



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY
APPLICATION #: OSP - 0611

OSHPD Special Seismic Certification Preapproval (OSP)

Type: [X] New [] Renewal

Manufacturer Information

Manufacturer: Caterpillar (CAT)

Manufacturer's Technical Representative: Sree Bandaru

Mailing Address: 4955 Marconi Drive, Alpharetta, GA 30005

Telephone: (678) 746-5077 Email: Bandaru.Sreekanth@cat.com

Product Information

Product Name: Caterpillar Low Voltage Paralleling Switchgear

Product Type: Emergency Generator Paralleling Switchgear

Product Model Number: See certified product line matrices
(List all unique product identification numbers and/or part numbers)

General Description: Switchgear is used for paralleling multiple generators to each other and/or to other sources of
incoming power. 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 floor mounted

Applicant Information

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

Contact Person: Travis Soppe, SE

Mailing Address: 1199 Shoreline Drive, Suite 310, Boise, Idaho 83702

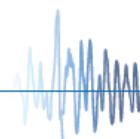
Telephone: (208) 342-5989 Ext 115 Email: tsoppe@wegai.com

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: [Signature] Date: 06-03-2019

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

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





**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: 1199 Shoreline Drive, Suite 310, Boise, Idaho 83702

Telephone: (208) 342-5989 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): _____

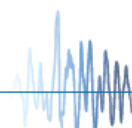
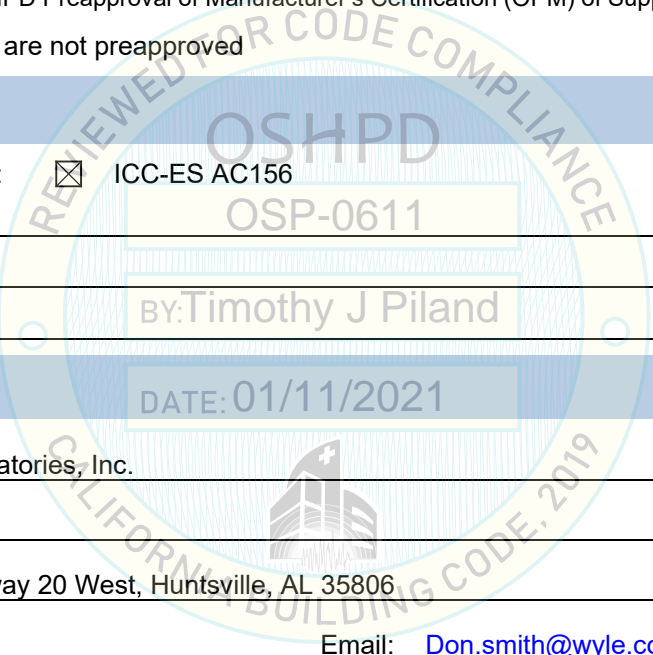
Testing Laboratory

Company Name: Wyle Laboratories, Inc.

Contact Name: Don Smith

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

Telephone: 256-837-4411 Email: Don.smith@wyle.com





OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

Seismic Parameters

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

Design Basis of Equipment or Components (Fp/Wp) = 1.50

Sds (Design spectral response acceleration at short period, g) = 2.00

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

Rp (Equipment or component response modification factor) = 6.0

Omega_0 (System overstrength factor) = 2

Ip (Importance factor) = 1.5

z/h (Height factor ratio) = 1

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 [X] No

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

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

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

R (Response modification coefficient) =

Omega_0 (System overstrength factor) =

Cd (Deflection amplification factor) =

Ip (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component Natural Frequencies (Hz) =

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2015: [] Yes [X] No

List of Attachments Supporting Special Seismic Certification

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

[X] Other(s) (Please Specify): Certified Product Matrix, UUT Summary Sheets, Subcomponent Certification Letter

OSHPD Approval (For Office Use Only) - Approval Expires on December 31, 2025

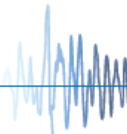
Signature: [Handwritten Signature]
Print Name: Timothy J Piland

Date: January 11, 2021

Title: SSE

Special Seismic Certification Valid Up to: Sds (g) = 2.00 z/h = 1

Condition of Approval (if applicable):



CATERPILLAR LOW VOLTAGE PARALLELING SWITCHGEAR CERTIFIED PRODUCT LINE MATRIX



Identification	Main Bus Rating (A)	NEMA	Width (in)	Depth (in)	Height (in)	Max Weight (lbs)	Max COG (in)	Representative UUT
Magnum DS-1600/2000	1600/2000	1	18-20	54-92	96-117	1400	52	Interpolated
Magnum DS-1600/2000	1600/2000	1	22-24	54-92	96-117	1700	52	Interpolated
Magnum DS-1600/2000	1600/2000	1	26-28	54-92	96-117	2000	52	Interpolated
Magnum DS-1600/2000	1600/2000	1	30	54-92	96-117	2200	52	Interpolated
Magnum DS-1600/2000	1600/2000	1	30	54-92	96-117	2400	49	Interpolated
Magnum DS-2000	2000	1	18	92	96	1433	48	UUT-8
Magnum DS-3200	3200	1	18-20	54	96-117	1400	52	Interpolated
Magnum DS-3200	3200	1	18-20	54	96-117	1700	42	Interpolated
Magnum DS-3200	3200	1	22-24	54	96-117	1700	52	Interpolated
Magnum DS-3200	3200	1	22	58	117	998	53	UUT-12
Magnum DS-3200	3200	1	22	92	96	1426	46	UUT-10
Magnum DS-3200	3200	1	22	58	117	1437	54	UUT-11
Magnum DS-3200	3200	1	22	58	99	1475	51	UUT-13
Magnum DS-3200	3200	1	22-24	54	96-117	2100	42	Interpolated
Magnum DS-3200	3200	1	26-28	54	96-117	2000	52	Interpolated
Magnum DS-3200	3200	1	26-28	54	96-117	2400	42	Interpolated
Magnum DS-3200	3200	1	30-36	54	96-117	2200	52	Interpolated
Magnum DS-3200	3200	1	30-36	54	96-117	3000	38	Interpolated
Magnum DS-3200	3200	1	38-44	54	96-117	2700	52	Interpolated
Magnum DS-3200	3200	1	38-44	54	96-117	3000	47	Interpolated

General Notes:

1. All circuit breakers sizes are limited to installation to cells below A and E
2. Standalone sections of switchgear are not seismically certified. A minimum of 3 mated sections is required for seismic certification.
3. Test Report: 7115R13 for UUT-8 through 14
4. Test Report: PR091398_01TR_RE3 for UUT-1 through 3

**CATERPILLAR LOW VOLTAGE PARALLELING SWITCHGEAR
CERTIFIED PRODUCT LINE MATRIX**



Identification	Main Bus Rating (A)	NEMA	Width (in)	Depth (in)	Height (in)	Max Weight (lbs)	Max COG (in)	Representative UUT
Magnum DS-4000	4000	1	22	66	96	1395	43	UUT-2
Magnum DS-4000	4000	1	22	66	96	1613	50	UUT-3
Magnum DS-4000/5000	4000/5000	1	22-28	54	96-117	1700	52	Interpolated
Magnum DS-4000/5000	4000/5000	1	22-28	54	96-117	2100	42	Interpolated
Magnum DS-4000/5000	4000/5000	1	30-36	54	96-117	2200	52	Interpolated
Magnum DS-4000	4000	1	30	66	96	2478	50	UUT-1
Magnum DS-4000/5000	4000/5000	1	30-36	54	96-117	2800	42	Interpolated
Magnum DS-4000/5000	4000/5000	1	38-44	54	96-117	2700	52	Interpolated
Magnum DS-4000/5000	4000/5000	1	38-44	54	96-117	3400	42	Interpolated
Magnum DS-4000/5000	4000/5000	1	46-52	54	96-117	3200	52	Interpolated
Magnum DS-4000/5000	4000/5000	1	46-52	54	96-117	3900	42	Interpolated
Magnum DS-4000/5000	4000/5000	1	54-58	54	96-117	3600	52	Interpolated
Magnum DS-4000/5000	4000/5000	1	54-58	54	96-117	4400	42	Interpolated
Magnum DS-4000/5000	4000/5000	1	60	54	96-117	3900	52	Interpolated
Magnum DS-5000	5000	1	60	58	99	4287	51	UUT-14
Magnum DS-4000/5000	4000/5000	1	60	54	96-117	4400	46	Interpolated
Magnum DS-5000	5000	1	60	92	96	4419	48	UUT-9

General Notes:

1. All circuit breakers sizes are limited to installation to cells below A and E
2. Standalone sections of switchgear are not seismically certified. A minimum of 3 mated sections is required for seismic certification.
3. Test Report: 7115R13 for UUT-8 through 14
4. Test Report: PR091398_01TR_RE3 for UUT-1 through 3

CATERPILLER LOW VOLTAGE PARALLELING SWITCHGEAR CERTIFIED SUBCOMPONENT MATRIX



ID/Catalog Number	Manufacturer	Description	Weight (lbs)	Representative UUT
Table 2: Circuit Breakers				
MDSx08/MDNx08/MDSBx08	Eaton	800A, Drawout, Standard, Narrow	145	Interpolated
MDSx16/MDNx16/MDSBx16	Eaton	1600A, Drawout, Standard, Narrow	145	Interpolated
MDSx20/MDNx20/MDSBx20	Eaton	2000A, Drawout, Standard, Narrow	145	Interpolated
MDNC20	Eaton	2000A, Drawout, Standard, Narrow	145	UUT-8
MDSx25/MDNx25/MDSBx25	Eaton	2500A, Drawout, Standard, Narrow	145	Interpolated
MDSx32/MDNx32/MDSBx32	Eaton	3200A, Drawout, Standard, Narrow	175	Interpolated
MDSC32	Eaton	3200A, Drawout, Standard, Narrow	175	UUT-10, 11, 13
MDN64N	Eaton	4000A, Drawout, Double Narrow	310	UUT-1
MDSx40/MDSBx40	Eaton	4000A, Drawout, Double, Narrow	310	Interpolated
MDSx50/MDSBx50	Eaton	5000A, Drawout, Double	310	Interpolated
MDSC50	Eaton	5000A, Drawout, Double	310	UUT-9
Table 3: Arc Quenching Device (AQD)				
478C709G01	Eaton	85kA, 635Vac	162	UUT-2, 3
Table 4: Control Power Transformers				
114BY38G02	ITI	Size 1-5	30	UUT-8, 11
114BY38G01-25	ITI	Size 1-5	30-40	Interpolated
114BY38G24	ITI	Size 1-5	40	UUT-13
Table 5: Potential Transformers				
4601B05H16	ITI	Size 150	24	UUT-11
475-480	ITI	Size 300	12.5	UUT-8
450-480	ITI	Size 750	25	UUT-9
9070T500D1	Square D	500VA, 480:120	11.9	UUT-2
9070T1000D1	Square D	1000VA, 480:120	21	Interpolated
9070T1500D1	Square D	1500VA, 480:120	35	UUT-2
Table 6: Human Machine Interface (HMI)				
TS-19WS-24VDC-ISO	ELO	19" Touchscreen	10.4	UUT-3
Table 7: Generator Protection System				
Multilin 889	GE	protection, control, management	20.0	UUT-3

General Notes:

Test Report: 7115R13 for UUT-8 through 14
 Test Report: PR091398_01TR_RE3 for UUT-1 through 3

UUT-1

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



Mounting Details: Floor mounted with (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: NTS
Product Line: Low Voltage Paralleling Switchgear	Report Number: PR091398-01TR
Matrix Identification: Magnum DS-4000	UUT No. in Test Report: UUT-1
Serial Number: L00G7JD-PA01	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 4000A circuit breakers & cradel and control power transformer.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
2,478	30	66	96	50	8.0	6.3	29.6

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	1.00	1.50	3.2g	2.4g	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 (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: NTS
Product Line: Low Voltage Paralleling Switchgear	Report Number: PR091398-01TR
Matrix Identification: Magnum DS-4000	UUT No. in Test Report: UUT-2
Serial Number: L00G7JD-PA02	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of an arc quenching device low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, arc quenching device, controls, and potential transformers.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Frequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,395	22	66	96	43	8.0	6.3	29.6

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	1.00	1.50	3.2g	2.4g	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-3

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



Mounting Details: Floor mounted with (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: NTS
Product Line: Low Voltage Paralleling Switchgear	Report Number: PR091398-01TR
Matrix Identification: Magnum DS-4000	UUT No. in Test Report: UUT-1
Serial Number: L00G7JD-PA03	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 arc quenching device low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, arc quenching device and 19" touchscreen.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Frequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,613	22	66	96	50	7.9	6.2	29.6

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	1.00	1.50	3.2g	2.4g	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-8

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



Mounting Details: Floor mounted with (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-2000	UUT No. in Test Report: UUT-8
Serial Number: XL13031-001a	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 2000A circuit breakers & cradel and control power transformer.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,433	18	92	96	48	9.8	8.5	>33

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	1.00	1.50	3.2g	2.4g	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-9

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



Mounting Details: Floor mounted with (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-5000	UUT No. in Test Report: UUT-9
Serial Number: XL13031-001b	

UUT Function: Paralleling switchgear provides low voltage circuit protection.

UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.

UUT Components:
NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 5000A circuit breaker & cradel and potential transformers.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
4,419	60	92	96	48	9.8	8.5	>33

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	1.00	1.50	3.2g	2.4g	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-10

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



Mounting Details: Floor mounted with (6) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-3200	UUT No. in Test Report: UUT-10
Serial Number: XL13031-001c	

UUT Function: Paralleling switchgear provides low voltage circuit protection.
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.

UUT Components:
 NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 3200A circuit breaker & cradel and potential transformers.

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,426	22	92	96	46	9.8	8.5	>33

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	1.00	1.50	3.2g	2.4g	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-11

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



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-3200	UUT No. in Test Report: UUT-11
Serial Number: XL13031-002a	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 3200A circuit breakers & cradel and control power transformers.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,437	22	58	117	54	7.0	6.8	20.0

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	1.00	1.50	3.2g	2.4g	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-12

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



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-3200	UUT No. in Test Report: UUT-12
Serial Number: XL13031-002b	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 cable section with arc venting.	
UUT Components: NEMA1 carbon steel enclosure with copper bus.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Frequency (Hz)		
	Width	Depth	Height		FB	SS	V
998	22	58	117	53	7.0	6.8	20.0

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	1.00	1.50	3.2g	2.4g	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-13

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



Mounting Details: Floor mounted with (4) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-3200	UUT No. in Test Report: UUT-13
Serial Number: XL13031-002c	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus, Eaton Magnum DS 3200A circuit breakers & cradel and control power transformer.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Fequency (Hz)		
	Width	Depth	Height		FB	SS	V
1,475	22	58	99	51	7.0	6.8	20.0

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	1.00	1.50	3.2g	2.4g	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-14

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



Mounting Details: Floor mounted with (8) 1/2" diameter grade 5 bolts.



Manufacturer: Caterpillar	Test Location: Wyle Laboratory, Inc.
Product Line: Low Voltage Paralleling Switchgear	Report Number: 71152R13
Matrix Identification: Magnum DS-5000	UUT No. in Test Report: UUT-14
Serial Number: XL13031-002d	
UUT Function: Paralleling switchgear provides low voltage circuit protection.	
UUT Description: The unit is comprised of one floor mounted NEMA type 1 enclosures consisting of a 1 breaker low voltage switchgear section.	
UUT Components: NEMA1 carbon steel enclosure with copper bus and Eaton Magnum DS 5000A circuit breakers & cradel.	

UUT PROPERTIES

Weight (lb)	Dimensions (inches)			COG (inches)	Natural Frequency (Hz)		
	Width	Depth	Height		FB	SS	V
4,287	60	58	99	51	7.0	6.8	21.0

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	1.00	1.50	3.2g	2.4g	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.