



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

APPLICATION FOR OSHPD SPECIAL SEISMIC
CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP – 0455 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Schneider Electric

Manufacturer's Technical Representative: Jacob Noehr Vangsgaard

Mailing Address: Silicon Allé 1, 6000 Kolding, Denmark

Telephone: +45 72 19 04 44 x0444

Email: Jacob.NoehrVangsgaard@Schneider-Electric.com

Product Information

Product Name: Galaxy VX, 500-1500 kVA

Product Type: Uninterruptible Power Supply

Product Model Number: See Certified Product Table attached

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

General Description: UPS systems consisting of I/O, Power, & Maintenance Bypass cabinets w/ power blocks, rectifiers, contactors, circuit breakers, fuses, PSUs, switches, fans, and chokes. 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 mounted

Applicant Information

Applicant Company Name: Schneider Electric

Contact Person: Jacob Noehr Vangsgaard

Mailing Address: Silicon Allé 1, 6000 Kolding, Denmark

Telephone: +45 72 19 04 44 x0444

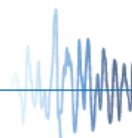
Email: Jacob.NoehrVangsgaard@Schneider-Electric.com

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: Jacob Noehr Vangsgaard Date: June 21, 2017

Title: Senior Mechanical Engineer Company Name: Schneider Electric

"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., 6th Flr., San Francisco, CA 94111

Telephone: (415) 837-0700 Email: m.scanu@forell.com

Supports and Attachments Preapproval

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

Certification Method

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

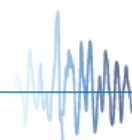
Testing Laboratory

Company Name: NTS Huntsville

Contact Name: Rod Thornberry

Mailing Address: 7800 Highway 20 West, Huntsville, AL 35806, U.S.

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) = 1.37

S_{DS} (Design spectral response acceleration at short period, g) = 1.83

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) = 1.0

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) = _____

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) = _____

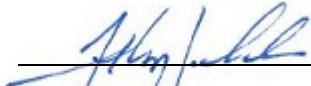
Tank(s) designed in accordance with ASME BPVC, 2015: ☐ Yes ☒ No

List of Attachments Supporting Special Seismic Certification

☒ Test Report(s) ☐ Drawings ☒ Calculations ☒ Manufacturer's Catalog

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

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

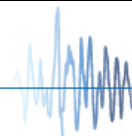
Signature:  Date: October 13, 2017

Print Name: Timothy J. Piland Title: SSE

Special Seismic Certification Valid Up to : S_{DS} (g) = 1.83 z/h = 1

Condition of Approval (if applicable): _____

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



Schneider Electric 500-1500 kVA Galaxy VX UPS

I. Certified Product Table

Unit	Width	Depth	Height	Max. Weight	Test Status
Power Cabinet (PC)					
250kW PC	23.6 in	35.4 in	77.6 in	1162 lbs	UUT4B, 5B, 5C
				1162 - 1190 lbs	Interpolated
				1190 lbs	UUT1B, 1C, 1D, 2C
Input/Output Cabinet (IOC)					
625-750 kW IOC	59.1 in	35.4 in	77.6 in	2229 lbs	UUT1A, 2B
500-1000 kW N+1 IOC	59.1 in			1826 lbs	UUT4A
1000-1500 kW N+1 IOC	78.7 in			1804 lbs	UUT5A
Maintenance Bypass Cabinet (MBC)					
625-750 kW MBC	31.5 in	35.4 in	77.6 in	1155 lbs	UUT2A, 3A
Notes					
1. Cabinet frames and panels are cold-formed carbon steel w/ 1.5-2.5mm thick frame members.					
2. All enclosures are rated for indoor use.					
3. All enclosures are floor mounted.					

Schneider Electric 500-1500 kVA Galaxy VX UPS

II. Certified Subcomponent Table

Description	Manufacturer	Part #	Test Status
Power Block			
42 kVA	Schneider Electric	0N-94906	UUT1B, UUT1C, UUT1D, UUT2C
42 kVA PF1	Schneider Electric	0N-9850	UUT4B, UUT5B, UUT5C
Rectifiers			
250 kW	Schneider Electric	0N-10236	UUT1B, UUT1C, UUT1D, UUT2C
250 kW PC2	Schneider Electric	0N-96600	UUT4B, UUT5B, UUT5C
Static Bypass Switch			
750 kW Module	Schneider Electric	0N-10542	UUT1A, UUT2B
1000 kW Module	Schneider Electric	0N-10742	UUT4A
Assembly Block	Infineon Technologies	1T3160NK0048U1105802	UUT5A
Contactors			
TeSys 2-pole Contactor 500A	Schneider Electric	LC1F4002	UUT5A
TeSys 3-pole Contactor 265A	Schneider Electric	LC1F265N7	UUT4A
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD	UUT1B, UUT1C, UUT1D, UUT2C, UUT4B
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D1156BD	UUT5B, UUT5C
TeSys 3-pole Contactor 185A	Schneider Electric	LC1F185M5	UUT1A, UUT2B
Auxiliary Contactor	Schneider Electric	LADN11	UUT1A, UUT2B
Chokes			
Line Reactor 250 kVA	Schneider Electric	420-0771	UUT1B, UUT1C, UUT1D, UUT2C
Line Reactor Coil for 250 kVA	Schneider Electric	420-0820	UUT4B, UUT5B, UUT5C
Fans			
Fan Assembly	Schneider Electric	0N-1254	(All UUTs)
Fan Assembly	Schneider Electric	0N-96386	UUT2A, UUT3A
Fan Assembly	Schneider Electric	0N-10487	UUT1A, UUT2B
Sub Fuse Fan Hot Swap BD1000	Schneider Electric	0N-96623	UUT4A
Circuit Breakers			
PowerPact 1600A 3 poles	Square D	RLF36160CU31AAE	UUT1A
PowerPact 1200A 3 poles	Square D	PLF34120CU31AAESK	UUT1A, UUT2A, UUT2B, UUT3A
PowerPact 2000A 3 poles	Square D	RLF36000S20	UUT4A
PowerPact 2500A 3 poles	Square D	RLF36000S25	UUT5A
Transformer			
Line Transformer 480V, 60Hz, 155VA	Qingdao Yunlu Energy Technology	1B-TB15225N-SD00	UUT2A, UUT3A

Schneider Electric 500-1500 kVA Galaxy VX UPS

II. Certified Subcomponent Table (cont.)

Power Supply Units			
PSU	Schneider Electric	0N-1229	UUT1A, UUT1B, UUT1C, UUT1D, UUT2B UUT2C, UUT4A, UUT4B, UUT5A, UUT5B, UUT5C
PSU	Schneider Electric	0N-10492	UUT1A, UUT2B
MPSU - Valhal Assembly PCB	Schneider Electric	0P3616	UUT4A, UUT4B, UUT5A, UUT5B, UUT5C
EPSU - Bluedoor Assembly PCB	Schneider Electric	0P6562	UUT5A
FEMPSU - Bluedoor Assembly PCB	Schneider Electric	0P6551	UUT4A, UUT5A
Fuses			
High Speed Fuse 550A 690V/700V + Microswitch	Mersen	X300400	UUT1B, UUT1C, UUT1D, UUT2C
High Speed Fuse 450A 1250V/1300V + Microswitch	Mersen	E300522	UUT1B, UUT1C, UUT1D, UUT2C
High Speed Fuse 1800A 600V/690V	Littelfuse	L060SQ33FL1800	UUT1A, UUT2B
High Speed Fuse 1500A 600V/690V	Littelfuse	L060SQ33FL1500	UUT1A, UUT2B
Microswitch	Littelfuse	MS3H1000C	UUT1A, UUT2B
Cartridge Fuse, Fast Acting 600V, 5A	Littelfuse	KLKD 5	UUT4A, UUT5A
Semiconductor Fuse 630A	Mersen	G1055246K	UUT4B
Semiconductor Fuse 630A	Cooper Bussmann	170M3473-SC	UUT5B, UUT5C
Semiconductor Fuse 450A	Cooper Bussmann	170M4957-CH	UUT4B
Semiconductor Fuse 450A	Mersen	C1040913K	UUT5B
Semiconductor Fuse 450A	Littelfuse	L125SQ71FL0450M	UUT5C
Semiconductor Fuse 2000A	Mersen	Q1054794F	UUT4A
Semiconductor Fuse 2500A	Mersen	R1054795A	UUT4A
Semiconductor Fuse 2500A	Cooper Bussmann	170M7083-SC	UUT4A
Ultra Fast-Acting Fuse 2500A	Mersen	PC44UD70V25CTQ	UUT5A
Fuse Holder			
FH 10x38 DIN Rail 35mm 30A 600V 75C	Bussmann	CHM1DU	UUT1A, UUT2B
FH 10x38 DIN Rail 35mm 30A 600V 120C	Bussmann	CHM2DU	UUT2A, UUT3A

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT1A - Test Report PR038133-TR-15 (IOC1)

Galaxy VX 625-750 kW Input/Output Cabinet

Cold formed carbon steel indoor enclosure

59.1"W x 35.4"D x 77.6"H, 2229 lbs

Floor-mounted using: (10) ½" Bolts, Grade 5

through full-width front & rear anchoring brackets

4mm thick, EN 10149-2-S355MC CFS (Fy = 355 MPa)

w/ (5) anchor holes each



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
8.0 Hz	7.0 Hz	23 Hz						

Subcomponents	Manufacturer	Part #
625-750 kW Static Bypass Module	Schneider	0N-10542
TeSys 3-pole Contactor 185A	Schneider Electric	LC1F185M5
Auxiliary Contactor	Schneider Electric	LADN11
Fan Assembly	Schneider Electric	0N-1254
Fan Assembly	Schneider Electric	0N-10487
PSU	Schneider Electric	0N-1229
PSU	Schneider Electric	0N-10492
PowerPact 1600A 3 poles	Square D	RLF36160CU31AAE
PowerPact 1200A 3 poles	Square D	PLF34120CU31AAESK
High Speed Fuse 1800A 600V/690V	Littelfuse	L060SQ33FL1800
High Speed Fuse 1500A 600V/690V	Littelfuse	L060SQ33FL1500
Microswitch	Littelfuse	MS3H1000C
Fuse Holder 10x38 DIN Rail 35mm 30A 600V 75C	Bussmann	CHM1DU

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT1B - Test Report PR038133-TR-15 (PC1)

Galaxy VX 250kW Power Cabinet

Cold formed carbon steel indoor enclosure

23.6"W x 35.4"D x 77.6"H, 1193 lbs

Floor-mounted using: (7) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
7.8 Hz	8.0 Hz	22 Hz						

Subcomponents	Manufacturer	Part #
42 kW Power Blocks	Schneider Electric	0N-94906
250 kW Rectifier	Schneider Electric	0N-10236
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor 250 kVA	Schneider Electric	420-0771
Fan Assembly	Schneider Electric	0N-1254
Power Supply	Schneider Electric	0N-1229
High Speed Fuse 550 690V/700V + Microswitch	Mersen	X300400
High Speed Fuse 450A 1250V/1300V + Microswitch	Mersen	E300522

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT1C - Test Report PR038133-TR-15 (PC2)

Galaxy VX 250kW Power Cabinet

Cold formed carbon steel indoor enclosure

23.6"W x 35.4"D x 77.6"H, 1193 lbs

Floor-mounted using: (7) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
8.0 Hz	8.0 Hz	21 Hz						

Subcomponents	Manufacturer	Part #
42 kW Power Blocks	Schneider Electric	0N-94906
250 kW Rectifier	Schneider Electric	0N-10236
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor 250 kVA	Schneider Electric	420-0771
Fan Assembly	Schneider Electric	0N-1254
Power Supply	Schneider Electric	0N-1229
High Speed Fuse 550 690V/700V + Microswitch	Mersen	X300400
High Speed Fuse 450A 1250V/1300V + Microswitch	Mersen	E300522

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT1D - Test Report PR038133-TR-15 (PC3)

Galaxy VX 250kW Power Cabinet

Cold formed carbon steel indoor enclosure

23.6"W x 35.4"D x 77.6"H, 1193 lbs

Floor-mounted using: (7) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
7.8 Hz	8.0 Hz	20 Hz						

Subcomponents	Manufacturer	Part #
42 kW Power Blocks	Schneider Electric	0N-94906
250 kW Rectifier	Schneider Electric	0N-10236
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor 250 kVA	Schneider Electric	420-0771
Fan Assembly	Schneider Electric	0N-1254
Power Supply	Schneider Electric	0N-1229
High Speed Fuse 550A 690V/700V + Microswitch	Mersen	X300400
High Speed Fuse 450A 1250V/1300V + Microswitch	Mersen	E300522

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT2A - Test Report PR038133-TR-15 (MBC1)

Galaxy VX 625-750 kW, Maintenance Bypass Cabinet
Cold formed carbon steel indoor enclosure
31.5"W x 35.4"D x 77.6"H, 1155 lbs
Floor-mounted using: (6) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)
w/ (3) anchor holes each



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
7.0 Hz	8.5 Hz	28 Hz						

Subcomponents	Manufacturer	Part #
Fan Assembly	Schneider Electric	0N-96386
PowerPact 1200A 3 poles	Square D	PLF34120CU31AAESK
Fuse Holder 10x38 DIN Rail 35mm 30A 600V 120C	Bussmann	CHM2DU
Line Transformer 480V, 60Hz, 155VA	Qingdao Yunlu Energy Technology	1B-TB15225N-SD00

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT2B - Test Report PR038133-TR-15 (IOC2)

Galaxy VX 625-750 kW Input/Output Cabinet

Cold formed carbon steel indoor enclosure

59.1"W x 35.4"D x 77.6"H, 2229 lbs

Floor-mounted using: (10) ½" Bolts, Grade 5

through full-width front & rear anchoring brackets

4mm thick, EN 10149-2-S355MC CFS (Fy = 355 MPa)

w/ (5) anchor holes each



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
7.0 Hz	8.5 Hz	28 Hz						

Subcomponents	Manufacturer	Part #
750 kW Static Bypass Module	Schneider	0N-10542
TeSys 3-pole Contactor 185A	Schneider Electric	LC1F185M5
AUXILIARY CONTACT FOR CIRCUIT BREAKER	Schneider Electric	LADN11
Fan Assembly	Schneider Electric	0N-1254
Fan Assembly	Schneider Electric	0N-10487
PSU	Schneider Electric	0N-1229
PSU	Schneider Electric	0N-10492
PowerPact 1200A 3 poles	Square D	PLF34120CU31AAESK
High Speed Fuse 1800A 600V/690V	Littelfuse	L060SQ33FL1800
High Speed Fuse 1500A 600V/690V	Littelfuse	L060SQ33FL1500
Microswitch	Littelfuse	MS3H1000C
Fuse Holder 10x38 DIN Rail 35mm 30A 600V 75C	Bussmann	CHM1DU

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT2C - Test Report PR038133-TR-15 (PC5)

Galaxy VX 250 kW Power Cabinet

Cold formed carbon steel indoor enclosure

23.6"W x 35.4"D x 77.6"H, 1193 lbs

Floor-mounted using: (7) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	2.00	1.0	1.5	3.20	2.40	1.33	0.53
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.					
7.0 Hz	8.5 Hz	20 Hz						

Subcomponents	Manufacturer	Part #
42 kW Power Blocks	Schneider Electric	0N-94906
250 kW Rectifier	Schneider Electric	0N-10236
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor 250 kVA	Schneider Electric	420-0771
Fan Assembly	Schneider Electric	0N-1254
Power Supply	Schneider Electric	0N-1229
High Speed Fuse 550 690V/700V + Microswitch	Mersen	X300400
High Speed Fuse 450A 1250V/1300V + Microswitch	Mersen	E300522

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT3A - Test Report PR038133-TR-15 (MBC2)

Galaxy VX 625-750 kW Maintenance Bypass Cabinet
Cold formed carbon steel indoor enclosure
31.5"W x 35.4"D x 77.6"H, 1155 lbs
Floor-mounted using: (6) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)
w/ (3) anchor holes each



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.84	1.0	1.5	2.94	2.21	1.23	0.49
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.					
11.5 Hz	6.5 Hz	>33 Hz						

Subcomponents	Manufacturer	Part #
Fan Assembly	Schneider Electric	0N-96386
PowerPact 1200A 3 poles	Square D	PLF34120CU31AAESK
Fuse Holder 10x38 DIN Rail 35MM 30A 600V 120C	Bussmann	CHM2DU
Line Transformer 480V, 60Hz, 155VA	Qingdao Yunlu Energy Technology	1B-TB15225N-SD00

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT4A - Test Report PR058851-TR-17 (IOC1)

Galaxy VX 500-1000 kW Input/Output Cabinet
(1000 kW in this configuration)

Cold-formed carbon steel indoor enclosure

59.1" W x 35.4" D x 77.6" H, 1,826 lbs

Floor-mounted using: (10) ½" Bolts, Grade 5
through full-width front & rear anchoring brackets
w/ (5) anchor holes each, 4mm thick

Front bracket: EN 10149-2-S355MC CFS (Fy = 355 MPa)

Rear bracket: EN 10130-DC01 CFS (Fy = 280 MPa)



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.83	1.0	1.5	2.93	2.20	1.23	0.49
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 Hz	8.5 Hz	30 Hz						

Subcomponents	Manufacturer	Part #
500-1000 kW Module	Schneider Electric	0N-10742
TeSys 3-pole Contactor 265A	Schneider Electric	LC1F265N7
Fan Assembly	Schneider Electric	0N-1254
Sub Fuse Fan Hot Swap BD1000	Schneider Electric	0N-96623
MPSU - Valhal Assembly PCB	Schneider Electric	0P3616
FEMPSU - Bluedoor Assembly PCB	Schneider Electric	0P6551
PowerPact 2000A 3 poles	Square D	RLF36000S20
Cartridge Fuse, Fast Acting 600V, 5A	Littelfuse	KLKD 5
Semiconductor Fuse 2500A	Cooper Bussmann	170M7083-SC
Semiconductor Fuse 2500A	Mersen	R1054795A
Semiconductor Fuse 2000A	Mersen	Q1054794F

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT4B - Test Report PR058851-TR-17 (PC1)

Galaxy VX 250 kW Power Cabinet

Cold-formed carbon steel indoor enclosure

23.6" W x 35.4" D x 77.6" H, 1,162 lbs

Floor mounted using: (7) ½"-13 Grade 5 bolts
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.83	1.0	1.5	2.93	2.20	1.23	0.49
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.					
9.0 Hz	8.5 Hz	23 Hz						

Subcomponents	Manufacturer	Part #
Power Block 42 kVA PF1	Schneider Electric	0N-9850
Rectifier 250 kW PC2	Schneider Electric	0N-96600
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor Coil for 250 kVA	Schneider Electric	420-0820
Fan Assembly	Schneider Electric	0N-1254
MPSU - Valhal Assembly PCB	Schneider Electric	0P3616
Semiconductor Fuse 630A	Mersen	G1055246K
Semiconductor Fuse 450A	Cooper Bussmann	170M4957-CH

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT5A - Test Report PR058851-TR-17 (IOC2)

Galaxy VX 1000-1500 kW Input/Output Cabinet
(1500 kW in this configuration)

Cold-formed carbon steel indoor enclosure

78.7" W x 35.4" D x 77.6" H, 1,804 lbs

Floor mounted using: (10) ½"-13 Grade 5 bolts
through full-width front & rear anchoring brackets
w/ (5) anchor holes each, 4mm thick

Front bracket: EN 10149-2-S355MC CFS (Fy = 355 MPa)

Rear bracket: EN 10130-DC01 CFS (Fy = 280 MPa)



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.85	1.0	1.5	2.96	2.22	1.23	0.49
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.					
7.5 Hz	8.0 Hz	33 Hz						

Subcomponents	Manufacturer	Part #
Static Bypass Switch Assembly Block	Infineon Technologies	1T3160NK0048U1105802
TeSys 2-pole Contactor 500A	Schneider Electric	LC1F4002
Fan Assembly	Schneider Electric	0N-1254
MPSU - Valhal Assembly PCB	Schneider Electric	0P3616
EPSU - Bluedoor Assembly PCB	Schneider Electric	0P6562
FEMPSU - Bluedoor Assembly PCB	Schneider Electric	0P6551
PowerPact 2500A 3 poles	Square D	RLF36000S25
Ultra Fast-Acting Fuse 2500A	Mersen	PC44UD70V25CTQ
Cartridge Fuse, Fast Acting 600V, 5A	Littelfuse	KLKD 5

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT5B - Test Report PR058851-TR-17 (PC2)

Galaxy VX 250 kW Power Cabinet
Cold-formed carbon steel indoor enclosure
23.6" W x 35.4" D x 77.6" H, 1,162 lbs
Floor mounted using: (7) ½"-13 Grade 5 bolts
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)
Front bracket: (3) anchor holes
Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.85	1.0	1.5	2.96	2.22	1.23	0.49
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.					
7.5 Hz	8.0 Hz	23 Hz						

Subcomponents	Manufacturer	Part #
Power Block 42 kVA PF1	Schneider Electric	0N-9850
Rectifier 250 kW PC2	Schneider Electric	0N-96600
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor Coil for 250 kVA	Schneider Electric	420-0820
Fan Assembly	Schneider Electric	0N-1254
MPSU - Valhal Assembly PCB	Schneider Electric	0P3616
Semiconductor Fuse 630A	Cooper Bussmann	170M3473-SC
Semiconductor Fuse 450A	Mersen	C1040913K

OSP APPLICATION
Schneider Electric – 500-1500 kVA Galaxy VX UPS
III. UUT Summary Sheets

UUT5C - Test Report PR058851-TR-17 (PC3)

Galaxy VX 250 kW Power Cabinet

Cold-formed carbon steel indoor enclosure

23.6" W x 35.4" D x 77.6" H, 1,162 lbs

Floor mounted using: (7) ½"-13 Grade 5 bolts
through full-width front & rear anchoring brackets,
4mm thick, EN 10130-DC01 CFS (Fy = 280 MPa)

Front bracket: (3) anchor holes

Rear bracket: (4) anchor holes



Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.85	1.0	1.5	2.96	2.22	1.23	0.49
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.					
7.5 Hz	8.0 Hz	>33 Hz						

Subcomponents	Manufacturer	Part #
6x Power Block 42 kVA PF1	Schneider Electric	0N-9850
Rectifier 250 kW PC2	Schneider Electric	0N-96600
TeSys 3-pole Contactor 200A	Schneider Electric	LC1D115BD
Line Reactor Coil for 250 kVA	Schneider Electric	420-0820
Fan Assembly	Schneider Electric	0N-1254
MPSU - Valhal Assembly PCB	Schneider Electric	OP3616
Semiconductor Fuse 630A	Cooper Bussmann	170M3473-SC