



DEPARTMENT OF HEALTH CARE ACCESS AND INFORMATION
OFFICE OF STATEWIDE HOSPITAL PLANNING AND DEVELOPMENT

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

OFFICE USE ONLY

APPLICATION #: OSP-0011

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Eaton

Manufacturer's Technical Representative: Dallas Bostian

Mailing Address: 3990 Old Tasso Road NE, Cleveland, TN 37312

Telephone: (423) 472-0238 Email: dallasjbostian@eaton.com

Product Information

Product Name: Elevator Control Switches

Product Model Number(s): See attachments

Product Category: Elevator Equipment

Product Sub-Category: Elevator Controllers

General Description: Switch assemblies used for the controlled shut down of single or multiple elevator units. Providing appropriate interface controls and relays to the fire alarm system. Unit or group mounted, 30-1200A, 3-phase, 600 Vac maximum, NEMA 1, 3R, and 4 enclosures.

Mounting Description: Wall Mounted Rigid

Tested Seismic Enhancements: None

Applicant Information

Applicant Company Name: WE Gundy & Associates, Inc

Contact Person: Travis Soppe

Mailing Address: PO Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Title: President

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STATE OF CALIFORNIA – HEALTH AND HUMAN SERVICES AGENCY



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

Company Name: W.E. GUNDY & ASOCIATES INC.

Name: Travis Soppe California License Number: S6115

Mailing Address: P.O. Box 9121, Boise, ID 83707

Telephone: (208) 342-5989 Email: tsoppe@wegai.com

Certification Method

GR-63-Core ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3

Other (Please Specify): _____

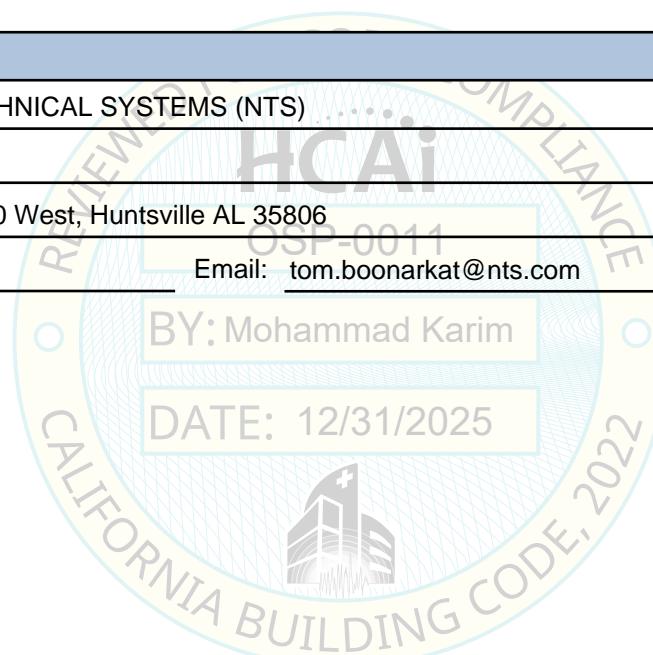
Testing Laboratory

Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)

Contact Person: Tom Boonarkat

Mailing Address: 7800 Highway 20 West, Huntsville AL 35806

Telephone: (256) 837-4411 Email: tom.boonarkat@nts.com



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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 2.03

SDs (Design spectral response acceleration at short period, g) = 2.70

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAi Approval (For Office Use Only) - Approval Expires on 12/30/2031

Date: 12/31/2025

Name: Mohammad Karim

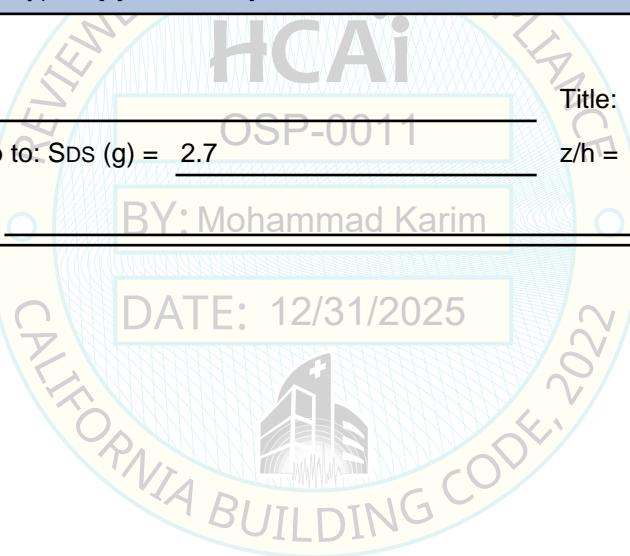
Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDs (g) = 2.7

z/h = 1

Condition of Approval (if applicable): BY: Mohammad Karim

DATE: 12/31/2025



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TABLE 1	EATON ELEVATOR CONTROL SWITCHES CERTIFIED PRODUCT LINE MATRIX						 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING
	Ampereage	³NEMA Rating	Dimensions (in)			Weight (lb)	Representative UUT
			Width	Depth	Height		
ES1T1R1F1B	30A	1	17.25	11.5	29.75	51	UUT-1
ES1xxxxxxx	30A	1 / 3R / 4	17.25	11.5	29.75	51	extrapolated
ESC1xxxxxxx	30A	1 / 3R / 4	17.25	11.5	29.75	51	extrapolated
ES2xxxxxxx	60A	1 / 3R / 4	17.25	11.5	29.75	60	extrapolated
ESC2xxxxxxx	60A	1 / 3R / 4	17.25	11.5	29.75	60	extrapolated
ES3xxxxxxx	100A	1 / 3R / 4	17.25	11.5	29.75	60	extrapolated
ESC3xxxxxxx	100A	1 / 3R / 4	17.25	11.5	29.75	60	extrapolated
ES4xxxxxxx	200A	1 / 3R / 4	21.50	11.5	32.75	76	extrapolated
ESC4xxxxxxx	200A	1 / 3R / 4	21.50	11.5	32.75	76	extrapolated
ES5xxxxxxxx	400A	1 / 3R / 4	26.75	11.5	54.50	142	interpolated
ES5T1R1GF3B	400A	1	26.75	11.5	54.50	142	UUT-19
ECP-400A	400A	1	40.00	11.5	57.00	400	interpolated
ECP-600A	600A	1	40.00	11.5	73.75	460	interpolated
ECP-800A	800A	1	40.00	11.5	90.00	530	interpolated
ECP-1200A	1200A	1	40.00	12.0	90.00	582	interpolated
ECP-1200A SM060812-001	1200A	1	40.50	12.0	90.25	582	UUT-2

Notes:

¹ All components are manufactured by Eaton and the part numbers listed uniquely identify type of component, manufacturer, and material of construction for each sub-component within the tested unit.

² The 400A-1200A configurations are engineered to order and utilize a unique model numbers for each project.

³ All enclosures are constructed of carbon steel. NEMA 3R / 4 enclosures are structurally identical to the NEMA 1 enclosure with the inclusion of gasket material for the door and seams.

SEISMIC CERTIFICATION LIMITS

System Component	Code	S_{DS} (g)	z / h	I_P	a_P	R_P	Ω₀	F_P / W_P
Elevator Control Switch	CBC 2022	2.70	1	1.50	2.5	6.0	2.0	2.03

TABLE 2		EATON ELEVATOR CONTROL SWITCHES CERTIFIED SUBCOMPONENT MATRIX		 W.E. GUNDY & ASSOCIATES, INC. STRUCTURAL & EARTHQUAKE ENGINEERING	
ID/Catalog Number	Manufacturer	Description		Weight (lbs)	Representative UUT
Molded Case Switch (Single)					
F: 6629C85G10	EATON	30A		5	UUT-1
F	EATON	30-200A		5	Interpolated
LG	EATON	400A		16	Interpolated
LG: LGK3400KSG	EATON	400A		16	UUT-19
Molded Case Switch (Twins)					
FDPB3601JSA	EATON	Blank/30A		22	UUT-2
FDPB3602JSA	EATON	Blank/60A		22	Interpolated
FDPB3603JSA	EATON	Blank/100A		22	Interpolated
FDPB3604JSA	EATON	Blank/200A		22	Interpolated
FDPB3611JSA	EATON	30A		26	Interpolated
FDPB3612JSA	EATON	30/60A		26	Interpolated
FDPB3613JSA	EATON	30/100A		26	Interpolated
FDPB3614JSA	EATON	30/200A		29	Interpolated
FDPB3622JSA	EATON	60A		26	Interpolated
FDPB3623JSA	EATON	60/100A		26	Interpolated
FDPB3624JSA	EATON	60/200A		29	Interpolated
FDPB3633JSA	EATON	100A		26	UUT-2
FDPB3634JSA	EATON	100/200A		29	Interpolated
FDPB3644JSA	EATON	200A		32	UUT-2
Control Relays					
D5PR3A-A3	EATON	120 Vac		< 1	UUT-1
D5PR3T1	EATON	24 Vdc		< 1	Interpolated
D5PR3A-A3	EATON	120 Vac		< 1	UUT-19
2961419	PHOENIX	120 Vac		< 1	UUT-2
Control Power Transformers					
C0100E5EFB	EATON	100VA		6	UUT-1/2/19

UUT-1

UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rigid wall mounted with (4) 3/8" grade 5 bolts.



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: Elevator Control Switches	Test Date: June 18-22, 2012
Component: ES1T1R1F1B	Report Number: 70282R12

UUT Function: Power interruption for equipment and circuit protection

UUT Description: 30A elevator control switch configuration in wall mounted NEMA 1 enclosure, Relay (D5PR3A-A3), Transformer (C0100E5EFB), Molded Case Switch (F: 6629C85G10)

UUT PROPERTIES

Weight (lb)	Enclosure Box Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
51	17.25	11.5	29.75	NA	NA	NA

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)
CBC 2022 / ICC-ES AC156	2.70	1	1.5	4.32	3.24	1.81	0.73

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT-2

UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rigid wall mounted with (4) 1/2" grade 5 bolts.



Manufacturer: Eaton	Test Location: Wyle Lab, Huntsville AL
Product Line: Elevator Control Switches	Test Date: June 18-22, 2012
Component: ECP-1200 / SM060812-001	Report Number: 70282R12

UUT Function: Power interruption for equipment and circuit protection

UUT Description: 30A elevator control switch configuration in wall mounted NEMA 1 enclosure, Molded Case Switch Assemblies (FDPB3612JSA, FDPB3633JSA, FDPB3644JSA), Control Transformer (D0100E5EFB), Relay (2961419)

UUT PROPERTIES

Weight (lb)	Enclosure Box Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
582	40.5	12.0	90.25	NA	NA	NA

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	SDS (g)	z / h	I _P	A _{FLEX-H} (g)	A _{REG-H} (g)	A _{FLEX-V} (g)	A _{REG-V} (g)
CBC 2022 / ICC-ES AC156	2.70	1	1.5	4.32	3.24	1.81	0.73

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.

UUT-19

UNIT UNDER TEST (UUT)
SUMMARY SHEET

Mounting Details: Rigid wall mounted with (4) 1/2" grade 5 bolts.



Manufacturer: Eaton

Test Location: Wyle Lab, Huntsville AL

Product Line: Elevator Control Switches

Test Date: June 18-22, 2012

Component: ES5T1RGF3B

Report Number: 70282R12

UUT Function: Power interruption for equipment and circuit protection

UUT Description: 400A elevator control switch configuration in wall mounted NEMA 1 enclosure, Relay (D5PR3A-A3), Transformer (C0100E5EFB), Molded Case Switch (LGK3400KSG)

UUT PROPERTIES

Weight (lb)	Enclosure Box Dimensions (inches)			Natural Frequency (Hz)		
	Width	Depth	Height	FB	SS	V
142	26.75	11.5	54.5	NA	NA	NA

SEISMIC TEST PARAMETERS

Building Code / Test Criteria	S _{DS} (g)	z / h	I _P	A _{FLX-H} (g)	A _{RIIG-H} (g)	A _{FLX-V} (g)	A _{RIIG-V} (g)
CBC 2022 / ICC-ES AC156	2.70	1	1.5	4.32	3.24	1.81	0.73

Note: The unit was full of contents during testing and remained functional before and after the ICC-ES AC156 test. The unit maintained structural integrity during and after the ICC-ES AC156 test.