



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

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

OFFICE USE ONLY

APPLICATION #: **OSP – 0261-10**

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

Type:  New  Renewal

**Manufacturer Information**

Manufacturer: Schneider Electric IT Business

Manufacturer's Technical Representative: Jesse Smith

Mailing Address: 1660 Scenic Ave., Costa Mesa, CA 92626

Telephone: (714) 557-1636 x 43445 Email: Jesse.smith@schneider-electric.com

**Product Information**

Product Name: MGE Galaxy 4000/5000

Product Type: UPS

Product Model Number: See Certified Product Table attached

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

General Description: MGE Galaxy 4000/5000 products consist of UPS, Distribution Cabinets, Maintenance and System By-Pass Cabinets, Top Entry Cabinet, and Transformer Cabinets, and rigidly wall mounted Maintenance By-Pass and Critical Bus Synchronization Box. Seismic enhancements made to the UUTs & modifications required to address anomalies observed during the tests shall be incorporated into the production units.

Mounting Description: Rigidly floor or Wall mounted

**Applicant Information**

Applicant Company Name: Schneider Electric IT Business

Contact Person: Jesse Smith

Mailing Address: 1660 Scenic Ave., Costa Mesa, CA 92626

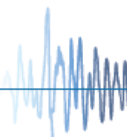
Telephone: (714) 557-1636 x 43445 Email: Jesse.smith@schneider-electric.com

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:  Date: 10/6/2016

Title: Mechanical Designer Company Name: Schneider Electric IT Business

"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: Forell/Elsesser Engineers, Inc.

Name: Marco Scanu, SE California License Number: S4454

Mailing Address: 160 Pine St., 6<sup>th</sup> 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): \_\_\_\_\_

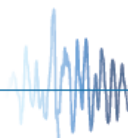
**Testing Laboratory**

Company Name: Wyle Laboratories

Contact Name: Rod Thornberry

Mailing Address: 7800 Hwy 20, Huntsville, AL 35806

Telephone: (256) 837-4411 Email: \_\_\_\_\_





**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 ( $F_p/W_p$ ) = 1.02

$S_{DS}$  (Design spectral response acceleration at short period, g) = 1.36

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

$R_p$  (Equipment or component response modification factor) = 6.0

$\Omega_0$  (System overstrength factor) = 2.0

$I_p$  (Importance factor) = 1.5

$z/h$  (Height factor ratio) = 1.0

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

Overall dimensions and weight (or range thereof) = See attachment, Certified Products Table

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15:  Yes  No

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

$S_{DS}$  (Design spectral response acceleration at short period, g) = \_\_\_\_\_

$S_{D1}$  (Design spectral response acceleration at 1 second period, g) = \_\_\_\_\_

$R$  (Response modification coefficient) = \_\_\_\_\_

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

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

$I_p$  (Importance factor) = 1.5

Height to Center of Gravity above base = \_\_\_\_\_

Equipment or Component Natural Frequencies (Hz) = \_\_\_\_\_

Overall dimensions and weight (or range thereof) = \_\_\_\_\_

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

**List of Attachments Supporting Special Seismic Certification**

Test Report(s)  Drawings  Calculations  Manufacturer's Catalog

Other(s) (Please Specify): Certified Products Table, Certified Subcomponents Table, UUT Summary Sheets

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

Signature:  Date: 11/28/2016

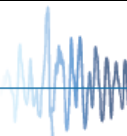
Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to :  $S_{DS}$  (g) = 1.36  $z/h$  = 1.0

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

\_\_\_\_\_

\_\_\_\_\_



## Schneider Electric IT Business - MGE Galaxy 4000/5000

### I. Certified Product Table

Unit	Width	Depth	Height	Max. Weight	Part No.	Construction Material <sup>1,2</sup>	Notes	Test Status
<b>Galaxy Uninterruptable Power Supply (UPS)</b>								
<b>Galaxy 4000</b>								
40 KVA 208V UNITARY	33.5 in	35.6 in	72.1 in	1004 lbs	0M-G4TU40F	0.108" CFS	3	Extrapolated
50 KVA 208V UNITARY	33.5 in	35.6 in	72.1 in	1004 lbs	0M-G4TU50F	0.108" CFS	3	58696R11-UUT2C
65 KVA 208V UNITARY	33.5 in	35.6 in	72.1 in	1210 lbs	0M-G4TU65F	0.108" CFS	3	Interpolated
75 KVA 208V UNITARY	33.5 in	35.6 in	72.1 in	1210 lbs	0M-G4TU75F	0.108" CFS	3	58696R11-UUT2A
<b>Galaxy 5000</b>								
40 KVA 480V UNITARY	28 in	33.5 in	75 in	850 lbs	0M-G5TU40G	0.06" CFS	3	Extrapolated
40 KVA 480V PARALLEL	28 in	33.5 in	75 in	850 lbs	0M-G5TP40G	0.06" CFS	3	Extrapolated
50 KVA 480V UNITARY	28 in	33.5 in	75 in	850 lbs	0M-G5TU50G	0.06" CFS	3	58696R11-UUT3A
50 KVA 480V PARALLEL	28 in	33.5 in	75 in	850 lbs	0M-G5TP50G	0.06" CFS	3	Interpolated
60 KVA 480V UNITARY	28 in	33.5 in	75 in	850 lbs	0M-G5TU60G	0.06" CFS	3	Interpolated
60KVA 480V PARALLEL	28 in	33.5 in	75 in	850 lbs	0M-G5TP60G	0.06" CFS	3	Interpolated
80KVA 480V UNITARY	28 in	33.5 in	75 in	850 lbs	0M-G5TU80G	0.06" CFS	3	Interpolated
80KVA 480V PARALLEL	28 in	33.5 in	75 in	850 lbs	0M-G5TP80G	0.06" CFS	3	Interpolated
100 480V UNITARY	28 in	33.5 in	75 in	1146 lbs	0M-G5TU100G	0.06" CFS	3	Interpolated
100 480V PARALLEL	28 in	33.5 in	75 in	1146 lbs	0M-G5TP100G	0.06" CFS	3	Interpolated
130KVA 480V UNITARY	28 in	33.5 in	75 in	1146 lbs	0M-G5TU130G	0.06" CFS	3	58923R11-UUT1A
130KVA 480V PARALLEL	28 in	33.5 in	75 in	1146 lbs	0M-G5TP130G	0.06" CFS	3	Extrapolated
<b>Galaxy Distribution Cabinets</b>								
<b>Galaxy 4000</b>								
42P DISTRIBUTION CABINET, 40-75 KVA	19 in	33.5 in	72 in	290 lbs	0M-G4TA75F	0.108" CFS	3	58696R11-UUT2B
<b>Galaxy 5000</b>								
ADJACENT DISTRIBUTION CABINET 208V	42.5 in	32.5 in	75 in	670 Lbs	0M-G5TPDUF42	0.108" CFS	3	Interpolated
ADJACENT DISTRIBUTION CABINET 480V	42.5 in	32.5 in	75 in	670 Lbs	0M-G5TPDUG8	0.108" CFS	3	58923R11-UUT2A
<b>Notes</b>								
<ol style="list-style-type: none"> <li>1. All enclosures are NEMA 1 rated.</li> <li>2. CFS= cold-formed carbon steel</li> <li>3. Floor mounted with seismic kits.</li> <li>4. Wall mounted.</li> <li>5. ADJ Maintenance By-Pass and System By-Pass Cabinets are intended to be installed side-by-side with other Galaxy units. REMOTE Maintenance By-Pass and System By-Pass Cabinets are stand-alone units.</li> </ol>								

**Schneider Electric IT Business - MGE Galaxy 4000/5000**

**I. Certified Product Table**

Unit	Width	Depth	Height	Max. Weight	Part No.	Construction Material <sup>1,2</sup>	Notes	Test Status
<b>Galaxy Maintenance By-Pass Boxes (MBC-Wall mounted)</b>								
<b>Galaxy 4000</b>								
MBC 2CB 40-50KVA 480V 80A	24.5 in	9.25 in	43 in	104 lbs	0M-G4TH50G2	0.079" CFS	4	Extrapolated
MBC 2CB 40-50KVA 208V 175A	24.5 in	9.25 in	43 in	104 lbs	0M-G4TH50F2	0.079" CFS	4	Extrapolated
MBC 3CB 40-50KVA 480V 80A	24.5 in	9.25 in	43 in	104 lbs	0M-G4TH50G3	0.079" CFS	4	58696R11-UUT3C
MBC 3CB 40-50KVA 208V 175A	24.5 in	9.25 in	43 in	135 lbs	0M-G4TH50F3	0.079" CFS	4	Interpolated
MBC 2CB 65-80KVA 480V 125A	24.5 in	9.25 in	43 in	125 lbs	0M-G4TH75G2	0.079" CFS	4	Interpolated
MBC 2CB 65-75KVA 208V 300A	24.5 in	9.25 in	43 in	146 lbs	0M-G4TH75F2	0.079" CFS	4	Interpolated
MBC 3CB 65-80KVA 480V 125A	24.5 in	9.25 in	43 in	135 lbs	0M-G4TH75G3	0.079" CFS	4	Interpolated
MBC 3CB 65-75KVA 208V 300A	24.5 in	9.25 in	43 in	146 lbs	0M-G4TH75F3	0.079" CFS	4	58696R11-UUT3B
<b>Galaxy 5000</b>								
MBC 2CB 40-50KVA 480V 100A WM	24.5 in	9.25 in	43 in	125 lbs	0M-G5THOPEXT007	0.079" CFS	4	Extrapolated
MBC 2CB 60-80KVA 480V 150A WM	24.5 in	9.25 in	43 in	125 lbs	0M-G5THOPEXT008	0.079" CFS	4	Extrapolated
MBC 2CB 100-130KVA 480V 250A WM	24.5 in	9.25 in	43 in	125 lbs	0M-G5THOPEXT009	0.079" CFS	4	Extrapolated
MBC 3CB 40-50KVA 480V 100A WM	24.5 in	9.25 in	43 in	135 lbs	0M-G5THOPEXT010	0.079" CFS	4	Extrapolated
MBC 3CB 60-80KVA 480V 150A WM	24.5 in	9.25 in	43 in	135 lbs	0M-G5THOPEXT011	0.079" CFS	4	Extrapolated
MBC 3CB 100-130KVA 480V 250A WM	24.5 in	9.25 in	43 in	135 lbs	0M-G5THOPEXT012	0.079" CFS	4	Extrapolated

**Notes**

1. All enclosures are NEMA 1 rated.
2. CFS= cold-formed carbon steel
3. Floor mounted with seismic kits.
4. Wall mounted.
5. ADJ Maintenance By-Pass and System By-Pass Cabinets are intended to be installed side-by-side with other Galaxy units. REMOTE Maintenance By-Pass and System By-Pass Cabinets are stand-alone units.

## Schneider Electric IT Business - MGE Galaxy 4000/5000

### I. Certified Product Table

Unit	Width	Depth	Height	Max. Weight	Part No.	Construction Material <sup>1,2</sup>	Notes	Test Status
<b>Galaxy Maintenance By-Pass Cabinet (MBC) and System By-Pass Cabinet (SBC)<sup>5</sup></b>								
<b>Galaxy 5000</b>								
AUX MBC STD 600A ADJ 208-220V 100-130KVA	28 in	32.5 in	75 in	614 Lbs	0M-G5TH100K130FADJ	0.108" CFS	3	Extrapolated
AUX MBC KAIC 600A ADJ	28 in	32.5 in	75 in	614 Lbs	0M-G5TH100K130FADJ65	0.108" CFS	3	Extrapolated
AUX MBC STD 600A REMOTE	28 in	32.5 in	75 in	614 Lbs	0M-G5TH100K130FSA	0.108" CFS	3	70284R12-UUT2
AUX MBC KAIC 600A REMOTE	28 in	32.5 in	75 in	614 Lbs	0M-G5TH100K130FSA65	0.108" CFS	3	Interpolated
AUX MBC STD 350A 208-220V ADJ 60-80KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80FADJ	0.108" CFS	3	Interpolated
AUX MBC KAIC 350A ADJ	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80FADJ65	0.108" CFS	3	Interpolated
AUX MBC STD 250A 480-600V ADJ 100-130KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH100K130GADJ	0.108" CFS	3	Interpolated
AUX MBC STD 250A 480-600V REM 100-130KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH100K130GSA	0.108" CFS	3	59040R11-UUT1C
AUX MBC KAIC 250A 480-600V ADJ 100-130K	28 in	32.5 in	75 in	510 Lbs	0M-G5TH100K130GADJ65	0.108" CFS	3	Extrapolated
AUX MBC KAIC 250A 480-600V REMOTE	28 in	32.5 in	75 in	510 Lbs	0M-G5TH100K130GSA65	0.108" CFS	3	Extrapolated
AUX MBC STD 250A 208-220V ADJ 40-50KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50FADJ	0.108" CFS	3	Extrapolated
AUX MBC KAIC 250A 208-220V ADJ	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50FADJ65	0.108" CFS	3	Extrapolated
AUX MBC STD 150A ADJ 60-80KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80GADJ	0.108" CFS	3	Extrapolated
AUX MBC STD 150A REMOTE 60-80KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80GSA	0.108" CFS	3	Extrapolated
AUX MBC KAIC 150A ADJ 60-80KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80GADJ65	0.108" CFS	3	Extrapolated
AUX MBC KAIC 150A REMOTE	28 in	32.5 in	75 in	510 Lbs	0M-G5TH60K80GSA65	0.108" CFS	3	Extrapolated
AUX MBC STD 100A ADJ 40-50KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50GADJ	0.108" CFS	3	Extrapolated
AUX MBC STD 100A REMOTE 40-50KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50GSA	0.108" CFS	3	Extrapolated
AUX MBC KAIC 100A ADJ 40-50KVA	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50GADJ65	0.108" CFS	3	Extrapolated
AUX MBC KAIC 100A REMOTE	28 in	32.5 in	75 in	510 Lbs	0M-G5TH40K50GSA65	0.108" CFS	3	Extrapolated
4 MODULE SBC, 480V, 2CB, 1200A, MONITOR	32.5 in	39 in	82 in	960 Lbs	0M-GWTA675G	0.108" CFS	3	58696R11-UUT5
<b>Notes</b>								
1. All enclosures are NEMA 1 rated. 2. CFS= cold-formed carbon steel 3. Floor mounted with seismic kits. 4. Wall mounted. 5. ADJ Maintenance By-Pass and System By-Pass Cabinets are intended to be installed side-by-side with other Galaxy units. REMOTE Maintenance By-Pass and System By-Pass Cabinets are stand-alone units.								

**Schneider Electric IT Business - MGE Galaxy 4000/5000**

**I. Certified Product Table**

Unit	Width	Depth	Height	Max. Weight	Part No.	Construction Material <sup>1,2</sup>	Notes	Test Status
<b>Galaxy Top/Bottom entry Cabinet</b>								
<b>Galaxy 5000</b>								
BOTTOM ENTRY CAB KAIC 16W	16.3 in	32.5 in	75 in	200 Lbs	0M-G5TAB	0.108" CFS	3	58923R11 -UUT1B
<b>Galaxy Transformer Cabinet</b>								
<b>Galaxy 5000</b>								
XFMR CAB 28W 40-50 KVA	28 in	32.5 in	75 in	470 Lbs	0M-G5TT40K50G	0.108" CFS	3	Extrapolated
INP/BYP XFMR CAB 28W 40-50KVA	28 in	32.5 in	75 in	740 Lbs	0M-G5TT40K50F	0.108" CFS	3	59040R11-UUT1B
INP/OUT XFMR CAB 28W 40-50KVA	28 in	32.5 in	75 in	740 Lbs	0M-G5TT40K50G2	0.108" CFS	3	Interpolated
XFMR CAB 28W 60-80 KVA	28 in	32.5 in	75 in	960 Lbs	0M-G5TT60K80G	0.108" CFS	3	Interpolated
INP/BYP XFMR CAB 28W 60-80KVA	28 in	32.5 in	75 in	1720 Lbs	0M-G5TT60K80F	0.108" CFS	3	Interpolated
INP/OUT XFMR CAB 28W 60-80 KVA	28 in	32.5 in	75 in	1720 Lbs	0M-G5TT60K80G2	0.108" CFS	3	Interpolated
AUX CAB XFMR SINGLE 28W 130KVA	28 in	32.5 in	75 in	1465 Lbs	0M-G5TT100K130G	0.108" CFS	3	Interpolated
AUX CAB XFMR IN/OUT 28W 130KVA	28 in	32.5 in	75 in	2700 Lbs	0M-G5TT100K130G2	0.108" CFS	3	Interpolated
AUX CAB XFMR IN/BYP 28W 130KVA	28 in	32.5 in	75 in	2700 Lbs	0M-G5TT100K130F	0.108" CFS	3	70284R12-UUT3
<b>Galaxy Critical Bus Synchronization Boxes (Wall mounted)</b>								
<b>Galaxy 5000</b>								
CRITICAL BUS SYNCHRONIZATION MODULE	16 in	8.5 in	20 in	37 Lbs	0M-GWTACBSUPS	0.06" CFS	4	58040R10-UUT2A
<b>Notes</b>								
1. All enclosures are NEMA 1 rated. 2. CFS= cold-formed carbon steel 3. Floor mounted with seismic kits. 4. Wall mounted. 5. ADJ Maintenance By-Pass and System By-Pass Cabinets are intended to be installed side-by-side with other Galaxy units. REMOTE Maintenance By-Pass and System By-Pass Cabinets are stand-alone units.								

## Schneider Electric IT Business - MGE Galaxy 4000/5000

### II. Certified Subcomponents Table

Internal Components	Manufacturer	Component No.	Testing Status
80A 3P Circuit Breaker	Square D	039-000039-0000	58696R11-UUT3C
175A 3P Circuit Breaker	Square D	530-1488	58696R11-UUT2C
225A 3P Circuit Breaker	Square D	039-000049-0003	58923R11-UUT2A
	Square D	04-15300-407	58696R11-UUT2B
250A 3P Circuit Breaker	Square D	039-000049-0001	59040R11-UUT1C
300A 3P Circuit Breaker	Square D	530-1482	58696R11-UUT2A
	Square D	04-15300-121	58696R11-UUT3B
600A 3P Circuit Breaker	Square D	039-000052-0001	70284R12-UUT2
1200A 3P Circuit Breaker	Square D	530-2208	58696R11-UUT5
125A 3P Service switch	Schneider Electric	530-1426	58696R11-UUT3A
150A 3P Service switch	Square D	530-1483	58696R11-UUT2C
150A 3P Service switch	Square D	530-1491	Interpolated
250A 3P Service Switch	Square D	530-1487	58696R11-UUT2A
	Schneider Electric	530-1428	58923R11-UUT1A
SCR	Semikron	320-0065	58696R11-UUT2A
		320-0066	58696R11-UUT2A, UUT2C
		320-0069-Z	58923R11-UUT1A
	Powerex	325-0218	58696R11-UUT2A
		325-9978A-001	58696R11-UUT2C
Ixis	320-0068-Z	58696R11-UUT3A	
DC Converter Power Filter	Schneider IT	0N-1135, 0N-1139, 0M-3400109800AA, 0M-3400110400AA	58696R11-UUT2A, UUT2C, UUT3A 58923R11-UUT1A
AC Converter Power Filter	Schneider IT	0N-1125, 0N-1132, 0N-1133, 0N-1136, 0M-3400251400AB, 0M-3400251600AB, 0M-3400251800AB, 0M-3400252000AB	58696R11-UUT2A, UUT2C, UUT3A 58923R11-UUT1A
Driver PCB	Schneider IT	72-171001-00, 72-171000-02, 0P3830, 0P3836, 0P3842, 0P3847	58696R11-UUT2A, UUT2C, UUT3A 58923R11-UUT1A
Acquisition PCB	Schneider IT	0P3320, 0P3327, 0P3823, 0P3829, 0P3833, 0P3834	58696R11-UUT2A, UUT2C, UUT3A 58923R11-UUT1A
Control PCB	Schneider IT	0P2611, 0P2612, 0P3341, 0P3342, 0P3343	58696R11-UUT2A, UUT2C, UUT3A 58923R11-UUT1A
Input Line Filter 200µH 170A	Onyx Power Inc.	422-0042	58696R11-UUT2C
Input Line Filter 125µH 273A	Pacific Transfomer	422-0041	58696R11-UUT2A
Input Line Filter 385µH 180A	Tamura	420-3400123300AH	58923R11-UUT1A
Input Line Filter 410µH 180A	Eurotrafo	420-3400226700AL	58696R11-UUT3A
Output Line Filter 53µH 283A	Pacific Transfomer	420-0505	58696R11-UUT2A
Output Line Filter 84µH 177A	Onyx Power Inc.	420-0506	58696R11-UUT2C
XMFR 50 kVA 600/480 V	Onyx power Inc.	8-97050-12	59040R11-UUT1B
XMFR 160 kVA 480/480 V	Onyx power Inc.	8-220-016044-00	70284R12-UUT3
Fuse 450A 700V	Bussmann	038-000007-0001	58923R11-UUT1B
Critical Bus Synchro module	Schneider IT	72-133156-00	58040R10-UUT2A



OSP APPLICATION  
Schneider Electric IT Business– MGE Galaxy 4000/5000  
III. UUT Summary Sheets

Date: 10/6/2016

**Test Report Test Report 58696R11 – UUT 2C**

Galaxy 4000 Single Module UPS 50kVA

Part No.: 0M-G4TU50F

0.108" Cold Formed Carbon Steel

33.50"W x 35.50"D x 72"H, 1004 lbs

Floor mounted using: (8) ½"-13 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
6.2	4.5	23.5						

58696R11 – UUT 2C – Internal Components		
Description	Manufacturer	Part Number
175A 3P Circuit Breaker (Q5N)	Square D	530-1488
150A 3P Service switch (Q1, Q4S)	Square D	530-1483
DC Converter Power Filter	Schneider IT	0N-1139
AC Converter Power Filter	Schneider IT	0N-1136, 0N-1133
SCR	Semikron	320-0066
	Powerex	325-9978A-001
Driver PCB	Schneider IT	72-171001-00, 72-171000-02
Acquisition PCB	Schneider IT	0P3327
Control PCB	Schneider IT	0P3341, 0P3342, 0P3343
Input Line Filter 200µH 170A	Onyx Power Inc.	422-0042
Output Line Filter 84µH 177A	Onyx Power Inc.	420-0506

**Test Report 58696R11 – UUT 2A**

Galaxy 4000 Single Module UPS 75kVA

Part No.: 0M-G4TU75F

0.108" Cold Formed Carbon Steel

33.50"W x 33.50"D x 72"H, 1210 lbs

Floor mounted using: (8) ½"-13 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
5.3	4.2	20.5						

**58696R11 – UUT 2A – Internal Components**

Description	Manufacturer	Part Number
300A 3P Circuit Breaker (Q5N)	Square D	530-1482
250A 3P Service switch (Q1, Q4S)	Square D	530-1487
DC Converter Power Filter	Schneider IT	0N-1135
AC Converter Power Filter	Schneider IT	0N-1132, 0N-1125
SCR	Semikron	320-0065
		320-0066
	Powerex	325-0218
Driver PCB	Schneider IT	72-171001-00, 72-171000-02
Acquisition PCB	Schneider IT	0P3320
Control PCB	Schneider IT	0P3341, 0P3342, 0P3343
Input Line Filter 125µH 273A	Pacific transformer	422-0041
Output Line Filter 53µH 283A	Pacific transformer	420-0505

**Test Report 58696R11 – UUT 3A**

Galaxy 5000 Single Module UPS 50kVA  
 Part No.: 0M-G5TU50G  
 0.06" Cold Formed Carbon Steel  
 28"W x 33.50"D x 75"H, 850 lbs  
 Floor mounted using: (12) 3/8"-16 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.38	1.0	1.5	2.21	1.66	0.92	0.37
<b>Natural Frequencies (Hz)</b>				<b>Test Results</b>				
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
16.5	8.5	>33.3						

58696R11 – UUT 3A – Internal Components		
Description	Manufacturer	Part Number
125A 3P Service switch (Q1, Q4S, Q3BP,Q5N)	Schneider Electric	530-1426
DC Converter Power Filter	Schneider IT	0M-3400109800AA
AC Converter Power Filter	Schneider IT	0M-3400251400AB, 0M-3400251600AB
SCR	Ixis	320-0068-Z
Driver PCB	Schneider IT	0P3842, 0P3847
Acquisition PCB	Schneider IT	0P3823, 0P3834
Control PCB	Schneider IT	0P2611, 0P2612
Input Line Filter 410µH 180A	Eurotrafo	420-3400226700AL

**Test Report 58923R11 – UUT 1A**

Galaxy 5000 130kVA UPS

Part No.: 0M-G5TU130G

0.06" Cold Formed Carbon Steel

28"W x 33.50"D x 75"H, 1146 lbs

Floor mounted using: (12) 5/16"-18 Grade 5 bolts



**Unit on Left**

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.48	1.0	1.5	2.37	1.78	0.99	0.40
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
15	10	>33.3						

58923R11 – UUT 1A – Internal Components		
Description	Manufacturer	Part Number
250A 3P Service switch (Q1, Q4S, Q3BP,Q5N)	Schneider Electric	530-1428
DC Converter Power Filter	Schneider IT	0M-3400110400AA
AC Converter Power Filter	Schneider IT	0M-3400251800AB, 0M-3400252000AB
SCR	Semikron	320-0069-Z
Driver PCB	Schneider IT	0P3830, 0P3836
Acquisition PCB	Schneider IT	0P3833, 0P3829
Control PCB	Schneider IT	0P2611, 0P2612
Input Line Filter 385µH 180A	Tamura	420-3400123300AH

**Test Report 58696R11 – UUT 2B**

Galaxy 4000 Distribution Cabinet  
 Part No.: 0M-G4TA75F  
 0.108" Cold Formed Carbon Steel  
 19"W x 33.50"D x 72"H, 286 lbs  
 Floor mounted using: (8) ½"-13 Grade 5 Bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
9.2	4.5	>33.3						

58696R11 – UUT 2B – Internal Components		
Description	Manufacturer	Part Number
225A 3P Circuit Breaker	Square D	04-15300-407

**Test Report 58923R11 – UUT 2A**

Galaxy 5000 Distribution Cabinet 480V  
 Part No.: 0M-G5TPDUG8  
 0.108" Cold Formed Carbon Steel  
 42.50"W x 32.50"D x 75"H, 670 lbs

Floor mounted using: (6) ½"-13 Grade 5 bolts



**Unit on Left**

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.51	1.0	1.5	2.42	1.81	1.01	0.41
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
6.7	7.3	>33.3						

**58923R11 – UUT 2A– Internal Components**

Description	Manufacturer	Part Number
225A 3P Circuit Breaker	Square D	039-000049-0003

**Test Report 58696R11 – UUT 3C**

Galaxy 4000 80A Maintenance By-Pass Cabinet

Part No. : 0M-G4TH50G3

0.079" Cold Formed Carbon Steel

24.5"W x 9.25"D x 43"H, 104 lbs

Wall mounted using: (6) 3/8"-16 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
N/A	N/A	N/A						

**58696R11 – UUT 3C – Internal Components**

Description	Manufacturer	Part Number
80A 3P Circuit Breaker	Square D	039-000039-0000

**Test Report 58696R11 – UUT 3B**

Galaxy 4000 300A Maintenance By-Pass Cabinet  
 Model No.: OM-G4TH75F3  
 0.079" Cold Formed Carbon Steel  
 24.5"W x 9.25"D x 43"H, 146 lbs  
 Wall mounted using: (6) 3/8"- 16 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
N/A	N/A	N/A						

58696R11 – UUT 3B – Internal Components		
Description	Manufacturer	Part Number
300A 3P Circuit Breaker	Square D	04-15300-121



**Test Report 70284R12 – UUT 2**

Galaxy 5000 600A Maintenance By-Pass Cabinet  
 Model No.: OM-G5TH100K130FSA  
 0.108" Cold Formed Carbon Steel  
 28"W x 32.5"D x 75"H, 614 lbs  
 Floor mounted using: (7) 1/2" - 13 Grade 5 bolts



UUT 2 on the right

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.42	1.0	1.5	2.27	1.70	0.95	0.38
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
11.0	7.1	12.0						

70284R12-UUT2– Internal Components		
Description	Manufacturer	Part Number
600A 3P Circuit Breaker	Square D	039-000052-0001

**Test Report 59040R11 – UUT 1C**

Galaxy 5000 100-130kVA 250A Maintenance By-Pass Cabinet  
 Model No.: 0M-G5TH100K130GSA  
 0.108" Cold Formed Carbon Steel  
 28"W x 32.5"D x 75"H, 300 lbs  
 Floor mounted using: (6) 1/2" - 13 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.39	1.0	1.5	2.22	1.67	0.93	0.38
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
11.0	8.5	>33.3						

59040R11-UUT1C– Internal Components		
Description	Manufacturer	Part Number
250A 3P Circuit Breaker	Square D	039-000049-0001

**Test Report 58696R11 – UUT 5**

Galaxy PW 1200A System By-Pass Cabinet  
 Model No.: OM-GWTA675G  
 0.108" Cold Formed Carbon Steel  
 32.5"W x 39"D x 82"H, 960 lbs  
 Floor mounted using: (8) 1/2"- 13 Grade 5 bolts



UUT 5 at the right rear

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.36	1.0	1.5	2.18	1.63	0.91	0.37
Natural Frequencies (Hz)			Test Results					
F-B	S-S	V	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
11.0	5.2	31.5						

**58696R11-UUT5– Internal Components**

Description	Manufacturer	Part Number
1200A 3P Circuit Breaker	Square D	530-2208

**Test Report 58923R11 – UUT 1B**

Galaxy 5000 KAIC 16W Top/Bottom Entry Cabinet  
 Model No.: OM-G5TAB  
 0.108" Cold Formed Carbon Steel  
 16.3"W x 32.5"D x 75"H, 198 lbs  
 Floor mounted using: (6) 1/2"- 13 Grade 5 bolts



UUT 1B in the center

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.48	1.0	1.5	2.37	1.78	0.99	0.40
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
10.0	11.5	>33.3						

**58923R11-UUT1B– Internal Components**

Description	Manufacturer	Part Number
Fuse 450A 700V	Bussmann	038-000007-0001

**Test Report 59040R11 – UUT 1B**

Galaxy 5000 40-50kVA Transformer Cabinet  
 Model No.: OM-G5TT40K50F  
 0.108" Cold Formed Carbon Steel  
 28"W x 32.5"D x 75"H, 740 lbs  
 Floor mounted using: (6) 1/2" - 13 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.39	1.0	1.5	2.22	1.67	0.93	0.38
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
12.0	12.0	>33.3						

**59040R11-UUT1B– Internal Components**

Description	Manufacturer	Part Number
XMFR 50 kVA 600/480 V	Onyx power Inc.	8-97050-12

**Test Report 70284R12 – UUT 3**

Galaxy 5000 130-160kVA Transformer Cabinet  
 Model No.: 0M-G5TT100K130F  
 0.108" Cold Formed Carbon Steel  
 28"W x 32.5"D x 75"H, 2632 lbs  
 Floor mounted using: (7) 1/2"- 13 Grade 5 bolts



UUT 3 on the left

Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.42	1.0	1.5	2.27	1.70	0.95	0.38
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
4.0	4.8	17.0						

70284R12-UUT3– Internal Components		
Description	Manufacturer	Part Number
XMFR 160 kVA 480/480 V	Onyx power Inc.	8-220-016044-00

**Test Report 58040R10 – UUT 2A**

Galaxy 5000 Critical Bus Synchro  
 Model No.: 0M-GWTACBSUPS  
 0.06" Cold Formed Carbon Steel  
 16"W x 8.5"D x 20"H, 37 lbs  
 Wall mounted using: (4) 1/4" - 20 Grade 5 bolts



Building Code	Test Criteria	S <sub>DS</sub> (g)	z/h	I <sub>p</sub>	Horizontal		Vertical	
					A <sub>FLX-H</sub> (g)	A <sub>RIG-H</sub> (g)	A <sub>FLX-V</sub> (g)	A <sub>RIG-V</sub> (g)
CBC 2016	ICC-ES AC 156	1.41	1.0	1.5	2.26	1.69	0.94	0.38
<b>Natural Frequencies (Hz)</b>			<b>Test Results</b>					
<b>F-B</b>	<b>S-S</b>	<b>V</b>	The UUT maintained structural integrity and functionality after the AC156 test. UUT full of contents during testing.					
N/A	N/A	N/A						

58040R10-UUT2A– Internal Components		
Description	Manufacturer	Part Number
Critical Bus Synchro module	Schneider IT	72-133156-00