



APPLICATION FOR PREAPPROVAL SPECIAL SEISMIC CERTIFICATION OF EQUIPMENT AND COMPONENTS

For Office Use Only

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|------------------------|
| APPLICATION NO. |
| OSP – 0016-10 |

Check whether application is: NEW RENEWAL

1.0 Square D by Schneider Electric North America Philip Caldwell
Manufacturer *Manufacturer's Technical Representative*

1990 Sandifer Blvd, Seneca, SC 29678
Mailing Address

864-886-1471 philip.caldwell@us.schneider-electric.com
Telephone *E-mail Address*

2.0 Square D NQ, NQOD, NF, I-Line, QMB Boards Panelboards
Product Name *Product Type*

NQ, NQOD, NF, I-Line, QMB Panelboards: see Product Range Summary, attached
Product model No (List all unique product identification numbers and/or serial numbers)

General Description: Wall-mounted panelboards; functions include but are not limited to: main switch, fusible, and circuit breaker panelboards.

3.0 Square D by Schneider Electric North America Philip Caldwell for Brett Wheless
Applicant Company Name *Contact Person*

1010 Airpark Center Dr., Nashville, TN 37217 *Philip J. Caldwell*
Mailing Address

615-844-8365 brett.wheless@us.schneider-electric.com
Telephone *E-mail Address*

I hereby agree to reimburse the Office of Statewide Health Planning and Development for the actual costs incurred by the department for review.

Philip J. Caldwell 8/11/2010
Signature of Applicant *Date*

Edison Expert Schneider Electric
Title *Company Name*

11/



Registered Design Professional Preparing the Report

4.0 University of Alabama - Birmingham

Company Name

Lee Gholamreza Moradi C41383

Contact Name *California License Number*

4824 Sulphur Springs Rd, Hoover, AL 35226

Mailing Address

205-975-2718 moradi@uab.edu

Telephone *E-mail Address*

California Licensed Structural Engineer Review and Acceptance of the Report

5.0 Forell-Elsesser Engineers, Inc.

Company Name

Marco Scanu, SE S4454

Contact Name *California License Number*

160 Pine St., 6th Flr., San Francisco, CA 94111

Mailing Address

415-837-0700 m.scanu@forell.com

Telephone *E-mail Address*

Anchorage Pre-Approval

6.0

Anchorage is pre-approved under OPA-
(Separate application for anchorage pre-approval is required)

Anchorage is not Pre-approved

Certification Method

7.0 Testing in accordance with: ICC-ES AC-156 Other (Please Specify):

Analysis

Experience data

Combination of Testing, Analysis, and/or Experience Data (Please Specify):

Testing Laboratory (if applicable)

8.0 Wyle Laboratories Ron Thornberry

Company Name *Contact Name*

7800 Hwy 20, Huntsville, AL 35806

Mailing Address

(256) 837-4411 E-mail:

Telephone



Approval Parameters

9.0 Design in accordance with ASCE 7-05 Chapter 13: Yes No

Design Basis of Equipment or Components (Fp/Wp) = 1.56g

S_{DS} (Spectral response acceleration at short period) = 2.08g

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

R_p (Equipment or component response modification factor) = 6.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component fundamental period(s) = N/A

Building period limits (if any) = N/A

Overall dimensions and weight (or range thereof) = See Attached "Product Range Summary"

Equipment or Components @ grade designed in accordance with ASCE 7-05 Chapter 15: Yes No

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

S_{DS} (Spectral response acceleration at short period) =

S₁ (Spectral response acceleration at 1 second period) =

R (Response modification coefficient) = 1.0

Ω₀ (System overstrength factor) = 1.0

C_d (Deflection amplification factor) = 1.0

I_p (Importance factor) = 1.5

Height to Center of Gravity above base =

Equipment or Component fundamental period(s) = Sec

Overall dimensions and weight (or range thereof) =

Tank(s) designed in accordance with ASME BPVC, 2007: Yes No

10.0 List of attachments supporting the special seismic certification of equipment or components:

Test Report

Drawings

Manufacturer's Catalog

Calculations

Other (Please Specify): SE Acceptance Letter, Product Range Summary, CAN2-1708A.5 & AC156 Requirements Checklist

11.0 OSHPD Approval (For Office Use Only)

Chris Tokas

Signature & Date

8/11/10

December 31, 2016

Chris Tokas, SHFR

Name & Title

Approval Expiration Date

S_{DS} (g) = 2.08 z/h = 1.0

Special Seismic Certification Valid Up to

Condition of Approval (if any):

OSP APPLICATION
Square D - Panelboards
Product Range Summary

8/11/2010

**Square D Panelboards - Product Range Summary
For Inclusion in OSP Application**

| Product Name | Height | Depth | Width | Max. Service Wt. | Notes |
|---------------------------------------|-----------|--------|-------|------------------|--|
| NQ Circuit Breaker Panelboards | | | | | |
| 100A | 26" - 62" | 5 3/4" | 20" | 87 - 113 lbs | |
| 225A | 32" - 74" | 5 3/4" | 20" | 97 - 159 lbs | Test 54869 UUT4 50"H x 5.75"D x 20"W x 101 lbs Included in OSP Application |
| 250A | 44" - 86" | 5 3/4" | 20" | 141 - 196 lbs | |
| 400A | 50" - 86" | 5 3/4" | 20" | 169 - 224 lbs | |
| 600A | 50" - 86" | 5 3/4" | 20" | 169 - 224 lbs | |

Anchorage

Panelboards are anchored to vertical structure through mounting holes in rear panel. Typical installation is with bolts into backing. Lateral forces are resisted by shear membrane action in the light gauge metal exterior sheathing. Shear is transferred to adjacent metal panels through screws, then to anchorage to structure.

NF Standard Width Panelboards

| | | | | | |
|------|-----------|-----------------|-----------|---------------|---|
| 100A | 38" - 44" | 5 3/4" | 20" - 26" | 149 - 152 lbs | |
| 125A | 26" - 50" | 5 3/4" | 20" - 26" | 147 - 152 lbs | Test 56963 UUT 50"H x 5.75"D x 20"W x 140 lbs |
| 250A | 50" - 62" | 5 3/4" - 8 3/4" | 20" - 26" | 152 - 225 lbs | |
| 400A | 50" - 80" | 5 3/4" - 8 3/4" | 20" - 26" | 225 - 243 lbs | Test 0Q016-01-01-01 80"H x 5.75"D x 20"W x 240 lbs |
| 600A | 50" - 80" | 5 3/4" - 8 3/4" | 20" - 26" | 227 - 243 lbs | Test 0Q016-02-01-01 80"H x 8"D x 26"W x 243 lbs |
| 800A | 50" - 62" | 8 3/4" | 20" - 26" | 200 - 300 lbs | Test 2Q007-02-01-01 92"H x 8.75"D x 26"W x 300 lbs |

Anchorage

Panelboards are anchored to vertical structure through mounting holes in rear panel. Typical installation is with bolts into backing. Lateral forces are resisted by shear membrane action in the light gauge metal exterior sheathing. Shear is transferred to adjacent metal panels through screws, then to anchorage to structure.

NQOD Circuit Breaker Panelboards

| | | | | | |
|------|-----------|--------|-----------|---------------|---|
| 100A | 20" - 38" | 5 3/4" | 14" - 20" | 87 - 113 lbs | |
| 150A | 32" - 50" | 5 3/4" | 14" - 20" | 87 - 113 lbs | |
| 225A | 32" - 50" | 5 3/4" | 14" - 20" | 87 - 113 lbs | Test 0Q016-04-01-01 56"H x 5.75"D x 20"W x 127 lbs |
| 250A | 44" - 50" | 5 3/4" | 20" | 141 - 196 lbs | |
| 400A | 50" - 68" | 5 3/4" | 20" | 169 - 224 lbs | |
| 600A | 53" - 56" | 5 3/4" | 20" | 169 - 224 lbs | |

Anchorage

Panelboards are anchored to vertical structure through mounting holes in rear panel. Typical installation is with bolts into backing. Lateral forces are resisted by shear membrane action in the light gauge metal exterior sheathing. Shear is transferred to adjacent metal panels through screws, then to anchorage to structure.

OSP APPLICATION
 Square D - Panelboards
 Product Range Summary

8/11/2010

| Square D Panelboards - Product Range Summary | | | | | |
|--|-----------|-----------------|---------------|------------------|---|
| Product Name | Height | Depth | Width | Max. Service Wt. | Notes |
| I-Line Circuit Breaker Panelboards | | | | | |
| 100A | 52" - 74" | 6 1/2" | 26" | 300 lbs | |
| 225A | 52" - 92" | 6 1/2" | 26" | 300 - 439 lbs | |
| 400A | 48" - 92" | 6 1/2" | 26" - 32" | 420 - 582 lbs | |
| 600A | 50" - 91" | 8 1/4" | 26" - 32" | 647 - 690 lbs | |
| 800A | 48" - 91" | 8 1/4" - 9 1/2" | 26" | 634 - 751 lbs | |
| 1200A | 50" - 86" | 9 1/2" | 42" - 44 1/2" | 740 - 830 lbs | Test 0Q016-05-01-01 86"H x 9.5"D x 42"W x 740 lbs Test 51551-4 86"H x 14.5"D x 44"W x 826 lbs Included in OSP Application |
| <p>Anchorage Panelboards are anchored to vertical structure through mounting holes in rear panel. Typical installation is with bolts into backing. Lateral forces are resisted by shear membrane action in the light gauge metal exterior sheathing. Shear is transferred to adjacent metal panels through screws, then to anchorage to structure.</p> | | | | | |
| QMB Fusible & Main Switch Panelboards | | | | | |
| 225A-600A | 90" max. | 11 1/2" | 38" | 803 lbs max. | |
| 800A | 75" - 96" | 11 1/2" | 38" | 300 - 930 lbs | Test 0Q016-06-01-01 96"H x 11.5"D x 38"W x 340 lbs |
| 1200A | 75" - 90" | 11 1/2" | 38" | 300 - 930 lbs | |
| 1600A | 96" | 11 1/2" | 38" | 300 - 930 lbs | |
| <p>Anchorage Panelboards are anchored to vertical structure through mounting holes in rear panel. Typical installation is with bolts into backing. Lateral forces are resisted by shear membrane action in the light gauge metal exterior sheathing. Shear is transferred to adjacent metal panels through screws, then to anchorage to structure.</p> | | | | | |

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