



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

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

OFFICE USE ONLY

APPLICATION #: OSP-0068

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Systecon

Manufacturer's Technical Representative: Stu Barrick

Mailing Address: 6121 Schumacher Park Drive, West Chester, OH 45069

Telephone: (513) 777-7722

Email: Stu.barrick@systecon.com

Product Information

Product Name: Industrial Control Panels

Product Type: HVAC Control Panels

Product Model Number: See tables for components included

General Description: Configurable control panels for HVAC applications

Mounting Description: Rigid or spring isolated, Wall Mounted

Tested Seismic Enhancements: Seismic enhancements made to the test units and/or modifications required to address anomalies during the tests shall be incorporated into the production units.

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates

Contact Person: Daniel Zentner

Mailing Address: 233 SW Wilson Ave, Suite 101, Bend, OR 97702

Telephone: (541) 292-5839

Email: dzentner@structint.com

Title: Program Manager





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

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

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.

Name: Andrew Coughlin California License Number: S6082

Mailing Address: 5215 Hellyer Ave, Suite 101, San Jose, CA 951381025

Telephone: (415) 635-8461 Email: acoughlin@structint.com

Certification Method

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

Other (Please Specify): _____

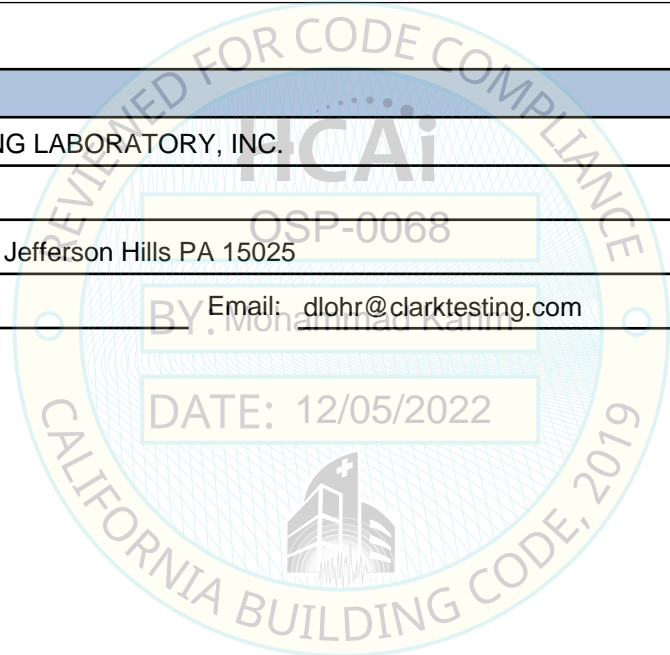
Testing Laboratory

Company Name: CLARK TESTING LABORATORY, INC.

Contact Person: Davon Lohr

Mailing Address: 1801 Route 51, Jefferson Hills PA 15025

Telephone: (412) 387-1001 Email: dlohr@clarktesting.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.35 (rigid) or 4.23 (isolated)

SDS (Design spectral response acceleration at short period, g) = 1.8 ($z/h = 1$), 2.0 ($z/h = 0$)

a_p (Amplification factor) = 1.0 (rigid) or 2.5 (isolated)

R_p (Response modification factor) = 2.5 (rigid) or 2.0 (isolated)

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

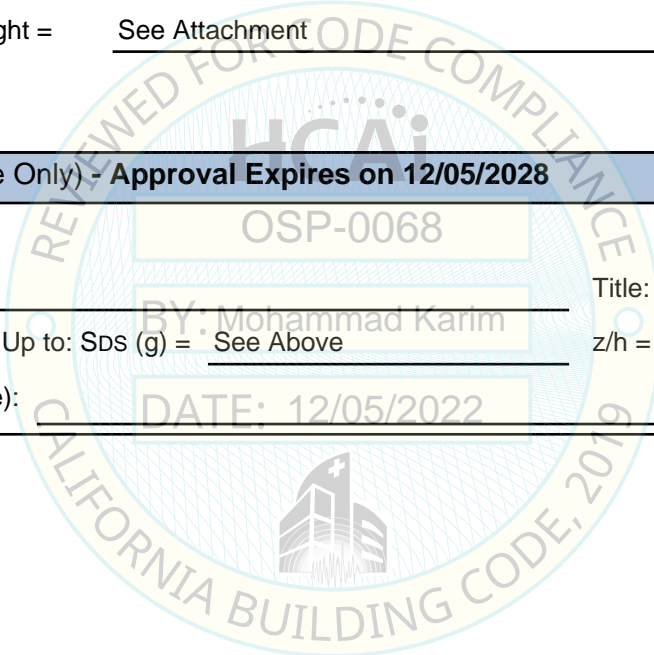
HCAI Approval (For Office Use Only) - Approval Expires on 12/05/2028

Date: 12/5/2022

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = See Above z/h = See Above

Condition of Approval (if applicable): DATE: 12/05/2022



SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 1800843



Manufacturer: Syscon		Table Description: I/O Devices			TABLE 2
Model Line: HVAC Control Panels					
Building Code: CBC 2022		Seismic Certification Limits:		$S_{DS} = 1.88 g$	$z/h = 1.0$
				$S_{DS} = 2.00 g$	$z/h = 0.0$
				$I_P = 1.5$	
Component Type	Manufacturer	Model	Description	Notes	UUT
Ethernet Adapter	Allen Bradley	1734-AENT	24V DC Ethernet/IP Adapter		1A/B
Input Modules	Allen Bradley	1734-IB2	24V DC 2 Point Digital Input Module		Extrap.
		1734-IB4	24V DC 4 Point Digital Input Module		Extrap.
		1734-IB8	24V DC 8 Point Digital Input Module		1A/B
		1734-IE8C	24V DC 8 Point Analog Current Input Module		1A/B
		1769-IQ16	24V DC 16 Point Digital Input Module		3A/B
		1769-IF16C	24V DC 16 Point Analog Current Input Module		3A/B
Output Modules	Allen Bradley	1734-OB2	24V DC 2 Point Digital Output Module		Extrap.
		1734-OE4C	24V DC 4 Point Analog Current Output Module		1A/B
		1734-OB4	24V DC 4 Point Digital Output Module		Interp.
		1734-OB8	24V DC 8 Point Digital Output Module		1A/B
		1769-OB16	24V DC 16 Point Digital Output Module		3A/B
		1769-OF4CI	24V DC 4 Point Isolated Analog Output Module		3A/B
CompactLogix Controller	Allen Bradley	1769-L32E	Ethernet Processor, 750 Kbyte Memory		3A/B
		1769-L30ER	Ethernet Processor, 1 Mbyte Memory	Identical to 1769-L32E/L35E (firmware & memory)	Interp.
		1769-L35E	Ethernet Processor, 1.5 Mbyte Memory		3A/B
		1769-L33ER	Ethernet Processor, 2 Mbyte Memory	Identical to 1769-L32E/L35E (firmware & memory)	Interp.
Expansion Pwr Supply	Allen Bradley	1734-EP24DC	Point I/O 24V DC Expansion Power Supply		1A/B
Communication Mod	Allen Bradley	MVI69-MCM	Modbus Master/Slave Network Interface Mod		3A/B
		MVI69E-MBS	Modbus Master/Slave Network Interface Mod	Identical to MVI69-MCM	Interp.

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 1800843



Manufacturer: Syscon Model Line: HVAC Control Panels		Table Description: Circuit Protection			TABLE 3	
Building Code: CBC 2022		Seismic Certification Limits:			$S_{DS} = 1.88 g \quad z/h = 1.0$ $S_{DS} = 2.00 g \quad z/h = 0.0$	
Component Type	Manufacturer	Model	Description	Notes	UUT	
Circuit Breakers	Eaton	FAZ-C0.5/1-NA-SP	0.5A Circuit Breaker		Extrap.	
		FAZ-C1/1-NA-SP	1A Circuit Breaker		3A/B	
		FAZ-C1.5/1-NA-SP	1.5A Circuit Breaker		Interp.	
		FAZ-C2/1-NA-SP	2A Circuit Breaker		Interp.	
		FAZ-C3/1-NA-SP	3A Circuit Breaker		Interp.	
		FAZ-C4/1-NA-SP	4A Circuit Breaker		Interp.	
		FAZ-C5/1-NA-SP	5A Circuit Breaker		Interp.	
		FAZ-C6/1-NA-SP	6A Circuit Breaker		Interp.	
		FAZ-C7/1-NA-SP	7A Circuit Breaker		Interp.	
		FAZ-C8/1-NA-SP	8A Circuit Breaker		Interp.	
		FAZ-C10/1-NA-SP	10A Circuit Breaker		Interp.	
		FAZ-C13/1-NA-SP	13A Circuit Breaker		Interp.	
		FAZ-C15/1-NA-SP	15A Circuit Breaker		3A/B	
		Phoenix Contact	712123	0.25A Circuit Breaker		1A/B
			712152	0.5A Circuit Breaker		1A/B
	712194		1A Circuit Breaker		Interp.	
	712217		2A Circuit Breaker		Interp.	
	712233		3A Circuit Breaker		1A/B	
Fuses	Bussman	FNQ-R-8	8A Fuse		2A/B	
		LPJ-100SP	100A Fuse		4A/B	
		OPM-1038RSW	30A Fuse Disconnect	Installed with cable tie to DIN rail	All	
		J60100-3CR	100A 3 Pole Fuse Block		2A/B,4A/B	
Power Dist. Block	Mersen	MPDB66573	Distribution Block		2A/B,4A/B	

SPECIAL SEISMIC CERTIFICATION CERTIFIED SUBCOMPONENT MATRIX

TRU PROJECT NO. 1800843



Manufacturer: Systecon	Table Description: Transformers & Power Supply	TABLE 4
Model Line: HVAC Control Panels		

Building Code: CBC 2022	Seismic Certification Limits:	$S_{DS} = 1.88 g$ $z/h = 1.0$	$I_p = 1.5$
		$S_{DS} = 2.00 g$ $z/h = 0.0$	

Component Type	Manufacturer	Model	Description	Notes	UUT
Transformers Open Core and Coil Copper	GE	9T58K2873	120/240v,12/24v,0.05kVA		3A/B
		PT58K3164	240/480v,12/24v,0.05kVA		Interp.
		9T51B0002	240/480v,120/240v,0.05kVA		Interp.
		9T58K2874	120/240v,12/24v,0.075kVA		Interp.
		9T51B0003	240/480v,120/240v,0.075kVA		Interp.
		9T58K2875	120/240v,12/24v,0.1kVA		Interp.
		9T58K2907	120/240v,120/240v,0.1kVA		Interp.
		PT58K4132	240/480v,12/24v,0.1kVA		Interp.
		9T51B0004	240/480v,120/240v,0.1kVA		Interp.
		9T58K2876	120/240v,12/24v,0.15kVA		Interp.
		PT58K4133	240/480v,12/24v,0.15kVA		Interp.
		9T51B0005	240/480v,120/240v,0.15kVA		Interp.
		9T58K2878	120/240v,12/24v,0.25kVA		Interp.
		PT58K3024	240/480v,12/24v,0.25kVA		Interp.
		9T51B0007	240/480v,120/240v,0.25kVA		Interp.
		PT58K2913	120/240v,120/240v,0.5kVA		Interp.
		9T51B0008	240/480v,120/240v,0.5kVA		Interp.
		PT58K2914	120/240v,120/240v,0.75kVA		Interp.
		9T51B0009	240/480v,120/240v,0.75kVA		Interp.
		PT58K2915	120/240v,120/240v,1kVA		Interp.
9T51B0010	240/480v,120/240v,1kVA		Interp.		
9T51B0011	240/480v,120/240v,1.5kVA		2A/B,4A/B		

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 1A
Model Line: HVAC Control Panels	
Model Description: 13"D x 30"W x 30"H Panel (Rigid) Serial Number: N/A	

Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

Options/Subcomponent Summary:
Ethernet Adapter: Allen Bradley (1734-AENT); **Input Modules:** Allen Bradley (1734-IB8, 1734-IE8C);
Output Modules: Allen Bradley (1734-OE4C, 1734-OB8); **Expansion Power Supply:** Allen Bradley (1734-EP24DC);
Circuit Breakers: Phoenix Contact (712123, 712152, 712233); **Fuses:** Bussman (OPM-1038RSW);
Power Supply: IDEC (PS5R-SF24); **Ethernet Switch:** Phoenix Contact (2891152);
2-Pole Relays w/ Relay Clip: Omron (MY1N DC24); **Isolator:** Weidmuller (8594840000)

<i>UUT Properties</i>						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
300	13.3	30.0	30.0	N/A	N/A	N/A

<i>UUT Highest Passed Seismic Run Information</i>									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53	
		2.00	0.0						

Test Mounting Details:



Run #1
Rigid mounted

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Direct Mount: Skid mounted to table using (8) 1/2" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 1B
Model Line: HVAC Control Panels	
Model Description: 13"D x 30"W x 30"H Panel (Isolated) Serial Number: N/A	

Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

Options/Subcomponent Summary:
Ethernet Adapter: Allen Bradley (1734-AENT); **Input Modules:** Allen Bradley (1734-IB8, 1734-IE8C);
Output Modules: Allen Bradley (1734-OE4C, 1734-OB8); **Expansion Power Supply:** Allen Bradley (1734-EP24DC);
Circuit Breakers: Phoenix Contact (712123, 712152, 712233); **Fuses:** Bussman (OPM-1038RSW);
Power Supply: IDEC (PS5R-SF24); **Ethernet Switch:** Phoenix Contact (2891152);
2-Pole Relays w/ Relay Clip: Omron (MY1N DC24); **Isolator:** Weidmuller (8594840000)

<i>UUT Properties</i>						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
300	13.3	30.0	30.0	N/A	N/A	N/A

<i>UUT Highest Passed Seismic Run Information</i>									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53	
		2.00	0.0						

Test Mounting Details:





Run #2
Isolated skid

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Isolation Mount: (4) Mason isolators attach to assembly using (2) 1/2" Grade 5 bolts each. Isolators welded to the table.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 2A
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 12"H Panel (Rigid) Serial Number: N/A	

Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

Options/Subcomponent Summary:
Fuses: Bussman (FNQ-R-8, OPM-1038RSW, J60100-3CR); **Power Dist. Block:** Mersen (MPDB66573);
Transformers: GE (9T51B0011);

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
150	13.0	36.0	12.0	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 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53
		2.00	0.0					

Test Mounting Details:



Run #1
Rigid mounted

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Direct Mount: Skid mounted to table using (8) 1/2" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 2B
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 12"H Panel (Isolated) Serial Number: N/A	


Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

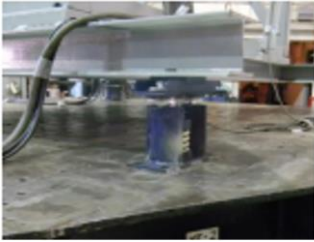
Options/Subcomponent Summary:
Fuses: Bussman (FNQ-R-8, OPM-1038RSW, J60100-3CR); **Power Dist. Block:** Mersen (MPDB66573);
Transformers: GE (9T51B0011);

<i>UUT Properties</i>						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
150	13.0	36.0	12.0	N/A	N/A	N/A

<i>UUT Highest Passed Seismic Run Information</i>									
Building Code	Test Criteria	S _{DS} (g)	z/h	I _P	A _{FLX-H} (g)	A _{RIG-H} (g)	A _{FLX-V} (g)	A _{RIG-V} (g)	
CBC 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53	
		2.00	0.0						

Test Mounting Details:





Run #2
Isolated skid

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Isolation Mount: (4) Mason isolators attach to assembly using (2) 1/2" Grade 5 bolts each. Isolators welded to the table.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 3A
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 60"H Panel (Rigid) Serial Number: N/A	


Product Construction Summary:
 NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
 Units tested mounted to steel frame and skid.
 30A Fused disconnect secured to DIN rail using cable tie.


Options/Subcomponent Summary:
Input Modules: Allen Bradley (1769-IQ16, 1769-IF16C); **Output Modules:** Allen Bradley (1769-OB16, 1769-OF4CI);
CompactLogix Controller: Allen Bradley (1769-L32E, 1769-L35E); **Communication Mod:** Allen Bradley (MVI69-MCM);
Circuit Breakers: Eaton (FAZ-C1/1-NA-SP, FAZ-C15/1-NA-SP); **Fuses:** Bussman (OPM-1038RSW); **Transformers:** GE (9T58K28773); **Power Supply:** IDEC (PS5R-SF24); **HMI:** Parker Automation (PA10T); **BACnet Portal:** OEMCtrl (OEMPrtl Pro);
LONWorks Interface: Echelon (SLTA-10, Adapter Power Supply); **2-Pole Relays w/ Relay Clip:** Omron (MY2N AC110/120);
Isolator: Weidmuller (8594840000); **Selector Switches:** Baco (2 position, 3 position); **Router:** Linksys (BEFSR81);
Switch/Modem: Sixnet (SL-5MS-MDM-1)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
200	13.3	36.0	60.0	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 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53	
		2.00	0.0						

Test Mounting Details:





**Run #1
Rigid mounted**

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
 Direct Mount: Skid mounted to table using (8) 1/2" Grade 5 bolts.
 Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
 Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 3B
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 60"H Panel (Isolated) Serial Number: N/A	


Product Construction Summary:
 NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
 Units tested mounted to steel frame and skid.
 30A Fused disconnect secured to DIN rail using cable tie.

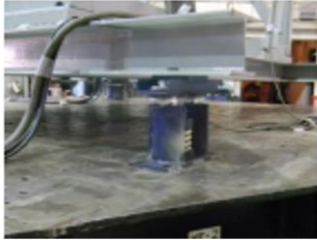
Options/Subcomponent Summary:
Input Modules: Allen Bradley (1769-IQ16, 1769-IF16C); **Output Modules:** Allen Bradley (1769-OB16, 1769-OF4CI);
CompactLogix Controller: Allen Bradley (1769-L32E, 1769-L35E); **Communication Mod:** Allen Bradley (MVI69-MCM);
Circuit Breakers: Eaton (FAZ-C1/1-NA-SP, FAZ-C15/1-NA-SP); **Fuses:** Bussman (OPM-1038RSW); **Transformers:** GE (9T58K28773); **Power Supply:** IDEC (PS5R-SF24); **HMI:** Parker Automation (PA10T); **BACnet Portal:** OEMCtrl (OEMPrtl Pro);
LONWorks Interface: Echelon (SLTA-10, Adapter Power Supply); **2-Pole Relays w/ Relay Clip:** Omron (MY2N AC110/120);
Isolator: Weidmuller (8594840000); **Selector Switches:** Baco (2 position, 3 position); **Router:** Linksys (BEFSR81);
Switch/Modem: Sixnet (SL-5MS-MDM-1)

UUT Properties						
Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
200	13.3	36.0	60.0	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 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53	
		2.00	0.0						

Test Mounting Details:





Run #2
Isolated skid

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
 Isolation Mount: (4) Mason isolators attach to assembly using (2) 1/2" Grade 5 bolts each. Isolators welded to the table.
 Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
 Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 4A
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 12"H Panel (Rigid) Serial Number: N/A	

Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

Options/Subcomponent Summary:
Fuses: Bussman (LPJ-100SP, OPM-1038RSW, J60100-3CR); **Power Dist. Block:** Mersen (MPDB66573);
Transformers: GE (9T51B0011);

UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
150	13.0	36.0	12.0	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 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53
		2.00	0.0					

Test Mounting Details:



Run #1
Rigid mounted

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Direct Mount: Skid mounted to table using (8) 1/2" Grade 5 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

TRU PROJECT NO. 1800843



Manufacturer: Systecon	UUT 4B
Model Line: HVAC Control Panels	
Model Description: 13"D x 36"W x 12"H Panel (Isolated) Serial Number: N/A	

Product Construction Summary:
NEMA 1/12 Sheet Metal Carbon Steel Cabinet.
Units tested mounted to steel frame and skid.

Options/Subcomponent Summary:
Fuses: Bussman (LPJ-100SP, OPM-1038RSW, J60100-3CR); **Power Dist. Block:** Mersen (MPDB66573);
Transformers: GE (9T51B0011);

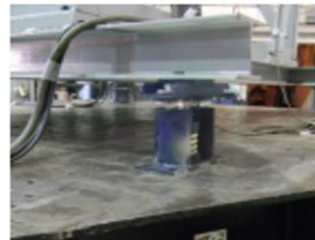
UUT Properties

Weight (lb)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
150	13.0	36.0	12.0	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 2022	ICC-ES AC156	1.88	1.0	1.5	3.01	2.26	1.33	0.53
		2.00	0.0					

Test Mounting Details:



Run #2
Isolated skid

Unit mounted to frame/skid using (4) 7/16" A325 bolts.
Isolation Mount: (4) Mason isolators attach to assembly using (2) 1/2" Grade 5 bolts each. Isolators welded to the table.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test.
Contents were included in testing per operating conditions.