



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

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

OFFICE USE ONLY

APPLICATION #: OSP-0818

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Generac Power Systems Inc.

Manufacturer's Technical Representative: Jon Breidenbach

Mailing Address: S45 W29290 Hwy 59, Waukesha, WI 531899071

Telephone: (262) 544-4811

Email: Jonathon.Breidenbach@generac.com

Product Information

Product Name: Emergency and Standby Power Systems

Product Model Number(s): See attached

Product Category: Switchgear/Switchboards

Product Sub-Category: Automatic Transfer Switches

General Description: Generac Non-Service Entrance Rated and Service Entrance Rated

Mounting Description: Wall or Wall and Base Mounted Rigid - see Certified Product Table

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: Dynamic Certification Laboratories

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg Street Suit 109, Sparks, NV 894316091

Telephone: (775) 358-5085

Email: kelly@shaketest.com

Title: Vice President of Sales





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

Company Name: THE VMC GROUP

Name: Kenneth Tarlow California License Number: S2851

Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814

Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com

Certification Method

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

Other (Please Specify): _____

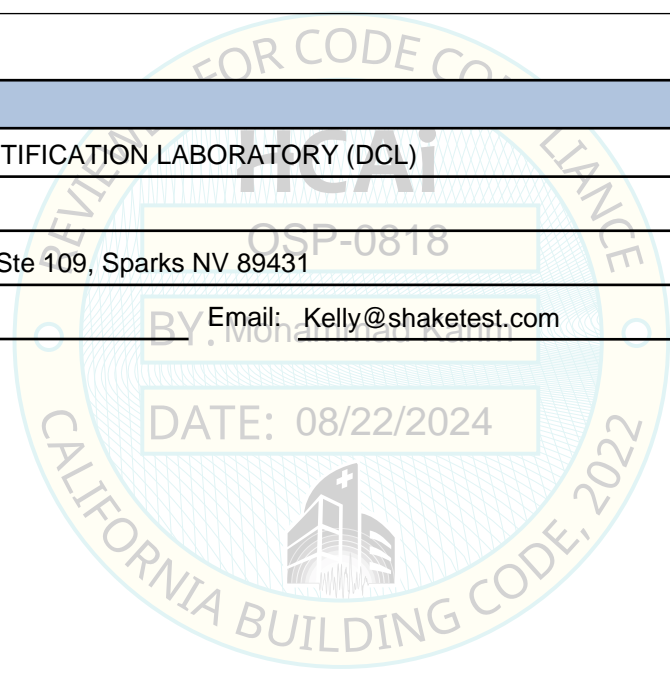
Testing Laboratory

Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)

Contact Person: Kelly Laplace

Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431

Telephone: (775) 358-5085 Email: Kelly@shaketest.com





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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.50 (Sds=2.0g, z/h=1.0) and 1.13 (Sds=2.5g, z/h=0.0)

SDS (Design spectral response acceleration at short period, g) = 2.0g at z/h=1.0 and 2.5g at z/h=0

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6.0

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

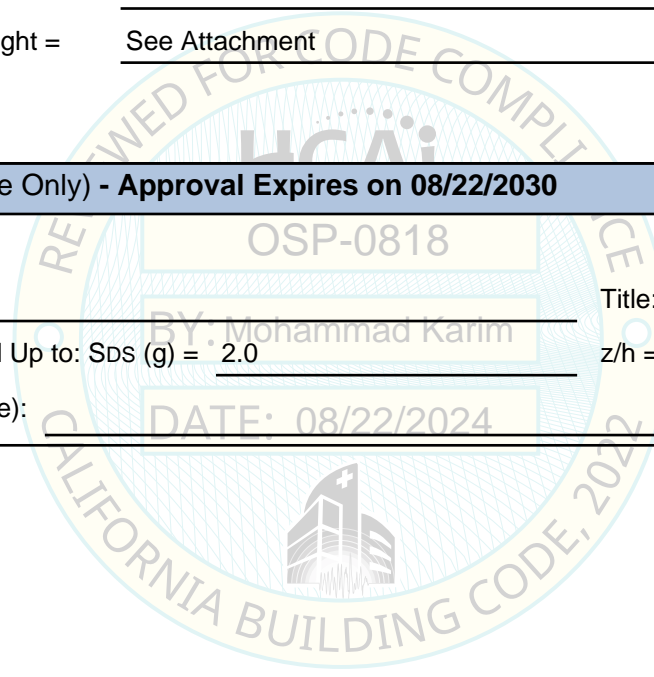
HCAI Approval (For Office Use Only) - Approval Expires on 08/22/2030

Date: 8/22/2024

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: SDS (g) = 2.0 z/h = 1

Condition of Approval (if applicable): DATE: 08/22/2024



Special Seismic Certification

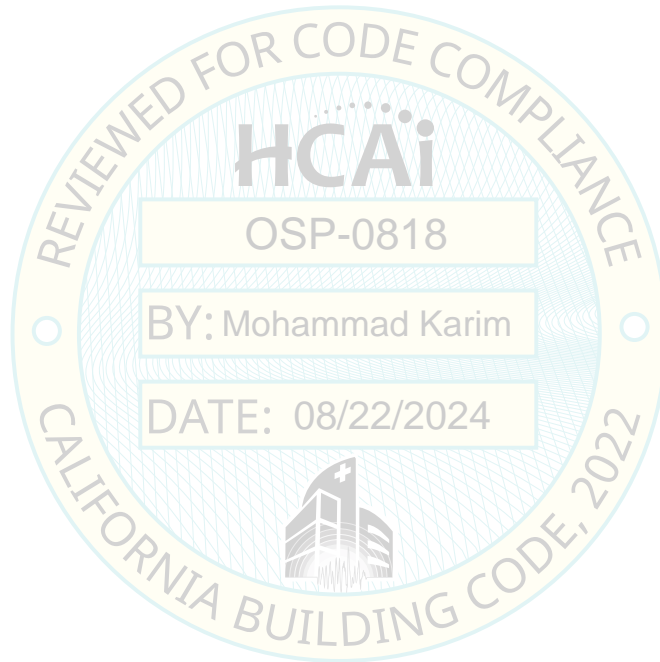
Table 1 - Certified Components - Wall Mounted, Non-Service Entrance



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX611
 Mounting: Wall Mounted
 Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Generac Model Number	Honeywell (Alternate Branding) Model Number	Dimensions [in]			NEMA Rating	# of Poles ¹	Amps	Weight [lb]	Unit
		Length	Depth	Height					
TX611DN0400E4CM	HX611DN0400E4CM	24	12	51	3R	4	400	185	UUT-06
TX611xN0600xxCx	HX611xN0600xxCx	28	17	64	3R	2/3	600	215	Interpolated
TX611xN0600xxAx	HX611xN0600xxAx	29	15	64	1	2/3	600	215	Interpolated
TX611xN0600xxAx	HX611xN0600xxAx	29	15	64	1	4	600	225	Interpolated
TX611DN0600L4CM	HX611DN0600L4CM	29	17	64	3R	4	600	225	UUT-01

Note:
 1. Reference Table 5 for the bookending of transfer switches.



Special Seismic Certification
Table 2 - Certified Options - Wall Mounted



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX611
 Mounting: Wall Mounted
 Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Sample Part Number: AAUVWBCYYYYDZEF				
Sample Value	Category	Allowable Value	Definition	Unit
AA	Branding	TX	Generac Branding	UUT-01, UUT-06
		HX	Honeywell Alternate Branding	Same as Tested UUTs
U	Series	6	Series 6	UUT-01, UUT-06
V	WCR & Cycle Rating	1	3 Cycle	UUT-01, UUT-06
W	Controller	1	TXC100 Controller	UUT-01, UUT-06
B	Transition Type	D	Open, Inphase, and Delayed	UUT-01, UUT-06
C	Switch Type	N	Non-Service Entrance	UUT-01, UUT-06
YYYY	Amperage Rating	400	400 Amperes	UUT-06
		600	600 Amperes	UUT-01
D	Voltage Code	A	120/240 VAC 1P	Extrapolated
		B	120/208 VAC 1P	Extrapolated
		E	480 VAC (Three Phase) Delta	UUT-06
		G	120/208 VAC 3P Wye	Extrapolated
		J	120/240 VAC 3P Delta	Extrapolated
		K	277/480 VAC 3P Wye	Extrapolated
		S	480 VAC 3P WYE	UUT-01
		L	600 VAC 3P WYE	Extrapolated ²
Z	Number of Poles ³	2	2 Poles	Extrapolated
		3	3 Poles	Extrapolated
		4	4 Poles	UUT-01, UUT-06
E	Enclosure	A	NEMA 1	Extrapolated
		C	NEMA 3R	UUT-01, UUT-06
F	Accessories	N	None	Extrapolated
		H	Heater	Extrapolated
		M	Multiple accessories ¹	UUT-01, UUT-06

Note:
 1. Multiple accessories contain heater, transient voltage surge suppressor (TVSS) assembly and current transformer (CT).
 2. Voltage change represents software differences.
 3. The subcomponent that changes the number of poles is modular; 2 Poles and 3 Poles represent depopulated versions of 4 Poles.

Special Seismic Certification

Table 3 - Certified Components - Combination Base and Wall Mounted, Non-Service and Service Entrance



Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Mounting Configuration: Combination Base and Wall Mounted

Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Generac Model Number	Honeywell (Alternate Branding) Model Number	Dimensions [in]			NEMA Rating	# of Poles ¹	Amps	Weight [lb]	Unit
		Length	Depth	Height					
TX611xN0600xx8x	HX611xx0600xx8x	30	25	81	12	2/3	600	375	Extrapolated
TX611DN0600S4BH	HX611DN0600S4BH	30	25	81	12	4	600	460	UUT-02
TX301xS0600xxAx	HX301xS0600xxAx	30	24	81	1	2/3	600	465	Interpolated
TX301xS0600x4Ax	HX301xS0600x4Ax	30	24	81	1	4	600	465	Interpolated
TX301xS0600xxCx	HX301xS0600xxCx	30	24	81	3R	2/3	600	467	Interpolated
TX301DS0600S4CH	HX301DS0600S4CH	30	23	81	3R	4	600	450	UUT-04
TX611xN0800x4Ax	HX611xN0800x4Ax	30	25	81	1	4	800	650	Interpolated
TX611xN0800xxCx	HX611xN0800xxCx	30	25	81	3R	2/3	800	650	Interpolated
TX611xN0800x4Cx	HX611xN0800x4Cx	30	25	81	3R	4	800	650	Interpolated
TX611xN0800xxAx	HX611xN0800xxAx	30	25	81	1	2/3	800	650	Interpolated
TX611xN0800xx8x	HX611xN0800xx8x	30	25	81	12	2/3	800	650	Interpolated
TX611xN0800x48x	HX611xN0800x48x	30	25	81	12	4	800	650	Interpolated
TX671xN1000xxAx	HX671xN1000xxAx	30	25	81	1	2/3	1000	650	Interpolated
TX671xN1000x4Ax	HX671xN1000x4Ax	30	25	81	1	4	1000	650	Interpolated
TX671xN1000xxCx	HX671xN1000xxCx	30	25	81	3R	2/3	1000	650	Interpolated
TX671xN1000x4Cx	HX671xN1000x4Cx	30	25	81	3R	4	1000	650	Interpolated
TX301xS0800xxAx	HX301xS0800xxAx	38	25	90	1	2/3	800	880	Interpolated
TX301xS0800x4Ax	HX301xS0800x4Ax	38	25	90	1	4	800	880	Interpolated
TX301xS0800xxCx	HX301xS0800xxCx	38	25	90	1	2/3	800	880	Interpolated
TX301xS1000xxAx	HX301xS1000xxAx	38	25	90	3R	2/3	1000	880	Interpolated
TX301NS0800S4CM	HX301NS0800S4CM	38	25	90	3R	4	800	880	UUT-03
TX301xS1000xxCx	HX301xS1000xxCx	38	25	90	3R	2/3	1000	890	Interpolated
TX301CS1000S4CM	HX301NS1000S4CM	38	24	90	3R	4	1000	890	UUT-05

Note:

1. Reference Table 8 for the bookending of transfer switches.

Special Seismic Certification
Table 4 - Certified Options - Combination Base and Wall Mounted



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX301, TX611
 Mounting Configuration: Combination Base and Wall mounted
 Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Sample Part Number: AAUVWBCYYYYZEF				
Sample Value	Category	Allowable Value	Definition	Unit
AA	Branding	TX	Generac Branding	UUT-02, UUT-03, UUT-04, UUT-05
		HX	Honeywell Alternate Branding	Same as Tested UUTs
U	Series	3	Series 3	UUT-03, UUT-04, UUT-05
		6	Series 6	UUT-02
V	WCR & Cycle Rating	0	WCR Breaker Only	UUT-03, UUT-04, UUT-05
		1	3 Cycle	UUT-02
		7	30 Cycle	Extrapolated ³
W	Controller	1	TXC100 Controller	UUT-02, UUT-03, UUT-04, UUT-05
B	Transition Type	N	Open, Inphase (Only)	UUT-03
		D	Open, Inphase, and Delayed	UUT-02 UUT-04
		C	Closed Transition	UUT-05
C	Switch Type	N	Non-Service Entrance	UUT-02
		S	Service Entrance	UUT-03, UUT-04 UUT-05
YYYY	Amperage Rating	600	600 Amperes	UUT-02, UUT-04
		800-1000	800-100 Amperes	UUT-03, UUT-05
D	Voltage Code ²	A	120/240 VAC 1P	Extrapolated
		B	120/208 VAC 1P	Extrapolated
		E	480 VAC (Three Phase) Delta	Extrapolated
		G	120/208 VAC 3P Wye	Extrapolated
		J	120/240 VAC 3P Delta	Extrapolated
		K	277/480 VAC 3P Wye	Extrapolated
		S	480 VAC 3P WYE	UUT-02, UUT-03, UUT-04, UUT-05
		L	600 VAC 3P WYE	Extrapolated ²
Z	Number of Poles ⁴	2	2 Poles	Extrapolated
		3	3 Poles	Extrapolated
		4	4 Poles	UUT-02, UUT-03, UUT-04, UUT-05
E	Enclosure	A	NEMA 1	Extrapolated
		B	NEMA 12	UUT-02
		C	NEMA 3R	UUT-03, UUT-04, UUT-05
F	Accessories	N	None	Extrapolated
		H	Heater	UUT-02, UUT-03, UUT-04, UUT-05
		M	Multiple accessories ¹	UUT-03, UUT-05

- Note:
- Multiple accessories contain heater, transient voltage surge suppressor (TVSS) assembly and current transformer (CT).
 - Voltage change represents software differences.
 - 3 cycle and 30 cycle represent branding differences.
 - The subcomponent that changes the number of poles is modular; 2 Poles and 3 Poles represent depopulated versions of 4 Poles.

Special Seismic Certification
Table 5 - Certified Subcomponents - Wall Mounted



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX 611
 Mounting Configuration: Wall mounted
 Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Subcomponent	Manufacturer	Model Number	Description	Material	Mounting Configuration	Weight [lb]	Unit	
Enclosures	Generac	F2-SZ1-3R	32T Enclosure TX 400A NSE Type 3R	Galvanized Carbon Steel	N/A	92	UUT-06	
		F3-SZ1-1	32T Enclosure TX 600A NSE Type 1	Galvanized Carbon Steel	N/A	104	Interpolated	
		F3-SZ1-3R	32T Enclosure TX 600A NSE Type 3R	Galvanized Carbon Steel	N/A	107	UUT-01	
Subcomponent	Manufacturer	Model Number	Description	Material	Mounting Configuration	Weight [lb]	Unit	
Enclosure Accessories	Generac	A000430735	GSOR Bracket Heater Double	Galvanized Carbon Steel	Subplate	2	UUT-01	
		A0001254977	GSOR Bracket TX Switch Control 353.4 Latch	Galvanized Carbon Steel	Subplate	2	UUT-01	
		A0001254927	GSOR Bracket TX Switch Control 353.4 Mount	Galvanized Carbon Steel	Subplate	3	UUT-01	
		A0001242952	GSOR Panel Enclosure F4 SZ1	Galvanized Carbon Steel	Back wall	21	UUT-01	
		A0001430261	GSOR Subplate 600 SE	Galvanized Carbon Steel	Back wall	37	UUT-01	
Controller	Generac	TX100	Switch Controller	Plastic, PCB	Back panel	7	UUT-01, UUT-06	
Battery	Tenergy	A0000214872	Li-ION 18650 Battery	Aluminum, Li Oxide, Copper	Controller	<1	UUT-01, UUT-06	
Neutral Bars	Generac	10000036956	400A With MTG Plate	Aluminum, Carbon Steel, Plastic	Back panel	1	UUT-06	
		A0004090963	Bus CU 600A NSE Neutral Tie	Copper	Back panel	1	UUT-01	
Ground Bar	Generac	A0004090961	GSOR 600A NSE Neutral	Galvanized Carbon Steel	Back panel	2	UUT-01	
Transformers	Siemens	A0000426315	MR 600/480:277 200VA TX(2X - only for 600V Supply)	Copper, Carbon Steel	On door	9	UUT-01, UUT-06	
Current Transformer	Generac	A0002022403	43T Assy Current Transformer 600A 4P	Copper, Plastic	On terminal	6	UUT-01	
Fuse Block	Bussmann	G073591	Fuse block 30A 600V 1POS	Thermoplastic, Copper Alloy	Transformer	<1	UUT-01, UUT-06	
		0D2572	Fuse block 30A 600V 3POS W/SQ	Thermoplastic, Copper Alloy	Transformer	<1	UUT-01, UUT-06	
Heater	Generac	A0002027010	Heater 100W 2 Resistor 600V(3R, 600V)	Copper, Aluminum, Carbon Steel	Back panel	2	UUT-01	
		A0000136603	Heater 100W 2 Resistor (3R, 480V)	Copper, Aluminum, Carbon Steel	Back panel	2	UUT-06	
Heater Guard	Generac	A0000313170	SSOR Guard Heater TX Series	Stainless Steel	Heater	1	UUT-01	
Relay	TE Relay Products	A0000139215	Relay 12VDC 3PDT Flange Mount	Plastics, Copper	Control box	<1	UUT-01	
Fuse	Bussmann	073590A	Fuse 5A X	Copper, Tin, Glass	Fuse holder	<1	UUT-01	
Transient Voltage Surge Suppressor	Atlantic Scientific	10000035940	TVSS Module Split 120/240V	Stainless Steel, Copper, PCB	Back panel	6	UUT-06	
		0L5698C	TVSS Module 3PH 277/480V		Back panel	5	UUT-01	
TVSS Accessories	Cinch	0D7393D	Block Terminal 5POS	Plastics	Back panel	<1	UUT-01	
TVSS Accessories	Siemens	0E5997D	CB 30A 3P 240V S BQ3 LL	Plastics, Coper	Back panel	<1	UUT-01, UUT-06	
Subcomponent	Manufacturer	Model Number	Description ¹	Material	Voltage	Mounting Configuration	Weight [lb]	Unit
Transfer Switch Mechanism (Assy Contactor)	Generac	A0000357611	400A TDN 4P	Copper, Carbon Steel, Plastic	120-480V	Back panel	54	UUT-06
		A0001688896	600A Inphase 2P		120-480/600	Back panel	56	Interpolated
		A0001688899	600A TDN 2P		120-480/600	Back panel	57	Interpolated
		A0001688897	600A Inphase 3P		120-480/600	Back panel	70	Interpolated
		A0001688900	600A TDN 3P		120-480/600	Back panel	72	Interpolated
		A0001688898	600A Inphase 4P		120-480/600	Back panel	84	Interpolated
		A0001688901	600A TDN 4P		120-480/600	Back panel	86	UUT-01

Note:
 1. Time delay neutral (TDN), and inphase represent software differences. 2P, 3P, 4P represent 2 Pole, 3 Pole, 4 Pole.

Special Seismic Certification
Table 6 - Certified Subcomponents - Combination Base and Wall Mounted



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX301, TX611

Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Subcomponent	Manufacturer	Model Number	Description	Material	Mounting Configuration	Weight [lb]	Unit		
Enclosures	Generac	F4-SZ1-1	32T Enclosure TX 600A SE TYPE 1	Galvanized Carbon Steel	N/A	232	Extrapolated		
		F4-SZ1-3R	32T Enclosure TX 600A SE TYPE 3R	Galvanized Carbon Steel	N/A	232	UUT-04		
		F4-SZ2-1	32T Enclosure TX 800/1000A NSE TYPE 1	Galvanized Carbon Steel	N/A	272	Interpolated		
		F3-SZ1-12	32T Enclosure TX 600A NSE TYPE 12	Galvanized Carbon Steel	N/A	280	UUT-02		
		F4-SZ2-12	32T Enclosure TX 800A NSE TYPE 12	Galvanized Carbon Steel	N/A	280	Interpolated		
		F4-SZ2-3R	32T Enclosure TX 800/1000A NSE TYPE 3R	Galvanized Carbon Steel	N/A	282	Interpolated		
		F6-SZ1-1	32T Enclosure TX 800/1000A SE TYPE 1	Galvanized Carbon Steel	N/A	338	Interpolated		
		F6-SZ1-3R	32T Enclosure TX 800/1000A SE TYPE 3R	Galvanized Carbon Steel	N/A	341	UUT-03, UUT-05		
Enclosure Accessories	Generac	A0000486891	Assy Cover CB 3R TX Series Black	Plastic, Stainless Steel, Carbon Steel	On door	<1	UUT-03, UUT-04, UUT-05		
		A0000486856	Assy CoverHMI 3R TX Series Clear	Plastic, Stainless Steel, Carbon Steel	On door	1	UUT-04		
		A0001663626	Bus Shield 600 SE	Lexan/Acrylic	Subplate	2	UUT-04		
		A0002365017	Bus Shield 800A-1000A SE	Lexan/Acrylic	Subplate	3	UUT-03, UUT-05		
		A0002091908	GSOR Bracket TX Switch Control Front LMNT	Galvanized Carbon Steel	On door	<1	UUT-04		
		A0002091907	GSOR Bracket TX Switch Control Front HMNT	Galvanized Carbon Steel	On door	<1	UUT-04		
		A0000430641	GSOR Bracket TX Switch Control 120.0 MNT	Galvanized Carbon Steel	On door	<1	UUT-03, UUT-05		
		A0000430642	GSOR Bracket TX Switch Control 120.0 LAT	Galvanized Carbon Steel	On door	<1	UUT-05		
		A0000430735	GSOR Bracket Heater Double	Galvanized Carbon Steel	Sub plate	2	UUT-02, UUT-03, UUT-04, UUT-05		
		A0001351180	GSOR Bracket TVSS CB TX STD	Galvanized Carbon Steel	Back wall	1	UUT-02, UUT-04		
		A0001313427	GSOR Bracket CB 600A SE	Galvanized Carbon Steel	Side wall	4	UUT-04		
		A0002355835	GSOR Bracket CB 800A SE	Galvanized Carbon Steel	Side wall	9	UUT-05		
		A0004027231	GSOR Bracket CB 800A-1000A SE	Galvanized Carbon Steel	Side wall	9	UUT-05		
		A0000430658	STOR Kick Plate 30° Enclosure	Galvanized Carbon Steel	On cabinet base	3	UUT-03, UUT-04		
		A0003251379	GSOR Control Enclosure Back Window	Galvanized Carbon Steel	On door	11	UUT-05		
		A0001430261	GSOR Subplate 600 SE	Galvanized Carbon Steel	Back wall	37	UUT-02, UUT-04		
		A0002957376	GSOR Subplate 800/1000A 2/3POLE	Galvanized Carbon Steel	Back wall	38	Interpolated		
		A0004027230	GSOR Subplate 800/1000A SE	Galvanized Carbon Steel	Back wall	48	UUT-03, UUT-05		
		Controller	Generac	A0000382550	Controller Option Board	Plastic, PCB	Controller	<1	UUT-05
				TX100	Switch Controller	Plastic, PCB	Back panel	7	UUT-02, UUT-03, UUT-04, UUT-05
Battery	Tenergy	A0000214872	Li-ION 18650 Battery	Aluminum, Li Oxide, Copper	Controller	<1	UUT-02, UUT-03, UUT-04, UUT-05		
Circuit Breaker	Siemens	A0000019085	CB 0600A 3P 600V S3VA07EL0A0J	Plastic, Copper, Aluminum	On breaker bracket	12	UUT-04		
	Eaton	A0001691102	CB 0800A 3P 600V EPDG3PE2NA0J	Plastic, Copper, Aluminum	On breaker bracket	43	UUT-03		
		A0001691103	CB 1000A 3P 600V EPDG3PE3NA0J	Plastic, Copper, Aluminum	On breaker bracket	45	UUT-05		
Neutral Bars	Generac	A0003361082	Neutral Link 600A SE	Copper	On neutral lugs	<1	UUT-02, UUT-04		
		A0003456278	Neutral Bus TIE 600A SE	Copper	On bracket	1	UUT-02, UUT-04		
		A0003373144	Neutral Bus Removable Link 800/1000A	Copper	On bracket	2	UUT-05		
		A0002743263	Neutral Bus TIE 1000A	Copper	On bracket	3	UUT-05		
		A0003373142	Neutral Bus Load 800/1000A	Copper	On bracket	3	UUT-05		
		A0003373143	Neutral Bus 800/1000A	Copper	On bracket	3	UUT-03, UUT-05		
Ground Bar	Generac	A0000774190	GSOR Ground and Neutral Riser	Galvanized Carbon Steel	Side wall	3	UUT-05		
		A0002828233	GSOR BRKT Neutral Ground 600A SE	Galvanized Carbon Steel	Side wall	3	UUT-02, UUT-04		
		A0003373141	GSOR Ground and Neutral Riser	Galvanized Carbon Steel	Side wall	4	UUT-03, UUT-05		

Special Seismic Certification
Table 7 - Certified Subcomponents - Combination Base and Wall Mounted (continued)



Manufacturer: Generac
 Product Type: Transfer Switch
 Product Line: TX301, TX611
 Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Subcomponent	Manufacturer	Model Number	Description	Material	Mounting Configuration	Weight [lb]	Unit
Neutral Current Sensor	EATON	A0001691113	Neutral Current Sensor PD5	Plastic	On neutral bar	3	UUT-05
Transformers	Siemens	A0000426315	XFMR 600/480:277 200VA TX (2X - only for 600V Supply)	Copper, Carbon Steel	On door	9	UUT-02, UUT-04
Current transformer	Generac	A0002022409	43T ASSY CT 600A 4P	Copper, Plastic	On terminal	7	UUT-03
		A0002022412	43T ASSY CT 600A 4P	Copper, Plastic Insulations	On terminal	8	UUT-05
Fuse Block	Bussmann	0D2572	Fuse Block 30A 600V 3POS W/SQ	Thermoplastic, Copper Alloy	Transformer	<1	UUT-02, UUT-03, UUT-05
		0D2806	Fuse Block 30A 600V 2POS W/SQ	Thermoplastic, Copper Alloy	Transformer	<1	UUT-02, UUT-03, UUT-05
		G073591	Fuse Block 30A 600V 1POS	Thermoplastic, Copper Alloy	Transformer	<1	UUT-04
Heater	Generac	A0002027010	Heater ASSY 100W 2 Resistor 600V (ONLY For 3R, 600V)	Copper, Aluminum, Carbon Steel	Subplate	2	UUT-02
		A0000136603	HEATER ASSY 100W 2 RESISTOR (ONLY For 3R, 480V)	Copper, Aluminum, Carbon Steel	Subplate	2	UUT-03, UUT-04, UUT-05
Heater Guard	Generac	A0000313170	SSOR Guard Heater TX Series	Stainless Steel	Subplate	1	UUT-02, UUT-03, UUT-04, UUT-05
Relay	Airtronics	A0002286114	Relay Single Function TimerSPST-NO	Plastic	Control box	<1	UUT-02, UUT-03, UUT-05
	IDEC	0C3211B	Socket Relay 11P	Plastic	Din rail	<1	UUT-02, UUT-03, UUT-05
		A0002285195	Relay Latching 12VDC 10A	Plastics, Copper Tin	Din Rail	<1	UUT-02, UUT-03, UUT-05
	TE Relay Products	A0000139215	Relay 12VDC 3PDT Flange Mount	Plastic, Copper	Control box	<1	UUT-02, UUT-03, UUT-05
Fuse	Bussmann	073590A	Fuse 5A X	Copper, Tin, Glass	Fuse holder	<1	UUT-02, UUT-03, UUT04, UUT-05
Terminal Block	CRV	1608510000_term_blk	Feed-Through Terminal Block	Plastic, Carbon Steel	Back panel	<1	UUT-02, UUT-03, UUT-05
	Wago	0D7393T	Term Block 3P UL 12-20AWG	Plastic, Carbon Steel	Back panel	<1	UUT-02, UUT-03, UUT-05
Transient Voltage Surge Suppressor (TVSS)	Atlantic Scientific	0L5698C	TVSS Module 3PH 277/480V	Stainless Steel, Copper, PCB	Back panel	5	UUT-02, UUT-03, UUT-04, UUT-05
TVSS Accessories (Terminal Block)	Tyco	0D4698	Block Term 20A 3 X 6 X 1100V	Plastics, Carbon Steel	Back panel	<1	UUT-02, UUT-03, UUT-04, UUT-05
TVSS Accessories (Mounting Track)	Tyco	G026127	Block Term 30A 3 X 8 X 1600V	Plastics, Carbon Steel	Back panel	<1	UUT-02, UUT-03, UUT-04, UUT-05
TVSS Accessories	Siemens	0E5997D	EB 30A 3P 240V'S BQ3 LL	Plastics, Copper	Back panel	2	UUT-02, UUT-03, UUT-04, UUT-05
Buses	Generac	A0001316643	Busbar CU 600A SE CB PH ABC	Copper	Contact terminal	1	UUT-04
		A0001316646	Busbar CU 600A SE CONT PH C	Copper	Contact terminal	2	UUT-04
		A0001316645	Busbar CU 600A SE CONT PH B,	Copper	Contact terminal	2	UUT-04
		A0001316641	Busbar CU 600A SE CONT PH A	Copper	Contact terminal	2	UUT-04
		A0001316638	Busbar AL 600A SE CROSS PH A	Aluminum	Contact terminal	4	UUT-04
		A0002713878	Busbar CU 800A-1000A CB PH ABC	Copper	On circuit breaker	4	UUT-03, UUT-05
		A0002713883	Busbar CU 800A-1000A CONT PH B	Copper	Contact terminal	4	UUT-03
		A0002713884	Busbar CU 800A-1000A CONT PH C	Copper	Contact terminal	4	UUT-03
		A0002713881	Busbar AL 800A-1000A CROSS PH C	Aluminum	between circuit breaker and contactor	4	UUT-03
		A0001316642	Busbar AL 600A SE CROSS PH C	Aluminum	Contact terminal	4	UUT-04
		A0001316644	Busbar AL 600A SE CROSS PH B	Aluminum	between circuit breaker and contactor	4	UUT-04
		A0002713879	Busbar AL 800A-1000A CROSS PH A	Aluminum	between circuit breaker and contactor	5	UUT-03
		A0002713880	Busbar AL 800A-1000A CROSS PH B	Aluminum	between circuit breaker and contactor	5	UUT-03
		A0002713882	Busbar CU 800A-1000A CONT PH A	Copper	Contact Terminal	5	UUT-03

Special Seismic Certification

Table 8 - Certified Subcomponents - Combination Base and Wall Mounted (continued)



Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Certified Seismic Level: SDS= 2.0g, z/h= 1.0

Subcomponent	Manufacturer	Model Number	Description ¹	Material	Voltage	Weight [lb]	Unit
Transfer Switch Mechanism	Generac	A0001688896	600A Inphase 2P	Copper, Carbon Steel, Plastic	120-480/600	56	Extrapolated
		A0001688899	600A TDN 2P		120-480/600	57	Extrapolated
		A0001688897	600A Inphase 3P		120-480/600	70	Extrapolated
		A0001688900	600A TDN 3P		120-480/600	72	Extrapolated
		A0001688898	600A Inphase 4P		120-480/600	84	Extrapolated
		A0001688901	600A TDN 4P		120-480/600	86	UUT-02, UUT-04
		A0001688902	800A Inphase 2P		120-480/600	236	Interpolated
		A0001688914	800A Closed 2P		120-480/600	236	Interpolated
		A0001688905	800A TDN 2P		120-480/600	236	Interpolated
		A0001688917	1000A Closed 2P		120-480/600	240	Interpolated
		A0001688908	1000A Inphase 2P		120-480/600	240	Interpolated
		A0001688911	1000A TDN 2P		120-480/600	240	Interpolated
		A0001688915	800A Closed 3P *		120-480/600	283	Interpolated
		A0001688906	800A TDN 3P		120-480/600	283	Interpolated
		A0001688903	800A Inphase 3P		120-480/600	283	Interpolated
		A0001688918	1000A Closed 3P		120-480/600	290	Interpolated
		A0001688912	1000A TDN 3P		120-480/600	290	Interpolated
		A0001688909	1000A Inphase 3P		120-480/600	290	Interpolated
		A0001688916	800A Closed 4P		120-480/600	331	Interpolated
		A0001688907	800A TDN 4P		120-480/600	331	Interpolated
A0001688904	800A Inphase 4P	120-480/600	331	UUT-03			
A0001688919	1000A Closed 4P	120-480/600	338	Interpolated			
A0001688913	1000A TDN 4P	120-480/600	338	Interpolated			
A0001688910	1000A Inphase 4P	120-480/600	338	UUT-05			

Note:
 1. Closed, time delay neutral (TDN), and inphase represent software differences. 2P, 3P, 4P represent 2 Pole, 3 Pole, 4 Pole.
 2. Transfer Switch Mechanisms are mounted to back wall.

Special Seismic Certification

Table 9 - Tested Units



Manufacturer: Generac

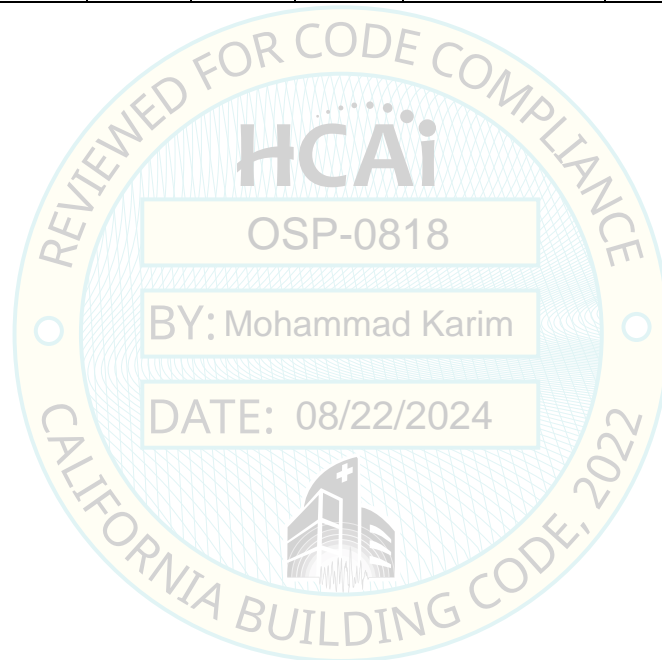
Product Type: Transfer Switch

Product Line: TX611, TX301

Mounting: Wall Mounted and Combination Base and Wall Mounted

Certified Seismic Level: Sds= 2.0g, z/h= 1.0 and Sds 2.5 at z/h=0.0

Generac Model Number	Amperage Rating (Amps)	Dimensions [in]			Mounting Configuration	Weight [lb]	Unit	DCL Test Report Number
		Length	Depth	Height				
TX611DN0400E4CM	400	24	12	51	Wall	185	UUT-06	08588-2001
TX611DN0600L4CM	600	29	17	64	Wall	225	UUT-01	77741-2201
TX301DS0600S4CH	600	30	23	81	Combination Base & Wall	450	UUT-04	77741-2201
TX611DN0600S4BH	600	30	25	81	Combination Base & Wall	460	UUT-02	77741-2201
TX301NS0800S4CM	800	38	25	90	Combination Base & Wall	880	UUT-03	77741-2201
TX301CS1000S4CM	1000	38	24	90	Combination Base & Wall	890	UUT-05	77741-2201



UNIT UNDER TEST (UUT) Summary Sheet



UUT-06 (DCL Report Number: 08588-2001 as UUT2)

Manufacturer: Generac

Product Type: Non-Service Entrance Rated Transfer Switch

Product Line: TX611 Transfer Switches

Model Number: TX611DN0400E4CM

Mounting: Rigid Wall Mount

Product Construction Summary: Type 3R NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: TX100 controller, Siemens transformer, 480V heater, 3PH 277/480V Transient Voltage Surge Suppressor (TVSS), and 400A time delay neutral transfer switch.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems were maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-06	24	12	51	185.0	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was rigidly wall mounted to the wall fixture using (4) 5/16" Grade 5 bolts, 3"x3"x1/4" Carbon Steel plate washers, channel nuts, and round washers. The bolts were spaced approximately 13-3/4" apart on center width-wise and approximately 50" apart on center height-wise.



UUT-06 overall picture



UUT-06 interior picture

UNIT UNDER TEST (UUT) Summary Sheet



UUT-02 (DCL Report Number: 77741-2201)

Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Model Number: TX611DN0600S4BH

Mounting: Combination Base & Wall Mount

Product Construction Summary: Type 12 NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: TX100 controller, 200VA transformer, 600V heater, 3PH 277/480V Transient Voltage Surge Suppressor (TVSS), and 600A time delay neutral transfer switch.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-02	30	25	81	460	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was combination base and wall mounted to the wall fixture and interface plate using (6) ½" Grade 5 bolts, flat washers 3.0" x 3.0" x 0.3" carbon steel plate washers, and (2) channel nuts for the wall mounted bolts. The bolts mounting the unit to the interface plate were spaced 25.0" apart in the side-side direction measured on center, and 16.0" apart in the front-back direction measured on center. The bolts mounting the unit to the wall fixture were spaced 19.8" apart in the side-side direction measured on center and 79.8" from the base of the unit in the vertical direction measured on center.



UUT-02 overall picture



UUT-02 interior picture

UNIT UNDER TEST (UUT) Summary Sheet



UUT-04 (DCL Report Number: 77741-2201)

Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Model Number: TX301DS0600S4CH

Mounting: Combination Base & Wall Mount

Product Construction Summary: Type 3R NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: TX100 controller, 200VA transformer, 480V heater, 3PH 277/480V Transient Voltage Surge Suppressor (TVSS), and 600A time delay neutral transfer switch.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-04	30	23	81	450	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was combination base and wall mounted to the wall fixture and interface plate using (6) ½" Grade 5 bolts, flat washers 3.0" x 3.0" x 0.3" carbon steel plate washers, and (2) channel nuts for the wall mounted bolts. The bolts mounting the unit to the interface plate were spaced 25.0" apart in the side-side direction measured on center, and 16.0" apart in the front-back direction measured on center. The bolts mounting the unit to the wall fixture were spaced 19.8" apart in the side-side direction measured on center and 79.8" from the base of the unit in the vertical direction measured on center.



UUT-04 overall picture



UUT-04 interior picture

UNIT UNDER TEST (UUT) Summary Sheet



UUT-03 (DCL Report Number: 77741-2201)

Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Model Number: TX301NS0800S4CM

Mounting: Combination Base & Wall Mount

Product Construction Summary: Type 3R NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: TX100 controller, 600A 4pole current transformer, 480V heater, 3PH 277/480V Transient Voltage Surge Suppressor (TVSS), 800A inphase transfer switch, and 800A 3Pole 600V circuit breaker.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-03	38	25	90	880	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was combination base and wall mounted to the wall fixture and interface plate using (6) ½” Grade 5 bolts, flat washers, 3.0” x 3.0” x 0.3” carbon steel plate washers, and (2) channel nuts for the wall mounted bolts. The bolts mounting the unit to the interface plate were spaced 33.0” apart in the side-side direction measured on center, and 16.0” apart in the front-back direction measured on center. The bolts mounting the unit to the wall fixture were spaced 28.0” apart in the side-side direction measured on center and 89.0” from the base of the unit in the vertical direction measured on center.

Design Changes: the TVSS will be zip tied to the mounting bracket for seismic installation.



UUT-03 overall picture



UUT-03 interior picture

UNIT UNDER TEST (UUT) Summary Sheet



UUT-05 (DCL Report Number: 77741-2201)

Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX301, TX611

Model Number: TX301CS1000S4CM

Mounting: Combination Base & Wall Mount

Product Construction Summary: Type 3R NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: Controller Option Board, 600A 4pole current transformer, 480V heater, 3PH 277/480V Transient Voltage Surge Suppressor (TVSS), 1000A inphase transfer switch, and 1000A 3Pole 600V circuit breaker.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-05	38	24	90	890	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was combination base and wall mounted to the wall fixture and interface plate using (6) ½” Grade 5 bolts, flat washers 3.0” x 3.0” x 0.3” carbon steel plate washers, and (2) channel nuts for the wall mounted bolts. The bolts mounting the unit to the interface plate were spaced 33.0” apart in the side-side direction measured on center, and 16.0” apart in the front-back direction measured on center. The bolts mounting the unit to the wall fixture were spaced 28.0” apart in the side-side direction measured on center and 89.0” from the base of the unit in the vertical direction measured on center.

Design Changes: the TVSS will be zip tied to the mounting bracket for seismic installation.



UUT-05 overall picture



UUT-05 interior picture

UNIT UNDER TEST (UUT) Summary Sheet



UUT-01 (DCL Report Number: 77741-2201)

Manufacturer: Generac

Product Type: Transfer Switch

Product Line: TX611

Model Number: TX611DN0600L4CM

Mounting: Wall Mount

Product Construction Summary: Type 3R NEMA Rated Enclosure, Galvanized Carbon Steel

Options / Component Summary: TX100 controller, Siemens transformer, 600V heater, Split 120/240V Transient Voltage Surge Suppressor (TVSS), and 600A time delay neutral transfer switch.

Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component and attachment system and force-resisting systems was maintained.

UUT Properties

Tested Unit	Dimensions (in)			Max Weight (lb)	Lowest Natural Frequency (Hz)		
	Length	Depth	Height		Front-Back	Side-Side	Vertical
UUT-01	29	17	64	225.0	N/A	N/A	N/A

Seismic Test Parameters

Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	N/A	N/A
		2.50	0.0	1.5	N/A	N/A	1.67	0.67

Unit Mounting Description: The unit was rigidly wall mounted to the wall fixture using (4) 5/16" Grade 8 bolts, flat washers, channel nuts and 1.6" x 1.6" x 0.3" carbon steel plate washers. The bolts were spaced 13.6" apart in the side-side direction measured on center, and 61.6" apart in the vertical direction measured on center.

Design change: the screws on the bottom panel will be lengthened for seismic installation.



UUT-01 overall picture



UUT-01 interior picture