



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0220-10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Schneider Electric IT Division

Manufacturer's Technical Representative: Jose Muniz

Mailing Address: Via de la Innovacion #408, Parque PIIT Apodaca, NL. CP 66628 Mexico

Telephone: +52 81 4739 2000 x82869 Email: Jose.Muniz@schneider-electic.com

Product Information

Product Name: Symmetra PX 250/500

Product Type: Uninterrupted Power Supply (UPS)

Product Model Number: See Certified Product Table attached
(List all unique product identification numbers and/or part numbers)

General Description: Symmetra PX 250/500 UPS units consist of Battery Enclosure, Battery Side Car, UPS Power Module, UPS I/O, Battery Break Enclosure, Maintenance Bypass and Distribution Panel, Bottom Feed Frame and Ancillary Monitor Board and EP Connection and Trip Boards. 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 except for rigidly wall mounted Ancillary Monitor Board and EP Connection and Trip Boards

Applicant Information

Applicant Company Name: Schneider Electric IT Division

Contact Person: Jose Muniz

Mailing Address: Via de la Innovacion #408, Parque PIIT Apodaca, NL. CP 66628 Mexico

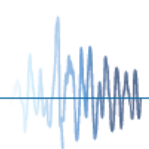
Telephone: +52 81 4739 2000 x82869 Email: Jose.Muniz@schneider-electic.com

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: 11/11/2016

Title: Regulatory Compliance Engineer Company Name: Schneider Electric IT Division

"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): _____

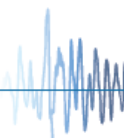
Testing Laboratory

Company Name: 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) = 1.17

S_{DS} (Design spectral response acceleration at short period, g) = 1.56

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

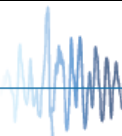
Signature:  Date: 12/22/16

Print Name: M. R. Karim Title: SHFR

Special Seismic Certification Valid Up to : S_{DS} (g) = 1.56 z/h = 1.0

Condition of Approval (if applicable): _____

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



Schneider Electric IT Division - Symmetra PX 250/500 kW

I. Certified Product Table

System Units	Width	Depth	Height	Max. Weight	Construction Material ^{1,2}	Model Number	Notes	Test Status
Battery Frame Enclosure	30.0 in	43.0 in	79.0 in	1499 lbs	2.5 mm CFS	SYBFXR8	3	58092R10 UUT1A
				3526 lbs	2.5 mm CFS		3	Interpolated
				3526 lbs	2.5 mm CFS		3	58092R10 UUT3
Battery Side Car	11.8 in	43.0 in	79.0 in	328 lbs	1.5 mm CFS	SYBSC	3	58092R10 UUT1A
UPS Power Module Frame	23.5 in	43.0 in	79.0 in	630 lbs	1.5 mm CFS	SYPF250KD	3	58092R10 UUT1B
				1485 lbs	1.5 mm CFS		3	Interpolated
				1485 lbs	1.5 mm CFS		3	58092R10 UUT3
UPS I/O Frame	23.5 in	43.0 in	79.0 in	904 lbs	1.5 mm CFS	SYIOF500KD	3	58092R10 UUT1B
				968 lbs	1.5 mm CFS		3	Interpolated
				968 lbs	1.5 mm CFS		3	58092R10 UUT3
Battery Breaker Enclosure	24.0 in	43.0 in	79.0 in	720 lbs	1.5 mm CFS	SYBBE	3	58092R10 UUT2
Maintenance Bypass and Distribution Panel	15.8 in	43.0 in	79.0 in	710 lbs	1.5 mm CFS	SYIOF500KMBL	3, 5	58092R10 UUT3
	15.8 in	43.0 in	79.0 in	710 lbs	1.5 mm CFS	SYIOF500KMBR	3, 5	Extrapolated
Bottom Feed Frame	11.8 in	43.0 in	79.0 in	330 lbs	1.5 mm CFS	SYBFF	3	58092R10 UUT3
Ancillary Monitor Board and EPO Connection and Trip Board	17.0 in	3.0 in	7.0 in	3 lbs	1.0 mm CFS	SYOPT007	4	58092R10 UUT1C

Notes

1. All enclosures are NEMA 1 or NEMA 3R rated.
2. CFS= cold-formed carbon steel
3. Floor mounted
4. Wall mounted
5. SYIOF500KMBL have input connection enter the cabinet from the left. SYIOF500KMBR have input connection enter the cabinet from the right.

Schneider Electric IT Division - Symmetra PX 250/500 kW

II. Certified Subcomponents Table

Internal Components	Manufacturer	Part #	Testing Status
25kW Power Module	Schneider Electric	SYPM25KD	58092R10 UUT1B, UUT3
250kW Static Switch Module	Schneider Electric	SYSW250KD	58092R10 UUT1B
500kW Static Switch Module	Schneider Electric	SYSW500KD	58092R10 UUT3
Battery Unit	Schneider Electric	SYBTU2-PLP	58092R10 UUT1A, UUT3
Battery Unit	Schneider Electric	SYBTU2-PLPLL	Extrapolated ¹
Battery Monitor Board	Schneider Electric	0G-SYBMB2	58092R10 UUT1A
Battery Breaker Motor PSU	ABB	0G-SYBBMOPSU2	58092R10 UUT1A
Battery Shelves	Schneider Electric	870-13035C	58092R10 UUT1A, UUT3
System PSU	Schneider Electric	0G-SYPSU2	58092R10 UUT1A, UUT1B, UUT3
Power Module Shelves	Schneider Electric	870-12761C	58092R10 UUT1B, UUT3
		870-12762C	58092R10 UUT1B, UUT3
Intelligence Modules	Schneider Electric	0G-SYMIM6	58092R10 UUT1B, UUT3
GUI	Schneider Electric	0N-9586SYPX	58092R10 UUT1B, UUT3
Interface Board	Schneider Electric	0G-SYEXCB	58092R10 UUT1B, UUT3
Interface PCB	Schneider Electric	0N-1086	5809R10 UUT1C, UUT2, UUT3
400A 4P Circuit Breaker	ABB	530-0895B	58092R10 UUT1A
800A 4P Circuit Breaker	ABB	530-0839B	58092R10 UUT3
1200A 4P Circuit Breaker	ABB	530-1031B	5809R10 UUT2
800A 3p Service Switch	ABB	540-0206A	58092R10 UUT3
800A 4p Service Switch	ABB	540-0207A	58092R10 UUT3
1000A 3p Service Switch	Schneider Electric	540-0285	58092R10 UUT1B, UUT3
Fuse and Sensing PCB	Schneider Electric	0P4711AA	58092R10 UUT1A, UUT3
500A Fuses	Ferraz Shawmut	515-0119-Z	5809R10 UUT2
630A Fuses	Bussmann	515-0116	58092R10 UUT1B
	Ferraz Shawmut	515-0116	58092R10 UUT1B
1100A Fuses	Bussmann	515-1100	58092R10 UUT3
	Ferraz Shawmut	515-1100	58092R10 UUT3
305A 3p Contactor	ABB	451-0188	58092R10 UUT1B
800A 3p Contactor	ABB	451-0217	58092R10 UUT3
SCR 250A	Infineon Tech. (Eupec)	320-0039	58092R10 UUT1B
	Ixys Corp.	320-0039	58092R10 UUT1B
SCR 545A	Infineon Tech. (Eupec)	320-0041	58092R10 UUT3
	Ixys Corp.	320-0041	58092R10 UUT3

Note: 1. Extrapolated unit is structurally identical and varies due to branding.

Schneider Electric IT Division - Symmetra PX 250/500 kW

II. Certified Subcomponents Table

Internal Components	Manufacturer	Part #	Testing Status
Copper Busbar	Schneider Electric	880-2002C	58092R10 UUT1B, UUT2
		880-2004G	58092R10 UUT1B
		880-2010D	58092R10 UUT1B, UUT3
		880-2012A	58092R10 UUT1B
		880-2029A	58092R10 UUT1B, UUT3
		880-2030A	58092R10 UUT1B
		880-2067B	5809R10 UUT3
		880-2164A	58092R10 UUT1A
		880-2165A	58092R10 UUT1A
		880-2166A	58092R10 UUT1A
		880-2167	58092R10 UUT1A
		880-2206A	58092R10 UUT1A
		880-2208	58092R10 UUT1A
		880-2210A	58092R10 UUT1A
		880-2211A	58092R10 UUT1A
		880-2214C	58092R10 UUT1A
		880-2215B	58092R10 UUT1A
		880-2429C	5809R10 UUT2
		880-2625	58092R10 UUT1A
		880-2626	58092R10 UUT1A
		880-2632	58092R10 UUT1A
		880-2633	58092R10 UUT1A
		880-2634	58092R10 UUT1A
880-2963A	5809R10 UUT3		
880-4705	58092R10 UUT1B, UUT3		
Load Panel Board	ABB	530-0842A	5809R10 UUT3
Subfeed	ABB	PD3P60AT1B	5809R10 UUT3
		PD3P225AT3B	5809R10 UUT3
		PD*	Interpolated
		PD3P400AT5B	5809R10 UUT3

OSP APPLICATION
 Schneider Electric IT Division Symmetra PX250/500 kW
 III. UUT Summary Sheets

Date: 11/14/2016

Test Report 58092R10 – UUT 1A

Symmetra PX250/500 Battery Frame with Side Car
 42”W x 43”D x 79”H, 1,852 lbs
 Floor mounted using: (12) ½” – 13 Grade 5 bolts



System Unit	Width	Depth	Height	Material	Component No.
Battery Frame Enclosure	30”	43”	79”	2.5 mm Carbon Steel, NEMA 1	SYBFXR8
Battery Side Car	11.8	43”	79”	1.5 mm Carbon Steel, NEMA 1	SYBSC

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	1.61	1.0	1.5	2.58	1.93	1.08	0.43
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.					
14	6.3	27						

Schneider Electric IT Division Symmetra PX250/500 kW

III. UUT Summary Sheets

Test Report 58092R10 – UUT 1A, cont’d

Symmetra PX250/500 Battery Frame with Side Car
 42”W x 43”D x 79”H, 1,852 lbs

Floor mounted using: (12) ½” – 13 Grade 5 bolts



Internal Components	Manufacturer	Part #
Battery Units	Schneider Electric	0G-SYBTU2-PLP
Battery Monitor Board	Schneider Electric	0G-SYBMB2
Battery Breaker Motor PSU	ABB	0G-SYBBMOPSU2
Battery Shelves	Schneider Electric	870-13035C
System PSU	Schneider Electric	0G-SYPSU2
400A 4P Circuit Breaker	ABB	530-0895B
Fuse and Sensing PCB	Schneider Electric	0P4711AA
Copper Busbar	Schneider Electric	880-2164A
System PSU	Schneider Electric	880-2165A
400A 4P Circuit Breaker	ABB	880-2166A
Fuse and Sensing PCB	Schneider Electric	880-2167
Copper Busbar	Schneider Electric	880-2206A
		880-2208
		880-2210A
		880-2211A
		880-2214C
		880-2215B
		880-2625
		880-2626
		880-2632
		880-2633
		880-2634

OSP APPLICATION
 Schneider Electric IT Division Symmetra PX250/500 kW
 III. UUT Summary Sheets

Date: 11/14/2016

Test Report 58092R10 – UUT 1B
 Uninterruptible Power Supply [UPS]
 47”W x 43”D x 79”H, 1,628 lbs
 Floor mounted using: (16) ½” – 13 Grade 5 bolts



System Unit	Width	Depth	Height	Material	Component No.
UPS Power Module Frame	23.5”	43”	79”	1.5 mm Carbon Steel, NEMA 1	SYPF250KD
UPS I/O Frame	23.5	43”	79”	1.5 mm Carbon Steel, NEMA 1	SYIOF500KD

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	1.61	1.0	1.5	2.58	1.93	1.08	0.43
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.					
6	5.1	>33.3						

OSP APPLICATION
 Schneider Electric IT Division Symmetra PX250/500 kW
 III. UUT Summary Sheets

Date: 11/14/2016

Test Report 58092R10 – UUT 1B, cont’d
 Uninterruptible Power Supply [UPS]
 47”W x 43”D x 79”H, 1,628 lbs
 Floor mounted using: (16) ½” – 13 Grade 5 bolts



Internal Components	Manufacturer	Part #
25kW Power Module	Schneider Electric	SYPM25KD
250kVA Static Switch Module	Schneider Electric	SYSW250KD
System PSU	Schneider Electric	OG-SYPSU2
Power Module Shelves	Schneider Electric	870-12761C
		870-12762C
Intelligence modules	Schneider Electric	OG-SYMIM6
GUI	Schneider Electric	0N-9586SYPX
Interface Boards	Schneider Electric	OG-SYEXCB
1000A 3p Service Switch	Schneider Electric	540-0285
630A Fuses	Bussmann	515-0116
	Ferraz	515-0116
305A 3p Contactor	ABB	451-0188
SCR 250A	EUPEC	320-0039
	IXYS	320-0039
Copper Busbars	Schneider Electric	880-2002C
		880-2004G
		880-2010D
		880-2012A
		880-2029A
		880-2030A
		880-4705

Test Report 58092R10 – UUT 1C

Ancillary Monitor Board and EPO

Connection and trip board

17"W x 3"D x 7"H, 3 lbs

1mm Carbon Steel

Wall mounted using: (6) No. 10-32 Screws



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	1.61	1.0	1.5	2.58	1.93	1.08	0.43
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.					
N/A	N/A	N/A						

Internal Components	Manufacturer	Part #
Ancillary Monitor Board and EPO connection and Trip Board	Schneider Electric	SYOPT007
Interface PCB	Schneider Electric	0N-1086

Test Report 58092R10 – UUT 2

Battery Breaker Enclosure
 24”W x 43”D x 79”H, 720 lbs
 1.5 mm Cold Formed Carbon Steel, NEMA 1
 Floor mounted using: (8)-½” – 13 Grade 5 bolts



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	1.56	1.0	1.5	2.50	1.87	1.05	0.42
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	4.7	24						

Internal Components	Manufacturer	Part #
500A Fuses	Ferraz Shawmut	515-0119-Z
1200A 4p Circuit Breaker	ABB	530-1031B
Interface PCB	Schneider Electric	0N-1086
Copper Busbar	Schneider Electric	880-2002C
		880-2429C

OSP APPLICATION
 Schneider Electric IT Division Symmetra PX250/500 kW
 III. UUT Summary Sheets

Date: 11/14/2016

Test Report 58092R10 – UUT 3

Complete System

104"W x 43"D x 79"H, 7,055lbs

Floor mounted using: (30) ½" – 13 Grade 5 bolts



System Unit	Width	Depth	Height	Material	Component No.
Battery Frame Enclosure	30"	43"	79"	2.5 mm Carbon Steel, NEMA 1	SYBFXR8
UPS Power Module Frame	23.5"	43"	79"	1.5 mm Carbon Steel, NEMA 1	SYPF250KD
Bottom Feed Frame	11.8"	43"	79"	1.5 mm Carbon Steel, NEMA 1	SYBFF
UPS I/O Frame	23.5"	43"	79"	1.5 mm Carbon Steel, NEMA 1	SYIOF500KD
Maintenance Bypass and Distribution Panel	15.8"	43"	79"	1.5 mm Carbon Steel, NEMA 1	OG-SY500KMB

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Horizontal		Vertical	
					A _{FLEX-H} (g)	A _{RIG-H} (g)	A _{FLEX-V} (g)	A _{RIG-V} (g)
CBC 2016	ICC-ES AC 156	1.62	1.0	1.5	2.59	1.94	1.09	0.43
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.					
6.7	4.8	15.5						

OSP APPLICATION
Schneider Electric IT Division Symmetra PX250/500 kW
III. UUT Summary Sheets

Date: 11/14/2016

Test Report 58092R10 – UUT 3 cont'd



Internal Components	Manufacturer	Part #
25 kW Power Module	Schneider Electric	SYPM25KD
500kW Static Switch Module	Schneider Electric	SYSW500KD
Battery Units (48 total)	Schneider Electric	OG-SYBTU2-PLP
Battery Shelves	Schneider Electric	870-13035C
System PSU	Schneider Electric	OG-SYPSU2
Power Module Shelves	Schneider Electric	870-12761C
		870-12762C
Intelligence modules	Schneider Electric	OG-SYMIM6
GUI	Schneider Electric	0N-9586SYPX
Interface Boards	Schneider Electric	OG-SYEXCB
Interface PCB	Schneider Electric	0N-1086
800A 4p Circuit Breaker	ABB	530-0839B
800A 3p Service Switch	ABB	540-0206A
800A 4p Service Switch	ABB	540-0207A
1000A 3p Service Switch	Schneider Electric	540-0285
Fuse and Sensing PCB	Schneider Electric	0P4711AA
1100A Fuses	Bussmann	515-1100
	Ferraz	515-1100
800A 3p Contactor	ABB	451-0217
SCR 545A	EUPEC	320-0041
	IXYS	320-0041
Copper Busbar	Schneider Electric	880-2010D
		880-2029A
		880-2067B
		880-2963A
		880-4705
T1 subfeed x 2 pcs	ABB	PD3P60AT1B
T3 subfeed	ABB	PD3P225AT3B
T5 subfeed x 6 pcs	ABB	PD3P400AT5B
Load Panel Board	ABB	530-0842A