



OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
FACILITIES DEVELOPMENT DIVISION

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

OFFICE USE ONLY

APPLICATION #: OSP – 0245 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Smartrise Engineering

Manufacturer's Technical Representative: Gilbert Zogbi

Mailing Address: 2601 Fair Oaks Boulevard, Sacramento, CA 95864

Telephone: 916.457.5129 Email: gilbert@smartrise.us

Product Information

Product Name: SRH, SRA, & SRD Elevator Controllers

Product Type: Elevator Controller

Product Model Number: See Attachment 1

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

General Description: Wall and floor mounted universal hydraulic, AC traction, and DC traction elevator controllers.

Seismic enhancements made to the test units shall be incorporated into the production units.

Mounting Description: Rigid wall and rigid floor mounted (see Attachment 1 for limitations)

Applicant Information

Applicant Company Name: Manwill Engineering LLC

Contact Person: Derek Manwill, SE

Mailing Address: PO Box 1194, Bend, OR 97709

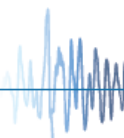
Telephone: 541.241.2102 Email: derek@manwillSE.com

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: July 7, 2017

Title: President Company Name: Manwill Engineering LLC

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





OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT
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California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)

Company Name: Manwill Engineering LLC

Name: Derek Manwill, SE California License Number: S6266

Mailing Address: PO Box 1194, Bend, OR 97709

Telephone: 541.241.2102 Email: derek@manwillSE.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: Environmental Testing Laboratory

Contact Name: Jeremy Lange

Mailing Address: 11034 Indian Trail, Dallas, TX 75229

Telephone: 972.247.9657 Email: jeremy@etldallas.com

Testing Laboratory

Company Name: UC Berkeley - PEER

Contact Name: Clement Barthes

Mailing Address: 1301 South 46th Street, Building 420, Richmond, CA 94804

Telephone: 510.665.3409 Email: clementbarthes@berkeley.edu

Testing Laboratory

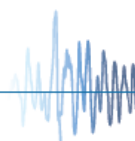
Company Name: National Technical Systems – Silicon Valley

Contact Name: Morrison Blackwell-White

Mailing Address: 38995 Cherry Street, Newark, CA 94560

Telephone: 510.578.3511 Email: Morrison.blackwell-white@nts.com

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Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: ☒ Yes ☐ No

Design Basis of Equipment or Components (F_p/W_p) = 1.5 ($S_{DS} = 2.0g$); 1.2 ($S_{DS} = 2.6g$)

S_{DS} (Design spectral response acceleration at short period, g) = 2.00 ($z/h = 1$); 2.60 ($z/h = 0$)

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 ($S_{DS} = 2.0g$); 0 ($S_{DS} = 2.6g$)

Equipment or Component Natural Frequencies (Hz) = N/A (wall mounted), See Attachment 2 (floor mounted)

Overall dimensions and weight (or range thereof) = See Attachments 1 & 2

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): Attachments 1 & 2

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

Signature: _____

Date: August 2, 2017

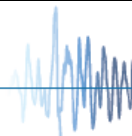
Print Name: Timothy J. Piland

Title: SSE

Special Seismic Certification Valid Up to : S_{DS} (g) = See Above

z/h = See Above

Condition of Approval (if applicable): _____



ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 1 - WALL MOUNTED

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb) ^[1]	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
SRH - Smartrise Universal Hydraulic Controller							
SRH-4015	10	24	30	170	22A, 480V	EXTRAP	
SRH-4020	10	24	30	170	32.9A, 480V	EXTRAP	
SRH-4025	10	24	30	170	35A, 480V	EXTRAP	
SRH-4030	10	24	30	170	51A, 480V	EXTRAP	
SRH-4040	10	24	30	170	64A, 480V	EXTRAP	
SRH-4060	10	24	30	170	80A, 480V	EXTRAP	
SRH-4075	10	24	30	170	105A, 480V	EXTRAP	
SRH-40100	10	24	30	170	147A, 480V	EXTRAP	
SRH-40125	10	24	30	170	156A, 480V	EXTRAP	
SRH-2015	10	24	30	170	55A, 240V	EXTRAP	
SRH-2020	10	24	30	170	68A, 240V, carbon steel	UUT 1	
SRH-2025	10	24	30	170	80A, 240V	INTERP	
SRH-2030	10	24	30	170	105A, 240V	INTERP	
SRH-2040	10	24	30	170	130A, 240V, carbon steel	UUT 2	
SRH-2050	10	24	30	170	156A, 240V	INTERP	
SRH-2075	10	24	30	170	252A, 240V	INTERP	
SRH-4015	14	30	39	232	22A, 480V	INTERP ^[2]	
SRH-4020	14	30	39	232	32.9A, 480V	INTERP	
SRH-4025	14	30	39	232	35A, 480V	INTERP	
SRH-4030	14	30	39	232	51A, 480V	INTERP	
SRH-4040	14	30	39	232	64A, 480V	INTERP	
SRH-4060	14	30	39	232	80A, 480V	INTERP	
SRH-4075	14	30	39	232	105A, 480V	INTERP	
SRH-40100	14	30	39	232	147A, 480V	INTERP	
SRH-40125	14	30	39	232	156A, 480V	INTERP	
SRH-2015	14	30	39	232	55A, 240V	INTERP	
SRH-2020	14	30	39	232	68A, 240V	INTERP	
SRH-2025	14	30	39	232	80A, 240V	INTERP	
SRH-2030	14	30	39	232	105A, 240V	INTERP	
SRH-2040	14	30	39	232	130A, 240V	INTERP	
SRH-2050	14	30	39	232	156A, 240V	INTERP	
SRA - Smartrise Universal AC Traction Controller							
SRA-4010	14	30	39	232	19A, 480V	INTERP	
SRA-4015	14	30	39	232	24A, 480V	INTERP	
SRA-4020	14	30	39	232	UUT=171lb, 31A, 480V, carbon steel	UUT 5	
SRA-4030	14	30	39	232	48A, 480V	INTERP	
SRA-4040	14	30	39	232	60A, 480V	INTERP	
SRA-4060	14	30	39	232	UUT=216lb, 84A, 480V, carbon steel	UUT 6	
SRA-2010	14	30	39	232	UUT=220lb, 36A, 240V, carbon steel	UUT 3	
SRA-2015	14	30	39	232	48A, 240V	INTERP	
SRA-2020	14	30	39	232	60A, 240V	INTERP	
SRA-2025	14	30	39	232	87A, 240V	INTERP	
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 1 - WALL MOUNTED (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb) ^[1]	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
SRA - Smartrise Universal AC Traction Controller (continued)							
SRA-2030		14	30	39	232	102A, 240V, carbon steel	UUT 4
SRA-4010		16	36	48	450	19A, 480V	INTERP
SRA-4015		16	36	48	450	24A, 480V	INTERP
SRA-4020		16	36	48	450	31A, 480V	INTERP
SRA-4030		16	36	48	450	48A, 480V	INTERP
SRA-4040		16	36	48	450	60A, 480V	INTERP
SRA-4060		16	36	48	450	84A, 480V	INTERP
SRA-4075		16	36	48	450	111A, 480V, carbon steel	UUT 7
SRA-2010		16	36	48	450	36A, 240V	INTERP
SRA-2015		16	36	48	450	48A, 240V	INTERP
SRA-2020		16	36	48	450	60A, 240V	INTERP
SRA-2025		16	36	48	450	87A, 240V	INTERP
SRA-2030		16	36	48	450	UUT=400lb, 102A, 240V, stainless st.	UUT 8
SRA-2040		16	36	48	450	114A, 240V	EXTRAP
SRD - Smartrise Universal DC Traction Controller							
SRD-060		16	36	48	339	UUT=324lb, 100A, 480V, carbon st.	UUT 9
SRD-125		16	36	48	339	195A, 480V, carbon steel	UUT 10
MOUNTING:	Rigid wall mounted.				SEISMIC LEVEL(S)	S _{DS} = 2.0g for z/h = 1 S _{DS} = 2.6g for z/h = 0	I _p = 1.5
NOTES:	Product Construction: Carbon steel (NEMA 1, 4, and 12) and stainless steel (NEMA 4X) enclosures. Carbon steel sub-frame. Options/Subcomponents: Wall mounted enclosures may contain any combination of subcomponents listed in Table 3 to create a complete controller. 1. Maximum weight for the enclosure size is taken as the maximum tested weight for that size, regardless of controller type. 2. SRH interpolation to the 14x30x39 enclosure is acceptable because the subcomponents are all certified in Table 3 and the weight is less than or equal to the enclosure weight tested for the SRA.						

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 2 - FLOOR MOUNTED

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
SRA - Smartrise Universal AC Traction Controller							
SRA-4010		16	36	60	450	19A, 480V	EXTRAP
SRA-4015		16	36	60	450	24A, 480V	EXTRAP
SRA-4020		16	36	60	450	31A, 480V	EXTRAP
SRA-4030		16	36	60	450	48A, 480V	EXTRAP
SRA-4040		16	36	60	450	60A, 480V	EXTRAP
SRA-4060		16	36	60	450	84A, 480V	EXTRAP
SRA-4075		16	36	60	450	111A, 480V, carbon steel	UUT 7
SRA-2010		16	36	60	450	36A, 240V	INTERP
SRA-2015		16	36	60	450	48A, 240V	INTERP
SRA-2020		16	36	60	450	60A, 240V	INTERP
SRA-2025		16	36	60	450	87A, 240V	INTERP
SRA-2030		16	36	60	450	UUT=400lb, 102A, 240V, stainless st.	UUT 8
SRA-2040		16	36	60	450	114A, 240V	EXTRAP
SRD - Smartrise Universal DC Traction Controller							
SRD-060		16	36	60	339	UUT=324lb, 100A, 480V, carbon st.	UUT 9
SRD-125		16	36	60	339	195A, 480V, carbon steel	UUT 10
MOUNTING:	Rigid floor mounted.				SEISMIC LEVEL(S)	S _{DS} = 2.0g for z/h = 1 S _{DS} = 2.6g for z/h = 0	I _p = 1.5
NOTES:	Product Construction: Carbon steel (NEMA 1, 4, and 12) and stainless steel (NEMA 4X) enclosures. Carbon steel sub-frame. Options/Subcomponents: Floor mounted enclosures may contain any combination of subcomponents listed in Table 4 to create a complete controller.						

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 3 - SUBCOMPONENTS [WALL-MNT]

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Sprecher + Schuh - PCEC Soft Starts							
PCEC-032-600V-120V		4.6	5.7	7.1	4		EXTRAP
PCEC-064-600V-120V		4.6	5.7	7.1	4		UUT 1
PCEC-074-600V-120V		5.8	8.9	9.5	14		INTERP
PCEC-104-600V-120V		5.8	8.9	9.5	14		INTERP
PCEC-147-600V-120V		5.8	8.9	9.5	14		UUT 2
Magnetek - HPV900 2 Drives							
HPV900-4008-2E1-01		7.4	7.3	11.0	15		EXTRAP
HPV900-2025-2E1-01		8.3	9.1	12.6	23		UUT 3, 8
HPV900-2031-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4012-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4016-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4021-2E1-01		8.9	10.4	15.6	36		INTERP
HPV900-4027-2E1-01		8.9	10.4	15.6	36		UUT 5
HPV900-2041-2E1-01		10.5	11.4	18.9	71		INTERP
HPV900-2052-2E1-01		10.5	11.4	18.9	71		INTERP
HPV900-2075-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-2088-2E1-01		12.2	12.0	21.1	72		UUT 4
HPV900-4034-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-4041-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-4052-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-2098-2E1-01		13.6	15.5	27.2	121		INTERP
HPV900-4065-2E1-01		13.6	15.5	27.2	121		UUT 6
HPV900-4072-2E1-01		13.6	15.5	27.2	121		INTERP
HPV900-4096-2E1-01		13.6	15.5	27.2	121		UUT 7
Magnetek - DSD 412 DC Drives							
53ST015-3A00		10.0	13.0	21.0	29		EXTRAP
53ST030-3A00		10.0	13.0	22.0	42		UUT 10
53ST060-3A00		10.0	13.0	22.0	42		INTERP
53ST125-3A00		14.0	13.0	22.0	62		UUT 9
Magnetek - R1000 Regenerative Drives							
RU2A0014FAA		7.4	7.1	11.8	13		UUT 8
RU4A0028FAA		7.8	8.7	14.4	18		INTERP
RU2A0017FAA		7.8	8.7	14.4	20		INTERP
RU2A0020FAA		7.8	8.7	14.4	20		INTERP
RU2A0028FAA		7.8	8.7	15.2	20		INTERP
RU4A0035FAA		10.2	10.8	17.7	44		INTERP
RU4A0043FAA		10.2	10.8	17.7	44		INTERP
RU2A0035FAA		10.2	10.8	17.7	46		UUT 8
Reynolds and Reynolds - RB-2 Battery Resque							
RB2-240		8.5	6.0	6.5	25		UUT 8
Automation Direct - 78 Relays							
782-2C-24D		2.7	1.2	4.0	0.2		UUT 3-10
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 3 - SUBCOMPONENTS [WALL-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Phoenix Contact - PLC & PSR Relays							
PLC-RSC-24DC/21		3.7	0.2	3.2	0.1		UUT 8
PLC-RSC-120UC/22		3.7	0.2	3.2	0.1		INTERP
PSR-SCF-24UC/URM/2X21		2.4	0.7	3.0	0.1		UUT 1-10
Macromatic - PCP Relays							
PCPU		3.0	1.7	2.4	0.4		UUT 10
Sprecher + Schuh - CA6 & CA7 Contactors							
CA7-12		3.4	1.8	3.2	0.9		UUT 3, 4
CA7-23		3.4	1.8	3.2	0.9		INTERP
CA7-37		4.3	1.8	3.2	1.0		INTERP
CA7-43		4.4	2.1	3.2	1.3		INTERP
CA7-60		4.4	2.8	4.8	3.2		UUT 3, 5
CA7-72		4.4	2.8	4.8	3.2		UUT 6
CA7-85		4.4	2.8	4.8	3.2		UUT 4
CA7-97		4.4	2.8	4.8	3.2		UUT 8
CA6-140		6.1	4.8	6.7	7.3		INTERP
CA6-180		6.1	4.8	6.7	7.3		INTERP
CA6-210		7.1	6.1	8.7	17		UUT 7
ABB - EHDB Contactors							
EHDB220C-1L		6.7	5.4	7.8	9.2		UUT 9
EHDB280C-1L		6.7	5.4	7.8	9.2		UUT 10
Pacific Transformers - Transformer							
31725-MOD4		4.4	5.3	6.4	25		UUT 1-7, 9
Phoenix Contact - UT 6 Circuit Protection							
UT 6-TMC M 1A		3.4	0.5	3.5	0.2		UUT 1-10
UT 6-TMC M 2A		3.4	0.5	3.5	0.2		UUT 1-10
UT 6-TMC M 4A		3.4	0.5	3.5	0.2		UUT 3-7
UT 6-TMC M 6A		3.4	0.5	3.5	0.2		UUT 3-6
UT 6-TMC M 8A		3.4	0.5	3.5	0.2		INTERP
UT 6-TMC M 10A		3.4	0.5	3.5	0.2		UUT 7
Sprecher + Schuh - L8 & L9 Circuit Breakers							
L8-6/1/D		2.9	0.4	4.4	0.4		UUT 1-6
L9-3/2/D		2.9	0.7	4.4	0.6		UUT 7
L9-6/2/D		2.9	0.7	4.4	0.6		UUT 1-6,8-10
PuSH - SR Printed Circuit Boards							
SRE-BU-B1 (Small Break)		0.9	3.0	4.7	0.2		UUT 3-8
SR-3040 Rev A (EQ)		2.7	0.6	2.3	0.1		UUT 3-6, 9
SR-3010 Rev G (SRU)		1.7	6.7	9.0	0.7		UUT 1-10
SR-2001 Rev B (Inspection)		1.3	2.0	4.1	0.1		UUT 1-10
SR-3050 Rev B (valve)		4.2	1.2	3.7	0.2		UUT 1, 2
SR-3070 Rev D (Lock)		4.2	1.1	3.7	0.2		UUT 1-10
SR-2006 Rev A		1.1	2.7	3.9	0.1		INTERP
SR-3080 Rev B (Battery Test)		2.9	1	2.4	0.1		UUT 8
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 3 - SUBCOMPONENTS [WALL-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
PuSH - SR Printed Circuit Boards (continued)							
SR-1020 Rev C (OIB)		0.8	3.5	3.7	0.1		INTERP
SR-2005 Rev C (Oits Contruction)		2.3	2.0	5.7	0.2		INTERP
SR-1030 Rev E (CIB)		4.2	1.0	3.5	0.2		INTERP
SR-2002 Rev A (Snubber)		0.9	0.7	1.5	0.1		UUT 3-10
SR-TT3-MOD1 (TT Brake)		2.6	3.0	6.7	0.5		INTERP
SR-TT25A-MOD1 (Titanic Brake)		3.8	5.0	5.5	1.3		UUT 9
SR-2010 Rev A (DSD Interface)		0.6	2.5	4.0	0.1		INTERP
Discrete IP		0.7	3.8	7.5	0.4		UUT 10
New Brake Board		3.2	3.0	6.2	0.6		UUT 7
Smartrise - Printed Circuit Board							
8200-300 (Smartview 2.0)		1.4	2.4	3.6	0.3		UUT 7, 8
Phoenix Contact - Quint Power Supply							
QUINT-PS/1AC/24DC/5		4.9	5.1	1.6	1.7		UUT 1-10
Phoenix Contact - Terminal Blocks							
UTTB 2,5		2.6	0.2	2.8	< 0.1		UUT 1-10
UTTB 2,5-PE		2.6	0.2	2.8	< 0.1		UUT 1-10
D-UTTB 2,5/4		2.3	0.1	2.8	< 0.1		UUT 1-10
ATP-UTTB 2,5/4		2.8	0.1	2.9	< 0.1		UUT 1-10
UTTB 4 HV		2.6	0.2	3.0	< 0.1		INTERP
UT 35		2.6	0.7	2.4	0.1		UUT 3-6
UT 35-PE		2.6	0.7	2.4	0.2		UUT 3-6, 9
USLKG 95		3.5	1.0	3.3	0.5		UUT 9
UKH 95		3.7	1.0	3.3	0.7		UUT 9
KEB - Z1F Motor Chokes							
15Z1F04-1005		7.0	2.8	7.0	8.6		UUT 7
17Z1F04-1005		8.9	5.1	8.6	22		INTERP
21Z1F04-1005		8.2	6.1	10.5	34		UUT 9
KEB - Z1B Line Reactors							
13Z1B05-1002		4.0	3.8	4.2	4.0		EXTRAP
14Z1B05-1002		4.0	3.8	4.2	4.0		EXTRAP
12Z1B03-1002		5.7	2.6	5.8	4.4		EXTRAP
12Z1B05-1002		5.7	2.7	5.8	4.6		EXTRAP
15Z1B05-1002		5.0	4.0	6.0	8.0		EXTRAP
16Z1B05-1002		5.0	4.0	6.0	8.0		EXTRAP
13Z1B03-1002		5.7	3.0	5.8	8.2		EXTRAP
17Z1B05-1002		5.8	4.3	7.2	10		UUT 7
18Z1B05-1002		5.8	4.3	7.2	10		INTERP
14Z1B03-1002		5.7	3.0	5.8	11		INTERP
15Z1B03-1002		6.9	3.5	7.0	13		INTERP
19Z1B05-1002		5.8	5.0	7.2	15		INTERP
16Z1B03-1002		6.3	5.1	8.6	16		INTERP
17Z1B03-1002		6.7	5.5	8.6	21		INTERP
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 3 - SUBCOMPONENTS [WALL-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
KEB - Z1B Line Reactors (continued)							
20Z1B05-1002		7.0	6.0	9.0	25		INTERP
18Z1B03-1002		6.7	5.9	8.6	27		INTERP
19Z1B03-1002		7.1	6.1	9.6	27		INTERP
20Z1B03-1002		7.1	6.5	9.6	33		INTERP
22Z1B05-1002		7.0	6.0	9.0	33		INTERP
21Z1B05-1002		8.2	6.1	10.5	34		INTERP
23Z1B05-1002		9.0	7.0	11.0	40		UUT 10
MTE - RL Line Reactors							
RL-00402		4.1	2.8	4.4	4		EXTRAP
RL-00801		4.8	3.0	6.0	7		EXTRAP
RL-00802		4.8	3.0	6.0	8		EXTRAP
RL-01201		5.0	3.3	6.0	9		EXTRAP
RL-01801		5.3	3.2	6.0	9		EXTRAP
RL-01202		5.0	3.3	6.0	10		EXTRAP
RL-02501		5.8	3.5	7.2	11		EXTRAP
RL-01802		5.3	3.5	6.0	12		EXTRAP
RL-02502		5.8	3.5	7.2	14		EXTRAP
RL-03501		5.8	4.0	7.2	14		EXTRAP
RL-03502		5.8	4.0	7.2	16		EXTRAP
RL-04501		7.4	4.7	9.0	23		UUT 8
RL-05501		7.3	5.3	9.0	24		INTERP
RL-08001		7.2	6.3	9.0	25		UUT 8
RL-05502		7.0	5.3	9.0	27		INTERP
RL-04502		7.4	4.7	9.0	28		INTERP
RL-10001		7.3	6.5	9.0	29		INTERP
RL-13001		7.0	4.7	9.0	29		INTERP
RL-08002		7.2	6.5	9.0	33		UUT 10
C.E. Electronics - Serial PI Driver							
SEI001-X		1.0	3.0	5.0	0.2		UUT 1-6,10
Emotive - Serial PI Driver							
MX003DPOX-SM		1.4	3.2	5.0	0.2		UUT 9
Ningbo Pecaf Electronic - Dynamic Brake Resistor							
1		4.9	10.0	18.1	8.1		UUT 3
2-3		6.7	10.0	18.1	11		UUT 5, 8
4		10.0	10.0	18.1	17		UUT 4
6		14.0	10.0	18.1	22		INTERP
large 6		14.0	10.0	20.1	30		UUT 7
Hubbell - GFCI Outlet							
DRUBGFI15		2.8	3.2	5.3	0.7		UUT 10
Hoffman Enclosures, Inc - Light							
LF120V15		2.7	1.3	15	1.3		UUT 10
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 3 - SUBCOMPONENTS [WALL-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Ohmite - L225 & D100 Soft Drop Resistor							
D100K1K0E		0.8	0.8	6.5	0.2		EXTRAP
D100K50RE		0.8	0.8	6.5	0.2		EXTRAP
L225J50RE		2.5	2.5	10.5	0.6		EXTRAP
L225J75RE		2.5	2.5	10.5	0.6		EXTRAP
L225J100E		2.5	2.5	10.5	0.6		UUT 3-6,7,9
L225J150E		2.5	2.5	10.5	0.6		INTERP
L225J200E		2.5	2.5	10.5	0.6		INTERP
L225J250E		2.5	2.5	10.5	0.6		INTERP
L225J500E		2.5	2.5	10.5	0.6		INTERP
L225J750E		2.5	2.5	10.5	0.6		UUT 10
Wenzhou Jinxin Electric Co. - Enclosures							
302410		10.0	24.0	30.0	57	Carbon steel	UUT 1, 2
393014		14.0	30.0	39.0	91	Carbon steel	UUT 3-6
16x36x48		16.0	36.0	48.0	151	Carbon steel	UUT 7,9,10
302410		10.0	24.0	30.0	57	Stainless steel	INTERP
393014		14.0	30.0	39.0	91	Stainless steel	INTERP
16x36x48		16.0	36.0	48.0	151	Stainless steel	UUT 8
Satie North America Inc. - Sub-Frame							
809203		1.0	21.0	28.0	5	Aluminum	UUT 1, 2
811216		1.0	28.0	34.0	9	Aluminum	UUT 3-6
902215		1.0	35.0	45.0	17	Aluminum	UUT 7-10
Vishay Semiconductors - Diode Bridge							
36MB160A		1.1	0.8	1.1	0.1		UUT 7, 9
GrayBar - Enclosure Fan							
22210		1.5	4.7	4.7	1.1		UUT 10
TE Connectivity - AC Filter							
16WGF1		1.5	1.5	2.8	0.3		UUT 7, 9
Thermal Edge - CS011 AC Unit							
CS-011-126-04-XBX-DRY CONTACT		7.0	7.0	17.0	30		UUT 7
CS-011-126-12-XBX-DRY CONTACT		7.0	7.0	17.0	30		INTERP
CS-011-126-4X-XBX-DRY CONTACT		7.0	7.0	17.0	30		UUT 8
Smartrise - Resets							
Traction loss Reset		2.1	2.1	3.1	0.4		UUT 7
Governor Reset Box		2.0	2.8	4.0	0.6		UUT 7
MOUNTING:	Mounted within wall mounted unit.				SEISMIC LEVEL(S)	S _{DS} = 2.0g for z/h = 1 S _{DS} = 2.6g for z/h = 0 I _p = 1.5	
NOTES:	Product Construction/Options: Model number uniquely identifies manufacturer, materials and configuration of subcomponents.						

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 4 - SUBCOMPONENTS [FLOOR-MNT]

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Magnetek - DSD 412 DC Drives							
53ST015-3A00		10.0	13.0	21.0	29		EXTRAP
53ST030-3A00		10.0	13.0	22.0	42		UUT 10
53ST060-3A00		10.0	13.0	22.0	42		INTERP
53ST125-3A00		14.0	13.0	22.0	62		UUT 9
Magnetek - HPV900 2 Drives							
HPV900-4008-2E1-01		7.4	7.3	11.0	15		EXTRAP
HPV900-2025-2E1-01		8.3	9.1	12.6	23		UUT 8
HPV900-2031-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4012-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4016-2E1-01		8.3	9.1	12.6	23		INTERP
HPV900-4021-2E1-01		8.9	10.4	15.6	36		INTERP
HPV900-4027-2E1-01		8.9	10.4	15.6	36		INTERP
HPV900-2041-2E1-01		10.5	11.4	18.9	71		INTERP
HPV900-2052-2E1-01		10.5	11.4	18.9	71		INTERP
HPV900-2075-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-2088-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-4034-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-4041-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-4052-2E1-01		12.2	12.0	21.1	72		INTERP
HPV900-2098-2E1-01		13.6	15.5	27.2	121		INTERP
HPV900-4065-2E1-01		13.6	15.5	27.2	121		INTERP
HPV900-4072-2E1-01		13.6	15.5	27.2	121		INTERP
HPV900-4096-2E1-01		13.6	15.5	27.2	121		UUT 7
Magnetek - R1000 Regenerative Drives							
RU2A0014FAA		7.4	7.1	11.8	13		UUT 8
RU4A0028FAA		7.8	8.7	14.4	18		INTERP
RU2A0017FAA		7.8	8.7	14.4	20		INTERP
RU2A0020FAA		7.8	8.7	14.4	20		INTERP
RU2A0028FAA		7.8	8.7	15.2	20		INTERP
RU4A0035FAA		10.2	10.8	17.7	44		INTERP
RU4A0043FAA		10.2	10.8	17.7	44		INTERP
RU2A0035FAA		10.2	10.8	17.7	46		UUT 8
Reynolds and Reynolds - RB-2 Battery Resque							
RB2-240		8.5	6.0	6.5	25		UUT 8
Automation Direct - 78 Relays							
782-2C-24D		2.7	1.2	4.0	0.2		UUT 7-10
Phoenix Contact - PLC & PSR Relays							
PLC-RSC-24DC/21		3.7	0.2	3.2	0.1		UUT 8
PLC-RSC-120UC/22		3.7	0.2	3.2	0.1		
PSR-SCF-24UC/URM/2X21		2.4	0.7	3.0	0.1		UUT 7-10
Macromatic - PCP Relays							
PCPU		3.0	1.7	2.4	0.4		UUT 10
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 4 - SUBCOMPONENTS [FLOOR-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Sprecher + Schuh - CA6 & CA7 Contactors							
CA7-12		3.4	1.8	3.2	0.9		EXTRAP
CA7-23		3.4	1.8	3.2	0.9		EXTRAP
CA7-37		4.3	1.8	3.2	1.0		EXTRAP
CA7-43		4.4	2.1	3.2	1.3		EXTRAP
CA7-60		4.4	2.8	4.8	3.2		EXTRAP
CA7-72		4.4	2.8	4.8	3.2		EXTRAP
CA7-85		4.4	2.8	4.8	3.2		EXTRAP
CA7-97		4.4	2.8	4.8	3.2		UUT 8
CA6-140		6.1	4.8	6.7	7.3		INTERP
CA6-180		6.1	4.8	6.7	7.3		INTERP
CA6-210		7.1	6.1	8.7	17		UUT 7
ABB - EHDB Contactors							
EHDB220C-1L		6.7	5.4	7.8	9.2		UUT 9
EHDB280C-1L		6.7	5.4	7.8	9.2		UUT 10
Phoenix Contact - Quint Power Supply							
QUINT-PS/1AC/24DC/5		4.9	5.1	1.6	1.7		UUT 7-10
Pacific Transformers - Transformer							
31725-MOD4		4.4	5.3	6.4	25		UUT 7, 9
Phoenix Contact - UT 6 Circuit Protection							
UT 6-TMC M 1A		3.4	0.5	3.5	0.2		UUT 7-10
UT 6-TMC M 2A		3.4	0.5	3.5	0.2		UUT 7-10
UT 6-TMC M 4A		3.4	0.5	3.5	0.2		UUT 7
UT 6-TMC M 6A		3.4	0.5	3.5	0.2		INTERP
UT 6-TMC M 8A		3.4	0.5	3.5	0.2		INTERP
UT 6-TMC M 10A		3.4	0.5	3.5	0.2		UUT 7
Sprecher + Schuh - L8 & L9 Circuit Breakers							
L9-3/2/D		2.9	0.7	4.4	0.6		UUT 7
L9-6/2/D		2.9	0.7	4.4	0.6		UUT 8-10
PuSH - SR Printed Circuit Boards							
SRE-BU-B1 (Small Break)		0.9	3.0	4.7	0.2		UUT 8
SR-3040 Rev A (EQ)		2.7	0.6	2.3	0.1		UUT 9
SR-3010 Rev G (SRU)		1.7	6.7	9.0	0.7		UUT 10
SR-2001 Rev B (Inspection)		1.3	2.0	4.1	0.1		UUT 10
SR-3050 Rev B (valve)		4.2	1.2	3.7	0.2		INTERP
SR-3070 Rev D (Lock)		4.2	1.1	3.7	0.2		UUT 10
SR-2006 Rev A		1.1	2.7	3.9	0.1		INTERP
SR-3080 Rev B (Battery Test)		2.9	1	2.4	0.1		UUT 8
SR-1020 Rev C (OIB)		0.8	3.5	3.7	0.1		INTERP
SR-2005 Rev C (Oits Contruction)		2.3	2.0	5.7	0.2		INTERP
SR-1030 Rev E (CIB)		4.2	1.0	3.5	0.2		INTERP
SR-2002 Rev A (Snubber)		0.9	0.7	1.5	0.1		UUT 7-10
SR-TT3-MOD1 (TT Brake)		2.6	3.0	6.7	0.5		INTERP
NOTES: Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.							

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 4 - SUBCOMPONENTS [FLOOR-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
PuSH - SR Printed Circuit Boards (continued)							
SR-TT3-MOD1 (TT Brake)		2.6	3.0	6.7	0.5		INTERP
SR-TT25A-MOD1 (Titanic Brake)		3.8	5.0	5.5	1.3		UUT 9
SR-2010 Rev A (DSD Interface)		0.6	2.5	4.0	0.1		INTERP
Discrete IP		0.7	3.8	7.5	0.4		UUT 10
New Brake Board		3.2	3.0	6.2	0.6		UUT 7
Smartrise - Printed Circuit Board							
8200-300 (Smartview 2.0)		1.4	2.4	3.6	0.3		UUT 7, 8
Smartrise - Resets							
Traction loss Reset		2.1	2.1	3.1	0.4		UUT 7
Governor Reset Box		2	2.8	4	0.6		UUT 7
Phoenix Contact - Terminal Blocks							
UTTB 2,5		2.6	0.2	2.8	< 0.1		UUT 7-10
UTTB 2,5-PE		2.6	0.2	2.8	< 0.1		UUT 7-10
D-UTTB 2,5/4		2.3	0.1	2.8	< 0.1		UUT 7-10
ATP-UTTB 2,5/4		2.8	0.1	2.9	< 0.1		UUT 7-10
UTTB 4 HV		2.6	0.2	3.0	< 0.1		INTERP
UT 35		2.6	0.7	2.4	0.1		INTERP
UT 35-PE		2.6	0.7	2.4	0.2		UUT 9
USLKG 95		3.5	1.0	3.3	0.5		UUT 9
UKH 95		3.7	1.0	3.3	0.7		UUT 9
KEB - Z1F Motor Chokes							
15Z1F04-1005		7.0	2.8	7.0	8.6		UUT 7
17Z1F04-1005		8.9	5.1	8.6	22		INTERP
21Z1F04-1005		8.2	6.1	10.5	34		UUT 9
KEB - Z1B Line Reactors							
13Z1B05-1002		4.0	3.8	4.2	4.0		EXTRAP
14Z1B05-1002		4.0	3.8	4.2	4.0		EXTRAP
12Z1B03-1002		5.7	2.6	5.8	4.4		EXTRAP
12Z1B05-1002		5.7	2.7	5.8	4.6		EXTRAP
15Z1B05-1002		5.0	4.0	6.0	8.0		EXTRAP
16Z1B05-1002		5.0	4.0	6.0	8.0		EXTRAP
13Z1B03-1002		5.7	3.0	5.8	8.2		EXTRAP
17Z1B05-1002		5.8	4.3	7.2	10		UUT 7
18Z1B05-1002		5.8	4.3	7.2	10		INTERP
14Z1B03-1002		5.7	3.0	5.8	11		INTERP
15Z1B03-1002		6.9	3.5	7.0	13		INTERP
19Z1B05-1002		5.8	5.0	7.2	15		INTERP
16Z1B03-1002		6.3	5.1	8.6	16		INTERP
17Z1B03-1002		6.7	5.5	8.6	21		INTERP
20Z1B05-1002		7.0	6.0	9.0	25		INTERP
18Z1B03-1002		6.7	5.9	8.6	27		INTERP
19Z1B03-1002		7.1	6.1	9.6	27		INTERP
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 4 - SUBCOMPONENTS [FLOOR-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
KEB - Z1B Line Reactors (continued)							
20Z1B03-1002		7.1	6.5	9.6	33		INTERP
22Z1B05-1002		7.0	6.0	9.0	33		INTERP
21Z1B05-1002		8.2	6.1	10.5	34		INTERP
23Z1B05-1002		9	7	11	40		UUT 10
MTE - RL Line Reactors							
RL-00402		4.1	2.8	4.4	4		EXTRAP
RL-00801		4.8	3.0	6.0	7		EXTRAP
RL-00802		4.8	3.0	6.0	8		EXTRAP
RL-01201		5.0	3.3	6.0	9		EXTRAP
RL-01801		5.3	3.2	6.0	9		EXTRAP
RL-01202		5.0	3.3	6.0	10		EXTRAP
RL-02501		5.8	3.5	7.2	11		EXTRAP
RL-01802		5.3	3.5	6.0	12		EXTRAP
RL-02502		5.8	3.5	7.2	14		EXTRAP
RL-03501		5.8	4.0	7.2	14		EXTRAP
RL-03502		5.8	4.0	7.2	16		EXTRAP
RL-04501		7.4	4.7	9.0	23		UUT 8
RL-05501		7.3	5.3	9.0	24		INTERP
RL-08001		7.2	6.3	9.0	25		UUT 8
RL-05502		7.0	5.3	9.0	27		INTERP
RL-04502		7.4	4.7	9.0	28		INTERP
RL-10001		7.3	6.5	9.0	29		INTERP
RL-13001		7.0	4.7	9.0	29		INTERP
RL-08002		7.2	6.5	9.0	33		UUT 10
C.E. Electronics - Serial PI Driver							
SEI001-X		1.0	3.0	5.0	0.2		UUT 10
Emotive - Serial PI Driver							
MX003DPOX-SM		1.4	3.2	5.0	0.2		UUT 9
Ningbo Pecaf Electronic - Dynamic Brake Resistor							
1		4.9	10.0	18.1	8.1		EXTRAP
2-3		6.7	10.0	18.1	11		UUT 8
4		10.0	10.0	18.1	17		INTERP
6		14.0	10.0	18.1	22		INTERP
large 6		14.0	10.0	20.1	30		UUT 7
Hubbell - GFCI Outlet							
DRUBGFI15		2.8	3.2	5.3	0.7		UUT 10
Hoffman Enclosures, Inc - Light							
LF120V15		2.7	1.3	15.0	1.3		UUT 10
NOTES:		Table continues on the next page. Additional notes, information and seismic parameters are shown at the end of the table.					

ATTACHMENT 1: CERTIFIED COMPONENTS

SEISMIC COMPLIANCE REPORT

TABLE 4 - SUBCOMPONENTS [FLOOR-MNT] (continued)

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING					
PRODUCT FAMILY:		SRH, SRA, & SRD ELEVATOR CONTROLLERS					
MODEL NUMBER		DIMENSIONS (in)			MAX. WT. (lb)	DESCRIPTION / NOTES	BASIS
		DEPTH	WIDTH	HEIGHT			
Ohmite - L225 & D100 Soft Drop Resistor							
D100K1K0E		0.8	0.8	6.5	0.2		EXTRAP
D100K50RE		0.8	0.8	6.5	0.2		EXTRAP
L225J50RE		2.5	2.5	10.5	0.6		EXTRAP
L225J75RE		2.5	2.5	10.5	0.6		EXTRAP
L225J100E		2.5	2.5	10.5	0.6		UUT 7, 9
L225J150E		2.5	2.5	10.5	0.6		INTERP
L225J200E		2.5	2.5	10.5	0.6		INTERP
L225J250E		2.5	2.5	10.5	0.6		INTERP
L225J500E		2.5	2.5	10.5	0.6		INTERP
L225J750E		2.5	2.5	10.5	0.6		UUT 10
Wenzhou Jinxin Electric Co. - Enclosures							
16x36x48		16.0	36.0	48.0	151	Carbon steel	UUT 7,9,10
16x36x48		16.0	36.0	48.0	151	Stainless steel	UUT 8
Satie North America Inc. - Sub-Frame							
902215		1.0	35.0	45.0	17	Aluminum	UUT 7-10
Vishay Semiconductors - Diode Bridge							
36MB160A		1.1	0.8	1.1	0.1		UUT 7, 9
GrayBar - Enclosure Fan							
22210		1.5	4.7	4.7	1.1		UUT 10
Thermal Edge - CS011 AC Unit							
CS-011-126-04-XBX-DRY CONTACT		7.0	7.0	17.0	30		UUT 7
CS-011-126-12-XBX-DRY CONTACT		7.0	7.0	17.0	30		INTERP
CS-011-126-4X-XBX-DRY CONTACT		7.0	7.0	17.0	30		UUT 8
TE Connectivity - AC Filter							
16WGF1		1.5	1.5	2.8	0.3		UUT 7, 9
MOUNTING:	Mounted within floor mounted unit.				SEISMIC LEVEL(S)	S _{DS} = 2.0g for z/h = 1 S _{DS} = 2.6g for z/h = 0	I _p = 1.5
NOTES:	Product Construction/Options: Model number uniquely identifies manufacturer, materials and configuration of subcomponents.						

ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 1

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRH-2020			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
10	24	30	170	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ10-1111-01		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) #14 self-tapping screws				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Sprecher + Schuh - soft start (PCEC-032-600V-120V) Transformers - transformer (31725-MOD4), Phoenix Contact Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D, SR-3050 Rev B, SR-3070 Rev D), Phoenix Contact terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4)				
TESTING NOTES:		The soft start for UUT 1 was placed with UUT 2, which allowed for testing of both UUT 1 & 2 in the same enclosure.				



UUT 2

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRH-2040			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
10	24	30	170	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ10-1111-01		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) #14 self-tapping screws				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Sprecher + Schuh - soft start (PCEC-147-600V-120V), Phoenix Contact - relays (PSR-SCF-24UC/URM/2X21), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A), Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D), PuSH - printed circuit boards (SR-3010 Rev G, SR-2001 Rev B, SR-3050 Rev B, SR-3070 Rev D), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4), C.E. Electronics - PI driver (SEI001-X)				
TESTING NOTES:		The soft start for UUT 1 was placed within UUT 2, which allowed for testing of both UUT 1 & 2 in the same enclosure.				



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 3

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRA-2010			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
14	30	39	220	N/A	N/A	N/A
BUILDING CODE			TEST CRITERIA		LAB REPORT NO.	
2016 CBC			ICC-ES AC156		ETL SQ10-1111-01	
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid wall mounted using (4) #14 self-tapping screws			
CONSTRUCTION:			NEMA 12 carbon steel enclosure			
SUBCOMPONENTS:			Magnetek - drive (HPV900-2025-2E1-01), Automation Direct (24UC/URM/2X21), Sprecher + Schuh - contactors (MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A, UT 6-TMC M 4A, UT 6-TMC M 6A), Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D), SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, PS/1AC/24DC/5), Phoenix Contact - terminal block (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4, UT 35-PE), C.E. Electronics - PI driver (SEI001-X), Ningbo Pecaf Electronic - resistor (L225J100E)			
TESTING NOTES:			N/A			



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 4

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRA-2030			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT	(lb)	F-B	S-S	V
14	30	39	232	N/A	N/A	N/A
BUILDING CODE			TEST CRITERIA		LAB REPORT NO.	
2016 CBC			ICC-ES AC156		ETL SQ10-1111-01	
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid wall mounted using (4) #14 self-tapping screws			
CONSTRUCTION:			NEMA 12 carbon steel enclosure			
SUBCOMPONENTS:			Magnetek - drive (HPV900-2088-2E1-01), Automation Direct - relay (782-2C-24D), Sprecher + Schuh - contactors (CA7-12, CA7-85), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A, UT 6-TMC M 4A, UT 6-TMC M 6A), Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D), PuSH - printed circuit boards (SRE-BU-B1, SR-3040 Rev A, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4, UT 35, UT 35-PE), C.E. Electronics - PI driver (SEI001-X), Ningbo Pecaf Electronic - resistor (4), Ohmite - resistor (L225J100E)			
TESTING NOTES:			N/A			



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 5

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING				
MODEL NUMBER:		SRA-4020				
UNIT FUNCTION:		Elevator controller				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
14	30	39	171	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ10-1111-02		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) #14 self-tapping screws.				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Magnetek - drive (HPV900-4027-2E1-01), Automation Direct - relay (782-2C-24D), Phoenix Contact - relay (PSR-SCF-24UC/URM/2X21), Sprecher + Schuh - contactors (CA7-60), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A, UT 6-TMC M 4A, UT 6-TMC M 6A), Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D), PuSH - printed circuit boards (SRE-BU-B1, SR-3040 Rev A, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4, UT 35, UT 35-PE), C.E. Electronics - PI driver (SEI001-X), Ningbo Pecaf Electronic - resistor (2-3), Ohmite - resistor (L225J100E)				
TESTING NOTES:		N/A				



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 6

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING				
MODEL NUMBER:		SRA-4060				
UNIT FUNCTION:		Elevator controller				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
14	30	39	216	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		ETL SQ10-1111-02		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) #14 self-tapping screws.				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		Magnetek - drive (HPV900-4065-2E1-01), Automation Direct - relay (782-2C-24D), Phoenix Contact - relay (PSR-SCF-24UC/URM/2X21), Sprecher + Schuh - contactors (CA7-72), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A, UT 6-TMC M 4A, UT 6-TMC M 6A), Sprecher + Schuh - circuit breakers (L8-6/1/D, L9-6/2/D), PuSH - printed circuit boards (SRE-BU-B1, SR-3040 Rev A, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4, UT 35, UT 35-PE), C.E. Electronics - PI driver (SEI001-X), Ohmite - resistor (L225J100E)				
TESTING NOTES:		Separation of the top latch occurred during testing. To resolve the anomaly, the latch used in UUTs 9 & 10 will be used on production units in place of the tested latch.				



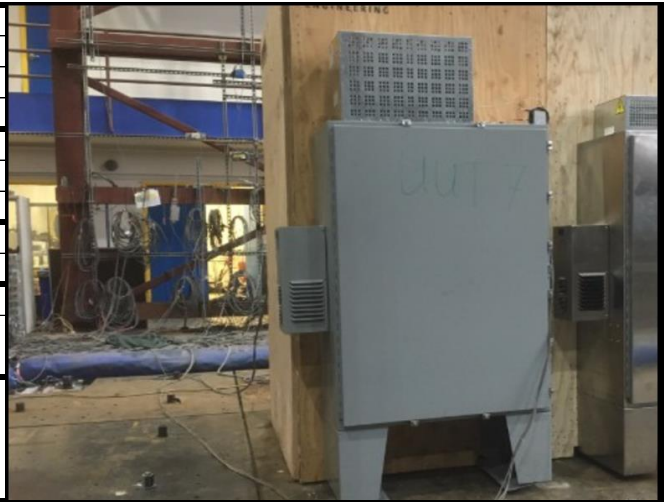
ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 7 - WALL MOUNT

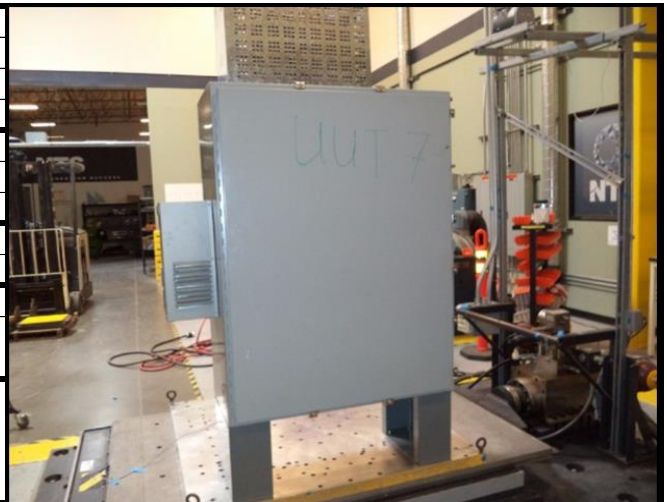
DOCUMENT NO.: 16123CR1.0

MANUFACTURER:		SMARTRISE ENGINEERING				
MODEL NUMBER:		SRA-4075				
UNIT FUNCTION:		Elevator controller				
SERIAL NUMBER:		N/A				
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	48	450	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		PEER 16123TR1		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid wall mounted using (4) 1/4" Grade 8 bolts.				
CONSTRUCTION:		NEMA 4 carbon steel enclosure				
SUBCOMPONENTS:		Magnetek - drive (HPV900-4096-2E1-01), Automation Direct - relay (782-2C-24D), Phoenix Contact - relay (PSR-SCF-24UC/URM/2X21), Sprecher + Schuh - contactors (CA6-210), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A, UT 6-TMC M 4A, UT 6-TMC M 10A), Sprecher + Schuh - circuit breakers (L9-3/2/D), PuSH - printed circuit boards (SRE-BU-B1, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A, New Brake Board), Smartrise - printed circuit board (8200-300 - Smartview 2.0), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4), KEB - motor choke (15Z1F04-1005), KEB - line reactor (17Z1B05-1002), Ningbo Pecaf Electronic - resistor (large 6), Ohmite - resistor (L225J100E), Vishay Semiconductors - diode bridge (36MB160A), TE Connectivity - AC filter (16WGF1), Thermal Edge - AC unit (CS-011-126-04-XBX-DRY CONTACT), Smartrise - resets (Traction loss Reset, Governor Reset Box)				
TESTING NOTES:		N/A				



UUT 7 - FLOOR MOUNT

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRA-4075			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	60	450	7.2	20.9	14.7
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		NTS 16123TR2		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid floor mounted using (8) 3/8" Grade 8 bolts.			
CONSTRUCTION:			NEMA 4 carbon steel enclosure			
SUBCOMPONENTS:			See above. Identical subcomponent list to wall mount test.			
TESTING NOTES:			Tested with upgraded legs. Enhancements will be incorporated into production units.			



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 8 - WALL MOUNT

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRA-2030			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	48	400	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		PEER 16123TR1		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid wall mounted using (4) 1/4" Grade 8 bolts.			
CONSTRUCTION:			NEMA 4X stainless steel enclosure			
SUBCOMPONENTS:			Magnetek - drives (HPV900-2025-2E1-01, RU2A0014FAA, RU2A0035FAA), Reynolds and Reynolds - battery rescue (RB2-240), Automation Direct - relay (782-2C-24D), Phoenix Contact - relays (PLC-RSC-24DC/21, PSR-SCF-24UC/URM/2X21), Sprecher + Schuh - contactor (CA7-97), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A), Sprecher + Schuh - circuit breaker (LL9-6/2/D), PuSH - printed circuit boards (SRE-BU-B1, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-3080 Rev B, SR-2002 Rev A), Smartrise - printed circuit board (8200-300 - Smartview 2.0), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2.5, UTTB 2.5-PE, D-UTTB 2.5/4, ATP-UTTB 2.5/4), MTE - line reactors (RL-04501, RL-08001), Ningbo Pecaf Electronic - resistor (2-3), Thermal Edge - AC unit (CS-011-126-4X-XBX-DRY CONTACT)			
TESTING NOTES:			N/A			



UUT 8 - FLOOR MOUNT

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRA-2030			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	60	400	9.6	17.3	>33
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		NTS 16123TR2		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid floor mounted using (8) 3/8" Grade 8 bolts.				
CONSTRUCTION:		NEMA 4X stainless steel enclosure				
SUBCOMPONENTS:		See above. Identical subcomponent list to wall mount test.				
TESTING NOTES:		Tested with upgraded legs. Enhancements will be incorporated into production units.				



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 9 - WALL MOUNT

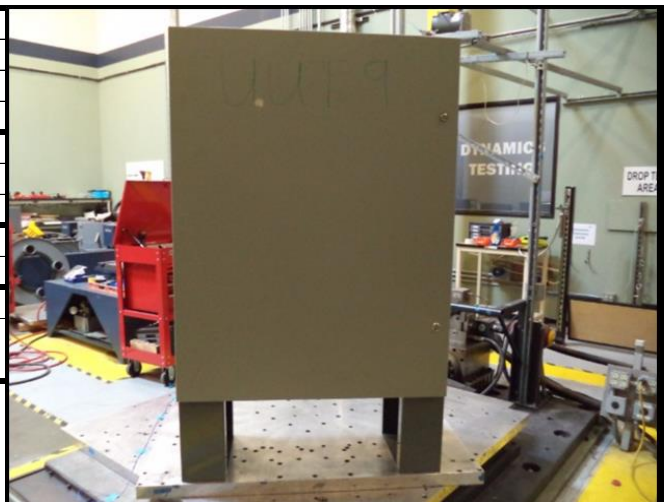
DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRD-060			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	48	324	N/A	N/A	N/A
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		PEER 16123TR1		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid wall mounted using (4) 1/4" Grade 8 bolts.			
CONSTRUCTION:			NEMA 1 carbon steel enclosure			
SUBCOMPONENTS:			Magnetek - drive (53ST125-3A00), Automation Direct - relay (782-2C-24D), Phoenix Contact - relay (PSR-SCF-24UC/URM/2X21), ABB - contactor (EHDB220C-1L), Pacific Transformers - transformer (31725-MOD4), Phoenix Contact - circuit protection (UT 6-TMC M 1A, UT 6-TMC M 2A), Sprecher + Schuh - circuit breakers (L9-6/2/D), PuSH - printed circuit boards (SR-3040 Rev A, SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A, SR-TT25A-MOD1), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2,5, UTTB 2,5-PE, D-UTTB 2,5/4, ATP-UTTB 2,5/4, UT 35-PE, USLKG 95, UKH 95), KEB - motor choke (21Z1F04-1005), Emotive - PI driver (MX003DPOX-SM), Ohmite - resistor (L225J100E), Vishay Semiconductors - diode bridge (36MB160A), TE Connectivity - AC filter (16WGF1)			
TESTING NOTES:			N/A			



UUT 9 - FLOOR MOUNT

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRD-060			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	60	324	8.1	10.4	>33
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		NTS 16123TR2		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid floor mounted using (8) 3/8" Grade 8 bolts.			
CONSTRUCTION:			NEMA 1 carbon steel enclosure			
SUBCOMPONENTS:			See above. Identical subcomponent list to wall mount test.			
TESTING NOTES:			Tested with upgraded legs. Enhancements will be incorporated into production units.			



ATTACHMENT 2: UNIT UNDER TEST SUMMARIES

SEISMIC COMPLIANCE REPORT

UUT 10 - WALL MOUNT

DOCUMENT NO.: 16123CR1.0

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRD-125			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	48	339	N/A	N/A	N/A
BUILDING CODE			TEST CRITERIA		LAB REPORT NO.	
2016 CBC			ICC-ES AC156		PEER 16123TR1	
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5						
Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:			Rigid wall mounted using (4) 1/4" Grade 8 bolts.			
CONSTRUCTION:			NEMA 1 carbon steel enclosure			
SUBCOMPONENTS:			Magnetek - drive (53ST030-3A00), Automation Direct - 24UC/URM/2X21), Macromatic - relay (PCPU), ABB (UT 6-TMC M 1A, UT 6-TMC M 2A), Sprecher + Schuh 3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A, PuSH - printed circuit boards (SR-3010 Rev G, SR-2001 Rev B, SR-3070 Rev D, SR-2002 Rev A, Discrete IP), Phoenix Contact - power supply (QUINT-PS/1AC/24DC/5), Phoenix Contact - terminal blocks (UTTB 2.5, UTTB 2.5-PE, D-UTTB 2.5/4, ATP-UTTB 2.5/4), KEB - line reactor (23Z1B05-1002), MTE - line reactor (RL-08002), C.E. Electronics - PI driver (SEI001-X), Hubbell - GFCI outlet (DRUBGF115), Hoffman Enclosures, Inc - light (LF120V15), Ohmite - resistor (L225J750E), GrayBar - fan (22210)			
TESTING NOTES:			N/A			



UUT 10 - FLOOR MOUNT

MANUFACTURER:			SMARTRISE ENGINEERING			
MODEL NUMBER:			SRD-125			
UNIT FUNCTION:			Elevator controller			
SERIAL NUMBER:			N/A			
DIMENSIONS (in)			WEIGHT (lb)	RES. FREQ. (Hz)		
DEPTH	WIDTH	HEIGHT		F-B	S-S	V
16	36	60	339	7.7	16.4	>33
BUILDING CODE		TEST CRITERIA		LAB REPORT NO.		
2016 CBC		ICC-ES AC156		NTS 16123TR2		
S_{DS} (g)	z/h	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)	
2.0	1	3.20	2.40	1.74	0.70	
2.6	0					
IMPORTANCE FACTOR, I_p = 1.5 Unit was full of operating content during the shake table test. Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.						
MOUNTING:		Rigid floor mounted using (8) 3/8" Grade 8 bolts.				
CONSTRUCTION:		NEMA 1 carbon steel enclosure				
SUBCOMPONENTS:		See above. Identical subcomponent list to wall mount test.				
TESTING NOTES:		Tested with upgraded legs. Enhancements will be incorporated into production units.				

