



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

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

OFFICE USE ONLY

APPLICATION #: OSP-0457

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Bevco Engineering

Manufacturer's Technical Representative: James Taylor

Mailing Address: W222 N5739 Miller Way, Sussex, WI 53089

Telephone: (262) 714-4212 Email: jtaylor@bevcoengineering.com

Product Information

Product Name: Electrical Control Panels on Life Safety/Critical Branch

Product Type: Medical System Control Panels

Product Model Number: See attachments

General Description: Multiple modality custom breaker panels.

Mounting Description: Rigid, 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: VMC Group

Contact Person: John Giuliano

Mailing Address: 113 Main Street, Bloomingdale, NJ 07403

Telephone: (973) 838-1780 Email: john.giuliano@thvmcgroup.com

Title: President





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

Company Name: 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: DATASYST ENGINEERING & TESTING SERVICES
Contact Person: Andrew Hoisington
Mailing Address: S14 W33511 Highway 18, Delafield WI 53018
Telephone: (800) 969-4050 Email: Andrew.hoisington@datasystest.com

Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)
Contact Person: Josh Sailer
Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431
Telephone: (775) 358-5085 Email: josh@shaketest.com

Company Name: NATIONAL TECHNICAL SYSTEMS (NTS)
Contact Person: Paul Baia
Mailing Address: 1146 Massachusetts Avenue, Boxborough MA 01719
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Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.92

SDS (Design spectral response acceleration at short period, g) = 2.56

a_p (Amplification factor) = 2.5

R_p (Response modification factor) = 6

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height ratio factor) = 1

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

OSHPD Approval (For Office Use Only) - Approval Expires on 12/31/2025

Date: 10/5/2020

Name: Timothy Piland Title: Senior Structural Engineer

Special Seismic Certification Valid Up to: SDS (g) = 2.56 z/h = 1

Condition of Approval (if applicable): DATE: 10/05/2020



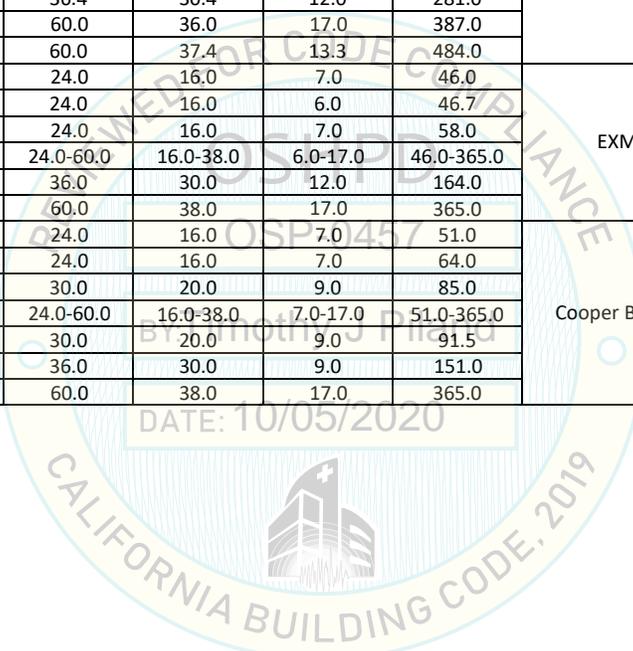
Bevco Engineering - Custom Breaker Panels



Table 1 - Certified Product Tables

Manufacturer: Bevco Engineering
Mounting: Rigid Wall Mounted
Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56g, z/h=0.0 (vertical)

Model Number	Height [in]	Width [in]	Depth [in]	Weight [lb]	Enclosure Manufacturer	NEMA Rating	UUT
BEV208/480-025-SP012	24.0	16.0	6.0	41.3	Saginaw	1	UUT12
BEV208/480-015-SP006	24.3	14.9	5.9	41.5		1	UUT6
BEV208/480-015-SP019	24.0	16.0	7.0	45.0		1	UUT19
BEV208/480-015-SP004	24.3	14.9	5.9	56.5		1	UUT4
BEV208/480-015-SP018	24.0	16.0	7.0	58.0		1	UUT18
BEV208/480-015-SP008	20.0	21.4	9.3	72.5		12	UUT8
BEV208/480-025/250-SP014	20.0	22.0	8.0	77.0		12	UUT14
BEVVVV-CBA-SPXXX	24-60	14.9-38.0	5.9-17.0	41.3-484.0		1 and 12	Interpolated
BEV208/480-250/600-SP013	36.0	30.0	12.0	137.0		1	UUT13
BEV208/480-015-SP003	42.0	31.4	11.0	223.5		12	UUT3
BEV208/480-250/600-SP015	60.0	38.0	12.0	247.0		12	UUT15
BEV208/480-030/100/250/400-SP011	48.0	37.4	9.3	264.0		12	UUT11
BEV208/480-100/600-SP007	36.4	30.4	12.0	281.0		1	UUT7
BEV208/480-400-SP020	60.0	36.0	17.0	387.0		12	UUT20
BEV208/480-600/1200-SP010	60.0	37.4	13.3	484.0		12	UUT10
BEV480-015-SP022	24.0	16.0	7.0	46.0		EXM	1
BEV208/480-125-SP016	24.0	16.0	6.0	46.7	1		UUT16
BEV480-015-SP021	24.0	16.0	7.0	58.0	1		UUT21
BEVVVV-CBA-SPXXX	24.0-60.0	16.0-38.0	6.0-17.0	46.0-365.0	1 and 12		Interpolated
BEV208/480-125-SP017	36.0	30.0	12.0	164.0	1		UUT17
BEV480-400-SP023	60.0	38.0	17.0	365.0	12		UUT23
BEV480-015-SP025	24.0	16.0	7.0	51.0	Cooper B-Line	1	UUT25
BEV480-015-SP024	24.0	16.0	7.0	64.0		1	UUT24
BEV208/480-100-SP001	30.0	20.0	9.0	85.0		4/12	UUT1
BEVVVV-CBA-SPXXX	24.0-60.0	16.0-38.0	7.0-17.0	51.0-365.0		1 and 12	Interpolated
BEV208/480-020/100-SP005	30.0	20.0	9.0	91.5		4/12	UUT5
BEV208/480-100/250-SP002	36.0	30.0	9.0	151.0		4/12	UUT2
BEV480-400-SP026	60.0	38.0	17.0	365.0	12	UUT26	



Special Seismic Certification
Table 2 - Certified Options - Nomenclature



Manufacturer: Bevco Engineering
Product Line: Custom Breaker Panels
Product Construction: Cold Formed Carbon Steel Enclosures, NEMA 1, 4, 12
Mounting Description: Rigid Wall Mounting

Bevco Custom Control Panels Model Chart				
MMMVVV-CBA-SPXXX				
Variable	Definition	Allowable Value	Allowable Value Description	Unit
MMM	Modality	BEV	Multiple Modality Panel	UUT1 - UUT26
VVV	Input Voltage	208	208V	UUT1, UUT2, UUT3, UUT4, UUT5, UUT6, UUT7, UUT8, UUT10, UUT11, UUT12, UUT13, UUT14, UUT15, UUT16, UUT17, UUT18, UUT19, UUT20
		380	380V	Interpolated
		400	400V	Interpolated
		415	415V	Interpolated
		480	480V	UUT1-UUT26
CBA	Circuit Breaker Amperage	015	15A	UUT3, UUT4, UUT6, UUT8, UUT18, UUT19, UUT21, UUT22, UUT24, UUT25
		020	20A	UUT5
		025	25A	UUT12, UUT14
		030	30A	UUT11
		040	40A	Interpolated
		050	50A	Interpolated
		060	60A	Interpolated
		070	70A	Interpolated
		080	80A	Interpolated
		090	90A	Interpolated
		100	100A	UUT1, UUT2, UUT5, UUT7, UUT11
		110	110A	Interpolated
		125	125A	UUT16
		150	150A	UUT17
		175	175A	Interpolated
		225	225A	Interpolated
		250	250A	UUT2, UUT11, UUT13, UUT14, UUT15
		400	400A	UUT11, UUT20, UUT23, UUT26
600	600A	UUT7, UUT10, UUT13, UUT15		
1200	1200A	UUT10		
SPXXX	Special Product	SP000-SP999	Internally Applied Serial Number	UUT1 - UUT26

Reference Only

Bevco Engineering - Custom Breaker Panels



Table 3 - Subcomponents - Enclosures

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer (NEMA Rating)	Model Number	Depth (in)	Width (in)	Height (in)	Max Weight	Material	UUT
Enclosure	Cooper B-Line (NEMA 4/12)	24166-1, 24166-SD	24	16	6	85	Cold formed carbon steel	UUT24, UUT25
Enclosure		30208-SD	30	20	9	92	Cold formed carbon steel	UUT1, UUT5
Enclosure		*-SD,	24-60	16-38	6-12	85-151	Cold formed carbon steel	Interpolated
Enclosure		36308-SD	36	30	9	151	Cold formed carbon steel	UUT2
Enclosure		603616-12, 603616-SD	60	38	12	278	Cold formed carbon steel	UUT26
Enclosure	Saginaw (NEMA 1)	SCE-24N1606LP	24	16	6	85	Cold formed carbon steel	UUT18, UUT19
Enclosure		SCE-24N1506LP	24	15	6	57	Cold formed carbon steel	UUT4, UUT6, UUT12
Enclosure		SCE-*N*LP*	24-60	15-36	6-12	42-281	Cold formed carbon steel	Interpolated
Enclosure		SCE-36N3012LP	36	30	12	281	Cold formed carbon steel	UUT7, UUT13
Enclosure		SCE-60XEL3716LP12	60	36	12	284	Cold formed carbon steel	Interpolated
Enclosure	Saginaw (NEMA 12)	SCE-20SA2208LPPL	20	22	9	73	Cold formed carbon steel	UUT8, UUT14
Enclosure		SCE-42XEL3110LP	42	31	11	224	Cold formed carbon steel	UUT3
Enclosure		SCE-48SA3808LPPL	48	38	9	264	Cold formed carbon steel	UUT11
Enclosure		SCE-*SA*LPPL	20-60	16-38	6-12	73-484	Cold formed carbon steel	Interpolated
Enclosure		SCE-*XEL*	20-60	16-38	6-12	73-484	Cold formed carbon steel	Interpolated
Enclosure	EXM (NEMA 1/12)	SCE-60SA3812LPPL	60	38	12	484	Cold formed carbon steel	UUT10, UUT 15, UUT20
Enclosure		1100 241606, 241606-SD	24	16	6	73	Cold formed carbon steel	UUT16
Enclosure		17-039464A, 039464A-SD	24	16	6	73	Cold formed carbon steel	UUT21, UUT22
Enclosure		1100 363012, 363012-SD	60	38	12	289	Cold formed carbon steel	UUT17
Enclosure		*-SD	24-60	16-38	6-12	73	Cold formed carbon steel	Interpolated
Enclosure		5412 ES603616, 603616-SD	60	38	12	289	Cold formed carbon steel	UUT23



Table 4 - Subcomponents - Interior

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Aux Contact	ABB	CAL4-11	Aux Contact	Contacto Frame	<10	UUT18, UUT20, UUT21, UUT 23, UUT24, UUT 26
Aux Contact	Siemens	3RH19211EA11	Aux Contact	Contacto Frame	<10	UUT1
Battery	Powersonic	PS1270	Battery	Subpanel	<10	UUT4, UUT7, UUT8, UUT10, UUT11, UUT17
Battery	Universal Power	UB1270	Battery	Subpanel	<10	UUT12, UUT17
Bridge	PXC Phoenix	3030284	Bridge	Terminal Block	<10	UUT3
Circuit Breaker Accessories	ABB	KXT1CU-3PC	Lugs	Terminals, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	ABB	KXTRHESTFP	Operating Mechanism	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	ABB	KXTFYOB	Shunt Trip	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT25
Circuit Breaker Accessories	ABB	KXTBMOD24	Motor Operator	Frame, Circuit Breaker	<10	UUT18, UUT21
Circuit Breaker Accessories	ABB	KXTASORCFPB	Shunt Trip	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT25
Circuit Breaker Accessories	ABB	KXT4CU-3PC	Lugs	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXTCRHEBFP	Operating Mechanism	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXT1N12FLHDL4	Handle	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXTAUVR1	Under Voltage Release	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXT5EF-3PC	Lugs	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	*KXTxxxxxxx	XT Accessories	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	ABB	KXT5RHESTH	Operating Mechanism	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXT5RHEBFP	Operating Mechanism	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXTHRHETR	Operating Mechanism	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	KXTAAXCDQSYFP	Aux Contact	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	ABB	OHB12510B	Operating Mechanism	Frame, Circuit Breaker	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Circuit Breaker Accessories	ABB	O*	Operating Mechanism	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	ABB	OXPI0X225	Operating Shaft	Frame, Circuit Breaker	<10	UUT18, UUT20, UUT21, UUT23, UUT26
Circuit Breaker Accessories	Siemens	3VA9133-0JG11	Lugs	Terminals, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA99780AB12	Bell alarm	Frame, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9978-0BB11	Undervoltage Release	Frame, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9978-0BL30	Shunt Trip	Frame, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9978-0AA12	Auxiliary Contact	Frame, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9133-0JF68	Lugs	Terminals, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9137-0FK31	Operating Mechanism	Frame, Circuit Breaker	<10	UUT19, UUT22, UUT25
Circuit Breaker Accessories	Siemens	3VA9373-0JG13	Lugs	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Siemens	*3VAxxxx-xxxx	3VA	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	Siemens	3VA9373-0JF68	Lugs	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Siemens	*3RPxxxx-xxxx	Relays	Din Rail	<10	Interpolated
Circuit Breaker Accessories	Siemens	3RP2511-1AW30	Relay	Din Rail	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Siemens	5S*	Accessories	Din Rail	<10	Interpolated
Circuit Breaker Accessories	Siemens	5SM2322-6	Ground Fault	Din Rail	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Circuit Breaker Accessories	Square D	LV426950	Auxiliary Contact	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	LV426967	Lugs	Terminals, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	LV426974	Lugs	Terminals, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	LV426841	Shunt Trip	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	LV*	Accessories	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	Square D	LV426801	Undervoltage Release	Frame, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	PDC6BD6	Lugs	Terminals, Circuit Breaker	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	*PDCxxxx	Accessories	Terminals, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	Square D	PDC6P20	Lugs	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	M9V11263	Circuit Ground Fault Breaker	Din Rail	<10	UUT18, UUT21, UUT24
Circuit Breaker Accessories	Square D	M9*	Accessories	Din Rail	<10	Interpolated
Circuit Breaker Accessories	Square D	S29450	Auxiliary Contact	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	S29338	Operating Mechanism	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	S37424	Lugs	Terminals, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	S31543	Motor Operator	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	S29384	Shunt Trip	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26
Circuit Breaker Accessories	Square D	S*	Accessories	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	Square D	S29404	Undervoltage Release	Frame, Circuit Breaker	<10	UUT20, UUT23, UUT26

Bevco Engineering - Custom Breaker Panels



Table 4 - Subcomponents - Interior (Continued 1)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Circuit Breaker Accessories	GE	SRPE30A15	Rating Plugs	Frame, Circuit Breaker	<10	UUT4, UUT8
Circuit Breaker Accessories	GE	SRPE30A20	Rating Plugs	Frame, Circuit Breaker	<10	UUT5
Circuit Breaker Accessories	GE	SRPE30A30	Rating Plugs	Frame, Circuit Breaker	<10	UUT11
Circuit Breaker Accessories	GE	SRPE100A70	Rating Plugs	Frame, Circuit Breaker	<10	UUT5
Circuit Breaker Accessories	GE	SRPE100A80	Rating Plugs	Frame, Circuit Breaker	<10	UUT11
Circuit Breaker Accessories	GE	SRPE100A100	Rating Plugs	Frame, Circuit Breaker	<10	UUT5
Circuit Breaker Accessories	GE	SRPF250A200	Rating Plugs	Frame, Circuit Breaker	<10	UUT11
Circuit Breaker Accessories	GE	SRPG400A250	Rating Plugs	Frame, Circuit Breaker	<10	UUT11
Circuit Breaker Accessories	GE	SRPG600A600	Rating Plugs	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	SR*	Rating Plugs	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	SRPK1200A1200	Rating Plugs	Frame, Circuit Breaker	<10	UUT10
Circuit Breaker Accessories	GE	SABAP1	Bell Alarm Switch	Frame, Circuit Breaker	<10	UUT8
Circuit Breaker Accessories	GE	SAST1	Shunt Trip	Frame, Circuit Breaker	<10	UUT4, UUT8
Circuit Breaker Accessories	GE	SA*	Shunt Trip	Frame, Circuit Breaker	<10	Extrapolated ¹
Circuit Breaker Accessories	GE	SAUV1	Under Voltage Trip	Frame, Circuit Breaker	<10	UUT10, UUT11
Circuit Breaker Accessories	GE	SA*	Under Voltage Trip	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	SAUV3	Under Voltage Trip	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	SAUXPAB1	Auxiliary Switch	Frame, Circuit Breaker	<10	UUT5, UUT10
Circuit Breaker Accessories	GE	SA*	Auxiliary Switch	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	SAUXPAB2	Auxiliary Switch	Frame, Circuit Breaker	<10	UUT5, UUT7
Circuit Breaker Accessories	GE	SC5L	Operating Cable	Enclosure Frame	<10	UUT11
Circuit Breaker Accessories	GE	SC*	Operating Cable	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SC6H	Operating Cable	Enclosure Frame	<10	UUT10, UUT11
Circuit Breaker Accessories	GE	SCH2	Operating Handle	Enclosure Frame	<10	UUT11
Circuit Breaker Accessories	GE	SC*	Operating Handle	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SCH2K	Operating Handle	Enclosure Frame	<10	UUT10
Circuit Breaker Accessories	GE	TH1	Operating Handle	Enclosure Frame	<10	UUT10
Circuit Breaker Accessories	GE	TH*	Operating Handle	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	TH2	Operating Handle	Enclosure Frame	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	STDA1	Disconnect Handle	Enclosure Frame	<10	UUT8
Circuit Breaker Accessories	GE	SCOM1G	Operating Mechanism	Enclosure Frame	<10	UUT11
Circuit Breaker Accessories	GE	SC*	Operating Mechanism	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SCOM1K	Operating Mechanism	Enclosure Frame	<10	UUT10
Circuit Breaker Accessories	GE	SD*	Operating Mechanism	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SDOM1A	Operating Mechanism	Enclosure Frame	<10	UUT8
Circuit Breaker Accessories	GE	SE*	Operating Mechanism	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SEFHM2	Operating Mechanism	Enclosure Frame	<10	UUT5
Circuit Breaker Accessories	GE	SG*	Operating Mechanism	Enclosure Frame	<10	Interpolated
Circuit Breaker Accessories	GE	SGOM2	Operating Mechanism	Enclosure Frame	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	TCAL124	Lug Kit	Terminals, Circuit Breaker	<10	UUT10

1. Extrapolated units differ in coil voltage rating only

Bevco Engineering - Custom Breaker Panels



Table 4 - Subcomponents - Interior (Continued 2)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Circuit Breaker Accessories	GE	TCAL125	Lug Kit	Terminals, Circuit Breaker	<10	UUT10
Circuit Breaker Accessories	GE	TCAL18	Lug Kit	Terminals, Circuit Breaker	<10	UUT4, UUT5, UUT8, UUT11
Circuit Breaker Accessories	GE	TCAL18LV	Lug Kit	Terminals, Circuit Breaker	<10	UUT4, UUT5, UUT8, UUT11
Circuit Breaker Accessories	GE	TCAL19PD3	Lug Kit	Terminals, Circuit Breaker	<10	UUT8, UUT11
Circuit Breaker Accessories	GE	TCAL29	Lug Kit	Terminals, Circuit Breaker	<10	UUT11
Circuit Breaker Accessories	GE	TCAL40PD1	Lug Kit	Terminals, Circuit Breaker	<10	UUT7
Circuit Breaker Accessories	GE	TCAL40PD3	Lug Kit	Terminals, Circuit Breaker	<10	UUT10
Circuit Breaker Accessories	GE	TCLK265	Lug Kit	Terminals, Circuit Breaker	<10	UUT7
Circuit Breaker Accessories	GE	TC*	Lug Kit	Terminals, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	TCLK365	Lug Kit	Terminals, Circuit Breaker	<10	UUT7, UUT10, UUT11
Circuit Breaker Accessories	GE	STDA1	Disconnect Handle	Enclosure Frame	<10	UUT8
Circuit Breaker Accessories	GE	FABAM10W	Bell Alarm	Frame, Circuit Breaker	<10	UUT8
Circuit Breaker Accessories	GE	FAUVRJW	UV-Shunt Trip	Frame, Circuit Breaker	<10	UUT8, UUT10
Circuit Breaker Accessories	GE	FCAL12	Lug Kit	Terminals, Circuit Breaker	<10	UUT6, UUT8
Circuit Breaker Accessories	GE	FCAL14	Lug Kit	Terminals, Circuit Breaker	<10	UUT6, UUT8
Circuit Breaker Accessories	GE	FC*	Lug Kit	Terminals, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	FCALK318H	Lug Kit	Terminals, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	TEDUV1	UV-Shunt Trip	Frame, Circuit Breaker	<10	UUT7 UUT10
Circuit Breaker Accessories	GE	TQCFMP3	Mounting Plates	Frame, Circuit Breaker	<10	UUT6, UUT8, UUT10
Circuit Breaker Accessories	GE	TQ*	Mounting Plates	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	TQCGFBMPA10	Mounting Plates	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	GPAC02LLA	Aux Contact	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	GP*	Aux Contact	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	GPAC11LLA	Aux Contact	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	BCLF01	Aux Contact	Frame, Circuit Breaker	<10	UUT5
Circuit Breaker Accessories	GE	BCLF10	Aux Contact	Frame, Circuit Breaker	<10	UUT5, UUT8
Circuit Breaker Accessories	GE	BC*	Aux Contact	Frame, Circuit Breaker	<10	Interpolated
Circuit Breaker Accessories	GE	BCLL20	Aux Contact	Frame, Circuit Breaker	<10	UUT6, UUT7, UUT8
Circuit Breaker Accessories	GE	MREBC10AC2	Timer	Frame, Circuit Breaker	<10	UUT4, UUT8
Circuit Breaker Accessories	GE	BTLF30C	Timer Kit	Contact Frame	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	CKX01	Lug Kit	Terminals, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	CK*	Lug Kit	Contact Frame	<10	Interpolated
Circuit Breaker Accessories	GE	CKX03	Lug Kit	Contact Frame	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	CM1CA5F	Lug Kit Cover	Frame, Circuit Breaker	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	RL4RA040T1	Relay	Din Rail	<10	UUT6, UUT8
Circuit Breaker Accessories	GE	RL*	Relay	Din Rail	<10	Interpolated
Circuit Breaker Accessories	GE	RL4RA040TJ	Relay	Din Rail	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	RT1B	Overload Relay	Contact Frame	<10	UUT6, UUT8
Circuit Breaker Accessories	GE	RT*	Overload Relay	Contact Frame	<10	Interpolated
Circuit Breaker Accessories	GE	RT5E	Overload Relay	Contact Frame	<10	UUT7, UUT10
Circuit Breaker Accessories	GE	RMLFD	Latch Mechanism	Contact Frame	<10	UUT8
Circuit Breaker Accessories	Souriau	SMS4PDH1	Plugs	Bracket	<10	UUT5
Circuit Breaker Accessories	Souriau	SC16ML156	Plugs	Bracket	<10	UUT5
Circuit Breaker Accessories	Souriau	S*	Plugs	Bracket	<10	Interpolated
Circuit Breaker Accessories	Souriau	SMS9PDH1	Plugs	Bracket	<10	UUT5
Circuit Breaker Accessories	GE	BELA02	Mechanical Interlock	Contact Frame	<10	UUT7, UUT10
Circuit Breakers	ABB	XT1NU3015AFF000XXX	XT	Subpanel	<10	UUT18, UUT21, UUT24
Circuit Breakers	ABB	*XT1xxxxxxxxxxxxxx	XT	Subpanel	<10	Interpolated
Circuit Breakers	ABB	*XT2xxxxxxxxxxxxxx	XT	Subpanel	<10	Interpolated
Circuit Breakers	ABB	*XT3xxxxxxxxxxxxxx	XT	Subpanel	<10	Interpolated
Circuit Breakers	ABB	XT4NU3250AFF000XXX	XT	Subpanel	<10	UUT20, UUT23, UUT26
Circuit Breakers	ABB	*XT4xxxxxxxxxxxxxx	XT	Subpanel	<10	Interpolated
Circuit Breakers	ABB	*XT5xxxxxxxxxxxxxx	XT	Subpanel	<10	Interpolated
Circuit Breakers	ABB	XT5U340ABFF000XXX	XT	Subpanel	<10	UUT20, UUT23, UUT26
Circuit Breakers	ABB	SU201M-K05	Miniature	Din Rail	<10	UUT18, UUT21, UUT24
Circuit Breakers	ABB	*SUxxxx-xxx	Miniature	Din Rail	<10	Interpolated
Circuit Breakers	ABB	SU201M-K63	Miniature	Din Rail	<10	UUT20, UUT 18, UUT26
Circuit Breakers	ABB	F202AS-63/0.1	Ground Fault F2*	Din Rail	<10	UUT18, UUT21, UUT24
Circuit Breakers	ABB	*F2xxAC-xx/x.xx	Ground Fault F2*	Din Rail	<10	Interpolated
Circuit Breakers	ABB	F202AC-40/0.03	Ground Fault F2*	Din Rail	<10	UUT20, UUT 18, UUT26
Circuit Breakers	Siemens	3VA5195-5ED31-0AA0	3VA*	Subpanel	<10	UUT19, UUT22, UUT25
Circuit Breakers	Siemens	3V*	3VA*	Subpanel	2-10.5	Interpolated ¹
Circuit Breakers	Siemens	3VA6440-SHL31-0AA0	3VA*	Subpanel	10.5	UUT20 ¹ , UUT23 ¹ , UUT26 ¹
Circuit Breakers	Siemens	5SY1017	Miniature 5S*	Din Rail	<10	UUT19, UUT22, UUT25
Circuit Breakers	Siemens	5S*	Miniature 5S*	Din Rail	<10	Interpolated
Circuit Breakers	Siemens	5SY4111-7	Miniature 5S*	Din Rail	<10	UUT20, UUT23, UUT26
Circuit Breakers	Square D	BGL36015	Power Pact	Subpanel	<10	UUT18, UUT21, UUT24
Circuit Breakers	Square D	BG*	Power Pact	Subpanel	<10	Interpolated
Circuit Breakers	Square D	JGL36250	Power Pact	Subpanel	<10	UUT20, UUT23, UUT26
Circuit Breakers	Square D	JG*	Power Pact	Subpanel	<10	Interpolated
Circuit Breakers	Square D	MG*	Power Pact	Subpanel	<10	Interpolated
Circuit Breakers	Square D	MGL36400	Power Pact	Subpanel	<10	UUT20, UUT23, UUT26
Circuit Breakers	Square D	M9F43170	Miniature	Din Rail	<10	UUT18, UUT21, UUT24
Circuit Breakers	Square D	M9F23170	Miniature	Din Rail	<10	UUT18, UUT21, UUT24
Circuit Breakers	Square D	M9*	Miniature	Din Rail	<10	Interpolated
Circuit Breakers	Square D	M9F43335	Miniature	Din Rail	<10	UUT20, UUT23, UUT26
Circuit Breakers	Square D	M9F23363	Miniature	Din Rail	<10	UUT20, UUT23, UUT26

1. Main material of construction is molded plastic and copper.

Bevco Engineering - Custom Breaker Panels



Table 4 - Subcomponents - Interior (Continued 3)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Circuit Breakers	GE	SEHA24AT0030	Molded Case	Subpanel	<10	UUT5
Circuit Breakers	GE	SE*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	SEHA36AT0030	Molded Case	Subpanel	<10	UUT4, UUT8, UUT11
Circuit Breakers	GE	SEHA36AT0100	Molded Case	Subpanel	<10	UUT5, UUT7, UUT11
Circuit Breakers	GE	SF*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	SFHA36AT0250	Molded Case	Subpanel	<10	UUT11
Circuit Breakers	GE	SGHA36AT0400	Molded Case	Subpanel	<10	UUT11
Circuit Breakers	GE	SG*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	SGHA36AT0600	Molded Case	Subpanel	<10	UUT7, UUT10
Circuit Breakers	GE	SK*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	SKHA36AT1200	Molded Case	Subpanel	<10	UUT10
Circuit Breakers	GE	FBV16TE015R	Molded Case	Subpanel	<10	UUT6, UUT8
Circuit Breakers	GE	FB*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	FC*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	FCS36TE100R	Molded Case	Subpanel	<10	UUT8
Circuit Breakers	GE	FE*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	FGH34TE600R1	Molded Case	Subpanel	<10	UUT7
Circuit Breakers	GE	FG*	Molded Case	Subpanel	<10	Interpolated
Circuit Breakers	GE	FGN36DB250LF	Molded Case	Subpanel	<10	UUT10
Circuit Breakers	GE	THQC1115WL	Thermal Magnetic	Subpanel	<10	UUT6, UUT8
Circuit Breakers	GE	THQ*	Thermal Magnetic	Subpanel	<10	Interpolated
Circuit Breakers	GE	THQC32100WL	Thermal Magnetic	Subpanel	<10	UUT7, UUT10
Circuit Breakers	GE	TEB*	Thermal Magnetic	Subpanel	<10	Interpolated
Circuit Breakers	GE	TEB122020WL	Thermal Magnetic	Subpanel	<10	UUT6, UUT8
Circuit Breakers	GE	TED*	Thermal Magnetic	Subpanel	<10	Interpolated
Circuit Breakers	GE	THED*	Thermal Magnetic	Subpanel	<10	Interpolated
Circuit Breakers	GE	THED136150WL	Thermal Magnetic	Subpanel	<10	UUT7, UUT10
Circuit Breakers	GE	EP101ULCO.5	EP (IEC)	Din Rail	<10	UUT4
Circuit Breakers	GE	EP101ULC01	EP (IEC)	Din Rail	<10	UUT11
Circuit Breakers	GE	EP101ULC03	EP (IEC)	Din Rail	<10	UUT11
Circuit Breakers	GE	EP101ULHD03	E2000 UL489 1P 3AMP	Din Rail	<10	UUT16
Circuit Breakers	GE	EP*	EP (IEC)	Din Rail	<10	Interpolated
Circuit Breakers	GE	EP103ULD63	EP (IEC)	Din Rail	<10	UUT7, UUT10
Circuit Breakers	GE	EP103ULH2D05	3P 5A	Din Rail	<10	UUT17
Circuit Breakers	GE	PEBC2ATS0025	E Frame	Subpanel	<10	UUT12
Clamp End	PXC Phoenix	1201442	Clamp End	Din Rail	<10	UUT1, UUT2, UUT3
Compression Lug	Panduit	LCA1/0-56-X	Compression Lug	Wire	<10	UUT3, UUT5
Compression Lug	Panduit	LCA2/0-56-X	Compression Lug	Wire	<10	UUT2
Compression Lug	Panduit	LCA410L	Compression Lug	Wire	<10	UUT3
Compression Lug	Panduit	LCA*	Compression Lug	Wire	<10	Interpolated
Compression Lug	Panduit	LCA638L	Compression Lug	Wire	<10	UUT11
Compression Lug	Panduit	LCA6-14-L	Compression Lug	Wire	<10	UUT16
Contact Block	GE	P9B01VN	Contact Block	Pilot Device	<10	UUT4, UUT7, UUT10, UUT11
Contact Block	GE	P9*	Contact Block	Pilot Device	<10	Interpolated
Contact Block	GE	P9B10VN	Contact Block	Pilot Device	<10	UUT4, UUT7, UUT10, UUT11
Contact Block	GE	CR104PXC01F	Contact Block	Pilot Device	<10	UUT4, UUT8, UUT10
Contact Block	ABB	MCB10	Contact Block	Pilot Device	<10	UUT5
Contact Block	ABB	MC*	Contact Block	Pilot Device	<10	Interpolated
Contact Block	ABB	MCBH00	Contact Block	Pilot Device	<10	UUT5
Contactors	ABB	AF09-30-10-11	Contactors	Subpanel	<10	UUT18, UUT21, UUT24
Contactors	ABB	*AFxxx-xx-xx-xx	Contactors	Subpanel	<10	Interpolated
Contactors	ABB	AF205-30-11-14	Contactors	Subpanel	<10	UUT20, UUT23, UUT26
Contactors	ABB	WA4-13	Mechanical Latching Block	Contact Frame	<10	UUT18, UUT21, UUT24
Contactors	Siemens	3RT10171BB41	Contactors	Subpanel	<10	UUT3
Contactors	Siemens	3RT10171BB4-43MA	Contactors	Subpanel	<10	UUT1, UUT2, UUT3
Contactors	Siemens	3RT10361AV60	Contactors	Din Rail/Subpanel	<10	UUT1
Contactors	Siemens	3RT10461AV60	Contactors	Din Rail/Subpanel	<10	UUT1
Contactors	Siemens	3RT10566AR36	Contactors	Din Rail/Subpanel	<10	UUT2, UUT3
Contactors	Siemens	3RT-1AK602028	Contactors	Din Rail/Subpanel	<10	UUT2
Contactors	Siemens	3RT20171BB4-43M4	Contactors	Din Rail/Subpanel	<10	UUT5
Contactors	Siemens	3RT*	Contactors	Din Rail/Subpanel	<10	Interpolated
Contactors	Siemens	3RT2017-BB40	Contactors	Subpanel	<10	UUT5
Contactors	Siemens	3TG10010BB4	Contactors	Subpanel	<10	UUT1, UUT3
Contactors	Siemens	3RT2015-2BB41	Contactors	Subpanel	<10	UUT19, UUT22, UUT25
Contactors	Siemens	3RT2023-1BB40	Contactors	Subpanel	<10	UUT19, UUT22, UUT25
Contactors	Siemens	3R*	Contactors	Subpanel	<10	Interpolated
Contactors	Siemens	3RT1065-6AF35	Contactors	Subpanel	<10	UUT20, UUT23, UUT26
Contactors	Siemens	3RH2440-1BB40	Latching Block	Contact Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Contactors	Square D	LC1D09BNE	Contactors	Subpanel	<10	UUT18, UUT21, UUT24
Contactors	Square D	LC*	Contactors	Subpanel	<10	Interpolated
Contactors	Square D	LC1F265	Contactors	Subpanel	<10	UUT20, UUT23, UUT26
Contactors	Square D	CAD32BD	Latching Block	Contact Frame	<10	UUT18, UUT20,

Bevco Engineering - Custom Breaker Panels



Table 4 - Subcomponents - Interior (Continued 4)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Contactors	GE	CL00A310TD	C2000 Contactor	Subpanel	<10	UUT7, UUT8
Contactors	GE	CL00A310TJ	C2000 Contactor	Subpanel	<10	UUT6
Contactors	GE	CL02A310TJ	C2000 Contactor	Subpanel	<10	UUT11
Contactors	GE	CL04A310M1	C2000 Contactor	Subpanel	<10	UUT5
Contactors	GE	CL10A311M1	C2000 Contactor	Subpanel	<10	UUT5
Contactors	GE	CL10A311MU	AC, 120A (UL), 480/480 Coil	Subpanel	<10	UUT16
Contactors	GE	CL*	C2000 Contactor	Subpanel	<10	Interpolated
Contactors	GE	CL10A311MJ	C2000 Contactor	Subpanel	<10	UUT4, UUT10
Contactors	GE	CK12BE311D	C2000 Contactor	Subpanel	<10	UUT7, UUT10
Contactors	GE	CK*	C2000 Contactor	Subpanel	<10	Interpolated
Contactors	GE	CK75CE311D	C2000 Contactor	Subpanel	<10	UUT7, UUT10
Contactors	GE	CK75CE311Y	C2000 Contactor	Subpanel	<10	UUT17
Contactors	GE	GP AE11LLA	Starter	Contact Frame	<10	UUT7, UUT10
Contactors	GE	GP AULRAAJ	Starter	Contact Frame	<10	UUT6, UUT8
Contactors	GE	GPS1BHAR	Starter	Contact Frame	<10	UUT7, UUT10
Contactors	GE	GPS1BSAA	Starter	Contact Frame	<10	UUT6, UUT8
Contactors	GE	GPS2BHAK	Starter	Contact Frame	<10	UUT6, UUT8
Contactors	GE	GP*	Starter	Contact Frame	<10	Interpolated
Contactors	GE	GPS2BHAU	Starter	Contact Frame	<10	UUT7, UUT10
Current Transformer	Bender	W3S105	Current Transformer	Contact Frame	<10	UUT11
Current Transformer	Bender	WR70X175S	Current Transformer	Contact Frame	<10	UUT10
Current Transformer	Bender	W*	Current Transformer	Contact Frame	<10	Interpolated
Current Transformer	Bender	WR70X176S	Current Transformer	Contact Frame	<10	UUT11
Current Transformer	GE	2SHT-500	Current Transformer	Contact Frame	<10	UUT10
Current Transformer	Accuenergy	CT203-600-5	Current Transformer	Contact Frame	<10	UUT11
Diode	Vishay	1N4001	Diode	Terminal Block	<10	UUT1, UUT3
Diode	Vishay	1N4004	Diode	Terminal Block	<10	UUT5
Diode	Vishay	1N*	Diode	Terminal Block	<10	Interpolated
Diode	Vishay	1N4007	Diode	Terminal Block	<10	UUT10, UUT11
Diode	NTE	NTES802	Diode	Terminal Block	<10	UUT4, UUT7, UUT10
Distribution Blocks	Bussman	PDBFS204	Distribution Block	Subpanel	<10	UUT4, UUT5, UUT8, UUT16
Distribution Blocks	Bussman	PDBFS220	Distribution Block	Subpanel	<10	UUT1
Distribution Blocks	Bussman	PDBFS303	Distribution Block	Subpanel	<10	UUT17
Distribution Blocks	Bussman	PDBFS330	Distribution Block	Subpanel	<10	UUT7, UUT10
Distribution Blocks	Bussman	PDBFS500	Distribution Block	Subpanel	<10	UUT1
Distribution Blocks	Bussman	PDB*	Distribution Block	Subpanel	<10	Interpolated
Distribution Blocks	Bussman	PDBFS504	Distribution Block	Subpanel	<10	UUT10
End Barrier	Weidmueller	105000	End Barrier	Din Rail	<10	UUT4, UUT5, UUT7, UUT10, UUT11, UUT16
End Barrier	Allen Bradley	1492EBJ3	End Barrier	Din Rail	<10	UUT3
End Cover	PXC Phoenix	3030433	End Cover	Din Rail	<10	UUT1, UUT2, UUT3
End Stop	Weidmueller	106120	End Stop	Din Rail	<10	UUT4, UUT5, UUT6, UUT7, UUT8, UUT10, UUT11, UUT16
Fuse Blocks	Littelfuse	CCMR002	Fuse Block	Din Rail	<10	UUT11
Fuse Blocks	Littelfuse	LFJ602003CR	Fuse Block	Din Rail	<10	UUT4
Fuse Blocks	Bussman	CHCC1DU	Fuse Block	Din Rail	<10	UUT5, UUT6, UUT11
Fuse Blocks	Bussman	CHCC2DU	Fuse Block	Din Rail	<10	UUT2, UUT3, UUT4, UUT5, UUT11, UUT16
Fuse Blocks	Bussman	CHCC3DU	Fuse Block	Din Rail	<10	UUT7, UUT10, UUT17
Fuse Blocks	Bussman	CH*	Fuse Block	Din Rail	<10	Interpolated
Fuse Blocks	Bussman	CHM1DU	Fuse Block	Din Rail	<10	UUT4, UUT8, UUT10
Fuse Blocks	Bussman	JM60400-1CR	Fuse Block	Din Rail	<10	UUT10
Fuse Blocks	Bussman	JM*	Fuse Block	Din Rail	<10	Interpolated
Fuse Blocks	Bussman	HM*	Fuse Block	Din Rail	<10	Interpolated
Fuse Blocks	Bussman	RM*	Fuse Block	Din Rail	<10	Interpolated
Fuse Blocks	Bussman	JM60600-1CR	Fuse Block	Din Rail	<10	UUT10
Fuse Blocks	Bussman	JT60030	Fuse Block	Din Rail	<10	UUT6, UUT8
Fuse Blocks	Bussman	JT*	Fuse Block	Din Rail	<10	Interpolated
Fuse Blocks	Bussman	JTN60060	Fuse Block	Din Rail	<10	UUT7, UUT10
Fuses	Bussman	LPJ60SP	Fuse	Fuse Block	<10	UUT7, UUT10
Fuses	Bussman	LPJ150SP	Fuse	Fuse Block	<10	UUT4
Fuses	Bussman	LPJ400SP	Fuse	Fuse Block	<10	UUT10
Fuses	Bussman	LP*	Fuse	Fuse Block	<10	Interpolated
Fuses	Bussman	FR*	Fuse	Fuse Block	<10	Interpolated
Fuses	Bussman	KT*	Fuse	Fuse Block	<10	Interpolated
Fuses	Bussman	LPJ600SP	Fuse	Fuse Block	<10	UUT10
Fuses	Bussman	FNQR1.5	Fuse	Fuse Block	<10	UUT16
Ground Bus	GE	TGK12	Ground Bus	Subpanel	<10	UUT6
Ground Bus	GE	TGK24	Ground Bus	Subpanel	<10	UUT7
Ground Bus	GE	TGK*	Ground Bus	Subpanel	<10	Interpolated
Ground Bus	GE	TGK42	Ground Bus	Subpanel	<10	UUT10
Ground Bus	GE	TGL*	Ground Bus	Subpanel	<10	Interpolated
Ground Bus	GE	TGL1	Ground Bus	Subpanel	<10	UUT4, UUT5
Ground Bus	GE	TGL3	Ground Bus	Subpanel	<10	UUT16
Ground Bus	GE	TGL8	Ground Bus	Subpanel	<10	UUT7, UUT10
Ground Bus	Panduit	UGB2/04146	Ground Bus	Subpanel	<10	UUT1, UUT2, UUT3
Ground Bus	Square D	PK12GTA	Ground Bus	Subpanel	<10	UUT8, UUT11

Table 4 - Subcomponents - Interior (Continued 5)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Ground Fault Monitor	Bender	RCM420D2	Ground Fault Monitor	Din Rail	<10	UUT11
Hold Down Clip	GE	CR420MAS	Hold Down Clip	Din Rail	<10	UUT6, UUT10
Hold Down Clip	GE	CR420*	Hold Down Clip	Din Rail	<10	Interpolated
Hold Down Clip	GE	CR420NAS	Hold Down Clip	Din Rail	<10	UUT5, UUT7, UUT8, UUT10
Jumper	Weidmueller	105236	Jumper	Terminal Block	<10	UUT5, UUT11
Limit Switch	Honeywell	GLDB01A2A	Limit Switch	Panel	<10	UUT7, UUT10
Lugs	T-B	ADR11-21	Lugs	Subpanel	<10	UUT5, UUT16
Lugs	T-B	ADR21	Lugs	Subpanel	<10	UUT1
Lugs	T-B	ADR25-21	Lugs	Subpanel	<10	UUT1, UUT2, UUT3, UUT7, UUT8, UUT10, UUT11, UUT17
Lugs	T-B	ADR35	Lugs	Subpanel	<10	UUT11
Lugs	T-B	ADR35-22	Lugs	Subpanel	<10	UUT4
Lugs	T-B	ADR*	Lugs	Subpanel	<10	Interpolated
Lugs	T-B	ADR60	Lugs	Subpanel	<10	UUT3, UUT8
Lugs	Burndy	CYA6CL6	Lugs	Subpanel	<10	UUT4
Lugs	GE	FETCA630A	Lugs	Subpanel	<10	UUT12
Lugs	Panduit	LCA2-56-Q	Compression Lug	Wire	<10	UUT17
Name Plate	GE	P9ASTBS	Name Plate	Enclosure Frame	<10	UUT4, UUT7, UUT10, UUT11
Name Plate	GE	CR104PXN1RP88	Name Plate	Enclosure Frame	<10	UUT4
Neutral Bar	GE	TNI100	Neutral Bar	Subpanel	<10	UUT6, UUT8
Neutral Bar	GE	TNIA400	Neutral Bar	Subpanel	<10	UUT11
Neutral Bar	GE	TNIA600	Neutral Bar	Subpanel	<10	UUT7
Neutral Bar	GE	TNI*	Neutral Bar	Subpanel	<10	Interpolated
Neutral Bar	GE	TNIA1200	Neutral Bar	Subpanel	<10	UUT10
PCL Module	TECO	SG212CRD	PCL Module	Din Rail	<10	UUT6, UUT10
Pilot Devices	ABB	MLBL01G	Light	Enclosure Frame	<10	UUT5
Pilot Devices	GE	PNPNDVJLV	Light Module	Enclosure Frame	<10	UUT11
Pilot Devices	GE	P*	Light Module	Enclosure Frame	<10	Interpolated
Pilot Devices	GE	P9PTNVJLB	Light Module	Enclosure Frame	<10	UUT4, UUT7, UUT10
Pilot Devices	ABB	CE4T-10R-02	Emergency Pushbutton	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	ABB	C2SS2-10B-20	Select Switch	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	ABB	CP1-116-10	Push Button	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	ABB	C*	Pilot Device	Enclosure Frame	<10	Interpolated
Pilot Devices	ABB	CL2-502G	Pilot Light	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	ABB	O*	Switch	Enclosure Frame	<10	Interpolated
Pilot Devices	ABB	OL40U3PB	Cam Switch	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	ABB	M*	Pilot Device	Enclosure Frame	<10	Interpolated
Pilot Devices	ABB	M2SS2-11C	Select Switch	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Pilot Devices	Siemens	3SU1102-0AB40-3BA0	Pushbutton	Enclosure Frame	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Pilot Devices	Siemens	3SU1100-0AB20-3CA0	Pushbutton	Enclosure Frame	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Pilot Devices	Siemens	3SU1500-0AA10-0AA0	Mounting Unit	Enclosure Frame	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Pilot Devices	Siemens	3SUxxxx-xxxx-xxxx	Select Switch	Enclosure Frame	<10	Interpolated
Pilot Devices	Siemens	3SU1002-2BL30-0AA0	Select Switch	Enclosure Frame	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Pilot Devices	Square D	*900xxxxxx	Pilot Light	Enclosure Frame	<10	Interpolated
Pilot Devices	Square D	9001KP5G9	Pilot Light	Enclosure Frame	<10	UUT18, UUT20, UUT21, UUT23, UUT26
Pilot Devices	IDEC	*Hxxx-xxxxxx	Pilot Light	Enclosure Frame	<10	Interpolated
Pilot Devices	IDEC	HW1P-2FT8DG	Pilot Light	Enclosure Frame	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Pilot Devices	GE	P9SLVD	Pilot Light	Enclosure Frame	<10	UUT11
Pilot Devices	GE	080BA9S24LB	LED, 24VDC, White	Enclosure Frame	<10	UUT16
Pilot Devices	GE	080BA9S24LV	LED, 24VDC, Green	Enclosure Frame	<10	UUT16
Pilot Devices	GE	080BA9S120LV	LED, 120VAC, Green	Enclosure Frame	<10	UUT16
Pilot Devices	GE	P9SEM3RN	Push Button	Enclosure Frame	<10	UUT4, UUT7, UUT10
Pilot Devices	GE	P9SPLBGD	Push Button	Enclosure Frame	<10	UUT4, UUT7, UUT10
Pilot Devices	GE	P9*	Push Button	Enclosure Frame	<10	Interpolated
Pilot Devices	GE	P9XPNRS	Push Button	Enclosure Frame	<10	UUT11
Pilot Devices	GE	CR104PBG00R1	Push Button	Enclosure Frame	<10	UUT4, UUT8, UUT10
Pilot Devices	GE	CR104P*	Push Button	Enclosure Frame	<10	Interpolated
Pilot Devices	GE	CR104PBG91B2	Push Button	Enclosure Frame	<10	UUT8, UUT10
Pilot Devices	ABB	CE4T10R02	Push Button	Enclosure Frame	<10	UUT5
Pilot Devices	GE	CR104PSG74B91	Switch	Enclosure Frame	<10	UUT8, UUT10
Pilot Devices	ABB	MP131G	Switch	Enclosure Frame	<10	UUT5
Power Meter	Accuenergy	ACUVIM-IIW-M-5A-P1-AXM-NET	Power Meter	Din Rail	<10	UUT10
Power Meter	Accuenergy	ACUVIM-IIW-D-5A-P1-AXM-NET	Power Meter	Din Rail	<10	UUT11
Power Meter	GE	EPM6000E	Power Meter	Din Rail	<10	UUT11
Power Meter	ELECTRO SW	SHARK 100-200	Power Meter	Din Rail	<10	UUT7, UUT10

Bevco Engineering - Custom Breaker Panels



Table 4 - Subcomponents - Interior (Continued 6)

Mounting: Rigid Wall Mounted
 Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Subcomponent	Manufacturer	Part Number	Description	Subcomponent Mounting	Weight [lb]	UUT
Power Supply	Siemens	6EP1333-3BA10	Power Supply	Din Rail	<10	UUT1, UUT2, UUT3
Power Supply	RHINO	PSB24-060S-3	Power Supply	Din Rail	<10	UUT6, UUT10
Power Supply	Puls	ML15.121	Power Supply	Din Rail	<10	UUT4, UUT7, UUT8, UUT10, UUT11, UUT17
Power Supply	Puls	ML15.241	Power Supply	Din Rail	<10	UUT17
Power Supply	Puls	ML100.200	Power Supply	Din Rail	<10	UUT12, UUT14, UUT17
Power Supply	Micron	MDP18-12A-1C	Power Supply	Din Rail	<10	UUT12, UUT14
Power Supply	Micron	MDP18-24A-1C	Power Supply	Din Rail	<10	UUT17
Power Supply	Micron	MDP-100-24-2C	Power Supply	Din Rail	<10	UUT13, UUT15, UUT17
Power Supply	Weidmueller	1469530000	Power Supply	Din Rail	<10	UUT 12, UUT16
Power Supply	Weidmueller	2637060000	UPS	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Power Supply	Weidmueller	1370050010	UPS	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Power Supply	Weidmueller	1251070000	UPS	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Power Supply	Weidmueller	6720005420	UPS	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Rectifier	Bevco	SD-300	Rectifier	Subpanel	<10	UUT10
Relay	GE	MCRA040ATJ	Relay	Din Rail	<10	UUT4, UUT7, UUT8, UUT10
Relay Socket	GE	CR420NA2	Relay Socket	Din Rail	<10	UUT4, UUT5, UUT7, UUT8, UUT10
Relay Socket	GE	CR420*	Relay Socket	Din Rail	<10	Interpolated
Relay Socket	GE	CR420NA4	Relay Socket	Din Rail	<10	UUT6, UUT10
Relay Socket	IDEC	SY4S-05	Relay Socket	Din Rail	<10	UUT10, UUT11
Relay Socket	IDEC	SY*	Relay Socket	Din Rail	<10	Interpolated
Relay Socket	IDEC	SY4S-51F1	Relay Socket	Din Rail	<10	UUT11
Relays	GE	451WFPR1D01	Relays	Din Rail	<10	UUT4, UUT7, UUT8, UUT10
Relays	GE	CR420NPA0114	Relays	Din Rail	<10	UUT5
Relays	GE	CR420NPL0222	Relays	Din Rail	<10	UUT4, UUT7, UUT8, UUT10
Relays	GE	CR420*	Relays	Din Rail	<10	Interpolated
Relays	GE	CR420NPL044J	Relays	Din Rail	<10	UUT6, UUT10
Relays	GE	451*	Relays	Din Rail	<10	Extrapolated ¹
Relays	GE	RL4RD040TD	Control Relay	Din Rail	<10	UUT16
Relays	GE	MCR022ATD	Control Relay	Din Rail	<10	UUT16, UUT17
Relays	GE	RE17RAMU	Timing Relay	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Relays	Siemens	3RH2262-1BB40	Interface Relay	Din Rail	<10	UUT19, UUT20, UUT22, UUT23, UUT25, UUT26
Relays	Square D	PRC1T20CDL	Interface Relay	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Relays	IDEC	RY4S-UDC12V	Relay	Din Rail	<10	UUT10, UUT11
Shroud	ABB	CA18053	Shroud	Enclosure Frame	<10	UUT5
Surge Suppressor	ABB	2CTB802341R3300	SPD Device	Din Rail	<10	UUT18, UUT20, UUT21, UUT23, UUT24, UUT26
Surge Suppressor	GE	BSLV3G	Surge Suppressor	Subpanel	<10	UUT5
Telephone Cabinet	Saginaw	1212TCF	Telephone Cabinet	Enclosure Frame	<10	UUT11
Terminal	PXC Phoenix	3031487	Terminal	Din Rail	<10	UUT1, UUT2, UUT3
Terminal	PXC Phoenix	30*	Terminal	Din Rail	<10	Interpolate
Terminal	PXC Phoenix	3031500	Terminal	Din Rail	<10	UUT1, UUT2, UUT3
Terminal Block	Weidmueller	101010	Terminal Block	Din Rail	<10	UUT11
Terminal Block	Weidmueller	101020	Terminal Block	Din Rail	<10	UUT16
Terminal Block	Weidmueller	102010	Terminal Block	Din Rail	<10	UUT11
Terminal Block	Weidmueller	102020	Terminal Block	Din Rail	<10	UUT16
Terminal Block	Weidmueller	10*	Terminal Block	Din Rail	<10	Interpolated
Terminal Block	Weidmueller	102020	Terminal Block	Din Rail	<10	UUT4, UUT5, UUT7, UUT10
Terminal Block	Allen Bradley	1492J3	Terminal Block	Din Rail	<10	UUT1
Terminal Block	Allen Bradley	1492*	Terminal Block	Din Rail	<10	Interpolated
Terminal Block	Allen Bradley	1492J4	Terminal Block	Din Rail	<10	UUT3
Terminal Block	GE	1KUGS-IKU-6-S 300V	CT Short Circuit TB	Din Rail	<10	UUT10
Timer	GE	MREBC10AC2	Electronic Timer	Din Rail	<10	UUT17
Transformers	GE	9T51B0210	Transformers	Subpanel	<10	UUT7, UUT10
Transformers	GE	9T58E0168	Transformers	Subpanel	<10	UUT5
Transformers	GE	9T58E0506	Transformers	Subpanel	<10	UUT4, UUT11
Transformers	GE	9T58K0042	Transformers	Subpanel	<10	UUT8, UUT17
Transformers	GE	9T5*	Transformers	Subpanel	<10	Interpolated
Transformers	GE	9T58K0052	Transformers	Subpanel	<10	UUT17
Transformers	GE	9T58K0055	Transformers	Subpanel	<10	UUT7, UUT10
Transformers	Hammond	Q*	Transformers	Subpanel	37	Interpolated ²
Transformers	Hammond	Q1CSDTCF	Transformers	Subpanel	37	UUT20 ² , UUT23 ² , UUT26 ²

1. Extrapolated units differ in coil voltage rating only

2. Main material of construction is copper.

Bevco Engineering - Custom Breaker Panels



Table 5 - Tested Units

Manufacturer: Bevco Engineering
Mounting: Rigid Wall Mounted
Test Levels: Sds=2.56g, z/h=1.0 (horizontal); Sds=2.56, z/h=0.0 (vertical)

Model Number	Dimensions [in]			Weight [lb]	Enclosure Manufacturer	NEMA Rating	Previous UUT Designation	DCL UUT Designation
	Height	Width	Depth					
BEV208/480-100-SP001	30.0	20.0	9.0	85.0	Cooper B-Line	4/12	B103-17034-R2 UUT 1	UUT1
BEV208/480-100/250-SP002	36.0	30.0	9.0	151.0	Cooper B-Line	4/12	B103-17034-R2 UUT 2	UUT2
BEV208/480-015-SP003	42.0	31.4	11.0	223.5	Saginaw	12	B103-17034-R2 UUT 3	UUT3
BEV208/480-015-SP004	24.3	14.9	5.9	56.5	Saginaw	1	B103-17034-R2 UUT 4	UUT4
BEV208/480-020/100-SP005	30.0	20.0	9.0	91.5	Cooper B-Line	4/12	B103-17034-R2 UUT 5	UUT5
BEV208/480-015-SP006	24.3	14.9	5.9	41.5	Saginaw	1	B103-17034-R2 UUT 6	UUT6
BEV208/480-100/600-SP007	36.4	30.4	12.0	281.0	Saginaw	1	B103-17034-R2 UUT 7	UUT7
BEV208/480-015-SP008	20.0	21.4	9.3	72.5	Saginaw	12	B103-17034-R2 UUT 8	UUT8
BEV208/480-600/1200-SP010	60.0	37.4	13.3	484.0	Saginaw	12	B103-17034-R2 UUT 10	UUT10
BEV208/480-030/100/250/400-SP011	48.0	37.4	9.3	264.0	Saginaw	12	B103-17034-R2 UUT 11	UUT11
BEV208/480-025-SP012	24.0	16.0	6.0	41.3	Saginaw	1	PR067247-2 UUT 1	UUT12
BEV208/480-250/600-SP013	36.0	30.0	12.0	137.0	Saginaw	1	PR067247-2 UUT 2	UUT13
BEV208/480-025/250-SP014	20.0	22.0	8.0	77.0	Saginaw	12	PR067247-2 UUT 3	UUT14
BEV208/480-250/600-SP015	60.0	38.0	12.0	247.0	Saginaw	12	PR067247-2 UUT 4	UUT15
BEV208/480-125-SP016	24.0	16.0	6.0	46.7	EXM	1	PR067247-2 UUT 5	UUT16
BEV208/480-125-SP017	36.0	30.0	12.0	164.0	EXM	1	PR067247-2 UUT 6	UUT17
BEV208/480-015-SP018	24.0	16.0	7.0	58.0	Saginaw	1	N/A	UUT18
BEV208/480-015-SP019	24.0	16.0	7.0	45.0	Saginaw	1	N/A	UUT19
BEV208/480-400-SP020	60.0	36.0	17.0	387.0	Saginaw	12	N/A	UUT20
BEV480-015-SP021	24.0	16.0	7.0	58.0	EXM	1	N/A	UUT21
BEV480-015-SP022	24.0	16.0	7.0	46.0	EXM	1	N/A	UUT22
BEV480-400-SP023	60.0	36.0	17.0	365.0	EXM	4/12	N/A	UUT23
BEV480-015-SP024	24.0	16.0	7.0	64.0	Cooper B-Line	1	N/A	UUT24
BEV480-015-SP025	24.0	16.0	7.0	51.0	Cooper B-Line	1	N/A	UUT25
BEV480-400-SP026	60.0	36.0	17.0	365.0	Cooper B-Line	12	N/A	UUT26



UUT1	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-100-SP001
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 4/12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
85.0	30.0	20.0	9.0	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 2019	ICC-ES AC156	2.86	1.0	1.5	4.58	3.43	N/A	N/A
		2.86	0.0	1.5	N/A	N/A	1.92	0.77

Unit Mounting Description:



UUT1 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 28.0" heightwise and 18.0" widthwise.

UUT2	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-100/250-SP002
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 4/12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
151.0	36.0	30.0	9.0	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 2019	ICC-ES AC156	2.79	1.0	1.5	4.46	3.35	N/A	N/A
		2.79	0.0	1.5	N/A	N/A	1.87	0.75

Unit Mounting Description:



UUT2 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 34.0" heightwise and 28.0" widthwise.

UUT3	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP003
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel Nema 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
223.5	42.0	31.4	11.0	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 2019	ICC-ES AC156	2.88	1.0	1.5	4.61	3.46	N/A	N/A
		2.88	0.0	1.5	N/A	N/A	1.93	0.78

Unit Mounting Description:



UUT3 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 40.0" heightwise and 30" widthwise.

UUT4	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP004
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
56.5	24.3	14.9	5.9	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT4 was mounted to the wall fixture with (4) 1/4" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 22.0" heightwise and 13.0" widthwise.

UUT5	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-020/100-SP005
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 4/12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
91.5	30.0	20.0	9.0	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 2019	ICC-ES AC156	2.86	1.0	1.5	4.58	3.43	N/A	N/A
		2.86	0.0	1.5	N/A	N/A	1.92	0.77

Unit Mounting Description:



UUT5 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 28.0" heightwise and 18.0" widthwise.

UUT6	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP006
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
41.5	24.3	14.9	5.9	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT6 was mounted to the wall fixture with (4) 1/4" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 22.0" heightwise and 13.0" widthwise.

UUT7	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-100/600-SP007
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
281.0	36.4	30.4	12.0	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 2019	ICC-ES AC156	2.70	1.0	1.5	4.32	3.24	N/A	N/A
		2.70	0.0	1.5	N/A	N/A	1.81	0.73

Unit Mounting Description:



UUT7 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 34.0" heightwise and 28.0" widthwise.

UUT8	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP008
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
72.5	20.0	21.4	9.3	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT8 was mounted to the wall fixture with (4) 1/2" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 18.0" heightwise and 19.0" widthwise.

UUT10	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-600/1200-SP010
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

<i>UUT Properties</i>						
Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
484.0	60.0	37.4	13.3	N/A	N/A	N/A

<i>Seismic Test Parameters</i>								
Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68



UUT10 was mounted to the wall fixture with (4) 1/2" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 58.0" heightwise and 35.0" widthwise.

UUT11	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-030/100/250/400-SP011
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
264.0	48.0	37.4	9.3	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 2019	ICC-ES AC156	2.77	1.0	1.5	4.43	3.32	N/A	N/A
		2.77	0.0	1.5	N/A	N/A	1.86	0.75



UUT11 was mounted to the wall fixture with (4) 1/2" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 46.0" heightwise and 35.0" widthwise.

UUT12	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-025-SP012
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
41.3	24.0	16.0	6.0	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 2019	ICC-ES AC156	3.07	1.0	1.5	4.91	3.68	N/A	N/A
		3.07	0.0	1.5	N/A	N/A	2.06	0.83

Unit Mounting Description:



UUT12 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 22.0" heightwise and 14.0" widthwise.

UUT13	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-250/600-SP013
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
137.0	36.0	30.0	12.0	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 2019	ICC-ES AC156	3.09	1.0	1.5	4.94	3.71	N/A	N/A
		3.09	0.0	1.5	N/A	N/A	2.07	0.83



UUT13 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 34.0" heightwise and 28.0" widthwise.

UUT14	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-025/250-SP014
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
77.0	20.0	22.0	8.0	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 2019	ICC-ES AC156	3.07	1.0	1.5	4.91	3.68	N/A	N/A
		3.07	0.0	1.5	N/A	N/A	2.06	0.83

Unit Mounting Description:



UUT14 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 18.0" heightwise and 20.0" widthwise.

UUT15	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-250/600-SP015
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
247.0	60.0	38.0	12.0	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 2019	ICC-ES AC156	2.76	1.0	1.5	4.42	3.31	N/A	N/A
		2.76	0.0	1.5	N/A	N/A	1.85	0.75

Unit Mounting Description:



UUT15 was mounted to the wall fixture with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 58.0" heightwise and 36.0" widthwise.

UUT16	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-125-SP016
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
46.7	24.0	16.0	6.0	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 2019	ICC-ES AC156	3.07	1.0	1.5	4.91	3.68	N/A	N/A
		3.07	0.0	1.5	N/A	N/A	2.06	0.83

Unit Mounting Description:



UUT16 was mounted with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 22.0" heightwise and 14.0" widthwise.

UUT17	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-125-SP017
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Cold Formed Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
164.0	36.0	30.0	12.0	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 2019	ICC-ES AC156	3.09	1.0	1.5	4.94	3.71	N/A	N/A
		3.09	0.0	1.5	N/A	N/A	2.07	0.83

Unit Mounting Description:



UUT17 was mounted with (4) 3/8" diameter grade 5 bolts, washers and nuts. The mounting locations were spaced approximately 34.0" heightwise and 28.0" widthwise.

UUT18	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP018
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
58.0	24.0	16.0	7.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT18 was mounted using 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 14.5" widthwise.

UUT19	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-015-SP019
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp (Green and White 24VDC, Green 120VDC), Contact Block, Pilot devices, Power Supply, Terminal, Jumper, Control Relay

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
45.0	24.0	16.0	7.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT19 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 14.5" widthwise.

UUT20	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV208/480-400-SP020
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
387.0	60.0	36.0	17.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT20 was mounted with (4) 3/8" diameter grade 5 bolts, washers, 3"x3"x3/8" carbon steel plate washers, and channel nuts. The UUT was bolted at the interior corners of the enclosure to a mounting bracket. The mounting bracket was bolted to the wall fixture. The mounting locations were spaced approximately 58.5" heightwise and 31.5" widthwise.

UUT21								
Unit Under Test (UUT) Summary Sheet								
Manufacturer:	Bevco Engineering							
Product Line:	Custom Breaker Panel							
Model Number:	BEV480-015-SP021							
Mounting:	Rigid Wall Mounted							
Product Construction Summary:								
Painted Carbon Steel NEMA 1								
Options / Component Summary:								
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp								
Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.								
UUT Properties								
Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)				
	Height	Width	Depth	Front-Back	Side-Side	Vertical		
58.0	24.0	16.0	7.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68
Unit Mounting Description:								
								
<p>UUT21 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 14.5" widthwise.</p>								

UUT22	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV480-015-SP022
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

<i>UUT Properties</i>						
Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
46.0	24.0	16.0	7.0	N/A	N/A	N/A

<i>Seismic Test Parameters</i>								
Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68



UUT22 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 14.0" widthwise.

UUT23	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV480-400-SP023
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 4/12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
365.0	60.0	36.0	17.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT23 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 58.5" heightwise and 34.5" widthwise.

UUT24	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV480-015-SP024
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 1

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

<i>UUT Properties</i>						
Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
64.0	24.0	16.0	7.0	N/A	N/A	N/A

<i>Seismic Test Parameters</i>								
Building Code	Test Criteria	Sds (g)	z/h	Ip	Aflx-H (g)	Arig-H (g)	Aflx-V (g)	Arig-V (g)
CBC 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68

Unit Mounting Description:



UUT24 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 11.0" widthwise.

UUT25								
Unit Under Test (UUT) Summary Sheet								
Manufacturer:	Bevco Engineering							
Product Line:	Custom Breaker Panel							
Model Number:	BEV480-015-SP025							
Mounting:	Rigid Wall Mounted							
Product Construction Summary:								
Painted Carbon Steel NEMA 1								
Options / Component Summary:								
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp								
Note: The UUT was operational before and after shaking and was full of operating content during the tests. The structural integrity of the component attachment system and force-resisting systems was maintained.								
UUT Properties								
Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)				
	Height	Width	Depth	Front-Back	Side-Side	Vertical		
51.0	24.0	16.0	7.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68
Unit Mounting Description:								
								
<p>UUT25 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts. The UUT was bolted to the wall fixture through the interior corners of the enclosure. The bolts were spaced 22.5" heightwise and 11.0" widthwise.</p>								

UUT26	
Unit Under Test (UUT) Summary Sheet	

Manufacturer:	Bevco Engineering
Product Line:	Custom Breaker Panel
Model Number:	BEV480-400-SP026
Mounting:	Rigid Wall Mounted

Product Construction Summary:
Painted Carbon Steel NEMA 12

Options / Component Summary:
Enclosure, Circuit Breakers, Lugs, Operating Mechanism, Aux Switch, Contactor, Distribution Block, Fuse and Block, Ground, LED Lamp

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

UUT Properties

Operating Weight (lb)	Dimensions (inches)			Lowest Natural Frequency (Hz)		
	Height	Width	Depth	Front-Back	Side-Side	Vertical
365.0	60.0	36.0	17.0	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 2019	ICC-ES AC156	2.56	1.0	1.5	4.10	3.07	N/A	N/A
		2.56	0.0	1.5	N/A	N/A	1.71	0.68



UUT26 was mounted using (4) 3/8" diameter grade 5 bolts, circular washers, 3"x3"x3/8" carbon steel plate washers and channel nuts through a welded bracket onto the wall fixture. The bolts were spaced 61.5" heightwise and 30.0" widthwise.