



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

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

OFFICE USE ONLY

APPLICATION #: OSP-0754

HCAI Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: C&C Power, Inc

Manufacturer's Technical Representative: James Lupinek

Mailing Address: 395 Mission Street, Carol Stream, IL 60188

Telephone: (630) 617-9022

Email: jlupinek@ccpower.com

Product Information

Product Name: UPS and Batteries

Product Type: UPS

Product Model Number: 90880, 90881, 90821, 90820

General Description: UPS Maintenance Bypass Cabinet

Mounting Description: Rigid, Floor/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: Dynamic Certification Laboratories

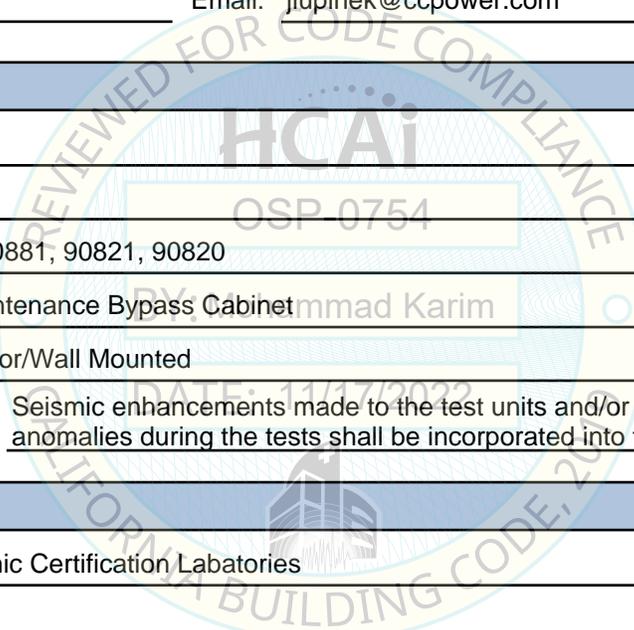
Contact Person: Kelly Laplace

Mailing Address: 1315 Greg Street Suite 109, Sparks, NV 89431

Telephone: (775) 358-5085

Email: kelly@shaketest.com

Title: Business Manager





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

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

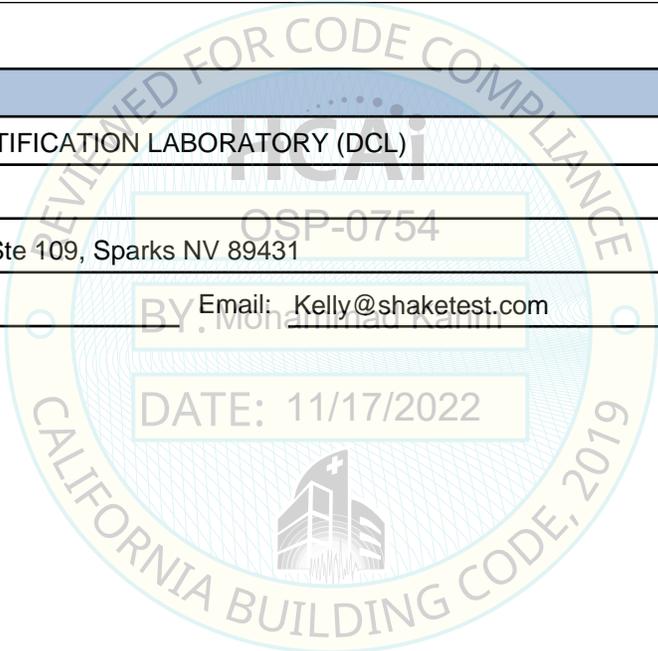
Company Name: THE VMC GROUP
Name: Kenneth Tarlow California License Number: S2851
Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814
Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com

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





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

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.5

SDS (Design spectral response acceleration at short period, g) = 2

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

HCAI Approval (For Office Use Only) - Approval Expires on 11/17/2028

Date: 11/17/2022

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: 11/17/2022



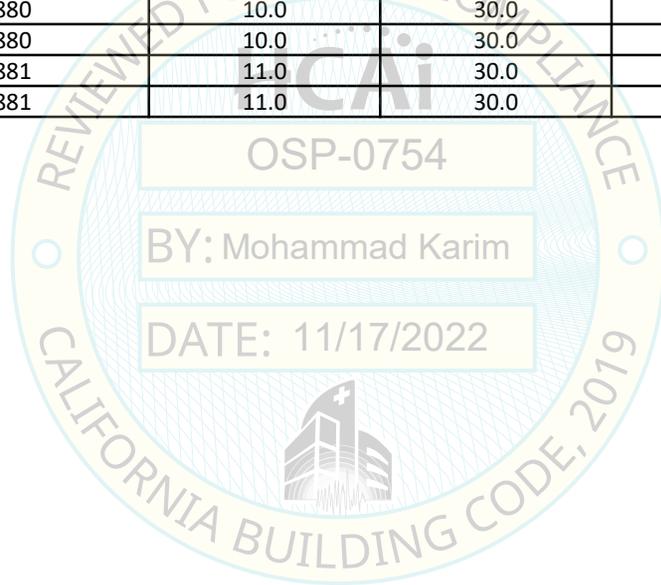
Special Seismic Certification

Table 1 - Certified Components - Wall Mounted Units



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptable Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Wall Mounted
Test Levels: SDS = 2.0g, z/h=1.0

Model Number	Cabinet Type	Dimensions (in)			Weight (lb)	Unit
		Depth	Width	Height		
90880-xxxxxxxECxxxxxxxxxxxxxx	90880	10.0	30.0	36.0	100	Interpolated
90880-C483314ECA150A15042MB	90880	10.0	30.0	36.0	130	UUT-01
90881-xxxxxxxECxxxxxxxxxxxxxx	90881	11.0	30.0	42.0	130	Interpolated
90881-C208365ECA400A40044MB	90881	11.0	30.0	42.0	176	UUT-02



Special Seismic Certification
Table 2 - Nomenclature Chart - Wall Mounted Units



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptible Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Wall Mounted
Test Levels: SDS = 2.0g, z/h=1.0

Sample Model Number				
90xxx -C 480 3 65 EC 4 225 A 225 06 BT A1 H				
1 2 3 4 5 6 7 8 9 10 11 12 13 14				
Character	Category	Allowable Value	Description	Unit
1	Base Model Number	90880	90880 UPS Maintenance Bypass	UUT-01
		90881	90881 UPS Maintenance Bypass	UUT-02
2	Customer Code	A	Identifier for the buying customer.	Same
		C		UUT-01,UUT-02
		B-Z		Same
3	Voltage	120	120 VAC 1PH/2W	Extrapolated
		208	208Y/120 VAC 3PH/4W	UUT-02
		240	240 VAC 3PH/3W	Interpolated
		241	120/208/240 VAC 1PH/3W	Interpolated
		242	240 VAC 1PH/2W	Interpolated
		400	400Y/230 VAC 3PH/4W	Interpolated
		480	380Y/277 VAC 3PH/4W	Interpolated
		483	480 VAC 3PH/3W	UUT-01
4	Breaker Quantity	2	2 Breakers	Extrapolated
		3	3 Breakers	UUT-01,UUT-02
5	AIC Rating	14	14K	UUT-01
		18	18K	Extrapolated
		22	22K	Extrapolated
		35	35K	Extrapolated
		50	50K	Extrapolated
6	Breaker Type	EC	Eaton/Cutler Hammer Series C	UUT-01,UUT-02
		0	UIB Breaker Absent	Extrapolated
7 ¹	BIB or UIB Breaker Trip Unit Type	A	TMAG 80%	UUT-01,UUT-02
		B	TMAG 100%	Same
		C	LS 80%	Same
		D	LS 100%	Same
		E	LSI 80%	Same
		F	LSI 100%	Same
		G	LSIG 80%	Same
		H	LSIG 100%	Same
		J	ALSI 80%	Same
		K	ALSI 100%	Same
		L	ALSIG 80%	Same
		M	ALSIG 100%	Same
		8	BIB or UIB Breaker Trip Unit Rating (Amps)	000
015-400	Ranges from 015-400A			UUT-01,UUT-02

Note:
 1. Different electronic trip types add different dials and software that allow for field adjustments of settings that would otherwise be set from the factory. These do not alter the weight or overall power capacity of the circuit breaker.

Terminology Guide:
 80% = All standard industry circuit breakers are rated to 80% of their advertised amperage value.
 100% = Special order breakers rated to 100% of the advertised amperage value.
 TMAG = Thermal Magnetic Trip (No Amperage Field Adjustment)
 LS = Electronic Trip Adjustable Short Time Pickup
 LSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay
 LSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection
 ALSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay w/ Maintenance Mode
 ALSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection & Maintenance Mode
 LI = Electronic Trip Adjustable Instantaneous

Special Seismic Certification
Table 2 - Nomenclature Chart - Wall Mounted Units (Continued)



DCL Project Number: 51577-2001
 Manufacturer: C & C Power, Inc.
 Product Type: Uninterruptable Power Supply (UPS)
 Product Line: UPS Maintenance Bypass
 Mounting Configuration: Rigid Wall Mounted
 Test Levels: SDS = 2.0g, z/h=1.0

		Sample Model Number														
		90xxx	-C	480	3	65	EC	4	225	A	225	06	BT	A1	H	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	
Character	Category	Allowable Value					Description					Unit				
9 ¹	MBB and MIB Breaker Trip Unit Type	A					TMAG 80%					UUT-01,UUT-02				
		B					TMAG 100%					Same				
		C					LS 80%					Same				
		D					LS 100%					Same				
		E					LSI 80%					Same				
		F					LSI 100%					Same				
		G					LSIG 80% (LSIG on MIB and LSI on MBB)					Same				
		H					LSIG 100% (LSIG on MIB and LSI on MBB)					Same				
		J					ALSI 80%					Same				
		K					ALSI 100%					Same				
		L					ALSIG 80% (ALSIG on MIB and ALSI on MBB)					Same				
		M					ALSIG 100% (ALSIG on MIB and ALSI on MBB)					Same				
		N					LI 80%					Same				
		P					LI 100%					Same				
10	MBB and MIB Breaker Trip Unit Rating (Amps)	015-400					Ranges from 015-400A					UUT-01,UUT-02				
11	Interlock Configuration	##					Any 2-character alpha-numeric combination to represent a specific breaker interlocking configuration.					UUT-01,UUT-02				
12	Color Code	##					Color the enclosure is painted. Matches customer specification. Any 2-character alpha numeric combination to represent a specific color.					UUT-01,UUT-02				
13	Custom Code	##					Breaker accessory combination. Any 2-character alpha numeric combination to represent a specific breaker accessory combination.					UUT-01,UUT-02				
14	Certification	H					OSP certified					UUT-01,UUT-02				

Note:
 1. Different electronic trip types add different dials and software that allow for field adjustments of settings that would otherwise be set from the factory. These do not alter the weight or overall power capacity of the circuit breaker.

Terminology Guide:

- 80% = All standard industry circuit breakers are rated to 80% of their advertised amperage value.
- 100% = Special order breakers rated to 100% of the advertised amperage value.
- TMAG = Thermal Magnetic Trip (No Amperage Field Adjustment)
- LS = Electronic Trip Adjustable Short Time Pickup
- LSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay
- LSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection
- ALSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay w/ Maintenance Mode
- ALSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection & Maintenance Mode
- LI = Electronic Trip Adjustable Instantaneous

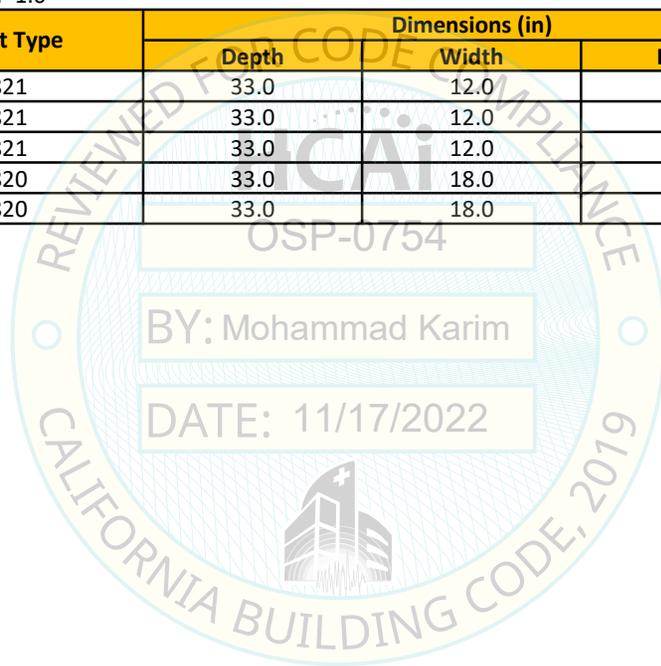
Special Seismic Certification

Table 3 - Certified Components - Base Mounted Units



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptable Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Base Mounted
Test Levels: SDS = 2.0g, z/h=1.0

Model Number	Cabinet Type	Dimensions (in)			Weight (lb)	Unit
		Depth	Width	Height		
90821-C483314ECA150A15042BT	90821	33.0	12.0	79.0	350	UUT-03
90821-C483335ECA400A40002BT	90821	33.0	12.0	79.0	350	UUT-04
90821-xxxxxxECxxxxxxxxxxxx	90821	33.0	12.0	79.0	365	Interpolated
90820-xxxxxxEGxxxxxxxxxxxx	90820	33.0	18.0	79.0	375	Interpolated
90820-C208365EGA600A60044BT	90820	33.0	18.0	79.0	420	UUT-05



Special Seismic Certification
Table 4 - Nomenclature Chart - Base Mounted Units



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptable Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Base Mounted
Test Levels: SDS = 2.0g, z/h=1.0

Sample Model Number				
90xxx -C 480 3 65 EC 4 225 A 225 06 BT A1 H				
1 2 3 4 5 6 7 8 9 10 11 12 13 14				
Character	Category	Allowable Value	Description	Unit
1	Base Model Number	90821	90821 UPS Maintenance Bypass	UUT-03,UUT-04
		90820	90820 UPS Maintenance Bypass	UUT-05
2	Customer Code	A	Identifier for the buying customer.	Same
		C		UUT-03,UUT-04,UUT-05
		B-Z		Same
3	Voltage	120	120 VAC 1PH/2W	Extrapolated
		208	208Y/120 VAC 3PH/4W	UUT-05
		240	240 VAC 3PH/3W	Interpolated
		241	120/208/240 VAC 1PH/3W	Interpolated
		242	240 VAC 1PH/2W	Interpolated
		400	400Y/230 VAC 3PH/4W	Interpolated
		480	380Y/277 VAC 3PH/4W	Interpolated
4	Breaker Quantity	2	2 Breakers	Extrapolated
		3	3 Breakers	UUT-03,UUT-04,UUT-05
5	AIC Rating	14	14K	UUT-03
		18	18K	Interpolated
		22	22K	Interpolated
		35	35K	UUT-04
		50	50K	Interpolated
6	Breaker Type	EC	Eaton/Cutler Hammer Series C	UUT-03,UUT-04
		EG	Eaton/Cutler Hammer Series G	UUT-05
7	BIB or UIB Breaker Trip Unit Type	0	UIB Breaker Absent	Extrapolated
		A	TMAG 80%	UUT-03,UUT-04,UUT-05
		B	TMAG 100%	Same
		C	LS 80%	Same
		D	LS 100%	Same
		E	LSI 80%	Same
		F	LSI 100%	Same
		G	LSIG 80%	Same
		H	LSIG 100%	Same
		J	ALSI 80%	Same
		K	ALSI 100%	Same
		L	ALSIG 80%	Same
		M	ALSIG 100%	Same
		N	LI 80%	Same
8	BIB or UIB Breaker Trip Unit Rating (Amps)	000	UIB breaker absent	Extrapolated
		015-600	Ranges from 015-600A	UUT-03,UUT-04,UUT-05

Note:
 1. Different electronic trip types add different dials and software that allow for field adjustments of settings that would otherwise be set from the factory. These do not alter the weight or overall power capacity of the circuit breaker.

Terminology Guide:
 80% = All standard industry circuit breakers are rated to 80% of their advertised amperage value.
 100% = Special order breakers rated to 100% of the advertised amperage value.
 TMAG = Thermal Magnetic Trip (No Amperage Field Adjustment)
 LS = Electronic Trip Adjustable Short Time Pickup
 LSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay
 LSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection
 ALSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay w/ Maintenance Mode
 ALSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection & Maintenance Mode
 LI = Electronic Trip Adjustable Instantaneous

Special Seismic Certification
Table 4 - Nomenclature Chart - Base Mounted Units (Continued)



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptable Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Base Mounted
Test Levels: SDS = 2.0g, z/h=1.0

		Sample Model Number															
		90xxx	-C	480	3	65	EC	4	225	A	225	06	BT	A1	H		
		1	2	3	4	5	6	7	8	9	10	11	12	13	14		
Character	Category	Allowable Value														Description	Unit
9	MBB and MIB Breaker Trip Unit Type	A														TMAG 80%	UUT-03,UUT-04,UUT-05
		B														TMAG 100%	Same
		C														LS 80%	Same
		D														LS 100%	Same
		E														LSI 80%	Same
		F														LSI 100%	Same
		G														LSIG 80% (LSIG on MIB and LSI on MBB)	Same
		H														LSIG 100% (LSIG on MIB and LSI on MBB)	Same
		J														ALSI 80%	Same
		K														ALSI 100%	Same
		L														ALSIG 80% (ALSIG on MIB and ALSI on MBB)	Same
		M														ALSIG 100% (ALSIG on MIB and ALSI on MBB)	Same
		N														LI 80%	Same
		P														LI 100%	Same
10	MBB and MIB Breaker Trip Unit Rating (Amps)	015-600														Ranges from 015-600A	UUT-03,UUT-04,UUT-05
11	Interlock Configuration	##														Any 2-character alpha-numeric combination to represent a specific breaker interlocking configuration.	UUT-03,UUT-04,UUT-05
12	Color Code	##														Color the enclosure is painted. Matches customer specification. Any 2-character alpha numeric combination to represent a specific color.	UUT-03,UUT-04,UUT-05
13	Custom Code	##														Breaker accessory combination. Any 2-character alpha numeric combination to represent a specific breaker accessory combination.	UUT-03,UUT-04,UUT-05
14	Certification	H														OSP certified	UUT-03,UUT-04,UUT-05

Note:
 1. Different electronic trip types add different dials and software that allow for field adjustments of settings that would otherwise be set from the factory. These do not alter the weight or overall power capacity of the circuit breaker.

Terminology Guide:
 80% = All standard industry circuit breakers are rated to 80% of their advertised amperage value.
 100% = Special order breakers rated to 100% of the advertised amperage value.
 TMAG = Thermal Magnetic Trip (No Amperage Field Adjustment)
 LS = Electronic Trip Adjustable Short Time Pickup
 LSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay
 LSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection
 ALSI = Electronic Trip Independent Adjustable Short Time Pickup & Delay w/ Maintenance Mode
 ALSIG = Electronic Trip Independent Adjustable Short Time Pickup & Ground Fault Protection & Maintenance Mode
 LI = Electronic Trip Adjustable Instantaneous

Special Seismic Certification

Table 5 - Certified Subcomponents - Wall Mounted Units



DCL Project Number: 51577-2001
 Product Type: Uninterruptible Power Supply (UPS)
 Product Line: UPS Maintenance Bypass
 Mounting Configuration: Rigid Wall Mounted
 Test Levels: SDS = 2.0g, z/h=1.0

Enclosures								
Model Number	Manufacturer	NEMA Rating	Description	Construction	Dimensions (D x W x H)	Weight (lb)	Unit	
90880 Enclosure	C & C Power Inc.	1	14 GA G90 Galvanized Steel Enclosure, 16 GA Powdercoated Cold Rolled Steel Cover/ Doors	Riveted	10" X 30" X 36"	45	UUT-01	
90881 Enclosure	C & C Power Inc.	1	14 GA G90 Galvanized Steel Enclosure, 16 GA Powdercoated Cold Rolled Steel Cover/ Doors	Riveted	11" X 30" X 42"	55	UUT-02	
Solenoid Key Release Unit								
Model Number	Manufacturer	Description		Material	Weight (lb)	Unit		
W221PB-EW-MVDLW-10	c3Controls	Push Button Illuminated Momentary 22MM 1NO 20V-277V LED		Plastic, Carbon Steel, and Copper	< 1	UUT-01,UUT-02		
ATQR1/4	Mersen	ATQR Series Fuse 1/4A Class CC Time Delay		Brass and Fiberglass	< 1	UUT-01		
ATQR1/2	Mersen	ATQR Series Fuse 1/2A Class CC Time Delay		Brass and Fiberglass	< 1	Interpolated		
ATQR1	Mersen	ATQR Series Fuse 1A Class CC Time Delay		Brass and Fiberglass	< 1	UUT-02		
ATQR3	Mersen	ATQR Series Fuse 3A Class CC Time Delay		Brass and Fiberglass	< 1	UUT-01,UUT-02		
HPF-RR	Eaton / Bussmann	Fuse Holder 1P 30A 600V Class CC Panel Mount		Plastic and Brass	< 1	UUT-01,UUT-02		
HP52	Eaton / Bussmann	Fuse Holder 2P 30A 600V Class CC Panel Mount		Plastic and Brass	< 1	UUT-01,UUT-02		
KFLO03710S	KIRK	Circuit Breaker Lock (Cylinder Locked in Retracted Position With Key Captive)		Brass and Stainless Steel	2	UUT-01,UUT-02		
KFLO03711S	KIRK	Circuit Breaker Lock (Cylinder Locked in Extended Position With Key Captive)		Brass and Stainless Steel	2	UUT-01,UUT-02		
SKPM111S	KIRK	Solenoid Key Lock (Key Captive Until Power Applied)		Plastic, Brass, and Stainless Steel	2	UUT-01,UUT-02		
C0050E1B	Eaton / Cutler Hammer	50VA Control Transformer 120V-240V / 24V		Carbon Steel and Copper	3	UUT-02		
C0050E2B	Eaton / Cutler Hammer	50VA Control Transformer 240V-480V / 24V		Carbon Steel and Copper	3	UUT-01		
C0050E4W	Eaton / Cutler Hammer	50VA Control Transformer 600W / 24V		Carbon Steel and Copper	3	Interpolated		
Circuit Breaker Accessories								
Model Number	Manufacturer	Description		Material	Weight (lb)	Unit		
A1X3PK	Eaton / Cutler Hammer	Auxiliary Switch 1A/1B		Plastic, Carbon Steel, and Copper	< 1	UUT-02		
A2X3PK	Eaton / Cutler Hammer	Auxiliary Switch 2A/2B		Plastic, Carbon Steel, and Copper	< 1	UUT-02		
SNT3P11K	Eaton / Cutler Hammer	Shunt Trip		Plastic, Carbon Steel, and Copper	< 1	UUT-02		
Busbar								
Model Number	Manufacturer	Description		Material	Weight (lb)	Unit		
90880 BUSWORK	C & C Power Inc.	Circuit Breaker Phase Connection Busbars		Copper	9	UUT-01		
90881 BUSWORK	C & C Power Inc.	Circuit Breaker Phase Connection Busbars		Copper	13	UUT-02		
Breakers								
Model Number	Manufacturer	Description		Material	Weight (lb)	Unit		
ED2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2175	Eaton / Cutler Hammer	175A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2200	Eaton / Cutler Hammer	200A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2225	Eaton / Cutler Hammer	225A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2175	Eaton / Cutler Hammer	175A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2200	Eaton / Cutler Hammer	200A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2225	Eaton / Cutler Hammer	225A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2010	Eaton / Cutler Hammer	10A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2045	Eaton / Cutler Hammer	45A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2070	Eaton / Cutler Hammer	70A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2080	Eaton / Cutler Hammer	80A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2090	Eaton / Cutler Hammer	90A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2010	Eaton / Cutler Hammer	10A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2045	Eaton / Cutler Hammer	45A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2070	Eaton / Cutler Hammer	70A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2080	Eaton / Cutler Hammer	80A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2090	Eaton / Cutler Hammer	90A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2110	Eaton / Cutler Hammer	110A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FD2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		
FD2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker		Plastic, Carbon Steel, and Copper	3	Extrapolated		

Special Seismic Certification

Table 5 - Certified Subcomponents - Wall Mounted Units (continued)



DCL Project Number: 51577-2001
 Product Type: Uninterruptible Power Supply (UPS)
 Product Line: UPS Maintenance Bypass
 Mounting Configuration: Rigid Wall Mounted
 Test Levels: SDS = 2.0g, z/h=1.0

Breakers					
Model Number	Manufacturer	Description	Material	Weight (lb)	Unit
HFD3015	Eaton / Cutler Hammer	15A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3020	Eaton / Cutler Hammer	20A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3025	Eaton / Cutler Hammer	25A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3030	Eaton / Cutler Hammer	30A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3035	Eaton / Cutler Hammer	35A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3040	Eaton / Cutler Hammer	40A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3045	Eaton / Cutler Hammer	45A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3050	Eaton / Cutler Hammer	50A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3060	Eaton / Cutler Hammer	60A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3070	Eaton / Cutler Hammer	70A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3080	Eaton / Cutler Hammer	80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3090	Eaton / Cutler Hammer	90A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3100	Eaton / Cutler Hammer	100A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3110	Eaton / Cutler Hammer	110A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3125	Eaton / Cutler Hammer	125A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3150	Eaton / Cutler Hammer	150A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3175	Eaton / Cutler Hammer	175A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3200	Eaton / Cutler Hammer	200A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFD3225	Eaton / Cutler Hammer	225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE310021	Eaton / Cutler Hammer	40A-100A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE315021	Eaton / Cutler Hammer	70A-150A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322521	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE310022	Eaton / Cutler Hammer	40A-100A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE315022	Eaton / Cutler Hammer	70A-150A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322522	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE310021	Eaton / Cutler Hammer	40A-100A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE315021	Eaton / Cutler Hammer	70A-150A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE322521	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE310022	Eaton / Cutler Hammer	40A-100A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE315022	Eaton / Cutler Hammer	70A-150A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HFDE322522	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE308032	Eaton / Cutler Hammer	15A-80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE316032	Eaton / Cutler Hammer	60A-160A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322532	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE308033	Eaton / Cutler Hammer	15A-80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE316033	Eaton / Cutler Hammer	60A-160A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322533	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE308034	Eaton / Cutler Hammer	15A-80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE316034	Eaton / Cutler Hammer	60A-160A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322534	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE308035	Eaton / Cutler Hammer	15A-80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE316035	Eaton / Cutler Hammer	60A-160A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322535	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE308036	Eaton / Cutler Hammer	15A-80A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE316036	Eaton / Cutler Hammer	60A-160A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
FDE322536	Eaton / Cutler Hammer	100A-225A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	5	Interpolated
HKD3400F	Eaton / Cutler Hammer	100A-400A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	12	Interpolated
CKD3400F	Eaton / Cutler Hammer	100A-400A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	12	Interpolated
CHKD3400F	Eaton / Cutler Hammer	100A-400A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	12	Interpolated
KD3400F	Eaton / Cutler Hammer	100A-400A C-Series 3-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	12	UUT-02

Special Seismic Certification

Table 6 - Certified Subcomponents - Base Mounted Units



DCL Project Number: 51577-2001
 Product Type: Uninterruptible Power Supply (UPS)
 Product Line: UPS Maintenance Bypass
 Mounting Configuration: Rigid Base Mounted
 Test Levels: SDS = 2.0g, z/h=1.0

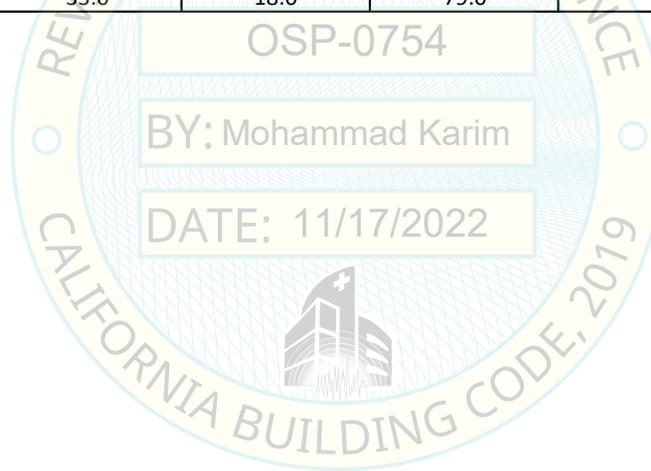
Enclosures							
Model Number	Manufacturer	NEMA Rating	Description	Construction	Dimensions (D x W x H)	Weight (lb)	Unit
90821 Enclosure	C & C Power Inc.	1	12 GA Powdercoated Cold Rolled Steel Enclosure, 16 GA Powdercoated Cold Rolled Steel Cover/ Doors	Welded	33" X 12" X 79"	265	UUT-03, UUT-04
90820 Enclosure	C & C Power Inc.	1	12 GA Powdercoated Cold Rolled Steel Enclosure, 16 GA Powdercoated Cold Rolled Steel Cover/ Doors	Welded	33" X 12" X 79"	296	UUT-05
Solenoid Key Release Unit							
Model Number	Manufacturer	Description	Material	Weight (lb)	Unit		
W221PB-EW-MVDLW-10	c3controls	Push Button Illuminated Momentary 22MM 1NO 20V-277V LED	Plastic, Carbon Steel, and Copper	< 1	UUT-03, UUT-05		
ATQR1/4	Mersen	ATQR Series Fuse 1/4A Class CC Time Delay	Brass and Fiberglass	< 1	UUT-03		
ATQR1/2	Mersen	ATQR Series Fuse 1/2A Class CC Time Delay	Brass and Fiberglass	< 1	Interpolated		
ATQR1	Mersen	ATQR Series Fuse 1A Class CC Time Delay	Brass and Fiberglass	< 1	UUT-05		
ATQR3	Mersen	ATQR Series Fuse 3A Class CC Time Delay	Brass and Fiberglass	< 1	UUT-03, UUT-05		
HPF-RR	Eaton / Bussmann	Fuse Holder 1P 30A 600V Class CC Panel Mount	Plastic and Brass	< 1	UUT-03, UUT-05		
HP52	Eaton / Bussmann	Fuse Holder 2P 30A 600V Class CC Panel Mount	Plastic and Brass	< 1	UUT-03, UUT-05		
KFLO03710S	KIRK	Circuit Breaker Lock (Cylinder Locked in Retracted Position With Key Captive)	Brass and Stainless Steel	2	UUT-03, UUT-04, UUT-05		
KFLO03711S	KIRK	Circuit Breaker Lock (Cylinder Locked in Extended Position With Key Captive)	Brass and Stainless Steel	2	UUT-03, UUT-04, UUT-05		
SKPM111S	KIRK	Solenoid Key Lock (Key Captive Until Power Applied)	Plastic, Brass, and Stainless Steel	2	UUT-03, UUT-05		
C0050E1B	Eaton / Cutler Hammer	50VA Control Transformer 120V-240V / 24V	Carbon Steel and Copper	3	UUT-05		
C0050E2B	Eaton / Cutler Hammer	50VA Control Transformer 240V-480V / 24V	Carbon Steel and Copper	3	UUT-03		
C0050E4W	Eaton / Cutler Hammer	50VA Control Transformer 600W / 24V	Carbon Steel and Copper	3	Interpolated		
Circuit Breaker Accessories							
Model Number	Manufacturer	Description	Material	Weight (lb)	Unit		
AUX1A1BPK	Eaton / Cutler Hammer	Auxiliary Switch 1A/1B	Plastic, Carbon Steel, and Copper	< 1	UUT-05		
AUX2A2BPK	Eaton / Cutler Hammer	Auxiliary Switch 2A/2B	Plastic, Carbon Steel, and Copper	< 1	UUT-05		
SNT120CPK	Eaton / Cutler Hammer	Shunt Trip	Plastic, Carbon Steel, and Copper	< 1	UUT-05		
Busbar							
Model Number	Manufacturer	Description	Material	Weight (lb)	Unit		
90821 F BUSWORK	C & C Power Inc.	Circuit Breaker Phase Connection Busbars	Copper	27	UUT-03		
90821 K BUSWORK	C & C Power Inc.	Circuit Breaker Phase Connection Busbars	Copper	25	UUT-04		
90820 LG BUSWORK	C & C Power Inc.	Circuit Breaker Phase Connection Busbars	Copper	28	UUT-05		
Breakers							
Model Number	Manufacturer	Description	Material	Weight (lb)	Unit		
ED2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2175	Eaton / Cutler Hammer	175A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2200	Eaton / Cutler Hammer	200A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
ED2225	Eaton / Cutler Hammer	225A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2175	Eaton / Cutler Hammer	175A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2200	Eaton / Cutler Hammer	200A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EDB2225	Eaton / Cutler Hammer	225A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2010	Eaton / Cutler Hammer	10A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2045	Eaton / Cutler Hammer	45A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2070	Eaton / Cutler Hammer	70A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2080	Eaton / Cutler Hammer	80A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2090	Eaton / Cutler Hammer	90A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
EHD2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2010	Eaton / Cutler Hammer	10A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2020	Eaton / Cutler Hammer	20A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2025	Eaton / Cutler Hammer	25A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2030	Eaton / Cutler Hammer	30A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2035	Eaton / Cutler Hammer	35A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2040	Eaton / Cutler Hammer	40A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2045	Eaton / Cutler Hammer	45A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2050	Eaton / Cutler Hammer	50A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2060	Eaton / Cutler Hammer	60A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2070	Eaton / Cutler Hammer	70A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2080	Eaton / Cutler Hammer	80A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2090	Eaton / Cutler Hammer	90A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2100	Eaton / Cutler Hammer	100A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2110	Eaton / Cutler Hammer	110A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2125	Eaton / Cutler Hammer	125A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Extrapolated		
FDB2150	Eaton / Cutler Hammer	150A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	UUT-03		
FD2015	Eaton / Cutler Hammer	15A C-Series 2-Pole Circuit Breaker	Plastic, Carbon Steel, and Copper	3	Interpolated		

Special Seismic Certification
Table 7 - Tested Units



DCL Project Number: 51577-2001
Manufacturer: C & C Power, Inc.
Product Type: Uninterruptable Power Supply (UPS)
Product Line: UPS Maintenance Bypass
Mounting Configuration: Rigid Wall Mounted and Rigid Base Mounted
Test Levels: SDS = 2.0g, z/h=1.0

Model Number	Dimensions (in)			Weight (lb)	Mounting	Unit
	Depth	Width	Height			
90880-C483314ECA150A15042MB	10.0	30.0	36.0	130	Rigid Wall	UUT-01
90881-C208365ECA400A40044MB	11.0	30.0	42.0	176	Rigid Wall	UUT-02
90821-C483314ECA150A15042BT	33.0	12.0	79.0	350	Rigid Base	UUT-03
90821-C483335ECA400A40002BT	33.0	12.0	79.0	350	Rigid Base	UUT-04
90820-C208365EGA600A60044BT	33.0	18.0	79.0	420	Rigid Base	UUT-05



UUT-01

DCL Test Report 51577-2001

UNIT UNDER TEST (UUT) Summary Sheet



DCL
DYNAMIC
CERTIFICATION
LABORATORIES, LLC

DCL Project Number: 51577-2001

Manufacturer: C & C Power, Inc.

Product Line: UPS Maintenance Bypass

Model Number: 90880-C483314ECA150A15042MB

Product Construction Summary:

Riveted Carbon Steel, NEMA 1

Options / Component Summary:

C & C Power Inc. Enclosures, Eaton / Cutler Hammer Circuit Breakers, C & C Power Inc. Busbars, c3Controls Push Button, Mersen Fuses, Eaton / Bussmann Fuse Holder, KIRK Circuit Breaker Lock, KIRK Solenoid Key Lock, Eaton / Cutler Hammer Control Transformers

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)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
130	10.0	30.0	36.0	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	1.34	0.54

Unit Mounting Description:

UUT-01 was mounted to the shake table interface frame at the 4 corners utilizing 3/8-inch grade 5 bolts, washers, 1/4-inch thick plate washers, and channel nuts.



Overall view of UUT-01

UUT-02

DCL Test Report 51577-2001

UNIT UNDER TEST (UUT) Summary Sheet



DCL
DYNAMIC
CERTIFICATION
LABORATORIES, LLC

DCL Project Number: 51577-2001

Manufacturer: C & C Power, Inc.

Product Line: UPS Maintenance Bypass

Model Number: 90881-C208365ECA400A40044MB

Product Construction Summary:

Riveted Carbon Steel, NEMA 1

Options / Component Summary:

C & C Power Inc. Enclosures, Eaton / Cutler Hammer Circuit Breakers, Eaton / Cutler Hammer Auxiliary Switch, Eaton / Cutler Hammer Shunt Trip, C & C Power Inc. Busbars, c3Controls Push Button, Mersen Fuses, Eaton / Busmann Fuse Holder, KIRK Circuit Breaker Lock, KIRK Solenoid Key Lock, Eaton / Cutler Hammer Control Transformer

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)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
176	11.0	30.0	42.0	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	1.34	0.54

Unit Mounting Description:

UUT-02 was mounted to the shake table interface frame at the 4 corners utilizing 3/8-inch grade 5 bolts, washers, 1/4-inch thick plate washers, and channel nuts.



Overall view of UUT-02

UUT-03

DCL Test Report 51577-2001

UNIT UNDER TEST (UUT) Summary Sheet



DCL
DYNAMIC
CERTIFICATION
LABORATORIES, LLC

DCL Project Number: 51577-2001

Manufacturer: C & C Power, Inc.

Product Line: UPS Maintenance Bypass

Model Number: 90821-C483314ECA150A15042BT

Product Construction Summary:

Welded Carbon Steel, NEMA 1

Options / Component Summary:

C & C Power Inc. Enclosures, Eaton / Cutler Hammer Circuit Breakers, c3Controls Push Button, Mersen Fuses, Eaton / Bussmann Fuse Holder, KIRK Circuit Breaker Lock, KIRK Solenoid Key Lock, Eaton / Cutler Hammer Control Transformer, C & C Power Inc. Busbars

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)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
350	33.0	12.0	79.0	8.0	14.0	>33.3

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	1.34	0.54

Unit Mounting Description:

UUT-03 was mounted on manufacturer provided stand (part number 49862A) using (4) 3/8" Grade 8 bolts, washers, and split washers. The provided stand was mounted to the shake table interface plate with (4) 1/2" Grade 5 bolts, washers, 1/4-inch thick plate washers.

The shake table interface plate was mounted to the shake table using M12 threaded rod spaced roughly 12" on center.



Overall view of UUT-03

UUT-04

DCL Test Report 51577-2001

UNIT UNDER TEST (UUT) Summary Sheet



DCL
DYNAMIC
CERTIFICATION
LABORATORIES, LLC

DCL Project Number: 51577-2001

Manufacturer: C & C Power, Inc.

Product Line: UPS Maintenance Bypass

Model Number: 90821-C483335ECA400A40002BT

Product Construction Summary:

Welded Carbon Steel, NEMA 1

Options / Component Summary:

C & C Power Inc. Enclosures, Eaton / Cutler Hammer Circuit Breakers, KIRK Circuit Breaker Lock, C & C Power Inc. Busbars

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)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
350	33.0	12.0	79.0	6.0	16.0	>33.3

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	1.34	0.54

Unit Mounting Description:

UUT-04 was mounted on manufacturer provided stand (part number 49862A) using (4) 3/8" Grade 8 bolts, washers, and split washers. The provided stand was mounted to the shake table interface plate with (4) 1/2" Grade 5 bolts, washers, 1/4-inch thick plate washers.

The shake table interface plate was mounted to the shake table using M12 threaded rod spaced roughly 12" on center.



Overall view of UUT-04

UUT-05

DCL Test Report 51577-2001

UNIT UNDER TEST (UUT) Summary Sheet



DCL
DYNAMIC
CERTIFICATION
LABORATORIES, LLC

DCL Project Number: 51577-2001

Manufacturer: C & C Power, Inc.

Product Line: UPS Maintenance Bypass

Model Number: 90820-C208365EGA600A60044BT

Product Construction Summary:

Welded Carbon Steel, NEMA 1

Options / Component Summary:

C & C Power Inc. Enclosures, Eaton / Cutler Hammer Circuit Breakers, Eaton / Cutler Hammer Auxiliary Switches, Eaton / Cutler Hammer Shunt Trip, c3Controls Push Button, Mersen Fuses, Eaton / Bussmann Fuse Holder, KIRK Circuit Breaker Lock, KIRK Solenoid Key Lock, Eaton / Cutler Hammer Control Transformer, C & C Power Inc. Busbars

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)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
420	33.0	18.0	79.0	7.8	10.3	>33.3

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	1.34	0.54

Unit Mounting Description:

UUT-05 was mounted on manufacturer provided stand (part number 49862A) using (4) 3/8" Grade 8 bolts, washers, and split washers. The provided stand was mounted to the shake table interface plate with (4) 1/2" Grade 5 bolts, washers, 1/4-inch thick plate washers. The shake table interface plate was mounted to the shake table using M12 threaded rod spaced roughly 12" on center.



Overall view of UUT-05