



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

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

OFFICE USE ONLY

APPLICATION #: OSP – 0405 – 10

OSHPD Special Seismic Certification Preapproval (OSP)

Type: New Renewal

Manufacturer Information

Manufacturer: Eaton Corporation

Manufacturer's Technical Representative: Karen Cronin

Mailing Address: 1000 Cherrington Parkway, Moon Township, PA 15108

Telephone: 919-878-6081 Email: KarenLCronin@eaton.com

Product Information

Product Name: Uninterruptible Power Supplies & Accessories

Product Type: UPS & Accessories

Product Model Number: 93PM

(List all unique product identification numbers and/or part numbers)

General Description: Backup power system and accessories qualified for use per UL1778.

Products have power ratings from 20kW – 200kW and operating voltages of 208V – 480V.

Mounting Description: Rigid base mounted.

Applicant Information

Applicant Company Name: Eaton Corporation

Contact Person: Karen Cronin

Mailing Address: 1000 Cherrington Parkway, Moon Township, PA 15108

Telephone: 919-878-6081 Email: KarenLCronin@eaton.com

I hereby agree to reimburse the Office of Statewide Health Planning and Development review fees in accordance with the California Administrative Code, 2013.

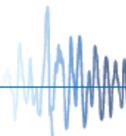
Signature of Applicant: 

Date: September 8, 2015

Project Manager, Eaton Electrical

Title: - Americas Company Name: Eaton Corporation

"Access to Safe, Quality Healthcare Environments that Meet California's Diverse and Dynamic Needs"





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

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

Company Name: ISAT Seismic Bracing
Name: William V Joerger California License Number: SE4545
Mailing Address: 1020 Crews Road, Suite Q, Matthews, NC 28105
Telephone: 510-714-0216 Email: wvjoerger@isatsb.com

Supports and Attachments Preapproval

- Supports and attachments are preapproved under OPM- _____
(Separate application for OSHPD Preapproval of Manufacturer's Certification (OPM) of Supports and attachments is required)
- Supports and attachments are not preapproved

Certification Method

- Testing in accordance with: ICC-ES AC156
- Other (Please Specify): _____

Testing Laboratory

Company Name: Areva Technical Center
Contact Name: Dan Fort
Mailing Address: 1724 Mount Athos Road Lynchburg, VA 24504
Telephone: 434-832-3816 Email: Daniel.Fort@AREVA.com





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

Seismic Parameters

Design in accordance with ASCE 7-10 Chapter 13: Yes No

Design Basis of Equipment or Components (F_p/W_p) = See Table 1

S_{DS} (Design spectral response acceleration at short period, g) = See Table 1

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

R_p (Equipment or component response modification factor) 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

z/h (Height factor ratio) = 1.0

Equipment or Component Natural Frequencies (Hz) See Table 4

Overall dimensions and weight (or range thereof) = See Table 1

Equipment or Components @ grade designed in accordance with ASCE 7-10 Chapter 15 Yes No

Design Basis of Equipment or Components (V/W) = _____

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

S_{D1} (Design spectral response acceleration at 1 second period, g) _____

R (Response modification coefficient) = _____

Ω_0 (System overstrength factor) = _____

C_d (Deflection amplification factor) = _____

I_p (Importance factor) = 1.5

Height to Center of Gravity above base = _____

Equipment or Component Natural Frequencies (Hz) = _____

Overall dimensions and weight (or range thereof) : _____

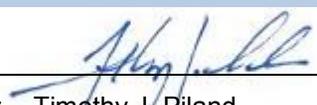
Tank(s) designed in accordance with ASME BPVC, 2010: Yes No

List of Attachments Supporting Special Seismic Certification

Test Report(s) Drawings Calculations Manufacturer's Catalog

Other(s) (Please Specify): _____

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

Signature:  Date: January 27, 2016

Print Name: Timothy J. Piland Title: SSE

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

Condition of Approval (if applicable): _____

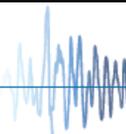


TABLE 1

CERTIFIED PRODUCT MATRIX



93PM Uninterruptible Power Supply (UPS)

Model Line	Power Range	Description	Part Number ¹		Manufacturer	Dimensions ² (inches)			Vertical Center of Gravity (inches)	S _{DS} ⁴ (g)	F _p / W _p (g)	Unit ⁵	Maximum Weight (lb) ³
			(Digits 1 - 10)	(Digits 11 - 15)		H	W	D					
			93PM	50 kVA - 200 kVA		50kVA Capacity UPS (1 UPM), no Batteries, no Sidecar	9PA05D0220	A01R1					
		100kVA Capacity UPS (1 UPM), no Sidecar	9DXXXXXXXX	AXXXX	Eaton	74	22	42	33	2.29	1.65	Interpolated	792
		100kVA Redundant UPS (1 UPM), no Sidecar	9XFXXXXXXX	AXXXX	Eaton	74	22	42	33	2.29	1.65	Interpolated	805
		150kVA Capacity UPS (1 UPM), no Sidecar	9XJXXXXXXX	AXXXX	Eaton	74	22	42	32	2.29	1.65	Interpolated	828
		100kVA Capacity UPS (2 UPM), no Sidecar	9XEXXXXXXXX	AXXXX	Eaton	74	22	42	36	2.29	1.65	Interpolated	932
		100kVA Redundant UPS (2 UPM), no Sidecar	9XGXXXXXXX	AXXXX	Eaton	74	22	42	36	2.29	1.65	Interpolated	945
		150kVA Capacity UPS (2 UPM), no Sidecar	9XKXXXXXXX	AXXXX	Eaton	74	22	42	35	2.29	1.65	Interpolated	968
		100kVA Redundant UPS (3 UPM), no Sidecar	9XHXXXXXXX	AXXXX	Eaton	74	22	42	40	2.29	1.65	Interpolated	1086
		100kVA Capacity UPS (1 or 2 UPM) + Empty Sidecar	9DXXXXXXXX 9EXXXXXXXX	BXXXX CXXXX	Eaton	74	30	42	35	2.29	1.65	Interpolated	1099
		150kVA Capacity UPS (3 UPM), no Sidecar	9XLXXXXXXX	AXXXX	Eaton	74	22	42	39	2.29	1.65	Interpolated	1109
		100kVA Redundant UPS (1, 2 or 3 UPM) + Empty Sidecar	9XFXXXXXXX 9XGXXXXXXX 9XHXXXXXXX	BXXXX CXXXX	Eaton	74	30	42	39	2.29	1.65	Interpolated	1253
		150kVA Capacity UPS (1, 2 or 3 UPM) + Empty Sidecar	9XJXXXXXXX 9XKXXXXXXX 9XLXXXXXXX	BXXXX CXXXX	Eaton	74	30	42	39	2.29	1.65	Interpolated	1276
		100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + 2 Bkr Tie Sidecar			Eaton	74	30	42	39	2.29	1.65	Interpolated	1290
						74	30	42	39	2.29	1.65	Interpolated	1290
		100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + 2 Bkr MBS Sidecar			Eaton	74	30	42	39	2.29	1.65	Interpolated	1293
						74	30	42	39	2.29	1.65	Interpolated	1293
		100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + 3 Bkr Tie Sidecar			Eaton	74	30	42	40	2.29	1.65	Interpolated	1296
						74	30	42	40	2.29	1.65	Interpolated	1296
						74	30	42	40	2.29	1.65	Interpolated	1299
						74	30	42	40	2.29	1.65	Interpolated	1299
		100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + 3 Bkr MBS Sidecar			Eaton	74	30	42	40	2.29	1.65	Interpolated	1303
						74	30	42	40	2.29	1.65	Interpolated	1303

¹ "X" indicates non-critical for seismic determination selection digit; most severe configuration was used for testing
² Maximum Without Seismic Mounting/Bracing Kit
³ Including Seismic Mounting /Bracing Kit
⁴ Certification level is limited to the lower rating of either the Certified Product Range Table, as listed here, or the internal subcomponents, as listed on the Certified Subcomponent tables.
⁵ All enclosures constructed from powder coated carbon steel.

TABLE 1 (cont'd)

CERTIFIED PRODUCT MATRIX



93PM Uninterruptible Power Supply (UPS)

Model Line	Power Range	Description	Part Number ¹		Manufacturer	Dimensions ² (inches)			Vertical Center of Gravity (inches)	S _{DS} ⁴ (g)	F _p / W _p (g)	Unit ⁵	Maximum Weight (lb) ³
			(Digits 1 - 10)	(Digits 11 - 15)		H	W	D					
			93PM	50 kVA - 200 kVA		100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + 4 Bkr MBS Sidecar	9XDXXXXXXXX 9XEXXXXXXXX 9XFXXXXXXXX 9XGXXXXXXXX 9XHXXXXXXXX	FXXXX					
	JXXXX	Eaton			74		30	42	39	2.29	1.65	Interpolated	1313
100kVA Capacity (1 or 2 UPM) or Redundant (1, 2 or 3 UPM) UPS + Tie/Bypass Sidecar	9XDXXXXXXXX 9XEXXXXXXXX 9XFXXXXXXXX 9XGXXXXXXXX 9XHXXXXXXXX	RXXXX			Eaton	74	37	42	39	2.29	1.65	Interpolated	1350
		TXXXX			Eaton	74	37	42	39	2.29	1.65	Interpolated	1350
		LXXXX			Eaton	74	37	42	39	2.29	1.65	Interpolated	1360
		NXXXX			Eaton	74	37	42	39	2.29	1.65	Interpolated	1360
150kVA Redundant or 200kVA Capacity UPS (1, 2, 3 or 4 UPM), no Sidecar	9XMXXXXXXXX 9XNXXXXXXXX 9XPXXXXXXXX 9XRXXXXXXXX 9XSXXXXXXXX 9XTXXXXXXXX 9XUXXXXXXXX 9XVXXXXXXXX	AXXXX			Eaton	74	32	42	38	2.29	1.65	Interpolated	1380
50kVA Redundant UPS (1 UPM), no Sidecar	9XBXXXXXXXX	AXXXX			Eaton	74	22	42	32	2.29	1.65	Interpolated	1515
150kVA Capacity UPS (1, 2 or 3 UPM) + 2 / 3 Bkr MBS Sidecar	9XJXXXXXXXX 9XKXXXXXXXX 9XLXXXXXXXX	DXXXX			Eaton	74	30	42	39	2.29	1.65	Interpolated	1525
		GXXXX			Eaton	74	30	42	39	2.29	1.65	Interpolated	1525
		EXXXX			Eaton	74	30	42	39	2.29	1.65	Interpolated	1540
		HXXXX			Eaton	74	30	42	39	2.29	1.65	Interpolated	1540
150kVA Capacity UPS (1, 2 or 3 UPM) + 4 Bkr MBS Sidecar	9XJXXXXXXXX 9XKXXXXXXXX 9XLXXXXXXXX	FXXXX			Eaton	74	30	42	38	2.29	1.65	Interpolated	1578
		JXXXX			Eaton	74	30	42	38	2.29	1.65	Interpolated	1578
50kVA Redundant UPS (2 UPM), no Sidecar	9XCXXXXXXXX	AXXXX			Eaton	74	22	42	33	2.29	1.65	Interpolated	1655
150kVA Redundant or 200kVA Capacity UPS (1, 2, 3 or 4 UPM) + 2 Bkr MBS Sidecar	9XMXXXXXXXX 9XNXXXXXXXX 9XPXXXXXXXX 9XRXXXXXXXX 9XSXXXXXXXX 9XTXXXXXXXX 9XUXXXXXXXX 9XVXXXXXXXX	DXXXX			Eaton	74	47	42	38	2.29	1.65	Interpolated	1819
		GXXXX			Eaton	74	47	42	38	2.29	1.65	Interpolated	1819
150kVA Redundant or 200kVA Capacity UPS (1, 2, 3 or 4 UPM) + 3 Bkr MBS Sidecar	9XMXXXXXXXX 9XNXXXXXXXX 9XPXXXXXXXX 9XRXXXXXXXX 9XSXXXXXXXX 9XTXXXXXXXX 9XUXXXXXXXX 9XVXXXXXXXX	EXXXX			Eaton	74	47	42	38	2.29	1.65	Interpolated	1834
		HXXXX			Eaton	74	47	42	38	2.29	1.65	Interpolated	1834

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⁵ All enclosures constructed from powder coated carbon steel.

TABLE 1 (cont'd)										 Powering Business Worldwide				
CERTIFIED PRODUCT MATRIX														
93PM Uninterruptible Power Supply (UPS)														
Model Line	Power Range	Description	Part Number ¹		Manufacturer	Dimensions ² (inches)			Vertical Center of Gravity (inches)	S _{DS} ⁴ (g)	F _p / W _p (g)	Unit ⁵	Maximum Weight (lb) ³	
			(Digits 1 - 10)	(Digits 11 - 15)		H	W	D						
93PM	50 kVA - 200 kVA	150kVA Redundant or 200kVA Capacity UPS (1, 2, 3 or 4 UPM) + 4 Bkr MBS Sidecar	9XMXXXXXX 9XNXXXXXX 9XPXXXXXX 9XRXXXXXX 9XSXXXXXX 9XTXXXXXX 9XUXXXXXX 9XVXXXXXX	FXXXX	Eaton	74	47	42	38	2.29	1.65	Interpolated	1849	
				JXXXX	Eaton	74	47	42	38	2.29	1.65	Interpolated	1849	
		200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	9PV20D0029	F20R1	Eaton	74	47	42	38	2.39	1.72	UUT 2	1774	
		200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	9PV20C0029	F20R2	Eaton	74	47	42	38	2.29	1.65	UUT 12	1795	
		50kVA Capacity UPS (1 UPM) with Batteries (5 Strings), no Sidecar	9PA05D6129	A00R1	Eaton	74	22	42	34	2.39	1.72	UUT 3	1992	
		50kVA Capacity (1 UPM) UPS, no Sidecar	9XAXXXXXXX	AXXXX	Eaton	74	22	42	34	2.39	1.72	Interpolated	1992	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + Empty Sidecar	9XAXXXXXXX	BXXXX	Eaton	74	30	42	34	2.39	1.72	Interpolated	2118	
				CXXXX	Eaton	74	30	42	34	2.39	1.72	Interpolated	2118	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 2 Bkr Tie Sidecar	9XAXXXXXXX	UXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2148	
				VXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2148	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 2 Bkr MBS Sidecar	9XAXXXXXXX	DXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2158	
				GXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2158	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 3 Bkr Tie Sidecar	9XAXXXXXXX	PXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2161	
				SXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2161	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 3 Bkr MBS Sidecar	9XAXXXXXXX	KXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2164	
				MXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2164	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 3 Bkr MBS Sidecar	9XAXXXXXXX	EXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2168	
				HXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2168	
		50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + 4 Bkr MBS Sidecar	9XAXXXXXXX	FXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178	
				JXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178	
50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + Tie/Bypass Sidecar	9XAXXXXXXX	RXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178			
		TXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178			
50kVA Capacity (1 UPM) or Redundant (1 or 2 UPM) UPS + Tie/Bypass Sidecar	9XAXXXXXXX	LXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178			
		NXXXX	Eaton	74	30	42	35	2.39	1.72	Interpolated	2178			
50kVA Capacity UPS (1 UPM) with Batteries (5 Strings) + Tie / Bypass Sidecar	9PA05D6029	L00R1	Eaton	74	30	42	35	2.39	1.72	UUT 4	2178			

¹ "X" indicates non-critical for seismic determination selection digit; most severe configuration was used for testing
² Maximum Without Seismic Mounting/Bracing Kit
³ Including Seismic Mounting /Bracing Kit
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⁵ All enclosures constructed from powder coated carbon steel.

TABLE 1 (cont'd)

CERTIFIED PRODUCT MATRIX



93PM Integrated Accessory Cabinet (IAC)

Model Line	Power Range	Description	Part Number ¹		Manufacturer	Dimensions ²			Vertical Center of Gravity (inches)	S _{DS} ⁴ (g)	F _p / W _p (g)	Unit ⁵	Maximum Weight (lb) ³
			(Digits 1 - 5)	(Digits 6 - 15)		H	W	D					
93PM	50 kVA - 200 kVA	50kVA External Redundant IAC-T, [1+1]	9PZMA	A00000010	Eaton	74	20	42	36	1.83	1.32	UUT 5	404
		50kVA - 100kVA IAC-T, [1+1] thru [4+0]	9PZMA 9PZMB	AXXXXXXXXX1X BXXXXXXXX1X CXXXXXXXX1X DXXXXXXXX1X EXXXXXXXX1X FXXXXXXXX1X	Eaton	74	20	42	36	1.83	1.32	Interpolated	650
		150kVA - 200kVA, [1+1] or [2+0]	9PZMC 9PZMD	AXXXXXXXXX1X BXXXXXXXX1X	Eaton	74	20	42	36	1.83	1.32	Interpolated	714
		200kVA External Capacity IAC-T, [4+0] + MIS, MBP	9PZMD	F20000010	Eaton	74	20	42	36	1.83	1.32	UUT 6	726
		150kVA - 200kVA IAC-T, [2+1] thru [4+0]	9PZMC 9PZMD	CXXXXXXXX1X DXXXXXXXX1X EXXXXXXXX1X FXXXXXXXX1X	Eaton	74	20	42	36	1.83	1.32	Interpolated	800
						74	20	42	36	1.83	1.32	Interpolated	800
		50kVA IAC-D, 480 in / 208 out	9PZD1	H00000011	Eaton	74	31	42	34	1.83	1.32	UUT 10	1105
		50kVA IAC-D, 480 in / 208 out	9PZDX	XXXXXXXX1X	Eaton	74	31	42	34	1.83	1.32	Interpolated	1161
		100kVA IAC-D, 480 in / 208 out	9PZEX	XXXXXXXX1X	Eaton	74	31	42	27	1.83	1.32	Interpolated	1397
		150kVA IAC-D, 480 in / 208 out	9PZFX	XXXXXXXX1X	Eaton	74	31	42	28	1.83	1.32	Interpolated	2015
		200kVA IAC-D, 480 in / 208 out	9PZGX	XXXXXXXX1X	Eaton	74	31	42	27	1.83	1.32	Interpolated	2165
		200kVA IAC-D, 480 in / 208 out	9PZG4	SBC0001011	Eaton	74	31	42	27	1.83	1.32	UUT 11	2165

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⁵ All enclosures constructed from powder coated carbon steel.

TABLE 1 (cont'd)

CERTIFIED PRODUCT MATRIX



93PM Integrated Battery Cabinet (IBC)

Model Line	Power Range	Description	Part Number ¹		Manufacturer	Dimensions ² (inches)			Vertical Center of Gravity (inches)	S _{DS} ⁴ (g)	F _p / W _p (g)	Unit ⁵	Maximum Weight (lb) ³
			(Digits 1 - 9)	(Digits 10 - 15)		H	W	D					
93PM	50 kVA - 200 kVA	IBC-S, Remote, no Sidecar	9PZBXXXXX	1XXX1X	Eaton	74	20	42	32	1.83	1.32	Extrapolated (Depopulated)	2233
		IBC-S, Line and Match, no Sidecar		0XXX1X	Eaton	74	20	42	32	1.83	1.32	Extrapolated (Depopulated)	2246
		100kVA IBC-S, Line and Match, no Sidecar	9PZBBAY08	013010	Eaton	74	20	42	32	1.83	1.32	UUT 7	2246
		100 kVA IBC-L, Line and Match, no sidecar	9PZABAE28	010010	Eaton	74	32	42	41	2.29	1.65	UUT 13	3185
		IBC-LH, Remote, no Sidecar	9PZCXXXXX	1XXX1X	Eaton	74	32	42	41	1.83	1.32	Interpolated	4701
		IBC-LH, Line and Match, no Sidecar		0XXX1X	Eaton	74	32	42	41	1.83	1.32	Interpolated	4714
		IBC-L, Remote, no Sidecar	9PZAXXXXXX	1XXX1X	Eaton	74	32	42	41	1.83	1.32	Interpolated	4732
		IBC-L, Line and Match, no Sidecar		0XXX1X	Eaton	74	32	42	41	1.83	1.32	Interpolated	4745
		100kVA IBC-L, Line and Match, no Sidecar	9PZABAE50	110010	Eaton	74	32	42	41	1.83	1.32	UUT 8	4745
		IBC-LH, Remote, with Sidecar	9PZCXXXXX	LXXX1X	Eaton	74	40	42	41	1.83	1.32	Interpolated	4810
				RXXX1X	Eaton	74	40	42	41	1.83	1.32	Interpolated	4810
		IBC-L, Remote with Sidecar	9PZAXXXXXX	LXXX1X	Eaton	74	40	42	41	1.83	1.32	Interpolated	4841
				RXXX1X	Eaton	74	40	42	41	1.83	1.32	Interpolated	4841
		100kVA IBC-L, Remote with Left Sidecar	9PZABAE50	L10010	Eaton	74	40	42	41	1.83	1.32	UUT 9	4841

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² Maximum Without Seismic Mounting/Bracing Kit

³ Including Seismic Mounting /Bracing Kit

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⁵ All enclosures constructed from powder coated carbon steel.

TABLE 2				 Powering Business Worldwide			
CERTIFIED PRODUCT SUBCOMPONENT MATRIX							
Certified Subcomponents: Panel Boards							
Part Number	Manufacturer	Description	Material	S _{ps} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
122950146	EATON	PDU PRL1 225A KIT (INCL NEU,CABLING, & LOADED W/ BKRS) (Cu)	Carbon steel, copper conductor	1.83	1.32	UUT 11	108
122950147	EATON	PDU PRL1 400A KIT (INCL NEU,CABLING, & LOADED W/ BKRS) (Cu)	Carbon steel, copper conductor	1.83	1.32	UUT 11	126
Certified Subcomponents: Power Modules							
Part Number	Manufacturer	Description	Material	S _{ps} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
730-B1045	EATON	50kW UPM	Al heat sinks, Al frame, Cu conductors	2.39	1.72	UUT 1, 2, 3, 4	155
730-D0057	EATON	480V-4 UPM	Al heat sinks, Al frame, Cu conductors	2.29	1.65	UUT 12	155
Certified Subcomponents: Batteries							
Part Number	Manufacturer	Description	Material	S _{ps} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
PWHR1234W2FR	CSB	Battery, 12V, 34 Watt (9Ah), VRLA	ABS housing	2.39	1.72	UUT 3, 4	6
HRL12280WFR	CSB	Battery, 12V, 34 Watt (9Ah), VRLA	ABS housing	2.29	1.65	Interpolated	57
PWHR12280W4FR	CSB	Battery, 12V, 34 Watt (9Ah), VRLA	ABS housing	2.29	1.65	UUT 13	57
HRL12330	CSB	Battery, 12V, 280W	Polypropylene housing	1.83	1.32	Interpolated	65
HRL12390	CSB	Battery, 12V, 390W	Polypropylene housing	1.83	1.32	Interpolated	73
PWHR12390W4FR	CSB	Battery, 12 V, 100 Ah	Polypropylene housing	1.83	1.32	Interpolated	74
HRL12540W	CSB	Battery, 12 V, 143 Ah	Polypropylene housing	1.83	1.32	Interpolated	97
HRL12500W	CSB	Battery, 12V, 120 Ah	Polypropylene housing	1.83	1.32	Interpolated	101
PWHR12500W4FR	CSB	Battery, 12 V, 120 Ah	Polypropylene housing	1.83	1.32	UUT 8, 9	101
12HX300	ENERSYS	Battery, 12 V, 83 Ah	Polypropylene housing	2.29	1.65	UUT 13	60
12HX330	ENERSYS	Battery, 12 V, 82 Ah	Polypropylene housing	2.29	1.65	Interpolated	71
0790-6005-C0K00	ENERSYS	Battery, 12 V, 95 Ah	Polypropylene housing	2.29	1.65	UUT 9	77
12HX400	ENERSYS	Battery, 12 V, 120 Ah	Polypropylene housing	2.29	1.65	Interpolated	80
12HX505	ENERSYS	Battery, 12 V, 506 Ah	Polypropylene housing	2.29	1.65	Interpolated	103
12HX540	ENERSYS	Battery, 12 V, 123 Ah	Polypropylene housing	2.29	1.65	Interpolated	106
12HX500	ENERSYS	Battery, 12 V, 506 Ah	Polypropylene housing	2.29	1.65	UUT 13	110
NPX—L35/250FRTW	G.S. YUASA	Battery, 12V, 34 Watt (9Ah), VRLA	ABS housing	2.39	1.72	UUT 3	5
PX12090F2V0	G.S. YUASA	Battery, 12V, 34 Watt (9Ah), VRLA	ABS housing	1.83	1.32	Interpolated	6
NPX-80RFR	G.S. YUASA	Battery, 12 V, 20 Ah, VRLA	Polypropylene housing	1.83	1.32	UUT 7	15
NSB12540	NORTHSTAR	Battery, 12V, 125 Ah	Polypropylene housing	1.83	1.32	UUT 9	98
UPS12-300MR	C&D Dynasty	Battery, 12 V, 78 Ah	Polypropylene housing	2.29	1.65	UUT 13	58
¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.							

TABLE 2 (cont'd)				 Powering Business Worldwide			
CERTIFIED PRODUCT SUBCOMPONENT MATRIX							
Certified Subcomponents: Batteries (cont'd)							
Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
UPS12-350MR	C&D Dynasty	Battery, 12 V, 93.2 Ah	Polypropylene housing	2.29	1.65	Interpolated	67
UPS12-400MR	C&D Dynasty	Battery, 12 V, 100 Ah	Polypropylene housing	2.29	1.65	Interpolated	80
UPS12-490MR	C&D Dynasty	Battery, 12 V, 134 Ah	Polypropylene housing	2.29	1.65	UUT 13	100
Certified Subcomponents: Static Switches							
Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
730-D0039	EATON	50kW STS	Carbon steel frame, Al heat sink	2.39	1.72	UUT 1, 3, 4	22
730-B1035	EATON	100kW STS	Carbon steel frame, Al heat sink	2.29	1.65	Interpolated	24
730-D0021	EATON	150kW / 200kW STS	Carbon steel frame, Al heat sink	2.29	1.65	UUT 12	31
Certified Subcomponents: Seismic Kits							
Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
P-103000766	EATON	KIT, FLOOR MOUNT, SMALL SIDECAR (FRAME C)	Carbon Steel	2.39	1.72	UUT 4	2
P-103000844	EATON	KIT, FLOOR MOUNT, LARGE SIDECAR (FRAME D)	Carbon Steel	2.29	1.65	UUT 2, 12	4
P-103000765	EATON	KIT, FLOOR MOUNT, STANDARD UPS FRAME (FRAME A)	Carbon Steel	2.39	1.72	UUT 1, 3, 4	8
P-103000842	EATON	KIT, FLOOR MOUNT, LARGE UPS FRAME (FRAME B)	Carbon Steel	2.29	1.65	UUT 2, 12	12
P-103000843	EATON	KIT, FLOOR MOUNT, IAC-T / IBC-S (FRAME E)	Carbon Steel	1.83	1.32	UUT 5, 6, 7	7
P-103000767	EATON	KIT, FLOOR MOUNT, IAC-D / IAC-IT (FRAME F)	Carbon Steel	1.83	1.32	UUT 10, 11	12
P-103000768	EATON	KIT, FLOOR MOUNT, IBC-L (FRAME G)	Carbon Steel	1.83	1.32	UUT 8, 13	18
P-103000769	EATON	KIT, FLOOR MOUNT, IBC-L W / SIDECAR (FRAME G + C)	Carbon Steel	1.83	1.32	UUT 9	22
Certified Subcomponents: Transformers							
Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
WPV50012	EATON	50 kVA, K1, TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	UUT 10	600
WPN50131	EATON	50 kVA, K13, Non TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	600
WPN50132	EATON	50 kVA, K13, TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	600
WPV12011	EATON	100 kVA, K1, Non TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	750
WPN12131	EATON	100 kVA, K13, Non TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	700
WPV12012	EATON	100 kVA, K1, TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	750
Note: Cu = Copper ¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.							

TABLE 2 (cont'd)

CERTIFIED PRODUCT SUBCOMPONENT MATRIX



Certified Subcomponents: Transformers (cont'd)

Part Number	Manufacturer	Description	Material	S _{ps} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
WPN12132	EATON	100 kVA, K13, TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	850
WPV49011	EATON	K1, Non TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1200
WPN49131	EATON	K13, Non TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1200
WPV49012	EATON	K1, TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1200
WPN49132	EATON	K13, TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1200
WPV19011	EATON	K1, Non TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1350
WPN19131	EATON	K13, Non TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1350
WPV19012	EATON	K1, TP1, 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	Interpolated	1350
WPN19132	EATON	K13, TP1 480/208 Delta/WYE Transformer	Aluminum winding	1.83	1.32	UUT 11	1350

Certified Subcomponents: Breakers

FD4175ELA02S22	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	UUT 3, 4	5
FD3110L	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	UUT 1, 3, 4	5
FD3080	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
HFDDC3150LA1301U3801	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
FD3225	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
FD3225KLA06	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
HFD3080L	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
HFDDC3175LA03S21	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
FD3150W	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
FD3080W	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
HFD3225	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	5
FD3080L	EATON (CH)	FD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	UUT 4	5
JGE3125FAGC	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	UUT 4	6
JGS325033G	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH325033G	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS310033G	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3150FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6

¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.

TABLE 2 (cont'd)

CERTIFIED PRODUCT SUBCOMPONENT MATRIX



Certified Subcomponents: Breakers (cont'd)

Part Number	Manufacturer	Description	Material	S _{ds} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
JGS3175FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3225FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3080FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH3080FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGE3250FAGC	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGE3150FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3150FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3200FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGE3200 FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH3150FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGE3200FAGC	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS325033WZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3100FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS310033WZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH3100FAG	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH3200FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGE3200FAWZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH325033WZ1	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGS3250033WZ1C	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH3250033WZ1C	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
JGH325032GC	EATON (CH)	JG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.39	1.72	Interpolated	6
KD3400W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	UUT 12	12
HKDDC3300WA07S49	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	UUT 13	12
HKD3175W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3225W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
HKD3225W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3300WA09	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12

¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.

TABLE 2 (cont'd)

CERTIFIED PRODUCT SUBCOMPONENT MATRIX



Certified Subcomponents: Breakers (cont'd)

Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
KD3400F	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3400KWA06	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3300WA06	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3400FK03P27A06	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
HKD3300W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
HKD3400W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
HKD3400F	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3250W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
HKD3250W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3175	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3350W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3350WA13	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3300WA13	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3350WA06S10	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3400FK03P27	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	12
KD3300W	EATON (CH)	KD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	2.29	1.65	UUT 12	12
LGE3300FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	UUT 6	16
LG3340033W	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3500FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3600FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGSDC3500FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3350FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH3350FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3600FAGC	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH3600FAGC	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH3600FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH3600FAWC	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16

¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.

TABLE 2 (cont'd)

CERTIFIED PRODUCT SUBCOMPONENT MATRIX



Certified Subcomponents: Breakers (cont'd)

Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
LGE3400FAWC	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3500FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3500FAWC	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH3600FAG	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGE3600FAW	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGH360033W	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
LGC360033W	EATON (CH)	LG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	16
CLDB3600FT33WP05	EATON (CH)	LD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	20
LD3600WKA06	EATON (CH)	LD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	20
MDL3700	EATON (CH)	MD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	29
HMDL3700	EATON (CH)	MD-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	29
CNDC312T33WP08	EATON (CH)	ND-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGH312T33WA13P08S10	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGC312T33WA13P08S10	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGH312T33WA06P08	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGC312T33WA06P08	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGH308032M	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	Interpolated	45
NGS312032MC	EATON (CH)	NG-FRAME CIRCUIT BREAKER	Copper current path, glass reinforced glass polyester housing	1.83	1.32	UUT 6	45

¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.

TABLE 2 (cont'd)

CERTIFIED PRODUCT SUBCOMPONENT MATRIX



Certified Subcomponents: Contactors

Part Number	Manufacturer	Description	Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lb)
DILM17-10 (RDC60)	EATON	K5 Contactor (50KW)	Copper current path, glass reinforced glass polyester housing	2.29	1.65	UUT 1, 3, 4	1
DILM115 (RDC60)	EATON	K5 Contactor (100KW)	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	5
DILM185A/22 (RDC60)	EATON	K5 Contactor (150KW)	Copper current path, glass reinforced glass polyester housing	2.29	1.65	Interpolated	14
DILM250/22 (RDC48)	EATON	Contactor, 1000 VAC, 3 pole	Copper current path, glass reinforced glass polyester housing	2.29	1.65	UUT 12	17

Certified Subcomponents: Enclosures

Frame	Manufacturer	Dimensions (inches)			Material	S _{DS} ¹ (g)	F _p / W _p (g)	Unit	Operating Weight (lbs.)
		Height	Width	Depth					
93PM SMALL IAC-T / IBC-S FRAME	EATON	74	20	42	Carbon Steel	1.83	1.32	UUT 5, 6, 7	366
93PM STD UPS FRAME	EATON	74	22	42	Carbon Steel	2.39	1.72	UUT 1, 3	392
93PM IAC-D / LARGE IAC-T FRAME	EATON	74	31	42	Carbon Steel	1.83	1.32	UUT 10, 11	397
93PM LARGE UPS FRAME	EATON	74	32	42	Carbon Steel	2.29	1.65	Extrapolated	435
93PM STD UPS + SMALL SC FRAME	EATON	74	30	42	Carbon Steel	2.39	1.72	UUT 4	557
93PM STD UPS + LARGE SC FRAME	EATON	74	37	42	Carbon Steel	2.29	1.65	Interpolated	679
93PM LARGE UPS + LARGE SC FRAME	EATON	74	47	42	Carbon Steel	2.29	1.65	UUT 2, 12	722
93PM IBC-L FRAME	EATON	74	32	42	Carbon Steel	1.83	1.32	UUT 8, 13	856
93PM IBC-L + SMALL SC FRAME	EATON	74	40	42	Carbon Steel	1.83	1.32	UUT 9	1021

¹ Certification level is limited to the lower rating of either the internal components, as listed here, or the Product section, as listed on the Certified Products table.

TABLE 3

TESTED UNITS - DESIGN BASIS



Manufacturer: Eaton Corporation
Product Line: 93PM Uninterruptable Power Supplies and Accessories
Certified Product Construction: All enclosures are of bolted steel construction and comply with UL1778
Certified Options: Various enclosure sizes, electronics/power modules, static switches, circuit breakers, switches, contactors, transformers, and various other components as listed in the approved components list of this Special Seismic Certification summary
Certified Mounting Description: All equipment is to be rigid mounted per the mounting description sheets

Product Line	Model Line	Dimensions (inches) ¹			Weight (lb)	z/h	S _{DS}	Description	UUT
		Height	Width	Depth					
UNINTERRUPTABLE POWER SUPPLIES & ACCESSORIES	93PM	74.0	22.0	42.0	686	1	2.39	50kVA Capacity UPS (1 UPM), no Batteries, no Sidecar	1
	93PM	74.0	46.7	42.0	1774	1	2.39	200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	2
	93PM	74.0	22.0	42.0	1992	1	2.39	50kVA Capacity UPS (1 UPM) with Batteries (5 Strings), no Sidecar	3
	93PM	74.0	30.0	42.0	2178	1	2.39	50kVA Capacity UPS (1 UPM) with Batteries (5 Strings) + Tie / Bypass Sidecar	4
	93PM	74.0	19.7	42.0	404	1	1.83	50kVA External Redundant IAC-T, 2 Bkr	5
	93PM	74.0	19.7	42.0	726	1	1.83	200kVA External Capacity IAC-T, 4 Bkr + MIS, MBP	6
	93PM	74.0	19.7	42.0	2246	1	1.83	100kVA IBC-S, Line and Match, no Sidecar	7
	93PM	74.0	32.2	42.0	4745	1	1.83	100kVA IBC-L, Line and Match, no Sidecar	8
	93PM	74.0	40.2	42.0	4841	1	1.83	100kVA IBC-L, Remote with Left Sidecar	9
	93PM	74.0	31.3	42.0	1105	1	1.83	50kVA IAC-D, 480 in / 208 out	10
	93PM	74.0	31.3	42.0	2165	1	1.83	200kVA IAC-D, 480 in / 208 out	11
	93PM	74.0	46.7	42.0	1795	1	2.29	200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	12
	93PM	74.0	32.2	42.0	3185	1	2.29	100kVA IBC-L, Line and Match, no Sidecar	13

Notes

¹ Maximum Without Seismic Mounting/Bracing Kit

TABLE 4

TESTED UNITS - RESONANT FREQUENCIES



Manufacturer: Eaton Corporation
Product Line: 93PM Uninterruptable Power Supplies and Accessories
Certified Product Construction: All enclosures are of bolted steel construction and comply with UL1778
Certified Options: Various enclosure sizes, electronics/power modules, static switches, circuit breakers, switches, contactors, transformers, and various other components as listed in the approved components list of this Special Seismic Certification summary
Certified Mounting Description: All equipment is to be rigid mounted per the mounting description sheets

Product Line	Model Line	Lowest Natural Frequency (Hz) +/-			Description	UUT
		Front-Back	Side-Side	Vertical		
UNINTERRUPTABLE POWER SUPPLIES & ACCESSORIES	93PM	13.0	10.5	> 33	50kVA Capacity UPS (1 UPM), no Batteries, no Sidecar	1
	93PM	14.0	12.2	32	200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	2
	93PM	10.0	5.8	> 33	50kVA Capacity UPS (1 UPM) with Batteries (5 Strings), no Sidecar	3
	93PM	13.0	7.8	> 33	50kVA Capacity UPS (1 UPM) with Batteries (5 Strings) + Tie / Bypass Sidecar	4
	93PM	9.0	7.9	24	50kVA External Redundant IAC-T, 2 Bkr	5
	93PM	9.5	5.5	> 33	200kVA External Capacity IAC-T, 4 Bkr + MIS, MBP	6
	93PM	10.0	5.0	22	100kVA IBC-S, Line and Match, no Sidecar	7
	93PM	10.0	4.7	21	100kVA IBC-L, Line and Match, no Sidecar	8
	93PM	9.5	5.7	22	100kVA IBC-L, Remote with Left Sidecar	9
	93PM	11.0	7.9	22	50kVA IAC-D, 480 in / 208 out	10
	93PM	9.5	8.0	22	200kVA IAC-D, 480 in / 208 out	11
	93PM	6.4	5.2	6.2	200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar	12
	93PM	14.6	5.4	> 33	100kVA IBC-L, Line and Match, no Sidecar	13

Notes

Table 5



MODEL LINE NUMBERING

Manufacturer: Eaton Corporation
Product Line: Uninterruptable Power Supplies (UPS)
Model Line: 93PM

Eaton 93PM Uninterruptible Power Supply (UPS) (50 kVA - 200 kVA)

Columns 1 & 2	Model Line	
Column 3	Base Model	9M = 93PM 0.8 pf
		9N = 93PM 0.9 pf
		9P = 93PM 1.0 pf
		A = 93PM-50 Capacity Frame
		B = 93PM-50 Redundant Frame, 1 UPM
		C = 93PM-50 Redundant Frame, 2 UPM
		D = 93PM-100 Capacity Frame, 1 UPM
		E = 93PM-100 Capacity Frame, 2 UPM
		F = 93PM-100 Redundant Frame, 1 UPM
		G = 93PM-100 Redundant Frame, 2 UPM
		H = 93PM-100 Redundant Frame, 3 UPM
		J = 93PM-150 Capacity Frame, 1 UPM
		K = 93PM-150 Capacity Frame, 2 UPM
		L = 93PM-150 Capacity Frame, 3 UPM
		M = 93PM-150 Redundant Frame, 1 UPM
N = 93PM-150 Redundant Frame, 2 UPM		
P = 93PM-150 Redundant Frame, 3 UPM		
R = 93PM-150 Redundant Frame, 4 UPM		
S = 93PM-200 Capacity Frame, 1 UPM		
T = 93PM-200 Capacity Frame, 2 UPM		
U = 93PM-200 Capacity Frame, 3 UPM		
V = 93PM-200 Capacity Frame, 4 UPM		
Z = N/A, Used on P-110000112 93PM Accessories CTO		
9 = No UPS (SideCar Only)		
Column 4 & 5	UPS kVA Rating	02 = 20 kVA
		03 = 30 kVA
		04 = 40 kVA
		05 = 50 kVA
		06 = 60 kVA
		07 = 70 kVA
		08 = 80 kVA
		09 = 90 kVA
		10 = 100 kVA
		11 = 110 kVA
		12 = 120 kVA
		13 = 130 kVA
		14 = 140 kVA
15 = 150 kVA		
16 = 160 kVA		
17 = 170 kVA		
18 = 180 kVA		
19 = 190 kVA		
20 = 200 kVA		
Column 6	Voltage Configuration	A = 400V, 4 wire
		B = 400V, 3 wire
		C = 480V, 4 wire
		D = 480V, 3 wire
		E = 380V, 4 wire
		F = 380V, 3 wire
		G = 360V, 4 wire
		H = 360V, 3 wire
		J = 415V, 4 wire
		K = 415V, 3 wire
		L = 440V, 4 wire
		M = 440V, 3 wire
		N = 480V 3-wire / 208V 4-wire (For use with IAC-D)
P = 208V 3-wire / 208V 4-wire (For use with IAC-D)		

Table 5 (cont'd)



MODEL LINE NUMBERING

Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies (UPS)
Model Line:	93PM

Eaton 93PM Uninterruptible Power Supply (UPS) (50 kVA - 200 kVA)

Column	Option Category	Options
Column 7	Internal Batteries	0 = No Internal Batteries; No Battery Breaker 2 = With Internal Batteries, 3 strings, type 9Ah 4 = With Internal Batteries, 4 strings, type 9Ah 6 = With Internal Batteries, 5 strings, type 9Ah A = Optional DC Breaker (50kVA / 100kVA / 150kVA), No Internal Batteries B = With Internal Battery Trays (3 strings), type 9Ah (Batteries not Supplied) C = With Internal Battery Trays (4 strings), type 9Ah (Batteries not Supplied) D = With Internal Battery Trays (5 strings), type 9Ah (Batteries not Supplied)
Column 8	Input Options	0 = Single Feed, no Internal MBS 1 = Single Feed, with Internal MBS 2 = Dual Feed, no Internal MBS 3 = Dual Feed, with Internal MBS
Column 9	Efficiency Options	0 = No ESS, no VMMS 1 = No ESS, with VMMS 2 = With ESS, no VMMS 3 = With ESS, with VMMS
Column 10	Communication Options	0 = None (Empty) 5 = PXGMS 7 = PXGMS and EMP 8 = Industrial Relay 9 = PXGMS, Industrial Relay and EMP
Column 11	Sidecar / Top Entry Options	A = No Sidecar B = No Breakers, Left Mount C = No Breakers, Right Mount D = 2 Breaker, Left Mount (MBS) E = 3 Breaker, Left Mount (MBS) F = 4 Breaker, Left Mount (MBS) G = 2 Breaker, Right Mount (MBS) H = 3 Breaker, Right Mount (MBS) J = 4 Breaker, Right Mount (MBS) K = 3 Breaker, Left Mount (Tie, External Capacity) L = 4 Breaker, Left Mount (Tie w/ MBS, External Capacity) M = 3 Breaker, Right Mount (Tie, External Capacity) N = 4 Breaker, Right Mount (Tie, w/ MBS, External Capacity) P = 3 Breaker, Left Mount (Tie, External Redundant) R = 4 Breaker, Left Mount (Tie w/ MBS, External Redundant) S = 3 Breaker, Right Mount (Tie, External Redundant) T = 4 Breaker, Right Mount (Tie w/ MBS, External Redundant) U = 2 Breaker, Left Mount (Tie, External Capacity / Redundant) V = 2 Breaker, Right Mount (Tie, External Capacity / Redundant)
Column 12	Sidecar Breaker kAIC Rating	0 = no specification 1 = STD kAIC, all Breakers Aux 2 = STD kAIC, MBS Aux Only 3 = High kAIC, all Breakers Aux 4 = High kAIC, MBS Aux Only
Column 13	Cabinet Configuration	0 = With Dress Skins, Top Air Exhaust 1 = With Dress Skins, Rear Air Exhaust 2 = No Dress Skins, Top Air Exhaust 3 = No Dress Skins, Rear Air Exhaust
Column 14	Factory Location	H, R, B = Various Eaton Factories F = FAA M = Healthcare L = UL 924
Column 15	Generation Code	0 - 9 = Product Generation Codes

Table 6



MODEL LINE NUMBERING

Manufacturer:		Eaton Corporation
Product Line:		Integrated Accessory Cabinet - Tie (IAC-T)
Model Line:		93PM
<i>Eaton 93PM Integrated Accessories Cabinet - Tie (IAC-T) (50 kVA - 200 kVA)</i>		
Columns 1, 2, 3	Model Line	9PZ = 93PM Accessories
Column 4	Accessory	M = IAC-T
		A = 50 kVA
		B = 100 kVA
Column 5	Associated UPS Model	C = 150 kVA
		D = 200 kVA
		A = 1+1
		B = 2+0
Column 6	UPS Configuration	C = 2+1
		D = 3+0
		E = 3+1
		F = 4+0
Column 7	MIS / MBP Breakers	0 = No MIS, no MBP
		1 = MIS, no MBP
		2 = MIS, MBP
Column 8	Exhaust Configuration	0 = Top Exhaust
		1 = Rear Exhaust
Column 9	Open	0 = Open
Column 10	Open	0 = Open
Column 11	Open	0 = Open
Column 12	Open	0 = Open
Column 13	Open	0 = Open
Column 14	Structural Configuration	0 = Standard
		1 = OSHPD
Column 15	Generation Code	0 - 9 = Product Generation Codes

FOR REFERENCE ONLY

Table 7



MODEL LINE NUMBERING

Manufacturer: Eaton Corporation
Product Line: Integrated Accessory Cabinet - Distribution (IAC-D)
Model Line: 93PM

Eaton 93PM Integrated Accessories Cabinet - Distribution (IAC-D) (50 kVA - 200 kVA)

Columns 1, 2, 3	Model Line	93PM Accessories
Column 4	Accessory	D = 50 kVA IAC-D, 480 V / 208 V E = 100 kVA IAC-D, 480 V / 208 V F = 150 kVA IAC-D, 480 V / 208 V G = 200 kVA IAC-D, 480 V / 208 V N = 50 kVA IAC-D, 208 V / 208 V P = 100 kVA IAC-D, 208 V / 208 V
Column 5	Output Transformer	1 = K1 Non TP1, 480 V / 208 V Delta / WYE 2 = K13 Non TP1, 480 V / 208 V Delta / WYE 3 = K1 TP1, 480 V / 208 V Delta / WYE 4 = K13 TP1 480 V / 208 V Delta / WYE
Column 6	Breaker kAIC Rating	S = STD kAIC H = High kAIC
Column 7	Distribution Top	0 = No Distribution B = 225 A Panel Board Top 1 = 1 Subfeed Breaker 2 = 2 Subfeed Breakers 3 = 3 Subfeed Breakers 4 = 4 Subfeed Breakers 5 = 5 Subfeed Breakers 6 = 1 Subfeed Breaker + 4 Field Upgrades 7 = 2 Subfeed Breakers + 3 Field Upgrades 8 = 3 Subfeed Breakers + 2 Field Upgrades 9 = 4 Subfeed Breakers + 1 Field Upgrade
Column 8	Distribution Bottom	0 = No Distribution B = 225 A Panel Board Bottom 1 = 1 Subfeed Breaker 2 = 2 Subfeed Breakers 3 = 3 Subfeed Breakers C = 400 A Panel Board Bottom 4 = 1 Subfeed Breaker + 2 Field Upgrades 5 = 2 Subfeed Breakers + 1 Field Upgrade
Column 9	Distribution Breaker Type	0 = 80% Rated Breaker 1 = 80% Rated Breaker w / Aux (Distribution Subfeed Only) 2 = 100% Rated Breaker (Distribution Subfeed Only) 3 = 100% Rated Breaker w / Aux (Distribution Subfeed Only)
Column 10	Branch Metering	0 = None
Column 11	Cabinet Configuration	0 = Top Exhaust 1 = Rear Exhaust
Column 12	Optional Breaker	0 = No Optional Breaker 1 = 1 Optional 225 A Breaker
Column 13	Line and Match / Remote Installation	0 = Line and Match 1 = Remote
Column 14	Structural Configuration	0 = Standard 1 = OSHPD
Column 15	Generation Code	0 - 9 = Product Generation Codes

Table 8



MODEL LINE NUMBERING		
Manufacturer:	Eaton Corporation	
Product Line:	Integrated Battery Cabinet (IBC)	
Model Line:	93PM	
Eaton 93PM Integrated Battery Cabinet (IBC) (50 kVA - 20 kVA)		
Columns 1, 2, 3	Model Line	9PZ = 93PM Accessories
Column 4	Accessory	A = IBC-L B = IBC-S C = IBC-LH T = IBC-LW U = IBC-LHW
Column 5	Associated UPS Model	A = 50 kVA B = 100 kVA C = 150 kVA D = 200 kVA
Column 6	DC Voltage	A = 432 V B = 480 V
Column 7, 8, 9	Battery Type	B37 = UPS12-400MR, 1/4 (M6) Lugs E28 = HRL 12-280, 1/4 (M6) Lugs E39 = PWR 12-390, 1/4 (M6) Lugs E50 = PWR 12-500, 1/4 (M6) Lugs E54 = HRL 12-540, 1/4 (M6) Lugs H41 = ENERSYS XE95, 3/8 (M10) Lugs N54 = NSB12-540, 1/4 (M6) Lugs Y08 = NPX-80RFR, #10 (M5) Lugs 001 = Empty Tray Assembly IBC-L, 1/4 (M6) Lugs 002 = Empty Tray Assembly IBC-S 003 = Empty Tray Assembly IBC-LH (B37 / E54 / N54), 1/4 (M6) Lugs 004 = Empty Tray Assembly IBC-LH (H41), 3/8 (M10) Lugs
Column 10	Remote / Top Entry Sidecar	0 = Line and Match, no Sidecar 1 = Remote Installation, no Sidecar L = Remote with Left Sidecar for Top Entry R = Remote with Right Sidecar for Top Entry
Column 11	Number of Battery Cabinets	1 = 1 Cabinet 2 = 2 Cabinets 3 = 3 Cabinets 4 = 4 Cabinets
Column 12	Number of Battery Strings	0 = Single String 2 = 2 Battery Strings 3 = 3 Battery Strings
Column 13	Battery Monitoring	0 = With Monitoring Tabs, Without Thermal Sensor 1 = Without Monitoring Tabs, Without Thermal Sensor 2 = With Monitoring Tabs, With Thermal Sensor 3 = W/Out Monitoring Tabs, With Thermal Sensor
Column 14	Structural Configuration	0 = Standard 1 = OSHPD L = UL 924
Column 15	Generation Code	0 - 9 = Product Generation Codes

TABLE 9a: UUT-1				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 1)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PA05D0220A01R1						
Product Construction Summary:		50kVA Capacity UPS (1 UPM), no Batteries, no Sidecar						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), Power Module (Eaton), FD3110L Breaker (Eaton), MBS Switch (Sontheimer), Static Switch (Eaton), Contactor (Eaton)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
686	T71589 UUT 1	40	74.0	22.0	42.0	13.0	10.5	> 33
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.39	1	1.5	3.82	2.87	1.60	0.64
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 9b: UUT-1



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 1)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PA05D0220A01R1

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

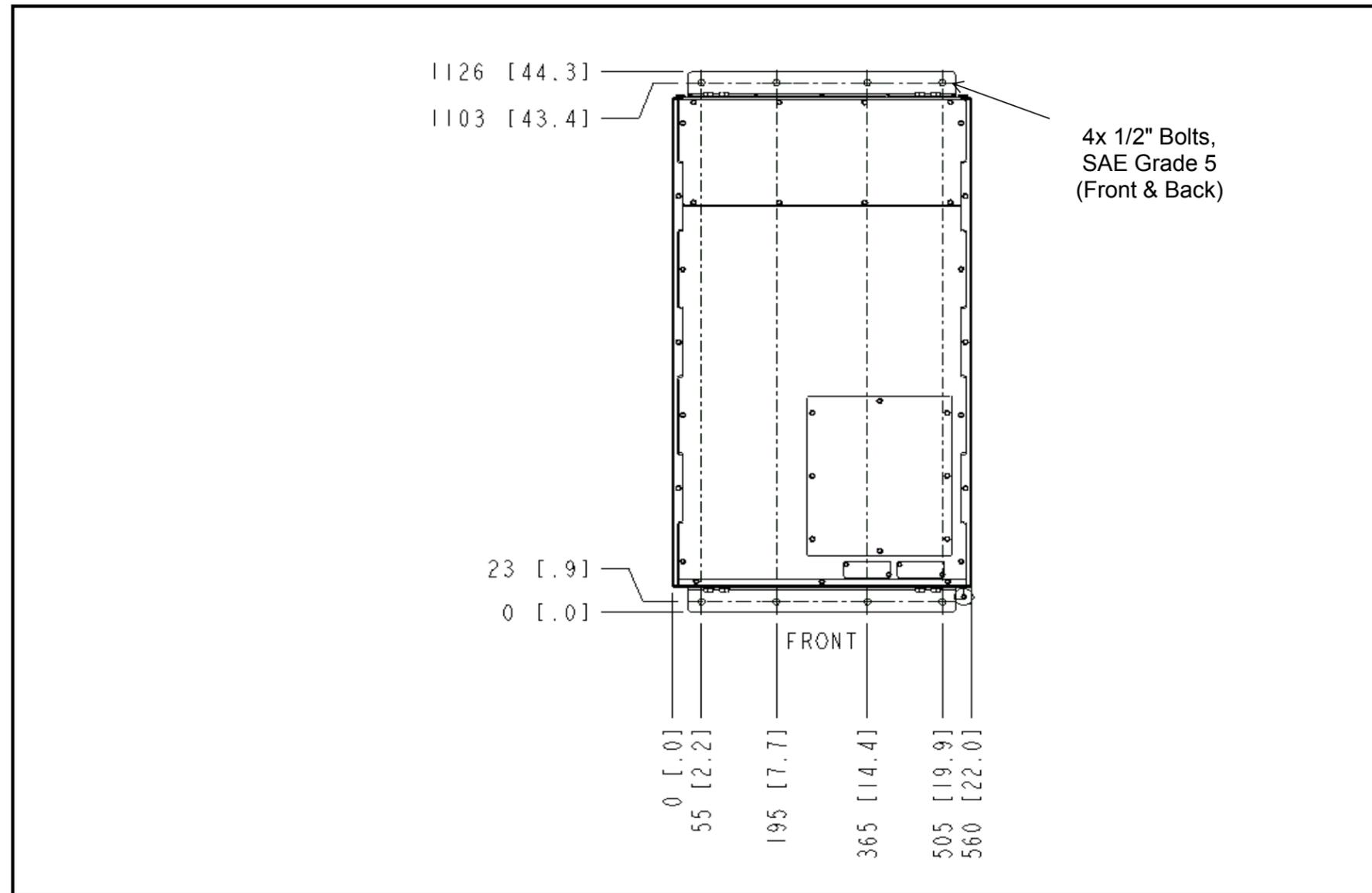


TABLE 10a: UUT-2				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 2)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PV20D0029F20R1						
Product Construction Summary:		200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), Power Module (Eaton), Static Switch (Eaton), Contactor (Eaton), KD3400W, KD3300W Breakers (Eaton)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
1774	T71589 UUT 2	38	74.0	46.7	42.0	14.0	12.2	32
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.39	1	1.5	3.82	2.87	1.60	0.64
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 10b: UUT-2



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 2)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PV20D0029F20R1

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

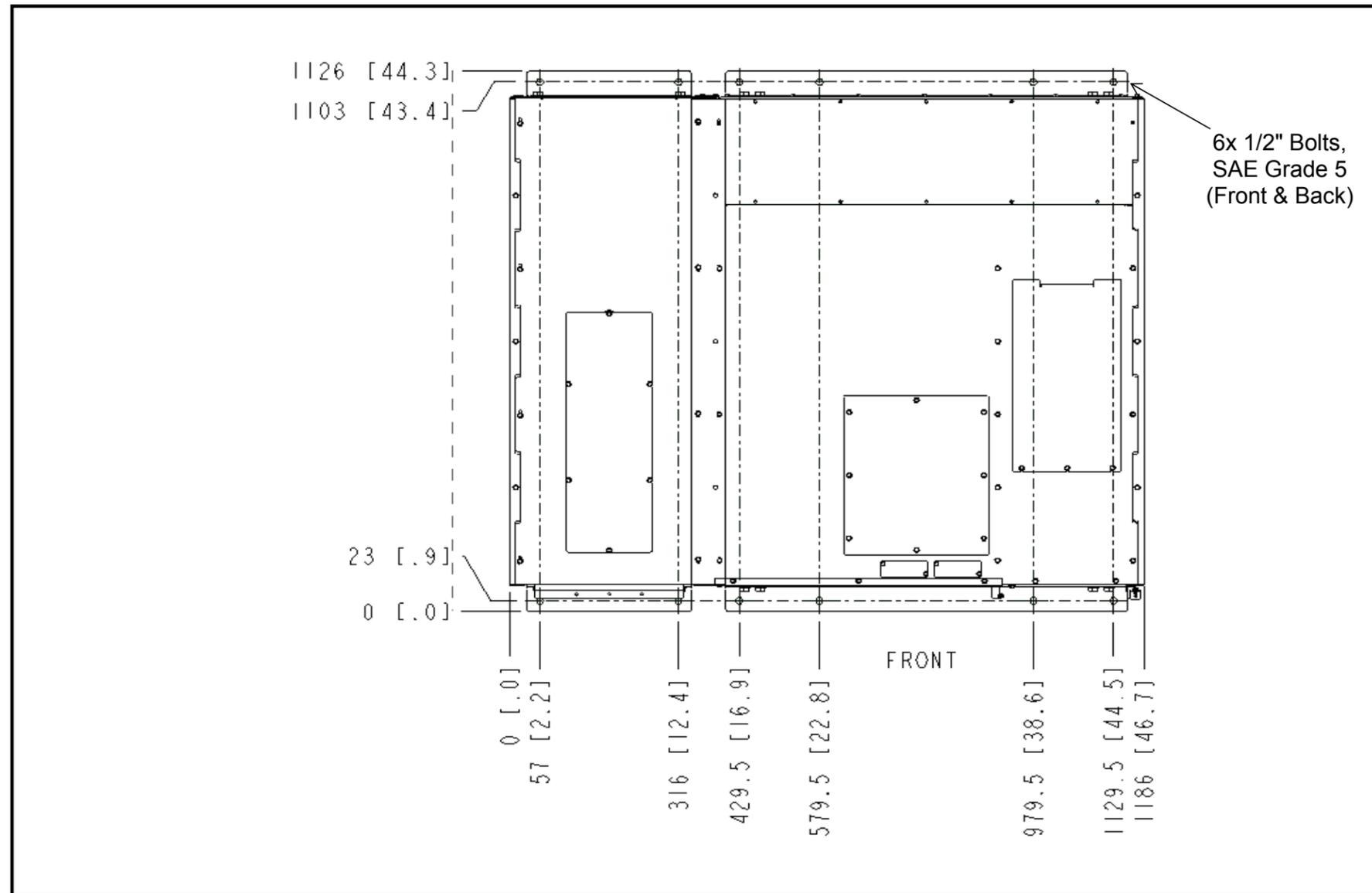


TABLE 11a: UUT-3				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 3)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PA05D6129A00R1						
Product Construction Summary:		50kVA Capacity UPS (1 UPM) with Batteries, no Sidecar						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), Power Module (Eaton), FD4175ELA02SS22, FD3110L Breakers (Eaton), MBS Switch (Sontheimer), Static Switch (Eaton), Contactor (Eaton), Batteries (CSB)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
1992	T71589 UUT 3	35	74.0	22.0	42.0	10.0	5.8	> 33
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.39	1	1.5	3.82	2.87	1.60	0.64
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 11b: UUT-3



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 3)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PA05D6129A00R1

Mounting Description:
 The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

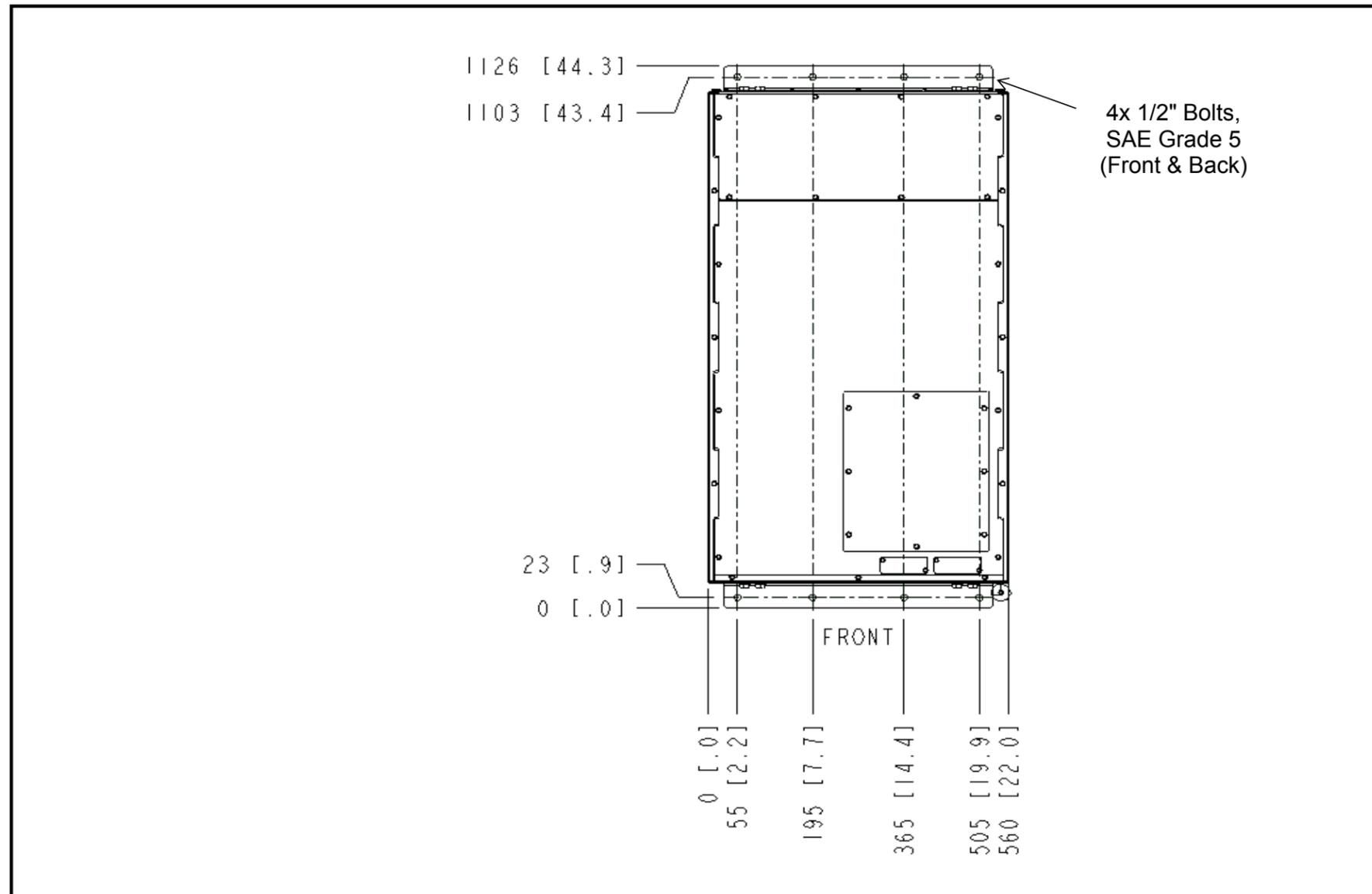


TABLE 12a: UUT-4				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 4)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PA05D6029L00R1						
Product Construction Summary: 50kVA Capacity UPS (1 UPM) with Batteries + Tie / Bypass Sidecar								
Options/Component Summary: Frame (Eaton), Seismic Kit (Eaton), Power Module (Eaton), FD4175ELA02SS22, FD3110L, JGE3125FAGC Breakers (Eaton), MBS Switch (Sontheimer), Static Switch (Eaton), Contactor (Eaton), Batteries (CSB)								
UUT PROPERTIES								
Weight (lb)	Test Report & EUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
2178	T71589 UUT 4	35	74.0	30.0	42.0	13.0	7.8	> 33
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.39	1	1.5	3.82	2.87	1.60	0.64
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes ¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 12b: UUT-4



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 4)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PA05D6029L00R1

Mounting Description:
 The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

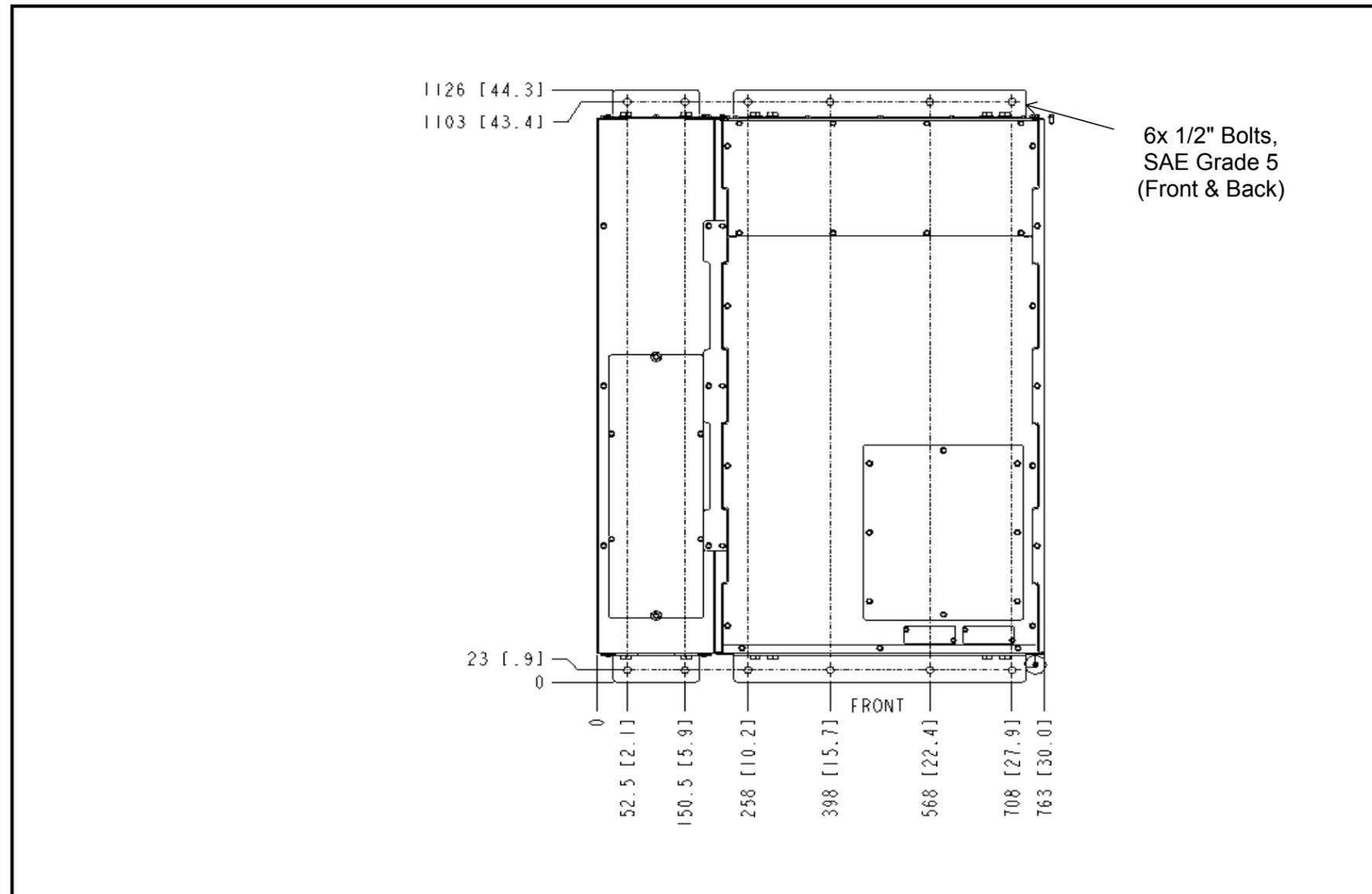


TABLE 13a: UUT-5				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 5)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PZMAA000000010						
Product Construction Summary:		50kVA External Redundant IAC-T, 2 Bkr						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), FD3080 Breakers (Eaton)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
404	T71589 UUT 5	36	74.0	19.7	42.0	9.0	7.9	24
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 13b: UUT-5



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 5)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZMAA000000010

Mounting Description:
 The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

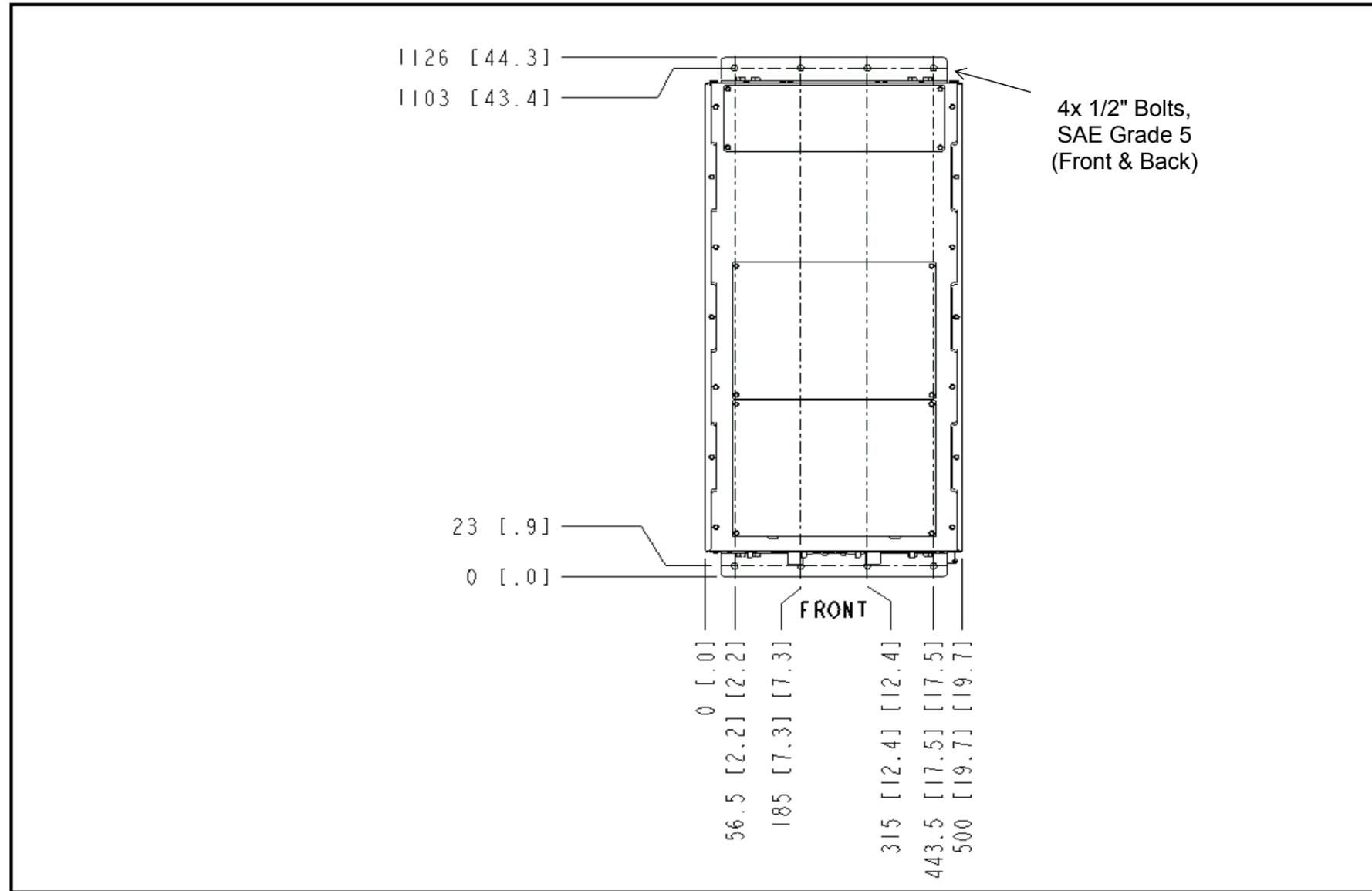


TABLE 14a: UUT-6				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 6)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PZMDF200000010						
Product Construction Summary:		200kVA External Capacity IAC-T, 4 Bkr + MIS, MBP						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), LGE3300FAW, NGS312032MC Breakers (Eaton)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
726	T71589 UUT 6	36	74.0	19.7	42.0	9.5	5.5	> 33
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes ¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 14b: UUT-6



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 6)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZMDF200000010

Mounting Description:
 The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

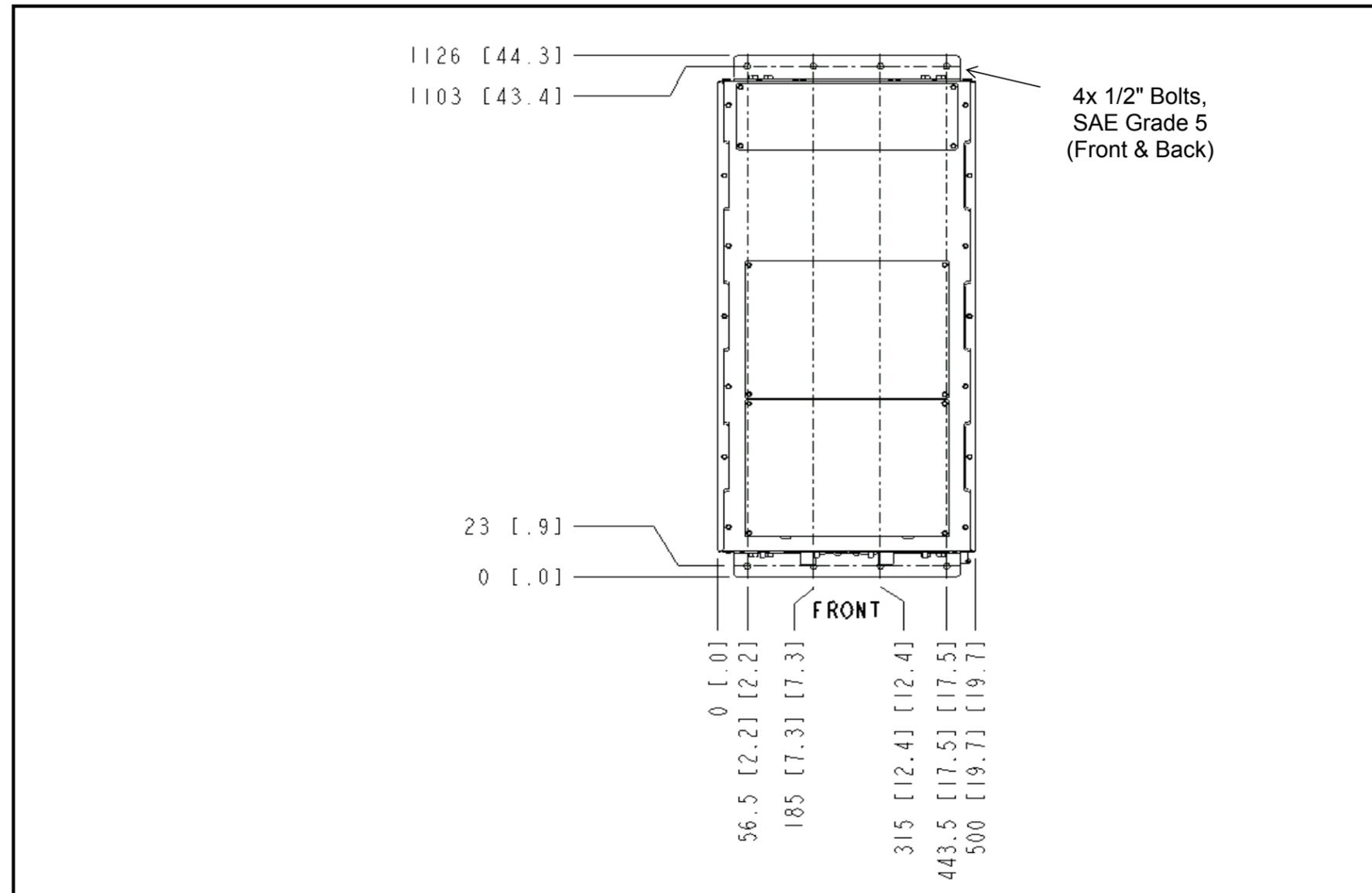


TABLE 15a: UUT-7				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 7)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PZBBAY08013010						
Product Construction Summary:		100kVA IBC-S, Line & Match						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), HKDC3300WA07S49 Breaker (Eaton), Batteries (G.S. Yuasa)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
2246	T71589 UUT 7	32	74.0	19.7	42.0	10.0	5.0	22
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 15b: UUT-7



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 7)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZBBAY08013010

Mounting Description:
 The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

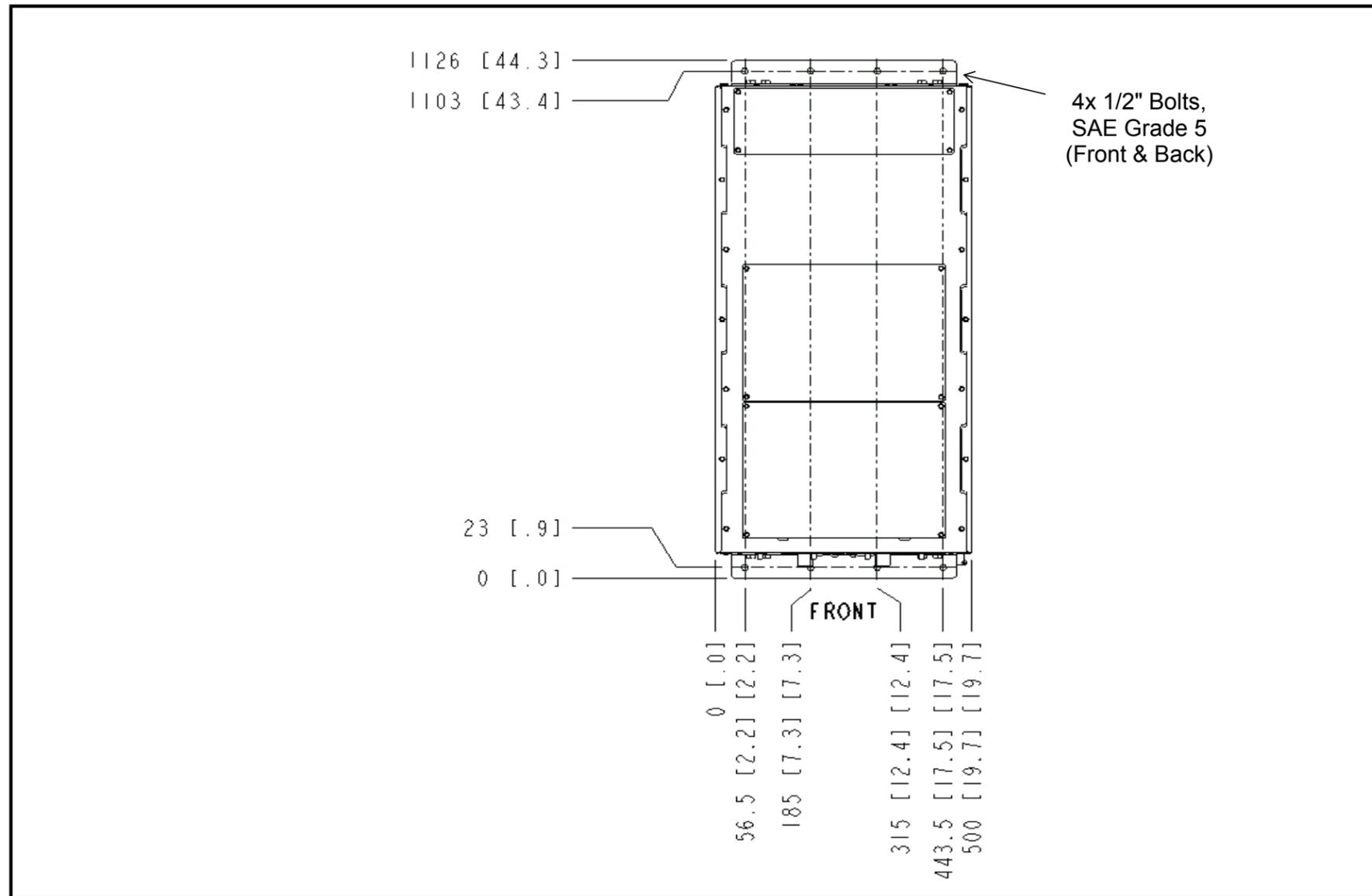


TABLE 16a: UUT-8				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 8)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PZABAE50010010						
Product Construction Summary:		100kVA IBC-L, Line & Match						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), HKDC3300WA07S49 Breaker (Eaton), Batteries (CSB)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
4745	T71589 UUT 8	41	74.0	32.2	42.0	10.0	4.7	21
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 16b: UUT-8



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 8)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZABAE50010010

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

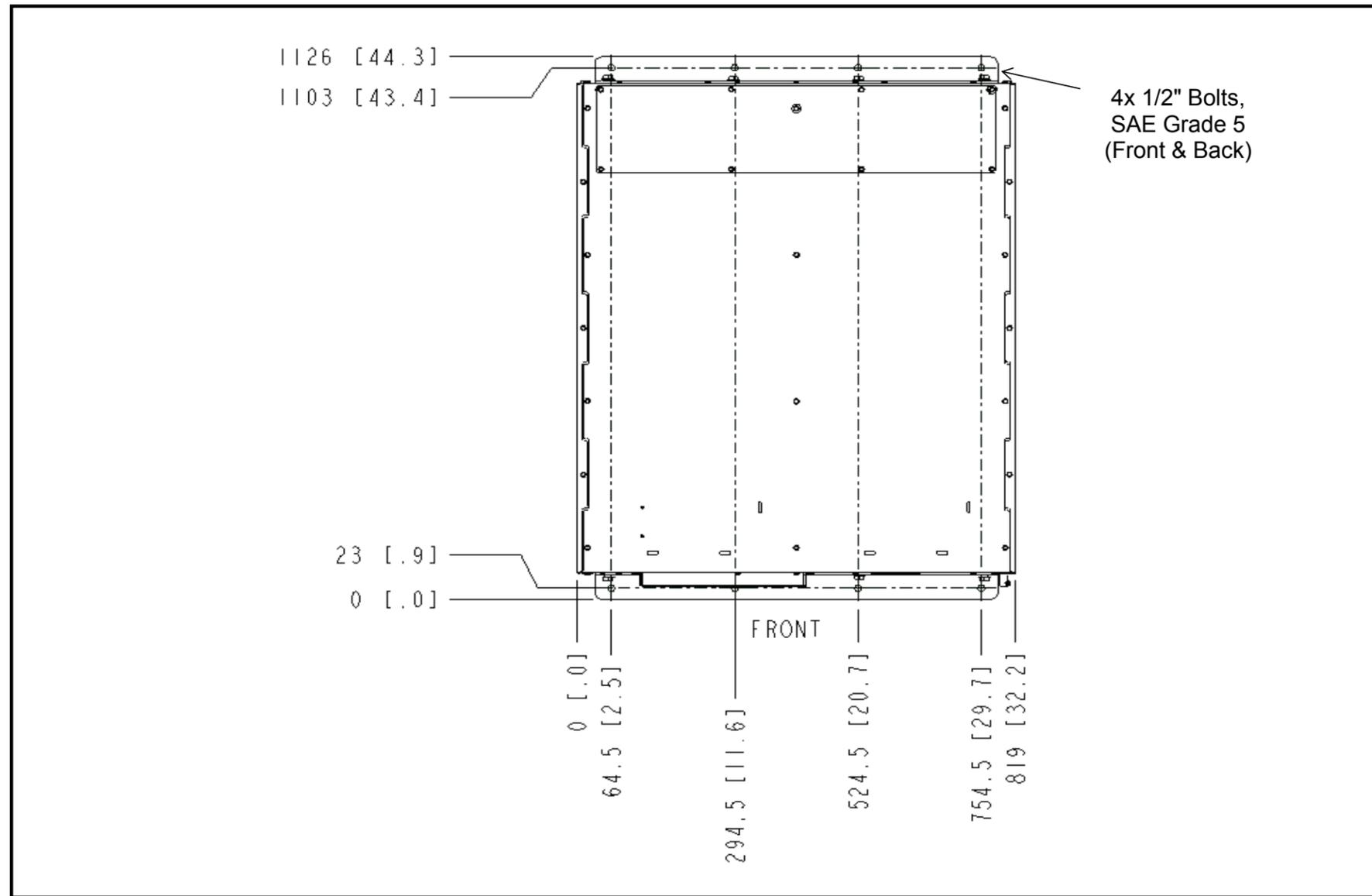


TABLE 17a: UUT-9				 Powering Business Worldwide				
UNIT UNDER TEST (UUT) SUMMARY SHEET								
Test Laboratory:		NTS Laboratories (Test Report #T71589, UUT 9)						
Manufacturer:		Eaton Corporation						
Product Line:		Uninterruptible Power Supplies and Accessories						
Model Line:		93PM						
Model Number:		9PZABAE50L10010						
Product Construction Summary:		100kVA IBC-L, Remote with Left Sidecar						
Options/Component Summary:		Frame (Eaton), Seismic Kit (Eaton), HKDC3300WA07S49 Breaker (Eaton), Batteries (CSB / Northstar / Enersys)						
UUT PROPERTIES								
Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
4841	T71589 UUT 9	41	74.0	40.2	42.0	9.5	5.7	22
Seismic Test Parameters								
Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49
Unit Under Test		UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.						
								
Notes								
¹ Maximum Without Seismic Mounting/Bracing Kit								

TABLE 17b: UUT-9



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 9)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZABAE50L10010

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

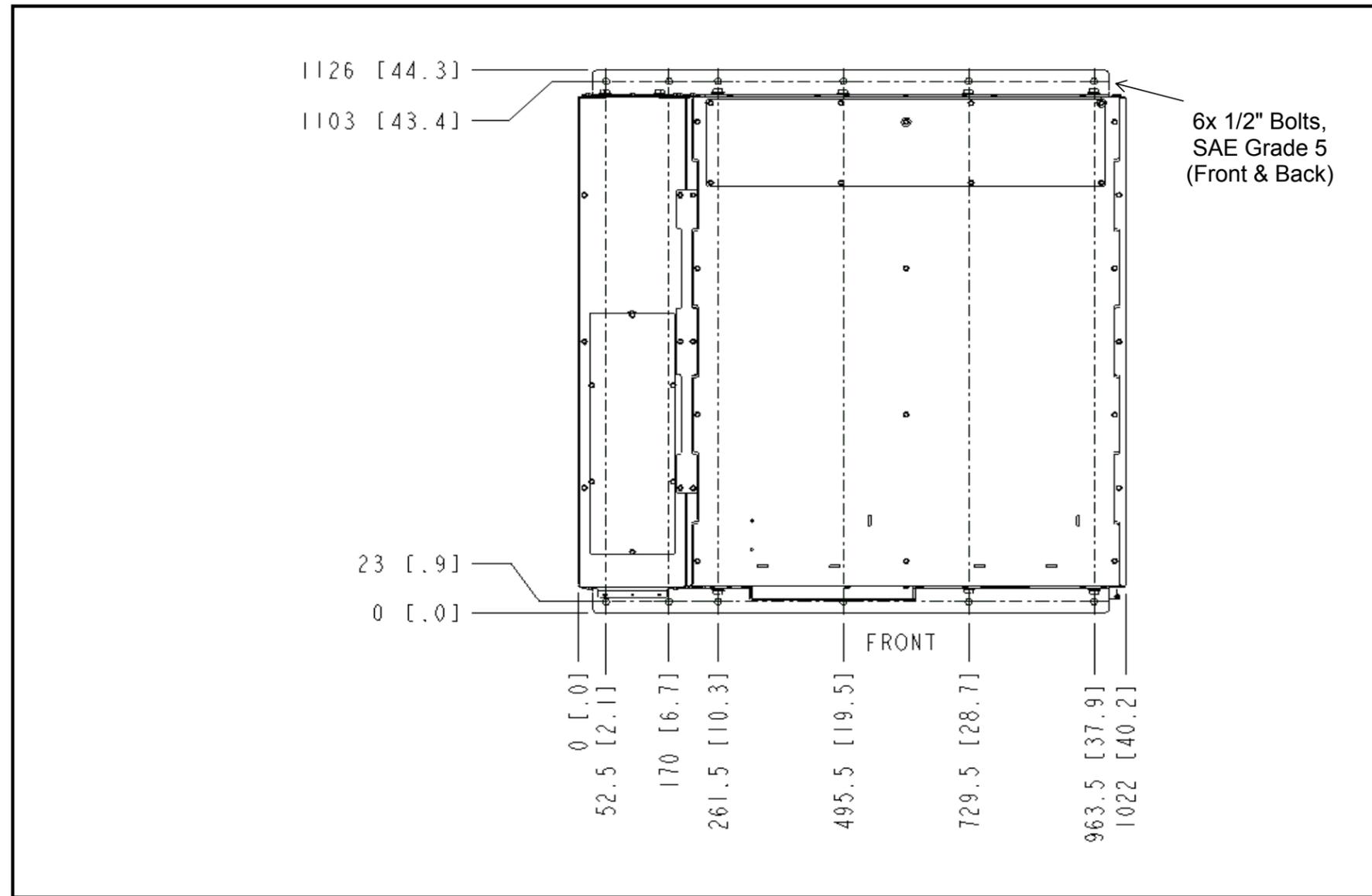


TABLE 18a: UUT-10



UNIT UNDER TEST (UUT) SUMMARY SHEET

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 10)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZD1H000000011
Product Construction Summary:	50kVA IAC-D, 480 Vin / 208 Vout
Options/Component Summary:	Frame (Eaton), Seismic Kit (Eaton), HFD3080L, HKD3175W Breakers (Eaton), Transformer (Eaton)

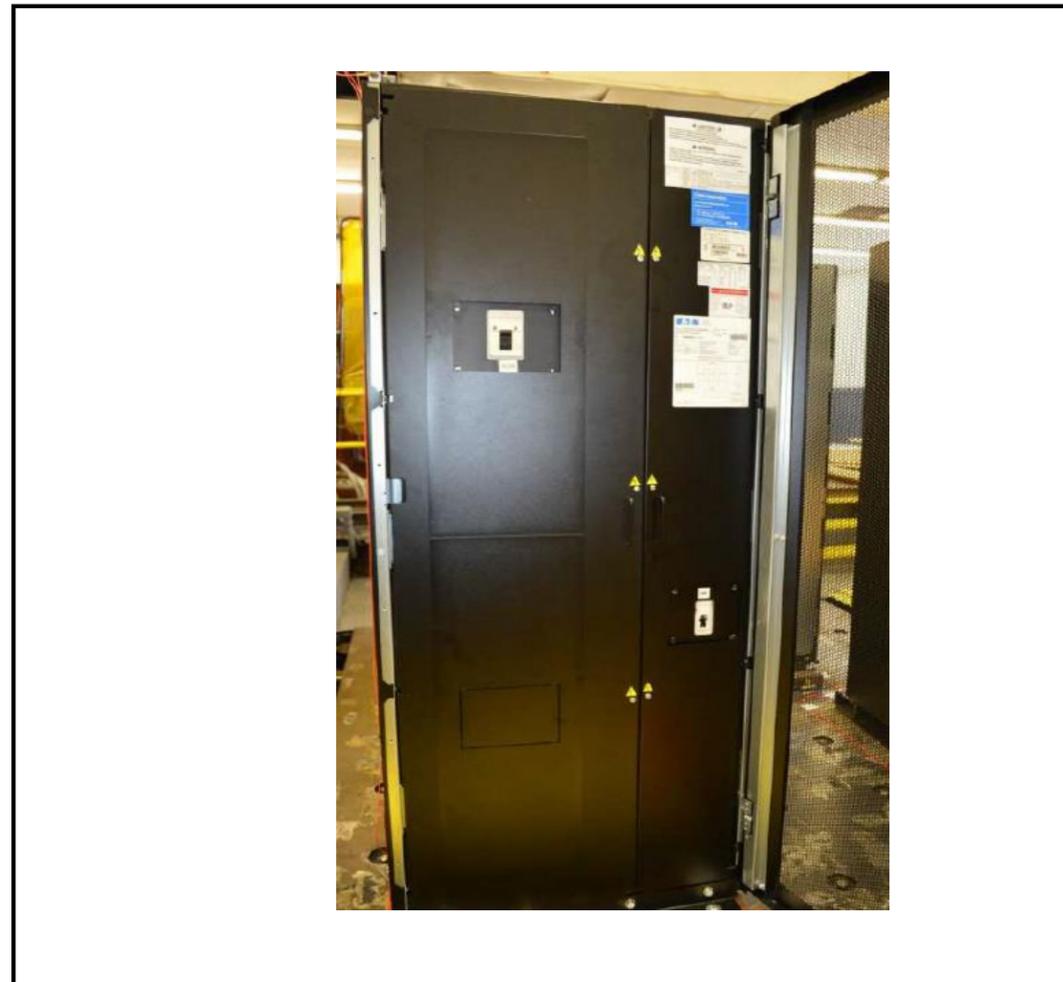
UUT PROPERTIES

Weight (lb)	Test Report & UUT #	Center of Gravity (in.)	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
1105	T71589 UUT 10	34	74.0	31.3	42.0	11.0	7.9	22

Seismic Test Parameters

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49

Unit Under Test UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.



Notes

¹ Maximum Without Seismic Mounting/Bracing Kit

TABLE 18b: UUT-10



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 10)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZD1H000000011

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

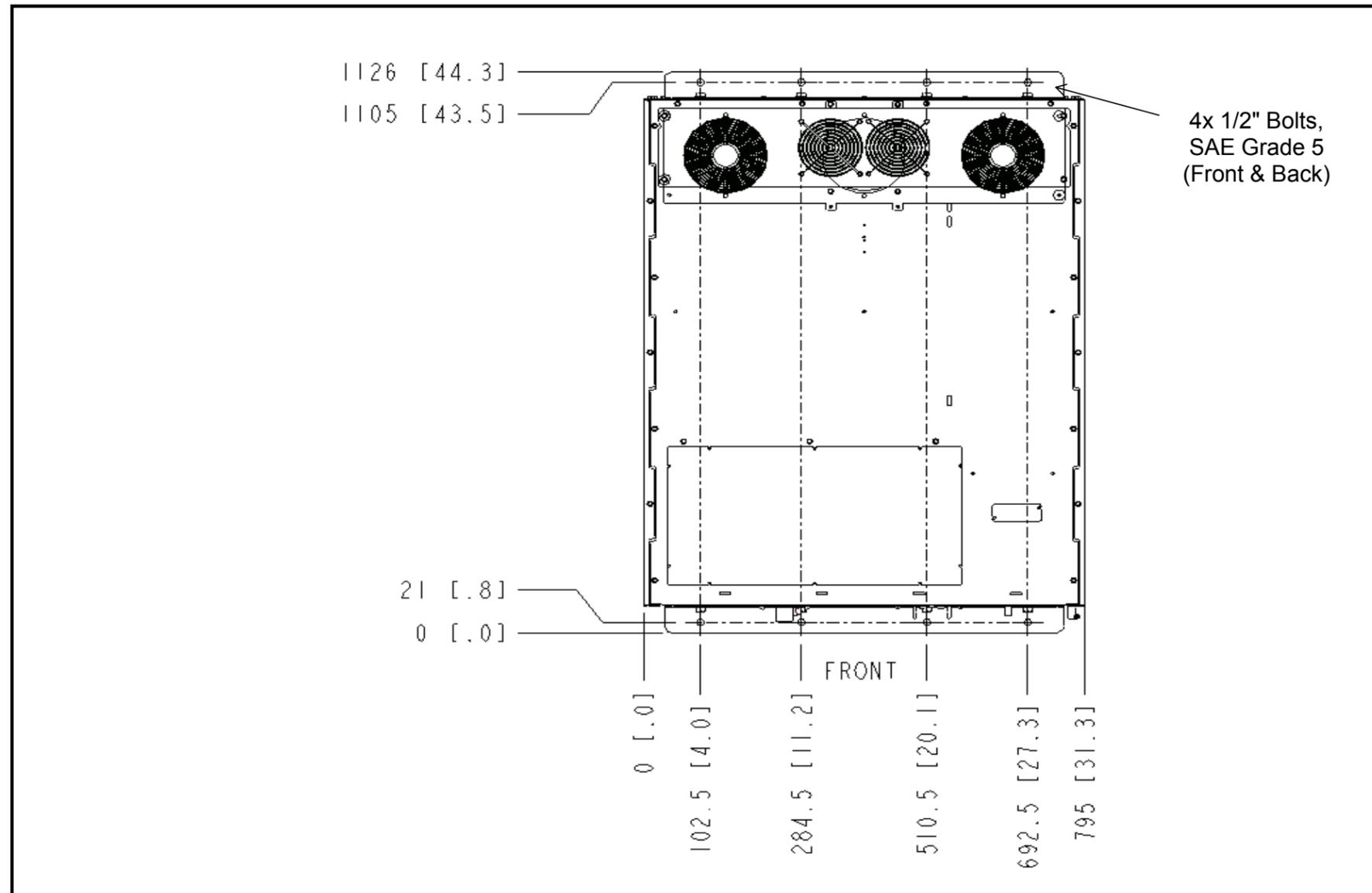


TABLE 19a: UUT-11



UNIT UNDER TEST (UUT) SUMMARY SHEET

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 11)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZG4SBC0001011
Product Construction Summary:	200kVA IAC-D, 480 Vin / 208 Vout
Options/Component Summary:	Frame (Eaton), Seismic Kit (Eaton), FD3225, KD3400F Breakers (Eaton), Transformer (Eaton)

UUT PROPERTIES

Weight (lb)	Test Report & UUT #	Center of Gravity	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
2165	T71589 UUT 11	27	74.0	31.3	42.0	9.5	8.0	22

Seismic Test Parameters

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	1.83	1	1.5	2.93	2.20	1.23	0.49

Unit Under Test UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.



Notes
¹ Maximum Without Seismic Mounting/Bracing Kit

TABLE 19b: UUT-11



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	NTS Laboratories (Test Report #T71589, UUT 11)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZG4SBC0001011

Mounting Description:
The UUT was rigid mounted to steel floor members using the mounting pattern shown below. The steel floor members were welded to the shake table.

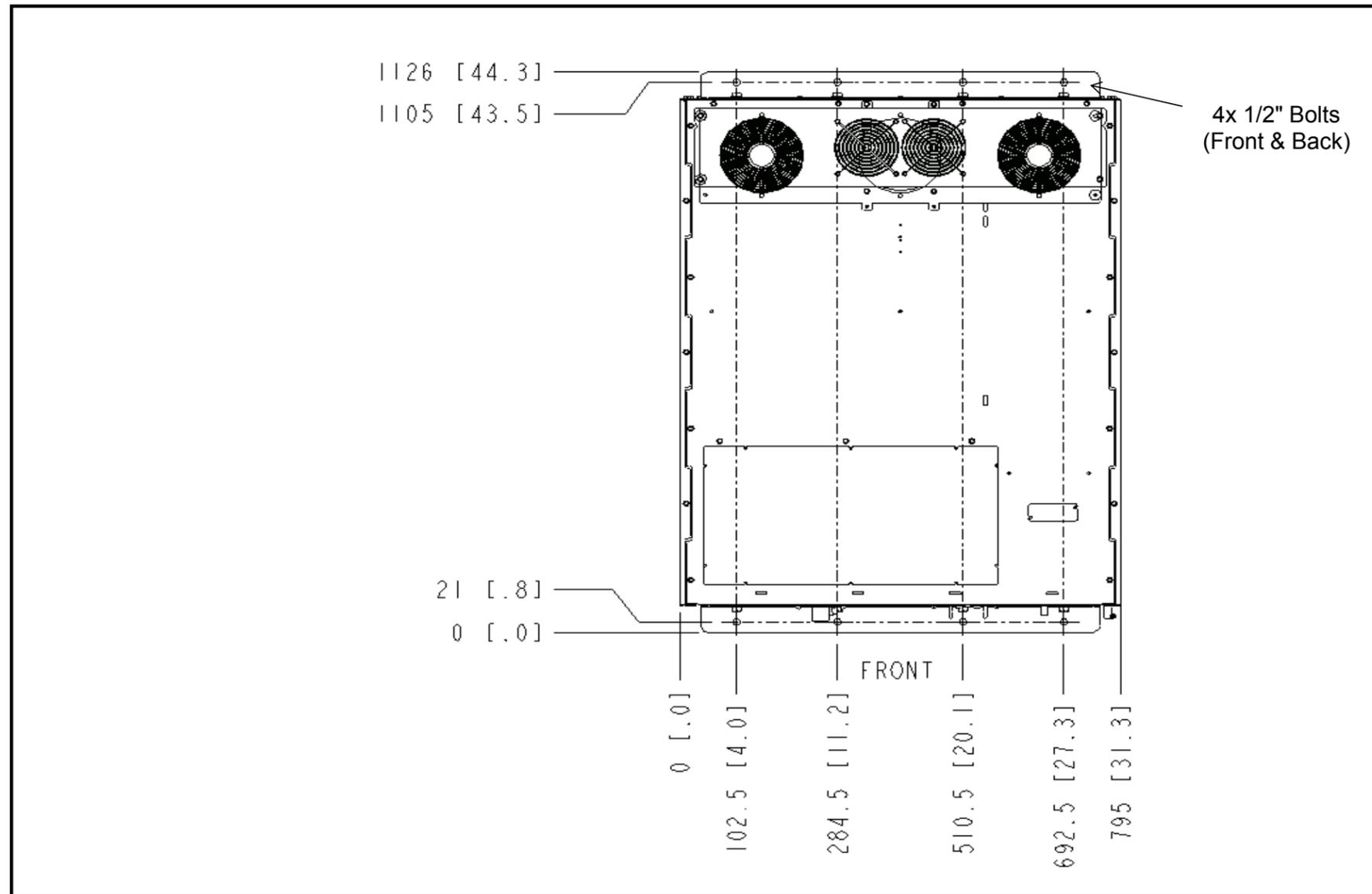


TABLE 20a: UUT-12



UNIT UNDER TEST (UUT) SUMMARY SHEET

Test Laboratory:	Areva Technical Center (Test Report 174-9243708-000, UUT 12)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PV20C0029F20R2
Product Construction Summary:	200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar
Options/Component Summary:	Frame (Eaton), Seismic Kit (Eaton), HKDC3300WA07S49 Breaker (Eaton), Batteries (CSB)

UUT PROPERTIES

Weight (lb)	Test Report & UUT #	Center of Gravity	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
1795	174-9243708-000 UUT 12	41	74.0	32.2	42.0	6.4	5.2	6.2

Seismic Test Parameters

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.29	1	1.5	3.66	2.74	1.53	0.61

Unit Under Test UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.



Notes

¹ Maximum Without Seismic Mounting/Bracing Kit

TABLE 20b: UUT-12



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	Areva Technical Center (Test Report 174-9243708-000, UUT 12)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PV20C0029F20R2

Mounting Description:
 The UUT was rigid mounted to an Aluminum plate using the mounting pattern shown below. The Aluminum plate was rigid mounted to the shake table.

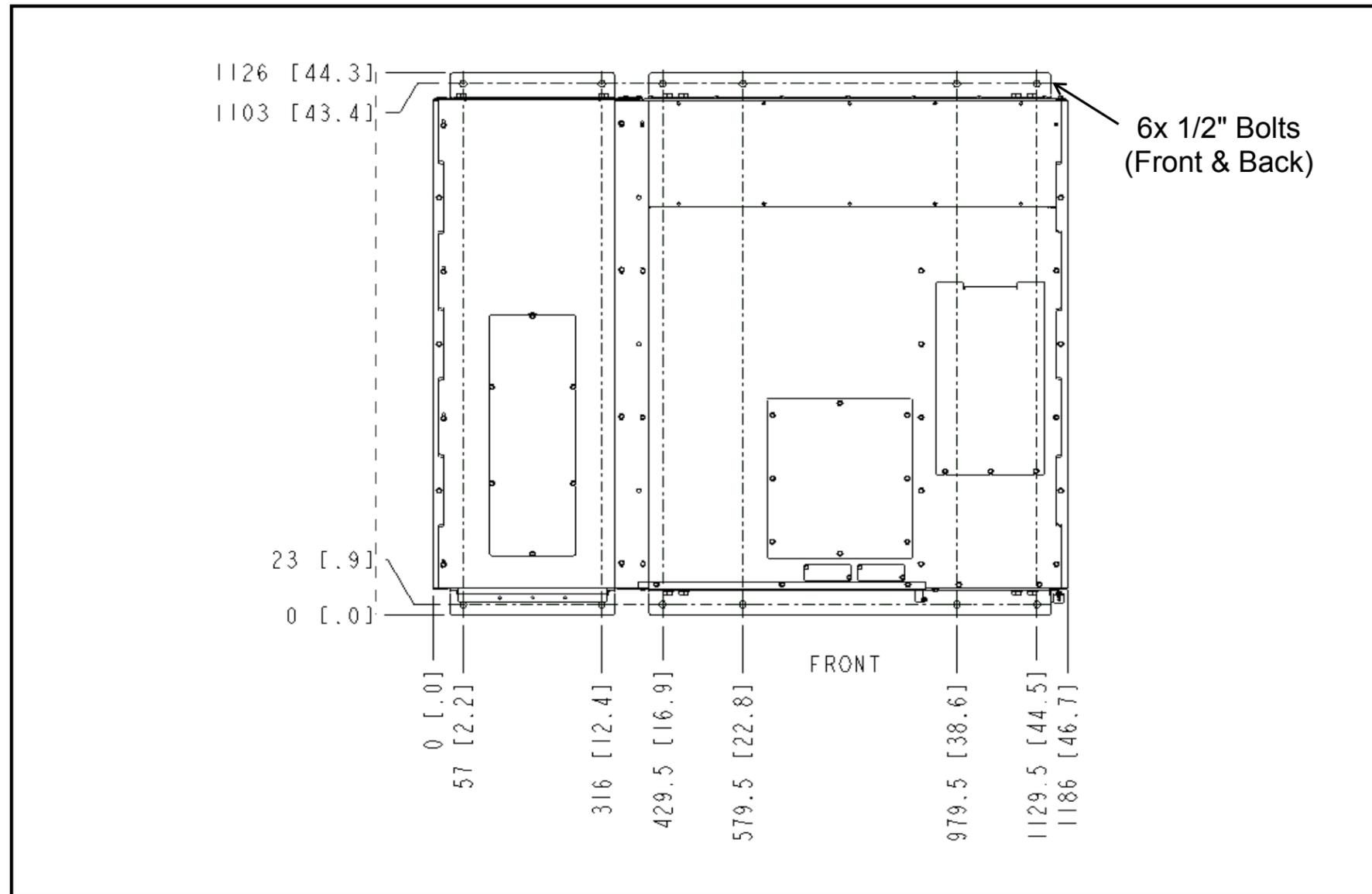


TABLE 21a: UUT-13



UNIT UNDER TEST (UUT) SUMMARY SHEET

Test Laboratory:	Areva Technical Center (Test Report 174-9243708-000, UUT 13)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptible Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZABAE28010010
Product Construction Summary:	100kVA IBC-L, Line and Match, no Sidecar
Options/Component Summary:	Frame (Eaton), Seismic Kit (Eaton), HKDC3300WA07S49 Breaker (Eaton), Batteries (CSB)

UUT PROPERTIES

Weight (lb)	Test Report & UUT #	Center of Gravity	Dimensions (inches) ¹			Lowest Natural Frequency (Hz) +/-		
			Height	Width	Depth	Front-Back	Side-Side	Vertical
3185	174-9243708-000 UUT 13	41	74.0	32.2	42.0	14.6	5.4	> 33

Seismic Test Parameters

Building Code	Test Criteria	S _{DS} (g)	z/h	I _p	A _{FLX-H}	A _{RIG-H}	A _{FLX-V}	A _{RIG-V}
CBC 2013	2012 ICC-ES AC156	2.29	1	1.5	3.66	2.74	1.53	0.61

Unit Under Test UUT, including all components listed in the Component Summary, maintained structural integrity and functionality as confirmed in post test inspection and operation.



Notes

¹ Maximum Without Seismic Mounting/Bracing Kit

TABLE 21b: UUT-13



UNIT UNDER TEST (UUT) MOUNTING DESCRIPTION

Test Laboratory:	Areva Technical Center (Test Report 174-9243708-000, UUT 13)
Manufacturer:	Eaton Corporation
Product Line:	Uninterruptable Power Supplies and Accessories
Model Line:	93PM
Model Number:	9PZABAE28010010

Mounting Description:
The UUT was rigid mounted to an Aluminum plate using the mounting pattern shown below. The Aluminum plate was rigid mounted to the shake table.

