



**DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
FACILITIES DEVELOPMENT DIVISION**

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

OFFICE USE ONLY

APPLICATION #: OSP-0046

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Square D by Schneider Electric

Manufacturer's Technical Representative: Scott Littler

Mailing Address: 6700 Tower Circle, Suite 700, Franklin, TN 37067

Telephone: (615) 267-9407 Email: scott.littler@se.com

Product Information

Product Name: Switchgear/Switchboards

Product Type: Switchgear - Medium Voltage

Product Model Number: MasterClad (4.76kV to 38kV) and Arc Resisting MasterClad (4.76kV to 15kV) Switchgear systems with bus Ampacity ratings from 1200A to 3000A (see Certified Product Listing tables).

General Description: Distribution and Auxiliary/Meter bay Metal-Clad Switchgear sections packaged in NEMA Type 1 and Type 3R sheet metal framed enclosures. Sub-components consist of VR Series vacuum interrupting circuit breakers, voltage transformers, control power transformers, meters, protective relays, and surge capacitors (see Certified Major Sub-Components table). The Arc Resistant offering includes arc flash mitigation and arc flash containment features.

Mounting Description: Rigid, Floor Mounted

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: Pre Compliance

Contact Person: Galen Reid

Mailing Address: 36 SW Wall Street, Bend, OR 97702

Telephone: (541) 241-2310 Email: galen@go-pre.com

Title: Principal & Program Manager





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

Company Name: PRE COMPLIANCE
Name: Andrew Coughlin California License Number: S6082
Mailing Address: 36 SW Wall Street, Bend, OR 97702
Telephone: (415) 635-8461 Email: Andy@go-pre.com

Certification Method

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

Testing Laboratory

Company Name: ENVIRONMENTAL TESTING LABORATORIES, INC. (ETL)
Contact Person: Jeremy Lange
Mailing Address: 11034 Indian Trail, Dallas TX 752293513
Telephone: (972) 247-9657 Email: Jeremy@etldallas.com

Company Name: Pacific Earthquake Engineering Research Center (PEER)
Contact Person: Amarnath Kasalanati
Mailing Address: 1301 South 46th St., Bldg. 420, Richmond CA 947201729
Telephone: (510) 642-3437 Email: Amarnath1@berkeley.edu

Company Name: UNIVERSITY OF BUFFALO (SEESL)
Contact Person: Mark Pitman
Mailing Address: 212 Ketter Hall, Buffalo NY 14260
Telephone: (716) 645-4377 Email: mpitman@buffalo.edu

Company Name: WYLE LABORATORIES
Contact Person: Greg Mason
Mailing Address: 7800 Highway 20 West, Huntsville AL 35806
Telephone: (256) 837-4411 Email: greg.mason@nts.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.40 (SDS = 1.86); 0.95 (SDS = 2.10)

SDS (Design spectral response acceleration at short period, g) = 1.86 (z/h = 1); 2.10 (SDS = 0)

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

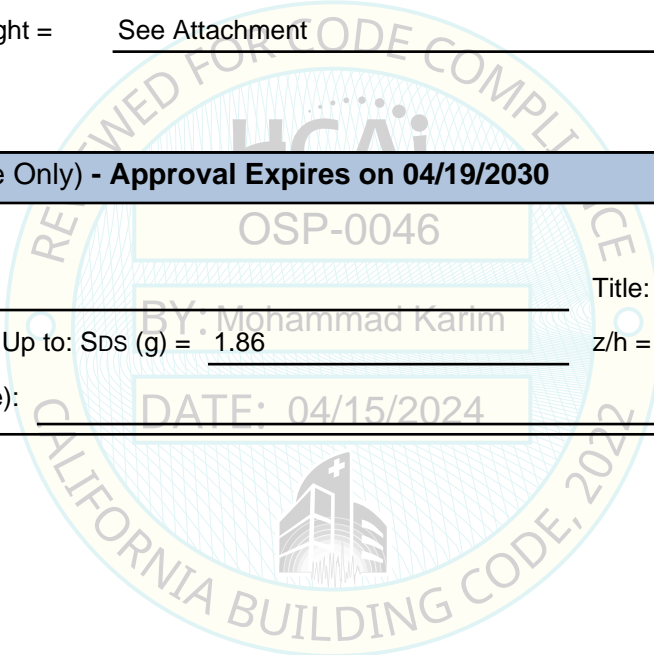
Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment



HCAI Approval (For Office Use Only) - Approval Expires on 04/19/2030

Date: 4/15/2024

Name: Mohammad Karim

Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 1.86

z/h = 1

Condition of Approval (if applicable): _____





SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241405-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: Masterclad

Seismic Parameters
 $S_{DS} = 1.86g$ for $z/h=1$
 $S_{DS} = 2.10g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 1A Mounting Configuration: Rigid Base Mounted - Standalone

Construction Summary

Masterclad: NEMA Type 1 and 3R enclosures constructed of carbon steel. Copper bus.
 Arc Resistant Masterclad: NEMA Type 1 enclosures with ANSI Type 2B Arc Resisting indoor rating. Constructed of carbon steel. Copper bus.

Options Summary

Masterclad: Voltage rating from 4.76 kV to 27 kV. Bus Ampacity ratings from 1200A to 3000A.
 Arc Resistant Masterclad: Voltage rating from 4.76 kV to 15 kV. Bus Ampacity ratings from 1200A to 3000A.
 See tables 2-6 for a complete listing of optional components.

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Masterclad MV Switchgear - Distribution and Auxiliary/Meter Bay	36W	92	36	95	4572		Interp.
		109	36	109	4240		1
	48W	92	48	95	3800		Interp.
		109	48	109	4000		Interp.
Arc Resistant Masterclad MV Switchgear - Distribution and Auxiliary/Meter Bay	36W	94	36	99	8061		8
		94	36	99	9164		Interp.
		94	36	99	9164		7



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENTS

Pre No. CC241405-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: Masterclad

Seismic Parameters
 $S_{DS} = 1.86g$ for $z/h=1$
 $S_{DS} = 2.10g$ for $z/h=0$
 $I_p = 1.5$

Building Codes
CBC 2022

TABLE 1B Mounting Configuration: Rigid Base Mounted - Ganged

Construction Summary

Masterclad: NEMA Type 1 and 3R enclosures constructed of carbon steel. Copper bus.
 Arc Resistant Masterclad: NEMA Type 1 enclosures with ANSI Type 2B Arc Resisting indoor rating. Constructed of carbon steel. Copper bus.

Options Summary

Masterclad: Voltage rating from 4.76 kV to 27 kV. Bus Ampacity ratings from 1200A to 3000A.
 Arc Resistant Masterclad: Voltage rating from 4.76 kV to 15 kV. Bus Ampacity ratings from 1200A to 3000A.
 See tables 2-6 for a complete listing of optional components.

Model Line	Model	Max. Dimensions (in)			Wt. (lb)	Notes	UUT
		D	W	H			
Masterclad MV Switchgear - Distribution and Auxiliary/Meter Bay	36W	92	36	95	4572	4a (3778 lbs.); 4b (4572 lbs.)	4a,4b
		109	36	109	4146	5b is an HVL section	5a
		111	36	95	4600		Interp.
		127	36	109	4998	2a (4692 lbs.); 2b (4998 lbs.)	2a,2b
	48W	92	48	95	3800		Interp.
		109	48	109	4000		Interp.
		111	48	95	4300		Interp.
		127	48	109	4350		Interp.
	60W	92	60	95	4000		Interp.
		109	60	109	4400		Interp.
		111	60	95	5000		Interp.
		127	60	109	5400		Interp.
	80W	92	80	95	4400		Interp.
		109	80	109	4800		Interp.
		111	80	95	5400		Interp.
		127	80	109	5800		Interp.
Arc Resistant Masterclad MV Switchgear - Distribution and Auxiliary/Meter Bay	36W	94	36	99	8061		Interp.
		94	36	99	9164		Interp.
		94	36	99	9164		Interp.

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: Masterclad

Seismic Parameters

$S_{DS} = 1.86g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.10g$ for $z/h=0$

Building Codes

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TABLE 4 Voltage Transformers

Component (Manufacturer)	Model	Description	Notes	UUT	
Voltage Transformers (ITI/GE)	PTG3160242FGC1	2400V/120V; Cu Windings; 34 lbs.		1	
	PT*	3000V/120V; Cu Windings; 34 lbs.		Interp.	
	PT*	4200V/120V; Cu Windings; 34 lbs.		Interp.	
	PT*	7200V/120V; Cu Windings; 85 lbs.		Interp.	
	PT*	8400V/120V; Cu Windings; 85 lbs.		Interp.	
	PT*	12000V/120V; Cu Windings; 85 lbs.		Interp.	
	PTG52SD02293FFG	12470V/120V; Cu Windings; 85 lbs.		5	
	PT*	13200V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	13800V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	16500V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	20780V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	22860V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	23000V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	24940V/120V; Cu Windings; 125 lbs.		Interp.	
	PT*	26400V/120V; Cu Windings; 125 lbs.		Interp.	
	PTG61125SD03591	27000V/120V; Cu Windings; 125 lbs.		2	
	Voltage Transformers (Amran)	V9*	2400V/120V; Cu Windings; 35 lbs.		Interp.
		V9-422FFGC2-01	4200V/120V; Cu Windings; 35 lbs.		9
V9*		4200V/120V; Cu Windings; 35 lbs.		Interp.	
V9*		4800V/120V; Cu Windings; 35 lbs.		Interp.	
V21*		4200V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		4800V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		6600V/110V; Cu Windings; 90 lbs.		Interp.	
V21*		7200V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		8400V/120V; Cu Windings; 90 lbs.		Interp.	
V21.1-2-123FF		12000V/120V; Cu Windings; 90 lbs.		9	
V21*		12000V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		12470V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		13200V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		13800V/120V; Cu Windings; 90 lbs.		Interp.	
V21*		14400V/120V; Cu Windings; 90 lbs.		Interp.	
V22*		10200V/120V; Cu Windings; 125 lbs.		Interp.	
V22*		12000V/120V; Cu Windings; 125 lbs.		Interp.	
V22*		13200V/120V; Cu Windings; 125 lbs.		Interp.	



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENTS

Pre No. CC241405-01-R0

Manufacturer: Square D by Schneider Electric
Product Type: Switchgear – Medium Voltage
Model Line: Masterclad

Seismic Parameters
 $S_{DS} = 1.86g$ for $z/h=1$ $I_p = 1.5$
 $S_{DS} = 2.10g$ for $z/h=0$

Building Codes
CBC 2022

TABLE 5 **Control Power Transformers**

Component (Manufacturer)	Model	Description	Notes	UUT
Control Power Transformers (ITI/GE)	CPTS3605242A	5 kVA, 2400V/120V; Cu Windings; 165 lbs.		2
	CPTS36054161A	5 kVA, 4160V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS3605482A	5 kVA, 4800V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS5955722A	5 kVA, 7200V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS5955123A	5 kVA, 12000V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS59551242A	5 kVA, 12470V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS59551322A	5 kVA, 13200V/120V; Cu Windings; 165 lbs.		Interp.
	CPTS36010242A	10 kVA, 2400V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS360104161A	10 kVA, 4160V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS36010482A	10 kVA, 4800V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS59510722A	10 kVA, 7200V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS59510123A	10 kVA, 12000V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS595101242A	10 kVA, 12470V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS595101322A	10 kVA, 13200V/120V; Cu Windings; 250 lbs.		Interp.
	CPTS36015242A	15 kVA, 2400V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS360154161A	15 kVA, 4160V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS36015482A	15 kVA, 4800V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS59515722A	15 kVA, 7200V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS59515123A	15 kVA, 12000V/120V; Cu Windings; 290 lbs.		Interp.
	CPTS595151242A	15 kVA, 12470V/120V; Cu Windings; 290 lbs.		5
CPTS595151322A	15 kVA, 13200V/120V; Cu Windings; 290 lbs.		Interp.	
CPT36025242A	25 kVA, 2400V/120V; Cu Windings; 411 lbs.		Interp.	
CPT360254161A	25 kVA, 4160V/120V; Cu Windings; 411 lbs.		2	
CPT36025482A	25 kVA, 4800V/120V; Cu Windings; 411 lbs.		Interp.	

