



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

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

OFFICE USE ONLY

APPLICATION #: **OSP – 0209 – 10**

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.

Manufacturer's Technical Representative: Doug Henderson

Mailing Address: 9280 Crestwyn Hills Drive, Memphis, TN 38125

Telephone: 731.376.3004 Email: Doug.Henderson@thyssenkrupp.com

Product Information

Product Name: Traction Controller

Product Type: Traction Elevator Controller

Product Model Number: Varies, see attachment.
(List all unique product identification numbers and/or part numbers)

General Description: Carbon steel cabinets with internal components. Seismic enhancements made to test units to address anomalies observed during testing shall be incorporated into production units.

Mounting Description: Rigid floor and wall mounted

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

Contact Person: Matthew J. Tobolski, PhD, SE

Mailing Address: 5215 Hellyer Ave., Suite 210, San Jose, CA 95138

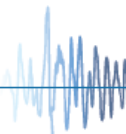
Telephone: 541.205.4064 Email: mtobolski@structint.com

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: 8/17/2017

Title: Executive Advisor Company Name: TRU Compliance, by Structural Integrity Associates, Inc.

"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: TRU Compliance, by Structural Integrity Associates, Inc.

Name: Matthew J. Tobolski, PhD, SE California License Number: S5648

Mailing Address: 5215 Hellyer Ave., Suite 210, San Jose, CA 95138

Telephone: 541.205.4064 Email: mtobolski@structint.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): _____

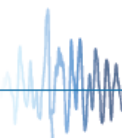
Testing Laboratory

Company Name: Wyle Laboratories

Contact Name: Rod Thornberry

Mailing Address: 7800 Highway 20 West, Huntsville, AL 35806

Telephone: 256.716.4229 Email: Rod.Thornberry@Wyle.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) = 1.44

S_{DS} (Design spectral response acceleration at short period, g) = 2.00

a_p (In-structure equipment or component amplification factor) = 1.0

R_p (Equipment or component response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1

Equipment or Component Natural Frequencies (Hz) = See Attachment

Overall dimensions and weight (or range thereof) = See Attachment

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): Attachment

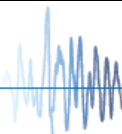
OSHPD Approval (For Office Use Only) – Approval Expires on December 31, 2022

Signature:  Date: November 20, 2017

Print Name: Timothy J. Piland Title: SSE

Special Seismic Certification Valid Up to : S_{DS} (g) = 2.00 z/h = 1

Condition of Approval (if applicable): _____



SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.
Model Line: Traction Controller

TABLE 1

Certified Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Certified Options Summary:
See Tables 1.1 - 1.13 for a complete listing of certified components.

Mounting Configuration:
Floor mounted - rigid
Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0g$ $z/h = 1.0$ $I_p = 1.5$

Model Line	Model	Dimensions (in)			Weight (lb)	Notes	UUT
		Depth	Width	Height			
Traction Controller	TAC50-72	22.3	30.3	72	715		5,6
	TAC50-84	26.3	30.3	84	1114		1,2
	TAC50-84	22.3	30.3	84	895		7,8

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Transformers			TABLE 1.1	
Model Line: Traction Controller						
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$		$I_p = 1.5$		
Component Type	Manufacturer	Model	Description	Notes	UUT	
0.5 kVA	GE	874DA	Single Phase, 0.5 kVA, 115 - 600V		Extrap.	
		874EM	Single Phase, 0.5 kVA, 208-600V		Extrap.	
0.75 kVA	GE	874DB	Single Phase, 0.75 kVA, 115-600V		1,5,6	
		874DC	Single Phase, 0.75 kVA, 115-400V		Interp.	
1.0 kVA	GE	874DP	Single Phase, 1.0 kVA, 115-600V		Interp.	
		874DW	Single Phase, 1.0 kVA, 115-400V		Interp.	
		874EN	Single Phase, 1.0 kVA, 208-600V		Interp.	
1.5 kVA	GE	874DR	Single Phase, 1.5 kVA, 115-208V		Interp.	
		874DX	Single Phase, 1.5 kVA, 115-600V		1,2,5	

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Drives			TABLE 1.2
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$			$I_P = 1.5$
Component Type	Manufacturer	Model	Description	Notes	UUT
230V 10K Drive - Non-Regen	Thyssen Krupp	2109BD07	PWMDC 10HP	Similar to Accord, software change	Interp.
		2109BL07	PWMDC 10HP	Similar to Accord, software change	Interp.
		2109BD08	PWMDC 15HP	Similar to Accord, software change	Interp.
		2109BL08	PWMDC 15HP	Similar to Accord, software change	Interp.
		2109BD09	PWMDC 20HP	Similar to Accord, software change	Interp.
		2109BL09	PWMDC 20HP	Similar to Accord, software change	Interp.
		2109BD10	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BL10	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BD11	PWMDC 40HP	Similar to Accord, software change	Interp.
		2109BD12	PWMDC 60HP	Similar to Accord, software change	Interp.
460V 10K Drive - Non-Regen	Thyssen Krupp	2109BD19	PWMDC 10HP	Similar to Accord, software change	Interp.
		2109BL19	PWMDC 10HP	Similar to Accord, software change	Interp.
		2109BD20	PWMDC 15HP	Similar to Accord, software change	Interp.
		2109BL20	PWMDC 15HP	Similar to Accord, software change	Interp.
		2109BD21	PWMDC 20HP	Similar to Accord, software change	Interp.
		2109BL21	PWMDC 20HP	Similar to Accord, software change	Interp.
		2109BD22	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BL22	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BD23	PWMDC 40HP	Similar to Accord, software change	Interp.
		2109BD24	PWMDC 60HP	Similar to Accord, software change	Interp.
230V 10K Drive - Regen	Thyssen Krupp	2109BC01	VVVF 30HP	Similar to Accord, software change	Interp.
		2109BC02	VVVF 40HP	Similar to Accord, software change	Interp.
		2109BC03	VVVF 60HP	Similar to Accord, software change	Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Drives			TABLE 1.2
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$		$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
230V 10K Drive - Regen	Thyssen Krupp	2109BC04	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BC05	PWMDC 40HP	Similar to Accord, software change	Interp.
		2109BC06	PWMDC 60HP	Similar to Accord, software change	Interp.
460V 10K Drive - With Regen Disable	Thyssen Krupp	2109BC13	VVVF 30HP	Similar to Accord, software change	Interp.
		2109BC14	VVVF 40HP	Similar to Accord, software change	Interp.
		2109BC15	VVVF 60HP	Similar to Accord, software change	Interp.
460V 10K Drive - Regen	Thyssen Krupp	2109BC07	VVVF 30HP	Similar to Accord, software change	Interp.
		2109BC08	VVVF 40HP	Similar to Accord, software change	Interp.
		2109BC09	VVVF 60HP	Similar to Accord, software change	Interp.
		2109BB01	VVVF 80HP	Similar to Accord, software change	Interp.
		2109BB02	VVVF 120HP	Similar to Accord, software change	Interp.
		2109BB03	VVVF 160HP	Similar to Accord, software change	Interp.
		2109BC10	PWMDC 30HP	Similar to Accord, software change	Interp.
		2109BC11	PWMDC 40HP	Similar to Accord, software change	Interp.
		2109BC12	PWMDC 60HP	Similar to Accord, software change	Interp.
		2109BB04	PWMDC 80HP	Similar to Accord, software change	Interp.
		2109BB05	PWMDC 120HP	Similar to Accord, software change	Interp.
		2109BB06	PWMDC 160HP		7
		240V Accord Drives - Non-Regen	Thyssen Krupp	731AG3	15HP
731AG5	20HP				Interp.
731AG7	30HP				Interp.
731AG9	40HP				Interp.
731AG11	60HP				Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Drives			TABLE 1.2
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$		$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
480V Accord Drives - Non-Regen	Thyssen Krupp	731AG4	15HP		6
		731AG6	20HP		Interp.
		731AG8	30HP		Interp.
		731AG10	40HP		Interp.
		731AG12	60HP		Interp.
240V Accord Drives - Regen	Thyssen Krupp	73A1H001	30HP		Interp.
		73A1H003	40HP		Interp.
		73A1H005	60HP		5
480V Accord Drives - Regen	Thyssen Krupp	73A1H007	30HP		Interp.
		73A1H009	40HP		Interp.
		73A1H011	60HP		Interp.
		73A1H013	80HP		Interp.
		73A1H015	120HP		Interp.
		73A1H017	160HP		1

**SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX**



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.				Table Description: Batteries	
Model Line: Traction Controller				TABLE 1.3	
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$		$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
Battery	Power Sonic	116AB2	12V Dry Cell Battery; 1.2 Ah		1,2,5,6

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Fuses			TABLE 1.4
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$			$I_p = 1.5$
Component Type	Manufacturer	Model	Description	Notes	UUT
FNQ Fuses	Bussmann	409CR200	FUSE 600V FNQ 0.2A		Interp.
		409BP8	FUSE 600V FNQ 1A		1
		409BP20	FUSE 600V FNQ 3A		2,5
		409BP23	FUSE 600V FNQ 4A		Interp.
		409BP24	FUSE 600V FNQ 5A		6
		409BP25	FUSE 600V FNQ 6A		6
		409BP28	FUSE 600V FNQ 8A		Interp.
		409BP30	FUSE 600V FNQ 10A		2,5
		409BP31	FUSE 600V FNQ 12A		Interp.
		409BP32	FUSE 600V FNQ 15A		Interp.
		409BP33	FUSE 600V FNQ 17.5A		Interp.
		409BP34	FUSE 600V FNQ 20A		Interp.
		409BP35	FUSE 600V FNQ 25A		Interp.
		409BP36	FUSE 600V FNQ 30A		1
MDA Fuses	Bussmann	409BR5	FUSE PANEL MDA 250V 1A		Interp.
		409BR7	FUSE PANEL MDA 250V 2A		2,5
		409BR9	FUSE PANEL MDA 250V 3A		1,2,5,6
		409BR10	FUSE PANEL MDA 250V 4A		Interp.
		409BR11	FUSE PANEL MDA 250V 5A		5
		409BR12	FUSE PANEL MDA 250V 6A		1,2,5,6
		409BR13	FUSE PANEL MDA 250V 7A		Interp.
		409BR14	FUSE PANEL MDA 250V 8A		Interp.
409BR15	FUSE PANEL MDA 250V 10A		5		

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Fuses	TABLE 1.4
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Semiconductor Fuses	Bussmann	409BT4	FUSE SEMICONDUCTOR 250V 50A FU1-3		Interp.
		409BT7	FUSE SEMICONDUCTOR 250V 80A FU1-3		8
		409BT9	FUSE SEMICONDUCTOR 250V 100A FU1-3		Interp.
		409BT11	FUSE SEMICONDUCTOR 250V 150A FU1-3		Interp.
		409BT13	FUSE SEMICONDUCTOR 250V 200A FU1-3		Interp.
		409BT17	FUSE SEMICONDUCTOR 250V 300A FU1-3		Interp.
		409BD2	FUSE SEMICONDUCTOR 500V 20A FU1-3		Interp.
		409BD3	FUSE SEMICONDUCTOR 500V 30A FU1-3		Interp.
		409AX4	FUSE SEMICONDUCTOR 700V 40A FU1-3		2,4,6
		409AX5	FUSE SEMICONDUCTOR 700V 50A FU1-3		Interp.
		409AX6	FUSE SEMICONDUCTOR 700V 80A FU1-3		Interp.
		409AX7	FUSE SEMICONDUCTOR 700V 100A FU1-3		Interp.
		409AX8	FUSE SEMICONDUCTOR 700V 150A FU1-3		5
		409AX9	FUSE SEMICONDUCTOR 700V 200A FU1-3		Interp.
		409AX10	FUSE SEMICONDUCTOR 700V 300A FU1-3		Interp.
		409AX11	FUSE SEMICONDUCTOR 700V 400A FU1-3		1

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Contactors	TABLE 1.5
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
3 Pole Contactors	Siemens	298AH36	CONTACTOR 3 POLE AC; 10HP @ 575V		Interp.
		298AH33	CONTACTOR 3 POLE AC; 20HP @ 575V		2
		298AH34	CONTACTOR 3 POLE AC; 30HP @ 575V		6
		298AH35	CONTACTOR 3 POLE AC; 40HP @ 575V		Interp.
		298AH37	CONTACTOR 3 POLE AC; 50HP @ 575V		5
		298AH28	CONTACTOR 3 POLE AC; 60HP @ 575V		Interp.
		298AH30	CONTACTOR 3 POLE AC; 80HP @ 575V		Interp.
		298AH31	CONTACTOR 3 POLE AC; 120HP @ 575V		Interp.
		298AH38	CONTACTOR 3 POLE AC; 160HP @ 575V		1
Mini Contactors	Siemens	298AP1	RELAY CONTACTOR 2NC/2NO 24VDC		Interp.
		298AP2	RELAY CONTACTOR 2NC/2NO 48VDC		Interp.
		298AP3	RELAY CONTACTOR 2NC/2NO 115VAC		Interp.
		298AP4	RELAY CONTACTOR 2NC/2NO 240VAC		Interp.
		298AP5	RELAY CONTACTOR 2NC/2NO 110VDC		Interp.
		298BD1	RELAY CONTACTOR 3NO/1NC 24VDC		1,2,5,6
		298BD3	RELAY CONTACTOR 3NO/1NC 115VAC		Interp.
		298BF1	RELAY CONTACTOR, 4NO/0NC, 24VDC		Interp.
		298BG1	CONTACTOR, 4NO, 115VAC		1,2,5,6
		298BH1	CONTACTOR, 4NO, 115VAC		1
		298BH2	CONTACTOR, 4NO, 24VDC		1
		298BE2	RELAY CONTACTOR, 2NO/2NC 115VAC		Interp.
		298BE3	RELAY CONTACTOR, 2NO/2NC 125VDC		7
		298BL001	RELAY CONTACTOR, 2NC/2NO 115VAC		2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Contactors	TABLE 1.5
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Auxiliary Contacts	Siemens	297BT3	CONTACT BLOCK, AUXILIARY		Interp.
		297BT4	CONTACT BLOCK, AUXILIARY		Interp.
		297CY001	CONTACT BLOCK, AUXILIARY		1,2,5,6
		297AD4	CONTACT CONTACTOR AUX.		1,2,5,6
Transit Voltage Suppressor	Siemens	804BF1	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		6,7,8
		804BF2	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		Interp.
		804BF3	SUPPRESSOR, RELAY CONTACTOR, RC 240VAC		Interp.
		804BF4	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		Interp.
		804BF5	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		1,2,5,6
		804BF6	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		2
		804BF7	SUPPRESSOR, RELAY CONTACTOR, DIODE DC	Same as tested in UUTs 6,7,8	Extrap.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Relays			TABLE 1.6	
Model Line: Traction Controller						
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$			$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT	
Relays	Tyco	690CA3	RELAY PWR DPDT 6A 24VDC		1,2,5,6	
		690CA5	RELAY PWR DPDT 6A 110VDC		1,2,5,6	
		690CA12	RELAY PWR DPDT 6A 12VDC		2	
	Carlo Gavazzi	690DA1	RELAY TRUE RMS VOLTAGE MONITOR 230VAC		8	
		690DA2	RELAY TRUE RMS VOLTAGE MONITOR 460VAC		5,6,8	
	Finder	690CJ1	RELAY PWR DPDT 5A 115VAC		5	
Transit Suppressors for Relays	Tyco	804BC1	SUPPRESSOR RELAY SOCKET RC 110-230VAC		5	
		804BC2	SUPPRESSOR RELAY SOCKET DIODE 24VDC		1,2,5,6	
		804BC3	SUPPRESSOR RELAY SOCKET DIODE 6-24VDC		2	
	Siemens	804BF1	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		1,2,5,6	
		804BF2	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		Interp.	
		804BF3	SUPPRESSOR, RELAY CONTACTOR, RC 240VAC		Interp.	
		804BF4	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		Interp.	
		804BF5	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		5	
		804BF6	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC	Same as tested in UUT5	Extrap.	
804BF7	SUPPRESSOR, RELAY CONTACTOR, DIODE DC	Same as tested in UUTs 1,2,5,6	Extrap.			

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Line Chokes	TABLE 1.7
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
3 Phase Line Chokes	MTE	486AR22	230V, 7.5HP		Interp.
		486AR25	230V, 15HP		8
		486AR28	230V, 20HP		Interp.
		486AR31	230V, 30HP		Interp.
		486AR34	230V, 40HP		Interp.
		486AR40	230V, 60HP		Interp.
		486AR41	230V, 40HP		Interp.
		486AR42	230V, 60HP		Interp.
		486AD1	460V, 15HP, 25A, 1.2 mh		2,6
		486AD2	460V, 20HP		Interp.
		486AD3	460V, 30HP, 45A, 0.7 mh		Interp.
		486AD4	460V, 40HP		Interp.
		486AD5	460V, 60HP		Interp.
		486AD6	460V, 7.5HP		Interp.
		486AD7	460V, 10HP		Interp.
486AD8	460V		Interp.		
486AD9	460V, 40HP		Interp.		
486AD10	460V, 60HP, 80A, 0.7 mh		5		
486AD11	460V, 80HP		Interp.		
486AD12	460V, 120HP		Interp.		
486AD13	460V, 30HP		Interp.		
486AD14	460V, 160HP, 160A, .23 mh		1		

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Power Supplies	TABLE 1.8
Model Line: Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
Power Supplies	LAMBDA	672BW1	POWER SUPPLY 24 VDC 50 W.		Extrap.
		672BX1	POWER SUPPLY 24 VDC 100 W.		1,2,5,6
		672BY1	POWER SUPPLY 24 VDC 150 W.		1
		672CC1	POWER SUPPLY 48 VDC 150 W. (PS6 PS7 PS		1
UPS Rescue Kits	TKE	200BWK002	POWER SUPPLY, UPS, 1500VA		2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description: TVS Assemblies	TABLE 1.9
Model Line:	Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
TVS Assembly	LCR Electronics	804CL4	SUPPRESSOR ASSEMBLY 480V		2,5,6
		804CL5	SUPPRESSOR ASSEMBLY 240V		Interp.
		804CL6	SUPPRESSOR ASSEMBLY 480V		Interp.
		804CL7	SUPPRESSOR ASSEMBLY 240V		8
		804CL8	SUPPRESSOR ASSEMBLY 575V		1

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Voltage Monitors	TABLE 1.10
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Voltage Monitors	Carlo Gavazzi	609DA1	230 VAC		Extrap.
		609DA2	460 VAC		2,5,6
		609DA3	600 VAC		1
Hour Meter	Kuebler	846AJ1	24 VDC		2

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Resistors/Capacitors	TABLE 1.11
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$	$I_P = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Resistors	Milwaukee Resistor	699AV4	RESISTOR 100W 50ohm		1,5
	Ohmite	708AT1	RESISTOR TUBE 1000W 60ohm		2
Capacitors	Cornell-Dubilier	238CG1	CAP LUG CAN 440VAC 10% 2MFD		2,6
		238CG3	CAP LUG CAN 440VAC 10% 4MFD		5
		238CG6	CAP LUG CAN 440VAC 10% 7.5MFD		1

**SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX**

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Seismic Kits	TABLE 1.13
Model Line:	Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Seismic Kits	Thyssen Krupp	200BTF001	Seismic Kit, TAC50-04, 72" High		5,6
		200BTF002	Seismic Kit, TAC50-04, 84" High		1,2,7,8

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc. Model Line: Traction Controller	TABLE 2
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Certified Product Construction Summary:
 NEMA 1, 11 Gauge carbon steel enclosure

Certified Options Summary:
 See Tables 2.1 - 2.12 for a complete listing of certified components.

Mounting Configuration:
 Wall mounted - rigid
 Note: Installed mounting configuration must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0g$ $z/h=1.0$ $I_p = 1.5$

Model Line	Model	Dimensions (in)			Weight (lb)	Notes	UUT
		Depth	Width	Height			
Traction Controller	TAC50-42	13.1	33.1	42	385		3,4

**SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX**

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description:	Transformers	TABLE 2.1
Model Line:	Traction Controller			

Building Code:	CBC 2016	Seismic Certification Limits:	$S_{DS} = 2.0 g$	$z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
0.5 kVA	GE	874DA	Single Phase, 0.5 kVA, 115 - 600V		Extrap.
		874EM	Single Phase, 0.5 kVA, 208-600V		Extrap.
0.75 kVA	GE	874DB	Single Phase, 0.75 kVA, 115-600V		Extrap.
		874DC	Single Phase, 0.75 kVA, 115-400V		Extrap.
1.0 kVA	GE	874DP	Single Phase, 1.0 kVA, 115-600V		4
		874DW	Single Phase, 1.0 kVA, 115-400V		Interp.
		874EN	Single Phase, 1.0 kVA, 208-600V		Interp.
1.5 kVA	GE	874DR	Single Phase, 1.5 kVA, 115-208V		Interp.
		874DX	Single Phase, 1.5 kVA, 115-600V		3

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Drives	TABLE 2.2
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
240V Accord Drives - Non-Regen	Thyssen Krupp	731AG3	15HP		4
		731AG5	20HP		Interp.
		731AG7	30HP		Interp.
		731AG9	40HP		Interp.
		731AG11	60HP		Interp.
480V Accord Drives - Non-Regen	Thyssen Krupp	731AG4	15HP		Interp.
		731AG6	20HP		Interp.
		731AG8	30HP		3

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Batteries	TABLE 2.3
Model Line: Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
Battery	Power Sonic	116AB2	12V Dry Cell Battery; 1.2 Ah		3,4

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Fuses	TABLE 2.4
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
FNQ Fuses	Bussmann	409CR200	FUSE 600V FNQ 0.2A		Extrap.
		409BP8	FUSE 600V FNQ 1A		Extrap.
		409BP20	FUSE 600V FNQ 3A		3,4
		409BP23	FUSE 600V FNQ 4A		Interp.
		409BP24	FUSE 600V FNQ 5A		Interp.
		409BP25	FUSE 600V FNQ 6A		Interp.
		409BP28	FUSE 600V FNQ 8A		4
		409BP30	FUSE 600V FNQ 10A		3
MDA Fuses	Bussmann	409BR5	FUSE PANEL MDA 250V 1A		4
		409BR7	FUSE PANEL MDA 250V 2A		Interp.
		409BR9	FUSE PANEL MDA 250V 3A		3,4
		409BR10	FUSE PANEL MDA 250V 4A		3
		409BR11	FUSE PANEL MDA 250V 5A		Interp.
		409BR12	FUSE PANEL MDA 250V 6A		3,4
Semiconductor Fuses	Bussmann	409BT4	FUSE SEMICONDUCTOR 250V 50A FU1-3		Extrap.
		409BT7	FUSE SEMICONDUCTOR 250V 80A FU1-3		Extrap.
		409BD2	FUSE SEMICONDUCTOR 500V 20A FU1-3		Extrap.
		409BD3	FUSE SEMICONDUCTOR 500V 30A FU1-3		Extrap.
		409AX4	FUSE SEMICONDUCTOR 700V 40A FU1-3		4
		409AX5	FUSE SEMICONDUCTOR 700V 50A FU1-3		Interp.
		409AX6	FUSE SEMICONDUCTOR 700V 80A FU1-3		3

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Contactors			TABLE 2.5
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$		$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
3 Pole Contactors	Siemens	298AH36	CONTACTOR 3 POLE AC; 10HP @ 575V		4
		298AH33	CONTACTOR 3 POLE AC; 20HP @ 575V		Interp.
		298AH34	CONTACTOR 3 POLE AC; 30HP @ 575V		3
Mini Contactors	Siemens	298AP1	RELAY CONTACTOR 2NC/2NO 24VDC		Interp.
		298AP2	RELAY CONTACTOR 2NC/2NO 48VDC		Interp.
		298AP3	RELAY CONTACTOR 2NC/2NO 115VAC		Interp.
		298AP4	RELAY CONTACTOR 2NC/2NO 240VAC		Interp.
		298AP5	RELAY CONTACTOR 2NC/2NO 110VDC		Interp.
		298BD1	RELAY CONTACTOR 3NO/1NC 24VDC		3,4
		298BD3	RELAY CONTACTOR 3NO/1NC 115VAC		Interp.
		298BF1	RELAY CONTACTOR, 4NO/0NC, 24VDC		Interp.
		298BG1	CONTACTOR, 4NO, 115VAC		3,4
		298BH1	CONTACTOR, 4NO, 115VAC		Interp.
		298BH2	CONTACTOR, 4NO, 24VDC		Interp.
		298BE2	RELAY CONTACTOR, 2NO/2NC 115VAC		Interp.
		298BE3	RELAY CONTACTOR, 2NO/2NC 125VDC		Interp.
		298BL001	RELAY CONTACTOR, 2NC/2NO 115VAC		3
Auxiliary Contacts	Siemens	297BT3	CONTACT BLOCK, AUXILIARY		Interp.
		297BT4	CONTACT BLOCK, AUXILIARY		Interp.
		297CY001	CONTACT BLOCK, AUXILIARY		3,4
		297AD4	CONTACT CONTACTOR AUX.		3,4
Transit Voltage Suppressor	Siemens	804BF1	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		3
		804BF2	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Contactors	TABLE 2.5
Model Line: Traction Controller		

Building Code: CBC 2016	Seismic Certification Limits: $S_{DS} = 2.0 g$ $z/h = 1.0$	$I_p = 1.5$
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Component Type	Manufacturer	Model	Description	Notes	UUT
Transit Voltage Supressor	Siemens	804BF3	SUPPRESSOR, RELAY CONTACTOR, RC 240VAC		Interp.
		804BF4	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		Interp.
		804BF5	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		3,4
		804BF6	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		3
		804BF7	SUPPRESSOR, RELAY CONTACTOR, DIODE DC	Same as 804BF1	Extrap.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.		Table Description: Relays			TABLE 2.6
Model Line: Traction Controller					
Building Code: CBC 2016		Seismic Certification Limits: $S_{DS} = 2.0g$ $z/h = 1.0$		$I_p = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
Relays	Tyco	690CA3	RELAY PWR DPDT 6A 24VDC		3,4
		690CA5	RELAY PWR DPDT 6A 110VDC		3,4
		690CA12	RELAY PWR DPDT 6A 12VDC		3
	Carlo Gavazzi	690DA2	RELAY TRUE RMS VOLTAGE MONITOR 460VAC		3
Transit Suppressors for Relays	Tyco	804BC1	SUPPRESSOR RELAY SOCKET RC 110-230VAC		Interp.
		804BC2	SUPPRESSOR RELAY SOCKET DIODE 24VDC		3,4
		804BC3	SUPPRESSOR RELAY SOCKET DIODE 6-24VDC		3
	Siemens	804BF1	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		3,4
		804BF2	SUPPRESSOR, RELAY CONTACTOR, RC 120VAC		Interp.
		804BF3	SUPPRESSOR, RELAY CONTACTOR, RC 240VAC		Interp.
		804BF4	SUPPRESSOR, RELAY CONTACTOR, DIODE DC		3

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Line Chokes	TABLE 2.7
Model Line: Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
3 Phase Line Chokes	MTE	486AD6	460V, 7.5HP		Interp.
		486AD7	460V, 10HP		Interp.
		486AD8	460V		Interp.
		486AD1	460V, 15HP, 25A, 1.2 mh		4
		486AD2	460V, 20HP		Interp.
		486AD13	460V, 30HP		Interp.
		486AD3	460V, 30HP, 45A, 0.7 mh		3

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description:	Power Supplies	TABLE 2.8
Model Line:	Traction Controller			

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
Power Supplies	LAMBDA	672BW1	POWER SUPPLY 24 VDC 50 W.		4
		672BX1	POWER SUPPLY 24 VDC 100 W.		3,4
		672BY1	POWER SUPPLY 24 VDC 150 W.	Circuit layout option only, < 1 lb.	Extrap.
		672CC1	POWER SUPPLY 48 VDC 150 W. (PS6 PS7 PS8 PS9)	Circuit layout option only, < 1 lb.	Extrap.
UPS Rescue Kits	TKE	200BWK001	POWER SUPPLY, UPS, 750VA		3,4

**SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX**

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description: TVS Assemblies	TABLE 2.9
Model Line:	Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0 g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
TVS Assembly	LCR Electronics	804CL5	SUPPRESSOR ASSEMBLY 240V		3
		804CL7	SUPPRESSOR ASSEMBLY 240V		Interp.
		804CL6	SUPPRESSOR ASSEMBLY 480V		Interp.
		804CL4	SUPPRESSOR ASSEMBLY 480V		4

**SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX**

16050-CR-001, rev. 0



Manufacturer:	Thyssen Krupp Elevator Manufacturing Inc.	Table Description: Cooling Fans	TABLE 2.12
Model Line:	Traction Controller		

Building Code: CBC 2016 **Seismic Certification Limits:** $S_{DS} = 2.0g$ $z/h = 1.0$ $I_p = 1.5$

Component Type	Manufacturer	Model	Description	Notes	UUT
Cooling Fans	NMB	378AE1	115VAC 100CFM		3
		378AH1	115VAC 220CFM		4

UNIT UNDER TEST (UUT) SUMMARY SHEET



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 1
Model Line: Traction Controller	
Model Number: TAC50 - 84" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
0.75 kVA and 1.5 kVA transformers; 160 HP regenerative drive; Extended seismic kit (200BTF002)

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1114	26.25	30.25	84	5.0	12.0	> 33.3

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 5/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 2
Model Line: Traction Controller	
Model Number: TAC50 - 84" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
1.5 kVA and 15 kVA transformers; 11 kW non-regenerative drive.

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
578	26.25	30.25	84	10.0	8.5	> 33.3

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 5/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 3
Model Line: Traction Controller	
Model Number: TAC50 - 42" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
1.5 kVA transformer; 22 kW non-regenerative drive.

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
385	13.1	33.1	42	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was rigid mounted to a wall fixture using (8) 3/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 4
Model Line: Traction Controller	
Model Number: TAC50 - 42" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
1.0 kVA transformer; 11 kW non-regenerative drive.

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
343	13.1	33.1	42	N/A	N/A	N/A

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was rigid mounted to a wall fixture using (8) 3/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 5
Model Line: Traction Controller	
Model Number: TAC50 - 72" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
1.5 kVA and 34 kVA transformers; 60 HP regenerative drive; Extended seismic kit (200BTF001)

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
715	22.25	30.25	72	5.0	15.0	> 33.3

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 5/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET



16050-CR-001, rev. 0

Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 6
Model Line: Traction Controller	
Model Number: TAC50 - 72" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
0.75 kVA transformer; 11 kW non-regenerative drive; Extended seismic kit (200BTF001)

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
520	22.25	30.25	72	7.0	15.0	> 33.3

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 5/8" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 7
Model Line: Traction Controller	
Model Number: TAC50 - 84" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
.5 and .75 kVA transformers; 15 HP non-regenerative drive; Extended seismic kit (200BTF002)

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
635	22.25	30.25	84	6.9	21.0	13.0

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 1/2" Grade 5 bolts, lock washers, and nuts. Unit maintained structural integrity and remained functional per manufacturer requirement. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

16050-CR-001, rev. 0



Manufacturer: Thyssen Krupp Elevator Manufacturing Inc.	UUT 8
Model Line: Traction Controller	
Model Number: TAC50 - 84" Serial Number: N/A	

Product Construction Summary:
NEMA 1, 11 Gauge carbon steel enclosure

Options/Subcomponent Summary:
.75 and 1.5 kVA transformers; 160 HP-regenerative drive; Extended seismic kit (200BTF002)

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
895	22.25	30.25	84	5.3	5.3	5.4

UUT Highest Passed Seismic Run Information

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 2016	ICC-ES AC156	2.0	1.0	1.5	3.2	2.4	1.33	0.53

Test Mounting Details:



The UUT was mounted to the table using (6) 1/2" Grade 5 bolts, lock washers, and nuts.
Unit maintained structural integrity and remained functional per manufacturer requirement.
Contents were included in testing per operating conditions.