 1.5 kVA 1-PH CPT (Part # 7525A70G02)	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,372	39.8	84.3	96.8	11.0	3.8	24.0

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_y-31

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



Mounting Details: Rigid floor mounted with (5) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: Medium Voltage Switchgear	Test Date: October 2013
Component: MVS2-AUX	Report Number: 71272R13
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Auxiliary section, NEMA 1 frame with 2000A main bus, MVS2 switch and 15kVA CPT (Part #3A39136H07A)	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
1,600	39.8	84.3	96.8	11.0	3.8	24.0

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _p	A _{AFLX-H} (g)	A _{ARIG-H} (g)	A _{AFLX-V} (g)	A _{ARIG-V} (g)
CBC 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_z-39A

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



Mounting Details: Rigid floor mounted with (4) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: ETL, Dallas TX
Product Line: VacClad-W MV Switchgear	Test Date: August 2024
Component: VacClad27-2H	Report Number: 17426-Rev1

UUT Function: Control, protection, and isolation of electrical equipment

UUT Description: Two-High breaker section, NEMA 3R frame with 2500A main bus, 270 VCP-W 25 / 270 VCP-W 40 circuit breakers, 6353C / 6350C / 6436C current transformers, and 1C19582G101 MR2 controller

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
5,615	36	133.6	121.6	> 33	4.2	16.1

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_z-39B

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



Mounting Details: Rigid floor mounted with (4) 1/2" grade 5 bolts



Manufacturer: Eaton	Test Location: ETL, Dallas TX
Product Line: VacClad-W MV Switchgear	Test Date: August 2024
Component: VacClad27-AUX	Report Number: 17426-Rev1

UUT Function: Control, protection, and isolation of electrical equipment

UUT Description: Auxiliary section, NEMA 3R frame with 2500A main bus, 4105136 current potential transformer, 1A34310H01 / 677C452G29 / 677C452G25 fuses

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,728	36	133.6	121.6	> 33	4.2	16.1

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_w-41A

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



Mounting Details: Rigid floor mounted with (4) 5/8" grade 5 bolts



Manufacturer: Eaton	Test Location: ETL, Dallas TX
Product Line: VacClad-W MV Switchgear	Test Date: November 2024
Component: VacClad27-2H	Report Number: 17551-Rev1
UUT Function: Control, protection, and isolation of electrical equipment	
UUT Description: Two-High breaker section, NEMA 3R frame with 1200A main bus, 27VCP-W25 / 27VCP-W40 circuit breakers, CT101 / CT102 / CT103 / CT104 current transformers	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
5,250	36	133.6	121.6	> 33	2.99	5.55

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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_w-41B

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



Mounting Details: Rigid floor mounted with (4) 5/8" grade 5 bolts



Manufacturer: Eaton	Test Location: ETL, Dallas TX
Product Line: VacClad-W MV Switchgear	Test Date: November 2024
Component: VacClad27-AUX	Report Number: 17551-Rev1

UUT Function: Control, protection, and isolation of electrical equipment

UUT Description: Auxiliary section, NEMA 3R frame with 1200A main bus, V22.1 / V22.2 voltage transformers, and VIZ-12G L-G / VIZ-12 voltage transformers

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
3,844	36	133.6	121.6	> 33	2.99	5.55

SEISMIC TEST PARAMETERS

Building Code / 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 2022 / ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
	2.50	0	1.5	-	-	1.67	0.67

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.