APPLICATION FOR HCAI SPECIAL SEISMIC CERTIFICATION PREAPPROVAL (OSP)

OFFICE USE ONLY

APPLICATION #: OSP-0405

HCAI Special Seismic Certification Preapproval (OSP)

Type: ☐ New ☒ Renewal

Manufacturer Information

Manufacturer: Eaton Corporation

Manufacturer's Technical Representative: Steven Solloway

Mailing Address: 3301 Spring Forest Road, Raleigh, NC 27616

Telephone: (919) 561-3137 Email: stevensolloway@eaton.com

Product Information

Product Name: 93PM and 93PM-L

Product Model Number(s): Varies, see attachment

Product Category: UPS and Batteries

Product Sub-Category: UPS

General Description: 50-400 kVA UPS

Mounting Description: Base Mounted Rigid -

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

Applicant Information

Applicant Company Name: TRU Compliance, by Structural Integrity Associates

Contact Person: Daniel Zentner

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

Telephone: (541) 292-5839 Email: dzentner@structint.com

Title: Program Manager

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

Company Name: STRUCTURAL INTEGRITY ASSOCIATES, INC.

Name: LACHEZAR HANDZHIYSKI California License Number: S6515

Mailing Address: 5215 Hellyer Avenue, Suite 210, San Jose, CA 95138

Telephone: (669) 437-0200 Email: Lhandzhiyski@StructInt.com

Certification Method

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

☐ Other (Please Specify):

Testing Laboratory

Company Name: AREVA TECHNICAL CENTER

Contact Person: Daniel Fort

Mailing Address: 1724 Mount Athos Road, Lynchburg VA 24504

Telephone: (434) 832-3816 Email: Daniel.Fort@AREVA.com

Company Name: CLARK TESTING LABORATORY, INC.

Contact Person: Devon Lohr

Mailing Address: 1801 Route 51, Jefferson Hills PA 15025

Telephone: (412) 387-1026 Email: dlohr@clarktesting.com

Company Name: National Technical Systems - Huntsville (Formerly Wyle)

Contact Person: Greg Mason

Mailing Address: 7800 Highway 20 West, Huntsville AL 35806

Telephone: (256) 837-4411 Email: greg.mason@nts.com

Seismic Parameters

Design Basis of Equipment or Components (F_p/W_p) = 1.32 (z/h = 1); 0.82 (z/h = 0)

S_{DS} (Design spectral response acceleration at short period, g) = 1.83 (z/h = 1); 1.83 (z/h = 0)

a_p (Amplification factor) = 1.0

R_p (Response modification factor) = 2.5

Ω_0 (System overstrength factor) = 2.0

I_p (Importance factor) = 1.5

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

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

HCAI Approval (For Office Use Only) - Approval Expires on 06/25/2030

Date: 6/24/2024

Name: Mohammad Karim Title: Supervisor, Health Facilities

Special Seismic Certification Valid Up to: S_{DS} (g) = 1.83 z/h = 1

Condition of Approval (if applicable):

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

1800524-CR-001-R5

TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM & 93PM-L Uninterruptible Power Supply

TABLE 1

Certified Product Construction Summary:
50kVA - 400 kVA, Carbon Steel Frame and Enclosure.

Certified Options Summary:
See model line numbering pages for the significance of "X";
Dimensions are Maximum Without Seismic Mounting/Bracing Kit; Weights are maximum.

Mounting Configuration:
Base mounted - rigid
Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS}= ***1.83 g z/h=1.0*** S_{DS}= ***1.83 g z/h=0.0*** I_P= ***1.5***

Model Line	Model	Dimensions (in)			Weight (lbs.)	Vertical C.G. (in)		UUT
		Depth	Width	Height				
93PM UPS	9PA05D0220 A01R1	42.0	22.0	74.0	686	40.0		1
	9PXXXXXXXX XXXXX	…	…	…	…	..		Interp.
	9PXXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9PA05D6029 L00R1	42.0	30.0	74.0	2,178	35.0		4
	9PXXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9PXXXXXXXX XXXXX	42.0	37.0	74.0	1,540	39.0		Interp.
	9PXXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9PV20D0029 F20R1	42.0	47.0	74.0	1,774	38.0		2
	9PV20C0029 F20R2	42.0	47.0	74.0	1,795	38.0		12
	9PXXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9P640D0029A00R2	42.0	63.9	74.0	2,628	35.0		15
93PM - L UPS	9GCXXXXXXX XXXXX	42.0	22.0	74.0	570	38.3		Interp.
	9GCXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9GC312A700A02R0	42.0	22.0	74.0	1,604	43.5		16
	9GCXXXXXXX XXXXX	42.0	30.0	74.0	742	37.1		Interp.
	9GCXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9GCXXXXXXX XXXXX	42.0	30.0	74.0	1,765	42.5		Interp.
	9GCXXXXXXX XXXXX	42.0	34.5	74.0	892	37.0		Interp.
	9GCXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9GCXXXXXXX XXXXX	42.0	34.5	74.0	1,992	41.9		Interp.
	9GFXXXXXXX XXXXX	42.0	22.0	74.0	702	37.4		Interp.
	9GFXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9GFXXXXXXX XXXXX	42.0	22.0	74.0	1,047	43.9		Interp.
	9GFXXXXXXX XXXXX	42.0	34.5	74.0	940	36.9		Interp.

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

1800524-CR-001-R5

TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM & 93PM-L Uninterruptible Power Supply

TABLE 1

Certified Product Construction Summary:

50kVA - 400 kVA, Carbon Steel Frame and Enclosure.

Certified Options Summary:

See model line numbering pages for the significance of "X";
Dimensions are Maximum Without Seismic Mounting/Bracing Kit; Weights are maximum.

Mounting Configuration:

Base mounted - rigid

Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS}= ***1.83 g*** ***z/h=1.0*** S_{DS}= ***1.83 g*** ***z/h=0.0*** I_P= ***1.5***

Model Line	Model	Dimensions (in)			Weight (lbs.)	Vertical C.G. (in)		UUT
		Depth	Width	Height				
93PM - L UPS	9GFXXXXXXX XXXXX	…	…	…	…	…		Interp.
	9GFXXXXXXX XXXXX	42.0	34.5	74.0	1,577	40.6		Interp.
	9GHXXXXXXX AXXXX	42.0	34.5	74.0	933	36.4		Interp.
	9GHXXXXXXX AXXXX	…	…	…	…	…		Interp.
	9GHXXXXXXX AXXXX	42.0	34.5	74.0	1,416	40.7		Interp.
	9GKXXXXXXX AXXXX	42.0	43.3	74.0	1,064	35.7		Interp.
	9GKXXXXXXX AXXXX	…	…	…	…	…		Interp.
	9GK040A000A02R0	42.0	43.3	74.0	1,722	38.1		17

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Manufacturer: Eaton Corporation ***Model Line:*** 93PM & 93PM-L Uninterruptible Power Supply		**TABLE 1.1**
Columns 1 & 2	Model Line	~~9M = 93PM 0.8 pf~~
		~~9N = 93PM 0.9 pf~~
		9P = 93PM 1.0 pf
Column 3	Base Model	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)
		0 = 93PM-400 Capacity Frame, 2 UPM
		1 = 93PM-400 Capacity Frame, 3 UPM
		2 = 93PM-400 Capacity Frame, 4 UPM
		3 = 93PM-400 Capacity Frame, 5 UPM
		4 = 93PM-400 Capacity Frame, 6 UPM
		5 = 93PM-400 Capacity Frame, 7 UPM
		6 = 93PM-400 Capacity Frame, 8 UPM
Columns 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

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CERTIFIED COMPONENT MATRIX

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Manufacturer: Eaton Corporation ***Model Line:*** 93PM & 93PM-L Uninterruptible Power Supply		**TABLE 1.1**
Columns 4 & 5 (continued)	UPS kVA Rating	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
		25 = 250 kVA
		30 = 300 kVA
		35 = 350 kVA
		40 = 400 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)
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)
		~~E = With External Separate Battery (per UPM)~~
		~~F = With Internal Batteries (4 strings), type 9Ah LL~~

SPECIAL SEISMIC CERTIFICATION
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TRU COMPLIANCE

Manufacturer: Eaton Corporation ***Model Line:*** 93PM & 93PM-L Uninterruptible Power Supply		**TABLE 1.1**
Column 7	Internal Batteries	~~G = With Internal Batteries (5 strings), type 9Ah LL~~
		~~H = With Internal Batteries (6 strings), type 9Ah LL~~
		~~J = With Internal Batteries (4 strings), type 9Ah LL~~
		K = With Internal Batteries And Thermal Sensor (3 strings), type 9Ah
		L = With Internal Batteries And Thermal Sensor (4 strings), type 9Ah
		M = With Internal Batteries And Thermal Sensor (4 strings), type 9Ah
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)

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TRU COMPLIANCE

Manufacturer: Eaton Corporation ***Model Line:*** 93PM & 93PM-L Uninterruptible Power Supply		**TABLE 1.1**
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[1]	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~~
		4 = With Dress Skins, Top Air Exhaust, Sidecar Ship Separate
		5 = With Dress Skins, Rear Air Exhaust, Sidecar Ship Separate
Column 14	Factory Location[2]	R = Raleigh, NC
		F = FAA
		M = Healthcare
		L = UL 924
		A = UL 924a
		P = Power Conditioner (RPO)
		C = Frequency Converter (RPO)
Column 15	Generation Code	0 = Initial Release
		1 = ESS
		2 = 50KW STS W/Contactors
		3-9=Future Product Generation Codes

Notes:

1. *Option 4 and 5 denotes whether the unit is built on site or at factory. Sidecar is attached at site if building doors will not accommodate size of fully constructed unit.*

2. *Based on runtime only*

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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TABLE 1.2

Manufacturer:	Eaton Corporation	
Model Line:	93PM & 93PM-L Uninterruptible Power Supply	
Columns 1 & 2	Model Line	9G = 93PM-L (208V)
Column 3 & 4	Model-UPM Count	C1= 93PM-L 60 Capacity Frame, 1UPM
		C2= 93PM-L 60 Capacity Frame, 2UPM
		C3= 93PM-L 60 Capacity Frame, 3UPM
		F1= 93PM-L 120 Capacity Frame, 1UPM
		F2= 93PM-L 120 Capacity Frame, 2UPM
		F3= 93PM-L 120 Capacity Frame, 3UPM
		F4= 93PM-L 120 Capacity Frame, 4UPM
		F5= 93PM-L 120 Capacity Frame, 5UPM
		F6= 93PM-L 120 Capacity Frame, 6UPM
		H1= 93PM-L 160 Capacity Frame, 1UPM
		H2= 93PM-L 160 Capacity Frame, 2UPM
		H3= 93PM-L 160 Capacity Frame, 3UPM
		H4= 93PM-L 160 Capacity Frame, 4UPM
		H5= 93PM-L 160 Capacity Frame, 5UPM
		H6= 93PM-L 160 Capacity Frame, 6UPM
		H7= 93PM-L 160 Capacity Frame, 7UPM
		H8= 93PM-L 160 Capacity Frame, 8UPM
		K1= 93PM-L 200 Capacity Frame, 1UPM
		K2= 93PM-L 200 Capacity Frame, 2UPM
		K3= 93PM-L 200 Capacity Frame, 3UPM
		K4= 93PM-L 200 Capacity Frame, 4UPM
		K5= 93PM-L 200 Capacity Frame, 5UPM
		K6= 93PM-L 200 Capacity Frame, 6UPM
		K7= 93PM-L 200 Capacity Frame, 7UPM
		K8= 93PM-L 200 Capacity Frame, 8UPM
		K9= 93PM-L 200 Capacity Frame, 9UPM
		K0= 93PM-L 200 Capacity Frame, 10UPM
		9C= No UPS(sidecar only) 60kVA frame, CTO5/6=12
		9K= No UPS(sidecar only) 120kVA frame, CTO5/6=24

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TABLE 1.2

Manufacturer:	Eaton Corporation	
Model Line:	93PM & 93PM-L Uninterruptible Power Supply	
Columns 5 & 6	UPS kVA Rating	02 = 10 kVA
		03 = 15 kVA
		04 = 20 kVA
		05 = 25 kVA
		06 = 30 kVA
		07 = 35 kVA
		08 = 40 kVA
		09 = 45 kVA
		10 = 50 kVA
		11 = 55 kVA
		12 = 60 kVA
		13 = 65 kVA
		14 = 70 kVA
		15 = 75 kVA
		16 = 80 kVA
		17 = 85 kVA
		18 = 90kVA
		19 = 95 kVA
		20 = 100 kVA
		21 = 105 kVA
		22 = 110 kVA
		23 = 115 kVA
		24 = 120 kVA
		25 = 125 kVA
		26 = 130 kVA
		27 = 135 kVA
		28 = 140 kVA
		29 = 145 kVA
		30 = 150 kVA
		31 = 155 kVA
		32 = 160 kVA
		33 = 165 kVA
		34 = 170 kVA
		35 = 175 kVA
		36 = 180 kVA
		37 = 185 kVA
		38 = 190 kVA
		39 = 195 kVA
		40 = 200 kVA

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CERTIFIED COMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer: Eaton Corporation ***Model Line:*** 93PM & 93PM-L Uninterruptible Power Supply		**TABLE 1.2**
Column 7	Voltage Configuration	A = Single Input 208/220V, 50/60 Hz; Output 208/220V, 1.0 p.f., 50/60Hz
		B = Dual Input 208/220V, 50/60 Hz; Output 208/220V, 1.0 p.f., 50/60Hz
Column 8	Internal Batteries	0 = No Internal Batteries; No Battery Breaker
		2 = With Internal Batteries, 2 strings
		3 = With Internal Batteries, 3 strings
		4 = With Internal Batteries, 4 strings
		5 = 2 Strings & Thermal Sensors
		6 = 3 Strings & Thermal Sensors
		7 = 4 Strings & Thermal Sensors
		8 = 2 Strings (Batteries Not Supplied)
		9 = 3 Strings (Batteries Not Supplied)
		A= 4 Strings (Batteries Not Supplied)
Column 9	Efficiency Options	0= No ESS
		1 =
		2 = ESS
Column 10	Connectivity Slots	0 = None
		1 = Environmental Monitoring Probe
		2 = PXGMS and IRC
		3 = EMP and IRC
		4 =
		5 = Power Xpert Gateway Mini-Slot
		6 =
		7 = PXGMS and EMP
		8 = Industrial Relay Card (IRC)
		9 = PXGMS, IRC and EMP
Column 11	Sidecar/Wireway Options	A = None
		B = Left Top Entry Sidecar, No Breakers
		C = Right Top Entry Sidecar, No Breakers
		D = Left MBS, 2 Breakers, MIS/MBP
		E = Left MBS, 3 Breakers, BIB/MIS/MBP
		F = Left MBS, 4 Breakers, RIB/BIB/MIS/MBP
		G = Right MBS, 2 Breakers, MIS/MBP
		H = 3 Breaker, Right Mount (MBS)
		J = Right MBS, 4 Breakers, RIB/BIB/MIS/MBP
		L = Wireway Ship Separate
Column 12	Sidecar Breaker	0 = No Specification
		1 = STD kAIC, Enhanced Monitoring (all breakers monitored)
		2 = STD kAIC, MBP/BIB Terminal Block monitored

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TABLE 1.2

Manufacturer:	Eaton Corporation	
Model Line:	93PM & 93PM-L Uninterruptible Power Supply	
Column 13	Environmental Options	0 = Top Exhaust
		1 = Rear Exhaust
		2 = Top Exhaust, OSHPD
		3 = Rear Exhaust, OSHPD
		4 = Top Exhaust, Conformal Coating
		5 = Rear Exhaust, Conformal Coating
		6 = Top Exhaust, OSHPD, Conformal Coating
		7 = Rear Exhaust, OSHPD, Conformal Coating
Column 14	Application Options	R = Standard (RPO)
		F = FAA
		M = Healthcare
		L = UL 924
		A = UL 924A
		C = Frequency Converter
		P = Power Converter
Column 15	Generation Code	0 = Initial Release
		1-9 = Future Product Generation Codes

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM IAC

TABLE 2

Certified Product Construction Summary:

50 kVA- 200 kVA; Carbon Steel Frame and Enclosure.

Certified Options Summary:

See model line numbering pages for the significance of 'X";
Dimensions are maximum without seismic mounting/bracket kit; weights are maximum.

Mounting Configuration:

Base mounted - rigid

Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS}= ***1.83 g*** ***z/h=1.0*** S_{DS}= ***1.83 g*** ***z/h=0.0*** I_P= ***1.5***

Model Line	Model	Dimensions (in)			Weight (lbs.)	Vertical C.G. (in)		UUT
		Depth	Width	Height				
93PM IAC	9PZMA A000000010	42.0	20.0	74.0	404	36.0		5
	9PZMX XXXXXXXX1X	…	…	…	…	…		Interp.
	9PZMD F200000010	42.0	20.0	74.0	726	36.0		6
	9PZMX XXXXXXXX1X	…	…	…	…	…		Interp.
	9PZRX XXXXXXXX1X	42.0	20.0	74.0	1,034	…		Interp.
	9PZRA AXXXXXXX1X	42.0	31.0	74.0	674	33.7		Interp.
	9PZRX XXXXXXXX1X	…	…	…	…	…		Interp.
	9PZRD CXXXXXXX1X	42.0	31.0	74.0	1,035	36.2		Interp.
	9PZSX XXXXXXXX1X	42.0	31.0	74.0	722	…		Interp.
	9PZXX XXXXXXXX1X	…	…	…	…	…		Interp.
	9PZD1 H000000011	42.0	31.0	74.0	1,105	34.0		10
	9PZXX XXXXXXXX1X	…	…	…	…	…		Interp.
	9PZG4 SBC0001011	42.0	31.0	74.0	2,165	27.0		11

SPECIAL SEISMIC CERTIFICATION
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Manufacturer: Eaton Corporation		IAC-T Model Line Numbering	**TABLE 2.1**
Model Line: 93PM Integrated Accessory Cabinet (IAC)			
Columns 1 - 3	Model Line	9PZ = 93PM Accessories	
Column 4	Accessory	M = IAC-T	
Column 5	Associated UPS Model	A = 50 kW	
		B = 100 kW	
		C = 150 kW	
		D = 200 kW	
Column 6	UPS Configuration	A = 1+1	
		B = 2+0	
		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	

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CERTIFIED COMPONENT MATRIX

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Manufacturer: Eaton Corporation IAC-D Model Line Numbering ***Model Line:*** 93PM Integrated Accessory Cabinet (IAC)		**TABLE 2.2**
Columns 1-3	Model line	9PZ = 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

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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Manufacturer: Eaton Corporation ***Model Line:*** 93PM Integrated Accessory Cabinet (IAC)		IAC-D Model Line Numbering	**TABLE 2.2**
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	

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer:	Eaton Corporation	IAC-B Model Line Numbering	**TABLE 2.3**
Model Line:	93PM Integrated Accessory Cabinet (IAC)		

Columns 1-3	Model line	9PZ = 93PM Accessories
Column 4	Accessory	R = IAC-B
Column 5	Associated UPS Model	A = 60 kW IAC-B 208/208V
		B = 120 kW IAC-B 208/208V
		C = 160 kW IAC-B 208/208V
		D = 200 kW IAC-B 208/208V
		E = 400 KW IAC-BD 480/480V
Column 6	Breaker Configuration	A = 2-Breaker 65 KAIC (MBP/MIS)
		B = 3-Breaker 65 KAIC (MBP/MIS/BIB)
		C = 4-Breaker 65 KAIC (MBP/MIS/BIB/RIB) Single Input
		D = 4-Breaker 65 KAIC (MBP/MIS/BIB/RIB) Dual Input
Column 7	Key/Interlock	1 = Key Interlock
		2 = Interlock Bracket
Column 8	Open	0 = None
Column 9	Open	0 = None
Column 10	Exhuast Configuration	0 = Top Exhaust
		1 = Rear Exhaust (208V only)
Column 11	Installation Configuration	0 = N/A (400 kVA only)
		1 = Right Side Install (208V only)
		2 =Left Side Install (208V only)
Column 12	Open	0 = None
Column 13	Line & Match/Remote Installation	0 = Line and Match (Required for 160 & 200 kVA)
		1 = Remote
Column 14	Structural Configuration	0 = Standard
		1 = OSHPD
Column 15	Generation Code	0 - 9 = Product Generation Codes

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SPECIAL SEISMIC CERTIFICATION
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TRU COMPLIANCE

Manufacturer: Eaton Corporation	IAC-BD Model Line Numbering	**TABLE 2.4**
Model Line: 93PM Integrated Accessory Cabinet (IAC)		

Columns 1-3	Model line	9PZ = 93PM Accessories
Column 4	Accessory	S = IAC-BD
Column 5	Associated UPS Model	E = 400 kW IAC-BD 480/480V
Column 6	Breaker Configuration	A = 2-Breaker 65 KAIC (MBP/MIS)
		B = 3-Breaker 65 KAIC (MBP/MIS/BIB)
Column 7	Breaker Interlock	1 = Key Interlock
		2 = Interlock Bracket
Column 8	Distribution	2 = 2 Subfeed Breakers
		3 = 3 Subfeed Breakers
		4 = 4 Subfeed Breakers
Column 9	Metering	0 = No Metering
		1 = Metering
Column 10	Exhaust Configuration	0 = Top Exhaust
		1 = Rear Exhaust
Column 11	Open	0 = None
Column 12	Open	0 = None
Column 13	Line & Match/ Remote Installation	0 = Line and Match
		1 = Remote Installation
Column 14	Structural Configuration	0 = Standard
		1 = OSHPD
Column 15	Generation Code	0 - 9 = Product Generation Codes

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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Manufacturer: Eaton Corporation ***Model Line:*** 93PM Integrated Accessory Cabinet (IAC)		IAC-PD Model Line Numbering	**TABLE 2.5**
Columns 1-3	Model line	9PZ = 93PM Accessories	
Column 4	Accessory	X = IAC-PD	
Column 5	Associated UPS Model or Distribution Cabinet	A = 60 kVA 93PM-L-60, 208V	
		B = 120 kVA 93PM-L-120, 208V	
		C = 160 kVA 93PM-L-160, 208V	
		D = 200 kVA 93PM-L-200, 208V	
		E = 50 kVA 93PM 50, 480V	
		F = 100 kVA 93PM 100, 480V	
		G = 150 kVA 93PM 150, 480V	
		H = 200 kVA 93PM 200, 480V	
		J = 400 kVA 93PM 400, 480V	
		K = 208V 250A IAC-D Subfeed Breaker	
		L = 50 kVA IAC-D (208V) W/no Distribution Option	
		M = 100 kVA IAC-D (208V) W/no Distribution Option	
		N = 150 kVA IAC-D (208V) W/no Distribution Option	
		P = 200 kVA IAC-D (208V) W/no Distribution Option	
		R = 480V 250A IAC-BD Subfeed Breaker	
Column 6	Input Voltage	2 = 208Y/120V 4-Wire	
		4 = 480Y/277V 4-Wire	
		5 = 480V 3-Wire	
Column 7	Distribution Top	0 = No Distribution	
		B = 225A Panel Board (208/120V)	
		C = 400A Panel Board (208/120V)	
		D = 225A Panel Board (480/277V)	
		1 = 1 Subfeed Breaker (250A)	
		2 = 2 Subfeed Breakers (250A)	
		3 = 3 Subfeed Breakers (250A)	
		4 = 1 Subfeed Breaker (400A)	
		5 = 2 Subfeed Breakers (400A)	
Column 8	Distribution Bottom	B = 225A Panel Board (208/120V)	
		C = 400A Panel Board (208/120V)	
		D = 225A Panel Board (480/277V)	
		4 = 1 Subfeed Breaker (400A)	
		5 = 2 Subfeed Breakers (400A)	
Column 9	Open	0 = None	
Column 10	Branch Metering	0 = None	
		1 = BCMS	
Column 11	Cabinet Configuration	0 = Top Exhaust	
		1 = Rear exhaust	

SPECIAL SEISMIC CERTIFICATION
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Manufacturer: Eaton Corporation		IAC-PD Model Line Numbering	**TABLE 2.5**
Model Line: 93PM Integrated Accessory Cabinet (IAC)			
Column 12	Open	0 = None	
Column 13	Line & Match/ Remote Installation	0 = Line and Match	
		1 = Remote Installation	
Column 14	Structural Configuration	0 = Standard	
		1 = OSHPD	
Column 15	Generation Code	0 - 9 = Product Generation Codes	

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM IBC

TABLE 3

Certified Product Construction Summary:

50 kVA- 200 kVA; Carbon Steel Frame and Enclosure.

Certified Options Summary:

See model line numbering pages for the significance of 'X";
Dimensions are maximum without seismic mounting/bracket kit; weights are maximum.

Mounting Configuration:

Base mounted - rigid

Note: Installed mounting must be of similar configuration and equivalent strength and stiffness to those tested.

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS}= ***1.83 g*** ***z/h=1.0*** S_{DS}= ***1.83 g*** ***z/h=0.0*** I_P= ***1.5***

Model Line	Model	Dimensions (in)			Weight (lbs.)	Vertical C.G. (in)		UUT
		Depth	Width	Height				
93PM IBC	9PZXXXXXX XXXXXX	42.0	20.0	74.0	…	…		Extrap.
	9PZBBAY08 013010	42.0	20.0	74.0	2,246	32.0		7
	9PZXXXXXX XXXXXX	42.0	20.0	74.0	…	…		Interp.
	9PZABAE28 010010	42.0	32.0	74.0	3,185	41.0		13
	9PZXXXXXX XXXXXX	42.0	32.0	74.0	…	…		Interp.
	9PZABAE50 110010	42.0	32.0	74.0	4,745	41.0		8
	9PZXXXXXX XXXXXX	42.0	40.0	74.0	…	…		Interp.
	9PZABAE50 L10010	42.0	40.0	74.0	4,841	41.0		9
	9PZXXXXXX XXXXXX	42.0	34.0	74.0	…	…		Interp.
	9PZUDBN54010010	42.0	34.0	74.0	5,082	39.0		14

SPECIAL SEISMIC CERTIFICATION CERTIFIED COMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer: Eaton Corporation ***Model Line:*** 93PM IBC	IBC Model Line Numbering	**TABLE 3.1**
Columns 1-3	Model Line	9PZ = 93PM Accessories
Column 4	Accessory	A = IBC-L
		B = IBC-S
		C = IBC-LH
		T = IBC-LW (300A breaker)
		U = IBC-LHW (500A breaker)
		V = IBC-LW (400A breaker)
		~~W = IBC-SW~~
Column 5	Associated UPS Model	A = 50 kW (93PM)
		B = 100 kW (93PM)
		C = 150 kW (93PM)
		D = 200 kW (93PM)
		E = 400 kW (93PM)
		F = 60 kW (93PM-L)
		G = 120 kW (93PM-L)
		H = 160 kW (93PM-L)
		J = 200 kW (93PM-L)
Column 6	DC Voltage	A = 432 V
		B = 480 V
Columns 7-9	Battery Type[1]	B37 = UPS12-400MR, 1/4 (M6) Lugs
		~~E20 = HRL-12-200 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
		E57 = PWP 12-502, 1/4 (M6) Lugs
		~~E62 = PWHR 12-620, 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, IBC-LW, 1/4 (M6) Lugs
		002 = Empty Tray Assembly IBC-S
		003 = Empty Tray Assembly IBC-LH, IBC-LW (N54), 1/4 (M6) Lugs
		004 = Emptry Tray Assembly IBC-LH, IBC-LW (H41), 3/8 (M10) Lugs
		005 = Empty Tray Assembly IBC-LW (E54/B37/N54), 1/4 (M6) LUGS
		006 = Empty Tray Assembly IBC-LW (H41), 3/8 (M10) Lugs
		007 = Empty tray assy IBC-LH (B37/E54) 1/4 (M6) Lugs

Notes:

1. *001-007 means the unit is shipped without batteries and they are installed ontsite.*

SPECIAL SEISMIC CERTIFICATION
CERTIFIED COMPONENT MATRIX

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Manufacturer: Eaton Corporation ***Model Line:*** 93PM IBC		IBC Model Line Numbering	**TABLE 3.1**
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 (IBC-L/LH only)	
		R = Remote with Right Sidecar for Top Entry (IBC-L/LH only)	
Column 11	Number of Battery Cabinets	1 = 1 Cabinet	
		2 = 2 Cabinets	
		3 = 3 Cabinets	
		4 = 4 Cabinets	
		5 = 5 Cabinets	
		6 = 6 Cabinets	
		7 = 7 Cabinets	
		8 = 8 Cabinets	
Column 12	Number of Battery Strings	0 = Single String	
		2 = 2 Battery Strings (IBC-S only)	
		3 = 3 Battery Strings (IBC-S only)	
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[2]	0 = Standard	
		1 = OSHPD	
		2 = UL924	
		3 = UL924/OSHPD	
Column 15	Generation Code	0 - 9 = Product Generation Codes	

Notes:

1. *001-007 means the unit is shipped without batteries and they are installed ontsite.*

2. *UL certification was completed after first OSP, nothing has changed on the unit.*

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

1800524-CR-001-R5

TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Table Description: Enclosures

TABLE 4

Building Code: CBC 2022
Seismic Certification Limits: S_{DS} = 1.83 g z/h = 1.0; S_{DS} = 1.83 g z/h = 0.0; I_P = 1.5

Model Line (Manufacturer)	Model	Dimension (in)			Weight (lbs.)	Material	Notes	UUT
		Depth	Width	Height				
93PM (Eaton)	93PM Enclosures	42.0	20.0	74.0	366	*93PM SMALL IAC-T / IBC-S FRAME*		5, 6, 7
		42.0	22.0	74.0	392	*93PM STD UPS FRAME*		1
		42.0	31.0	74.0	397	*93PM IAC-D / LARGE IAC-T FRAME*		10, 11
		42.0	32.0	74.0	435	*93PM LARGE UPS FRAME*		Interp.
		42.0	31.3	74.0	520	*93PM-L IAC-B*		Interp.
		42.0	31.3	74.0	540	*93PM IAC-PD*		Interp.
		42.0	30.0	74.0	557	*93PM STD UPS + SMALL SC FRAME*		4
		42.0	37.0	74.0	679	*93PM STD UPS + LARGE SC FRAME*		Interp.
		42.0	47.0	74.0	722	*93PM LARGE UPS + LARGE SC FRAME*		2, 12
		42.0	32.0	74.0	856	*93PM IBC-L FRAME*		8, 13
		42.0	34.0	74.0	828	*93PM Frame Asm, IBC-L Weld*		Interp.
		42.0	40.0	74.0	1,021	*93PM IBC-L + SMALL SC FRAME*		9
		42.0	64.0	74.0	800	*93PM 400 kVA capacity UPS (8UPM)*		15
		42.0	34.0	74.0	993	*93PM IBC-LHW Line & match*		14
		42.0	22.0	74.0	495	*93PM-L 60 kVA Frame*		16
		42.0	30.0	74.0	667	*93PM-L 60 kVA Frame w/ empty SC*		Interp.
		42.0	34.5	74.0	744	*93PM-L 60 kVA Frame w/ MBS SC*		Interp.
		42.0	22.0	74.0	621	*93PM-L 120 kVA Frame*		Interp.
		42.0	34.5	74.0	859	*93PM-L 120 kVA Frame w/ empty SC*		Interp.
		42.0	34.5	74.0	870	*93PM-L 120 kVA Frame w/ MBS SC*		Interp.
		42.0	34.5	74.0	732	*93PM-L 160k VA frame*		Interp.
		42.0	43.3	74.0	859	*93PM-L 200k VA frame*		17

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Table Description: Electrical Components

TABLE 5

Building Code: CBC 2022
Seismic Certification Limits: S_{DS} = 1.83 g z/h = 1.0; S_{DS} = 1.83 g z/h = 0.0; I_P = 1.5

Component Type	Manufacturer	Model	Description	Notes	UUT
Panel Board	Eaton	122950146	*PDU PRL1 225A; Cu*		11
		122950148	*PDU PRL2A 225A; Cu*		Interp.
		122950147	*PDU PRL1 400A; Cu*		11
Power Modules	Eaton	730-05211	*208V-4 Wire 20kW UPM*		16, 17
		733-D2072	*208V-4 Wire 20kW UPM*		Interp.
		730-80505	*480V-3 Wire 50kW UPM*	*New PCB layout, no structural change*	Interp.
		730-B1045	*480V-3 Wire 50kW UPM*		1, 2, 4
		733-82035	*480V-3 Wire 50kW UPM*		Interp.
		744-A4535	*480V-4 Wire 50kW UPM*		Interp.
		730-D0057	*480V-4 Wire 50kW UPM*		12
Static Switches	Eaton	730-D0039	*50kW STS; CS Frame; Al heat sink*		1, 4
		730-B1035	*100kW STS; CS Frame; Al heat sink*		Interp.
		730-D0021	*150kW/200kW STS; CS Frame; Al heat sink*		12
		730-05213	*93PM-L 60 kW STS*		16
		730-05212	*93PM-L 120 kW STS*		Interp.
		730-05214	*93PM-L 200 kW STS*		17
Contactors	Eaton	DILM17-10 (RDC60)	*K5 Contactor (50KW); 1 lb*		1, 4
		DILM115 (RDC60)	*K5 Contactor (100KW); 5 lbs*		Interp.
		DILM185A/22 (RDC60)	*K5 Contactor (150KW); 14 lbs*		Interp.
		DILM250/22 (RDC48)	*K5 Contactor, (200kW); 17 lbs*		12

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

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TRU COMPLIANCE

Manufacturer:	Eaton Corporation	***Table Description:*** Electrical Components	**TABLE 5**
Model Line:	93PM Uninterruptible Power Supply (UPS)		

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS} = 1.83 g z/h = 1.0 I_P = 1.5
S_{DS} = 1.83 g z/h = 0.0

Component Type	Manufacturer	Model	Description	Notes	UUT
Transformers	Eaton	WPV50012	*50 kVA, K1,TP1,480/208 Delta/WYE*		10
		WPN50131	*50 kVA, K13,Non TP1 480/208 Delta/WYE*		Interp.
		WPN50132	*50 kVA, K13,TP1 480/208 Delta/WYE*		Interp.
		WPV12011	*100 kVA, K1, Non TP1,480/208 Delta/WYE*		Interp.
		WPV12012	*100 kVA, K1,TP1,480/208 Delta/WYE*		Interp.
		WPN12132	*100 kVA, K13, TP1 480/208 Delta/WYE*		Interp.
		WPV49011	*K1, Non TP1, 480/208 Delta/WYE*		Interp.
		WPN49131	*K13, Non TP1 480/208 Delta/WYE*		Interp.
		WPV49012	*K1, TP1, 480/208 Delta/WYE*		Interp.
		WPN49132	*K13, TP1 480/208 Delta/WYE*		Interp.
		WPV19011	*K1, Non TP1, 480/208 Delta/WYE*		Interp.
		WPN19131	*K13, Non TP1 480/208 Delta/WYE*		Interp.
		WPV19012	*K1, TP1, 480/208 Delta/WYE*		Interp.
		WPN19132	*K13, TP1 480/208 Delta/WYE*		11

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

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Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Table Description: Batteries

TABLE 6

Building Code: CBC 2022
Seismic Certification Limits: S_{DS} = 1.83 g z/h = 1.0; S_{DS} = 1.83 g z/h = 0.0; I_P = 1.5

Component Type	Manufacturer	Model	Description	Notes	UUT
Batteries	CSB	HR1227WFR	*12V, 27 Watt (5Ah), VRLA; ABS housing; 4.3 lbs*		16
		PWRH1227W2FR	*12V, 27 Watt (5Ah), VRLA; ABS housing; 4.3 lbs*		Interp.
		PWHR1234W2FR	*12V, 34 Watt (9Ah), VRLA; ABS housing; 6 lbs*		4
		HRL1234W2FR	*12V, 34 Watt (9Ah), VRLA; ABS housing; 6 lbs*		Interp.
		HRL12280WFR	*12V, 34 Watt (9Ah), VRLA; ABS housing; 57 lbs*		Interp.
		PWHR12280W4FR	*12V, 34 Watt (9Ah), VRLA; ABS housing; 57 lbs*		13
		HRL12330FR	*12V, 280W; PP housing; 65 lbs*		Interp.
		HRL12390FR	*12V, 390W; PP housing; 73 lbs*		Interp.
		PWHR12390W4FR	*12V, 100 Ah; PP housing; 74 lbs*		Interp.
		XPL5700FR	*12V, 110 Ah, VRLA; PP housing; 82 lbs.*		Interp.
		PWXP12502W4FR	*12V, 110 Ah, VRLA; PP housing; 82 lbs.*		Interp.
		HRL12540WFR	*12 V, 143 Ah; PP housing; 97 lbs*		Interp.
		PWHR12540WFR	*12 V, 143 Ah; PP housing; 97 lbs*		Interp.
		HRL12500W	*12V, 120 Ah; PP housing; 101 lbs*		Interp.
		PWHR12500W4FR	*12 V, 120 Ah; PP housing; 101 lbs*		8, 9
	ENERSYS	12HX300	*12 V, 83 Ah; PP housing; 60 lbs*		13
		12HX330	*12 V, 82 Ah; PP housing; 71 lbs*		Interp.
		0790-6005-C0K00	*12 V, 95 Ah; PP housing; 77 lbs*		9
		12HX400	*12 V, 120 Ah; PP housing; 80 lbs*		Interp.
		12HX505	*12 V, 506 Ah; PP housing; 103 lbs*		Interp.
		12HX540	*12 V, 123 Ah; PP housing; 106 lbs*		Interp.
		12HX500	*12 V, 506 Ah; PP housing; 110 lbs*		13

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

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Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Table Description: Batteries

TABLE 6

Building Code: CBC 2022
Seismic Certification Limits: S_{DS} = 1.83 g z/h = 1.0; S_{DS} = 1.83 g z/h = 0.0; I_P = 1.5

Component Type	Manufacturer	Model	Description	Notes	UUT
Batteries	G.S. YUASA	NPX-80RFR	*12 V, 20 Ah, VRLA; PP housing; 15 lbs*		7
	NORTHSTAR	NSB12540	*12V, 125 Ah; PP housing; 98 lbs*		9, 14
	C&D Dynasty	UPS12-300MR	*12 V, 78 Ah; PP housing; 58 lbs*		13
		UPS12-350MR	*12 V, 93.2 Ah; PP housing; 67 lbs*		Interp.
		UPS12-400MR	*12 V, 100 Ah; PP housing; 80 lbs*		Interp.
		UPS12-490MR	*12 V, 134 Ah; PP housing; 100 lbs*		13

SPECIAL SEISMIC CERTIFICATION
CERTIFIED SUBCOMPONENT MATRIX

1800524-CR-001-R5

TRU COMPLIANCE

Manufacturer:	Eaton Corporation	***Table Description:*** Breakers	**TABLE 7**
Model Line:	93PM Uninterruptible Power Supply (UPS)		

Building Code: CBC 2022 ***Seismic Certification Limits:*** S_{DS} = 1.83 g z/h = 1.0 S_{DS} = 1.83 g z/h = 0.0 I_P = 1.5

Component Type	Manufacturer	Model	Description	Notes	UUT
Breakers (Thermal Magnetic)	Eaton (CH)	HFD3080L	FD-Frame, 3-pole, 80 A, 5 lbs		4
		FD	FD-Frame, 3-pole, 80-225 A, 5 lbs		Interp.
		HFD3110L	FD-Frame, 3-pole, 110 A, 5 lbs		1, 4
		HFD4175ELA02S22	FD-Frame, 3-pole, 175 A, 5 lbs		4
		JG	JG-Frame, 3-pole, 80-250 A, 6 lbs		Interp.
		HJGE3125FAGC	JG-Frame, 3-pole, 125 A, 6 lbs		4
		HKDDC3300WA07S49	KD-Frame, 3-pole, 300 A, 12 lbs		13
		HKD3300W	KD-Frame, 3-pole, 300 A, 12 lbs		2, 12
		KD	KD-Frame, 3-pole, 175-400 A, 12 lbs		Interp.
		HKD3400W	KD-Frame, 3-pole, 400 A, 12 lbs		2, 12
		HLGE3300FAW	LG-Frame, 3-pole, 300 A, 16 lbs		6
		LG	LG-Frame, 3-pole, 300-600 A, 16 lbs		Interp.
		LD	LD-Frame, 3-pole, 600 A, 20 lbs		Interp.
		MD	MD-Frame, 3-pole, 700 A, 29 lbs		Interp.
		ND	ND-Frame, 3-pole, 1200 A, 45 lbs		Interp.
		NG	NG-Frame, 3-pole, 800-1200 A, 45 lbs		Interp.
		HNGS312032MC	NG-Frame, 3-pole, 1200 A, 45 lbs		6

Notes:

** Breakers listed here include part numbers which identify configuration, manufacturer, materials, and breaker rating. Interpolated items have the same manufacturer, materials, and have the same configuration and construction as the tested units.*

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

Manufacturer: Eaton Corporation

Model Line: 93PM, 93PM-L, 93PM IAC, 93PM IBC Uninterruptible Power Supply (UPS)

UUT	Unit Description (mounting)	Report Number (UUT#)	Testing Lab	Year Tested	ISO 17025 Accredited?	S_{DS}	z/h	I_P
1	93PM 50kVA Capacity UPS (1 UPM)	71589 Rev.A (UUT1)	Wyle Laboratories	2014	Yes	2.39	1.0 0.0	1.5
2	93PM 200kVA Capacity UPS (4 UPM)	71589 Rev.A (UUT2)	Wyle Laboratories	2014	Yes	2.39	1.0 0.0	1.5
3	NOT USED							
4	93PM 50kVA Capacity UPS (1 UPM)	71589 Rev.A (UUT4)	Wyle Laboratories	2014	Yes	2.39	1.0 0.0	1.5
5	93PM 50kVA External Redundant IAC-T	71589 Rev.A (UUT5)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
6	93PM 200kVA External Capacity IAC-T	71589 Rev.A (UUT6)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
7	93PM 100kVA IBC-S (line & match)	71589 Rev.A (UUT7)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
8	93PM 100kVA IBC-L (line & match)	71589 Rev.A (UUT8)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
9	93PM 100kVA IBC-L (remote w/ left sidecar)	71589 Rev.A (UUT9)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
10	93PM 50kVA IAC-D	71589 Rev.A (UUT10)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
11	93PM 200kVA IAC-D	71589 Rev.A (UUT11)	Wyle Laboratories	2014	Yes	1.83	1.0 0.0	1.5
12	93PM 200kVA Capacity UPS (4 UPM)	174-9243708-000 (UUT12)	AREVA Inc.	2015	Yes	2.50	1.0 0.0	1.5
13	93PM 100kVA IBC-L	174-9243708-000 (UUT13)	AREVA Inc.	2015	Yes	2.29	1.0 0.0	1.5
14	93PM 200 kVA IBC-LHW	JID 16-00773 Rev.1 (UUT14)	Clark Testing	2016	Yes	2.00 3.20	1.0 0.0	1.5
15	93PM 400 kVA UPS (8 UPM)	JID 16-00773 Rev.1 (UUT15)	Clark Testing	2016	Yes	2.00 3.20	1.0 0.0	1.5
16	93PM-L-60kVA (3 UPM)	JID 19-00067 Rev.3 (UUT16)	Clark Testing	2019	Yes	1.83	1.0 0.0	1.5
17	93PM-L-200kVA (10 UPM)	JID 19-00067 Rev.3 (UUT17)	Clark Testing	2019	Yes	1.83	1.0 0.0	1.5

Notes:

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 1

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9PA05D0220A01R1 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
50kVA Capacity UPS (1 UPM); No Batteries; No Sidecare; Frame (Eaton); MBS Switch (Eaton);
Power Modules: Eaton (730-B1045); Static Switches: Eaton (730-D0039); Contactors: Eaton (DILM17-10 (RDC60));
Breakers: Eaton (HFD3110L); Seismic Kit: Eaton (P-103000765)

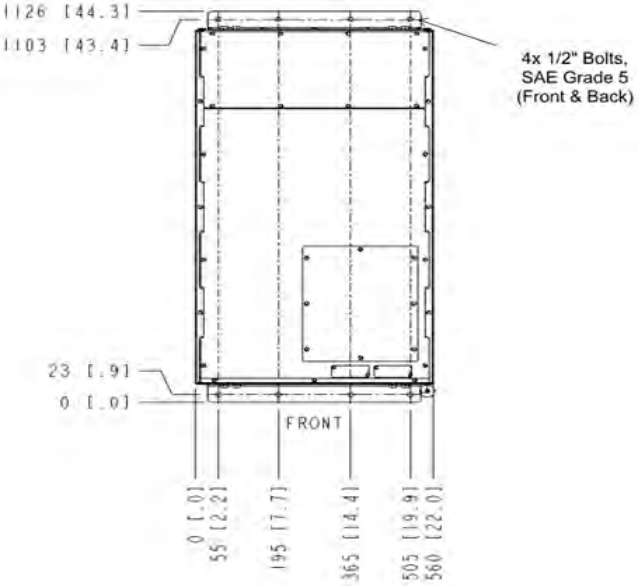
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
686	42.0	22.0	74.0	13.0	10.5	>33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.39	1.0	1.5	3.82	2.87	1.59	0.64
		2.39	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT1))*



The UUT1 was based mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 2

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9PV20D0029F20R1 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar; Frame (Eaton); Static Switch (Eaton); Contactor (Eaton); Breakers: Eaton (HKD3300W, HKD3400W); Power Modules: Eaton (730-B1045); Seismic Kit: Eaton (P-103000842); Side Car Seismic Kit: Eaton (P-103000844)

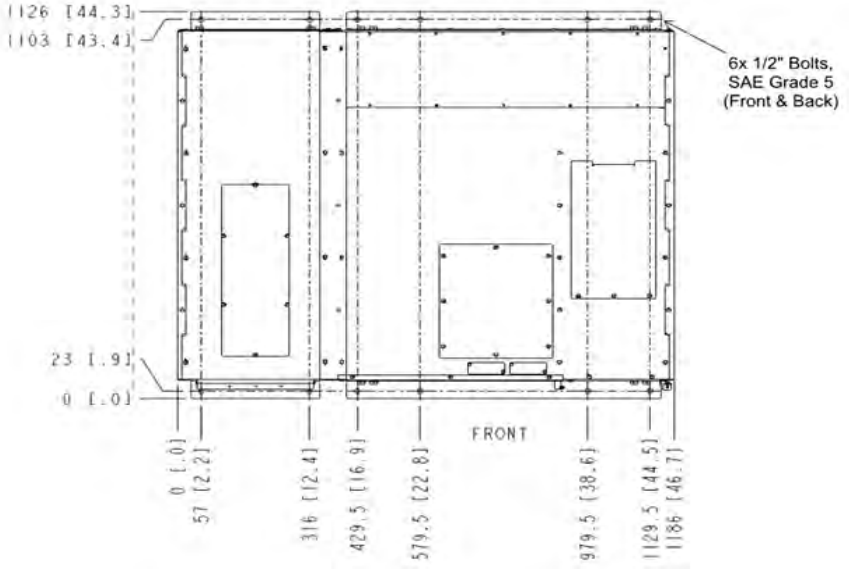
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,774	42.0	46.7	74.0	14.0	12.2	32.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.39	1.0	1.5	3.82	2.87	1.59	0.64
		2.39	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT2))*



The UUT2 was base mounted - rigid to steel floor members using twelve (12) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using twelve (12) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 4

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9PA05D6029L00R1 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
50kVA Capacity UPS (1 UPM) with Batteries + Tie / Bypass Sidecar; Frame (Eaton); MBS Switch (Sontheimer); Power Modules: Eaton (730-B1045); Static Switches: Eaton (730-D0039); Contactors: Eaton (DILM17-10 (RDC60)); Batteries: CSB (PWHR1234W2FR); Breakers: Eaton (HFD3080L, HFD3110L, HFD4175ELA02S22, HJGE3125FAGC); Seismic Kit: Eaton (P-103000765); Side Car Seismic Kit: Eaton (P-103000766)

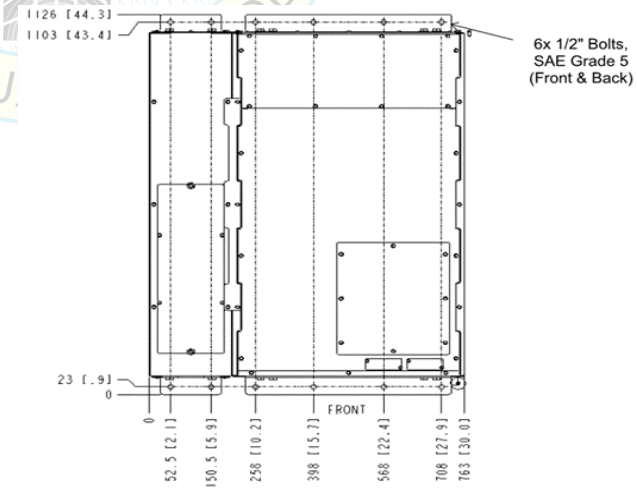
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,178	42.0	30.0	74.0	13.0	7.8	> 33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.39	1.0	1.5	3.82	2.87	1.59	0.64
		2.39	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT4))*



The UUT4 was base mounted - rigid to steel floor members using twelve (12) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using twelve (12) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 5

Manufacturer: Eaton Corporation
Model Line: 93PM IAC
Model Number: 9PZMAA000000010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
50kVA External Redundant IAC-T, 2 Bkr. Frame (Eaton); Breakers: Eaton (FD3080); Seismic Kit: Eaton (P-103000843)

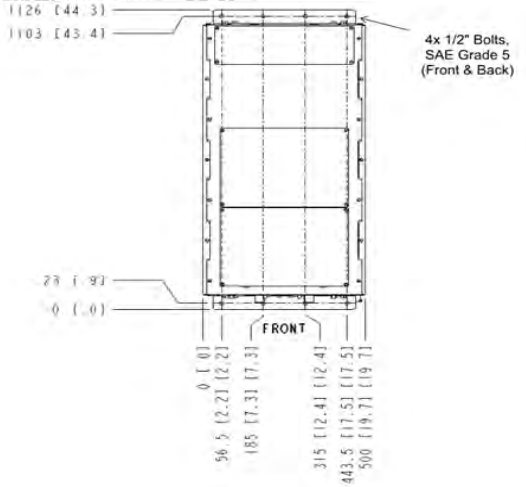
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
404	42.0	19.7	74.0	9.0	7.9	24.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT5))*



The UUT5 was base mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 6

Manufacturer: Eaton Corporation
Model Line: 93 PM IAC
Model Number: 9PZMDF200000010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
200kVA External Capacity IAC-T, 4 Bkr + MIS, MBP. Frame (Eaton); Breakers: Eaton (HLGE3300FAW, HNGS312032MC); Seismic Kit: Eaton (P-103000843)

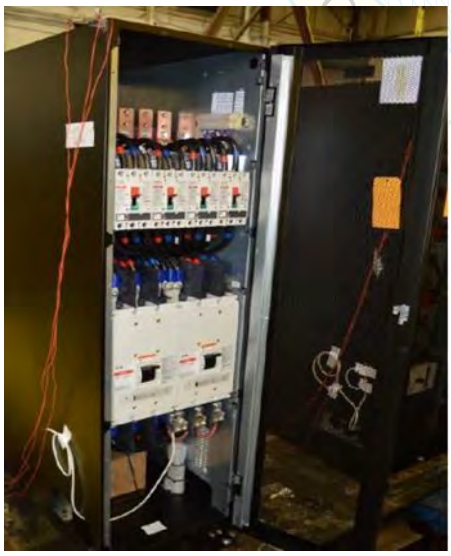
UUT Properties

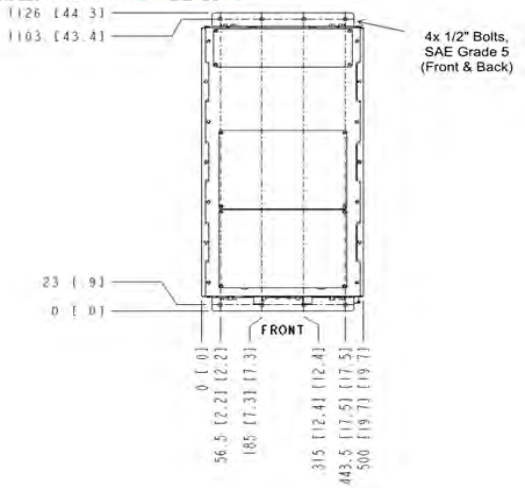
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
726	42.0	19.7	74.0	9.5	5.5	> 33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT6))*





The UUT6 was base mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 7

Manufacturer: Eaton Corporation
Model Line: 93 PM IBC
Model Number: 9PZBBAY08013010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
100kVA IBC-S, Line & Match. Frame (Eaton); Breakers: Eaton (HKDC3300WA07S49); Batteries: G.S. YUASA (NPX-80RFR); Seismic Kit: Eaton (P-103000843)

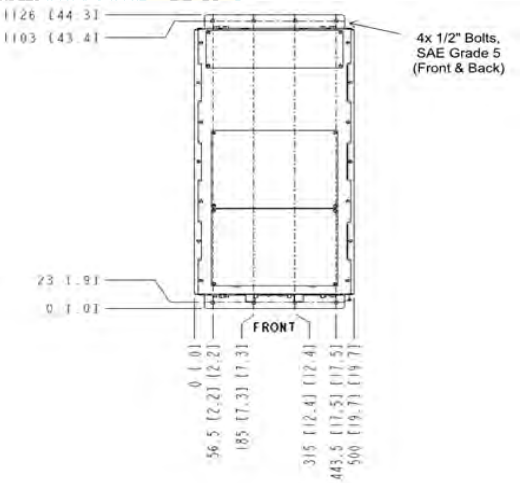
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,246	42.0	19.7	74.0	10.0	5.0	22.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT7))*



The UUT7 was rigid mounted to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 8

Manufacturer: Eaton Corporation
Model Line: 93PM IBC
Model Number: 9PZABAE50010010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
100kVA IBC-L, Line & Match. Frame (Eaton); Breakers: Eaton (HKDC3300WA07S49); Batteries: CSB (PWHR12500W4FR); Seismic Kit: Eaton (P-103000768)

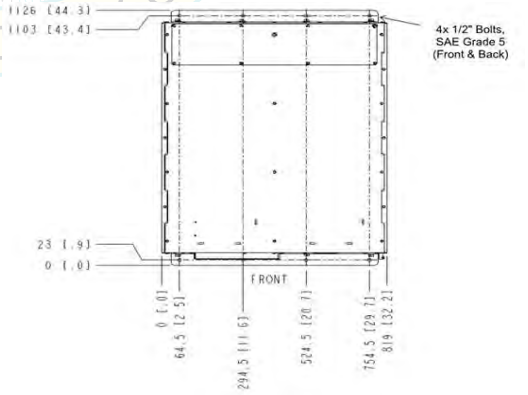
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
4,745	42.0	32.2	74.0	10.0	4.7	21.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT8))*



The UUT8 was base mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M12x25 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 9

Manufacturer: Eaton Corporation
Model Line: 93PM IBC
Model Number: 9PZABAE50L10010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
100kVA IBC-L; Remote with Left Sidecar; Frame (Eaton); Breakers: Eaton (HKDC3300WA07S49);
Batteries: CSB (PWHR12500W4FR), ENERSYS (0790-6005-C0K00), NORTHSTAR (NSB12540); Seismic Kit: Eaton (P-103000769)

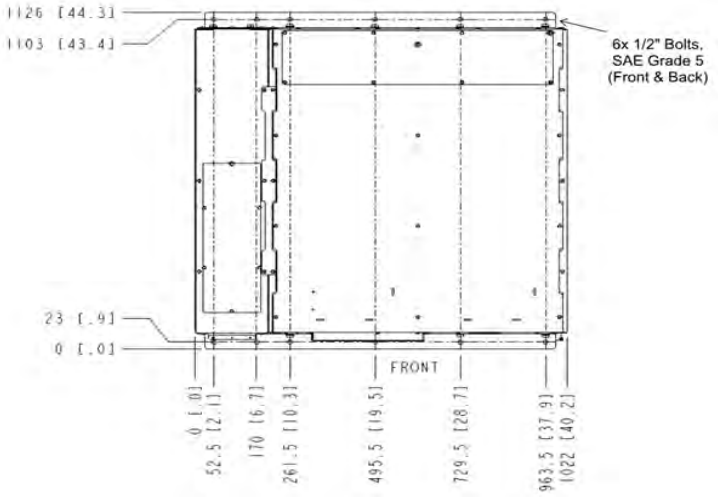
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
4,841	42.0	40.2	74.0	9.5	5.7	22.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT9))*



The UUT9 was base mounted - rigid to steel floor members using twelve (12) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M12x25 Class 8.8 bolts (IBC-L) and four (4) M8x20 Class 8.8 bolts (sidecar).
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 10

Manufacturer: Eaton Corporation
Model Line: 93 PM IAC
Model Number: 9PZD1H000000011 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
50kVA IAC-D; 480 Vin / 208 Vout. Frame (Eaton); Breakers: Eaton (HFD3080L, HKD3175W); Transformer: Eaton (WPV50012); Seismic Kit: Eaton (P-103000767)

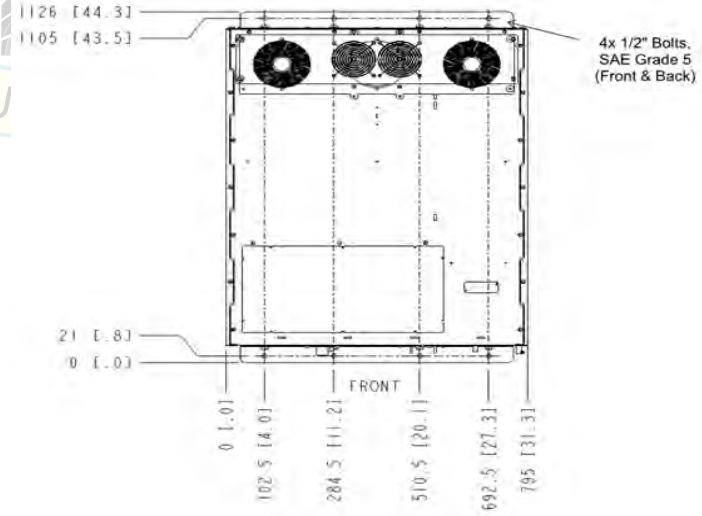
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,105	42.0	31.3	74.0	11.0	7.9	22.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT10))*



The UUT10 was base mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M12x25 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 11

Manufacturer: Eaton Corporation
Model Line: 93 PM IAC
Model Number: 9PZG4SBC0001011 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
200kVA IAC-D; 480 Vin / 208 Vout; Frame (Eaton); Breakers: Eaton (FD3225, KD3400F);
Panel Board: Eaton (122950146, 122950147); Transformer: Eaton (WPN19132); Seismic Kit: Eaton (P-103000767)

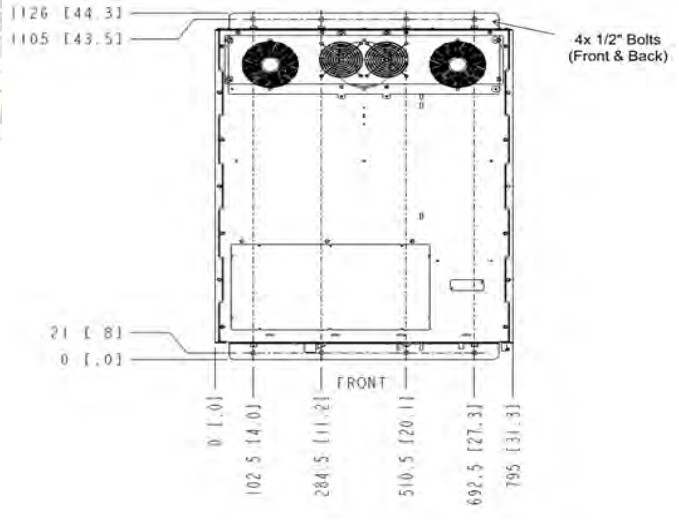
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,165	42.0	31.3	74.0	9.5	8.0	22.0

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: 71589 Rev.A (UUT11))*



The UUT11 was base mounted - rigid to steel floor members using eight (8) 1/2" Grade 5 bolts. The steel floor members were welded to the shake table. Mounting brackets were attached to the UUT using eight (8) M12x25 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 12

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9PV20C0029F20R2 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
200kVA Capacity UPS (4 UPM) + 4 Bkr MBS Sidecar; Frame (Eaton); Power Modules: Eaton (730-D0057); Static Switches: Eaton (730-D0021); Contactors: Eaton (DILM250/22 (RDC48)); Breakers: Eaton (HKD3300W, HKD3400W); Seismic Kit: Eaton (P-103000842); Side Car Seismic Kit: Eaton (P-103000844)

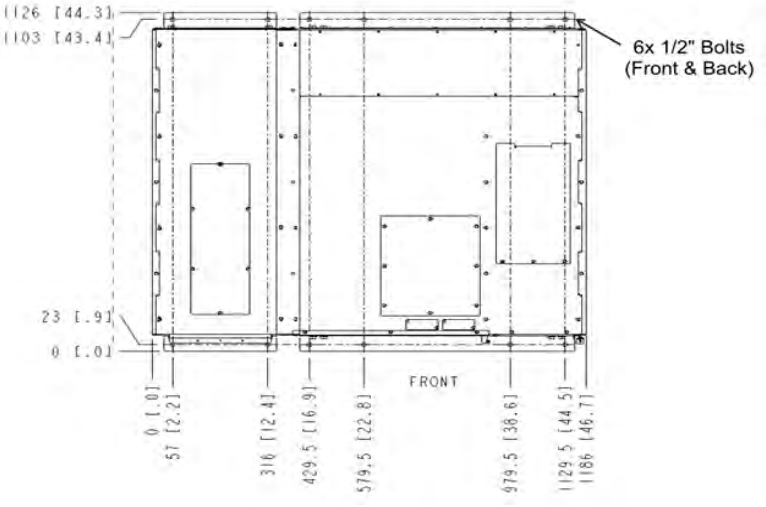
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,795	42.0	46.7	74.0	6.4	5.2	6.2

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.5	1.0	1.5	4.00	3.00	1.67	0.67
		2.5	0.0					

Test Mounting Details: *(Test Report: 174-9243708-000 (UUT12))*



The UUT12 was base mounted - rigid to an aluminum plate using twelve (12) 1/2" Grade 5 bolts and washers torqued to 63 ft./lbs. The aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using twelve (12) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 13

Manufacturer: Eaton Corporation
Model Line: 93 PM IBC
Model Number: 9PZABAE28010010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
100kVA IBC-L; Line and Match; No Sidecar; Frame (Eaton);
Batteries: CSB (PWHR12280W4FR), ENERSYS (12HX300, 12HX500), C&D Dynasty (UPS12-300MR, UPS12-490MR);
Breakers: Eaton (HKDDC3300WA07S49); Seismic Kit: Eaton (P-103000768)

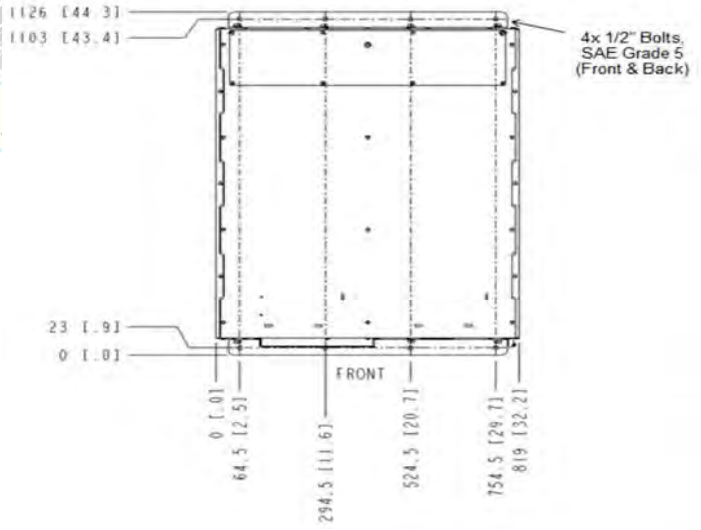
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
3,185	42.0	32.2	74.0	14.6	5.4	> 33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.29	1.0	1.5	3.66	2.75	1.53	0.61
		2.29	0.0					

Test Mounting Details: *(Test Report: 174-9243708-000 (UUT13))*



The UUT13 was base mounted - rigid to an aluminum plate using eight (8) 1/2" Grade 5 bolts and washers torqued to 63 ft./lbs. The aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using eight (8) M12x25 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 14

Manufacturer: Eaton Corporation
Model Line: 93 PM IBC
Model Number: 9PZUDBN54010010 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
93PM 200 kVA IBC-LHW; Line and Match; Batteries: NORTHSTAR (NSB12540 x40); Seismic Kit: Eaton (P-103002072)

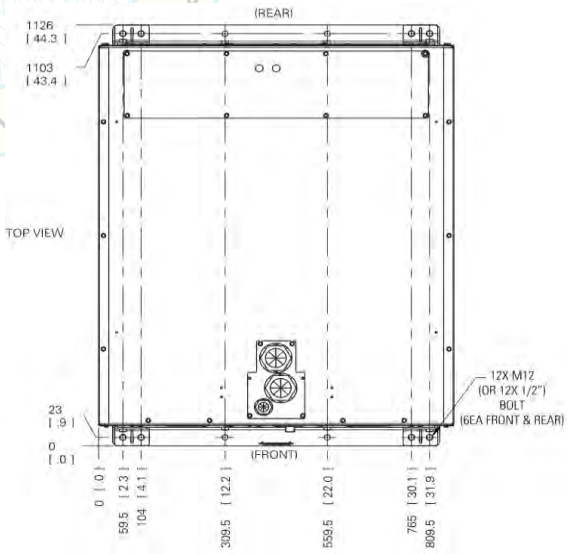
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
5,082	42.0	34.2	74.0	10.57	9.86	>33.33

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	2.13	0.85
		3.20	0.0					

Test Mounting Details: *(Test Report: JID 16-00773 Rev.1 (UUT14))*



The UUT14 was base mounted - rigid to an aluminum plate using twelve (12) 1/2"-13 Grade 5 hex head bolts, washers, and lock washers torqued to 55 ft./lbs. The Aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using twelve (12) M8x25 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 15

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9P640D0029A00R2 ***Serial Number:*** N/A

Product Construction Summary:
Powder Coated Carbon Steel Framing

Options/Subcomponent Summary:
400 kVA UPS (8 UPM); Frame (Eaton); Seismic Kit: Eaton (P-103000842, QTY 2)

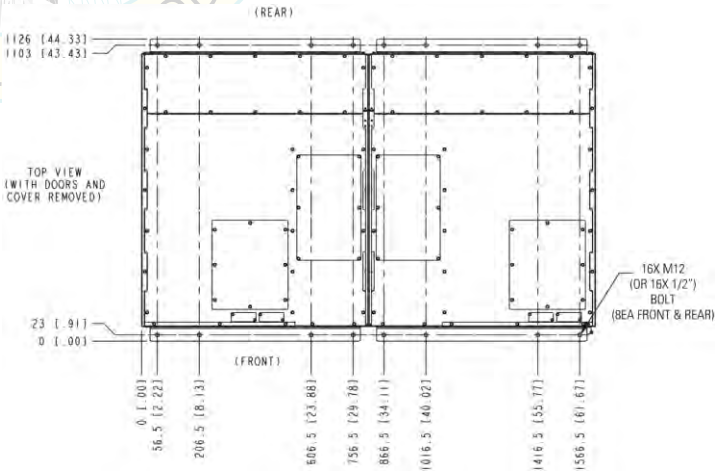
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
2,628	42.0	63.9	74.0	20.55	12.91	>33.33

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	2.13	0.85
		3.20	0.0					

Test Mounting Details: *(Test Report: JID 16-00773 Rev.1 (UUT15))*



UUT15 was base mounted - rigid to an aluminum plate using sixteen (16) 1/2"-13 Grade 5 hex head bolts, washers and lock washers torqued to 55 ft./lbs. The Aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using (16) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 16

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9GC312A700A02R0 ***Serial Number:*** EN025UJJ02

Product Construction Summary:
Powder Coated Carbon Steel Framing.

Options/Subcomponent Summary:
93PM-L-60kVA; Frame (Eaton); Power Modules: Eaton (730-05211 x3); Static Switches: Eaton (730-05213); Batteries: CSB (HR1227WFR x160); Seismic Kit: Eaton (P-103000765)

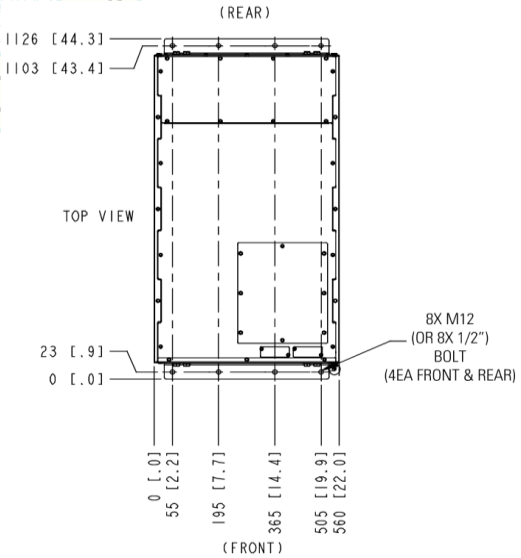
UUT Properties

Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,604	42.0	22.0	74.0	10.5	6.6	12.2

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: JID 19-00067 Rev.3 (UUT16))*



The UUT16 was base mounted - rigid to an aluminum plate using eight (8) 1/2"-13 Grade 5 bolts, washers, and lock washers torqued to 55 ft./lbs. The aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using eight (8) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.

UNIT UNDER TEST (UUT) SUMMARY SHEET

1800524-CR-001-R5

UUT 17

Manufacturer: Eaton Corporation
Model Line: 93PM Uninterruptible Power Supply (UPS)
Model Number: 9GK040A000A02R0 ***Serial Number:*** EN021UJJ05

Product Construction Summary:
Powder Coated Carbon Steel Framing.

Options/Subcomponent Summary:
93PM-L-200kVA; Frame (Eaton); Power Modules: Eaton (730-05211 x10); Static Switches: Eaton (730-05214); Seismic Kit: Eaton (P-103003059)

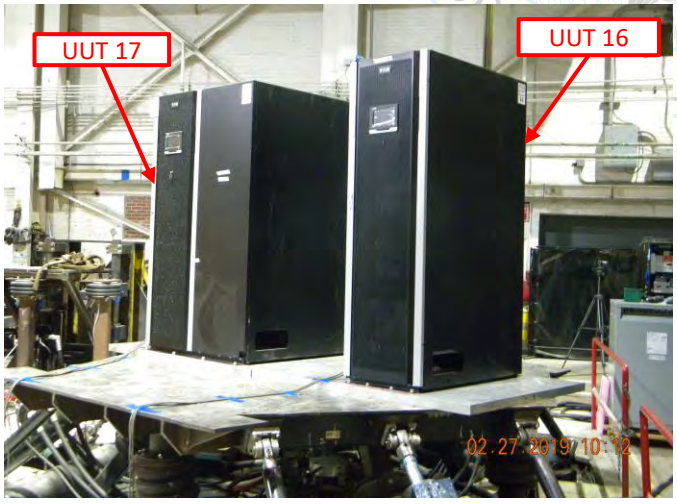
UUT Properties

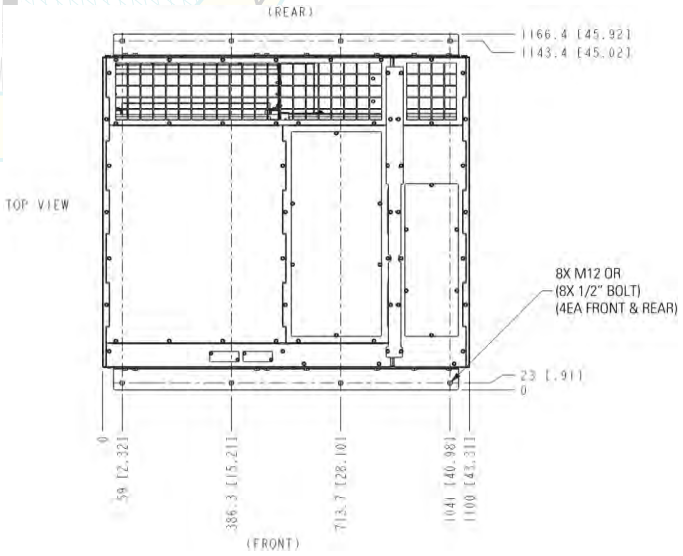
Weight (lbs.)	Dimension (in)			Lowest Natural Frequency (Hz)		
	Depth	Width	Height	Front-Back	Side-Side	Vertical
1,722	42.0	43.4	74.0	22.4	19.2	>33.3

UUT Highest Passed Seismic Run Information

Building Code	Test Criteria	S_{DS} (g)	z/h	I_P	A_{FLX-H} (g)	A_{RIG-H} (g)	A_{FLX-V} (g)	A_{RIG-V} (g)
CBC 2022	ICC-ES AC156	1.83	1.0	1.5	2.93	2.20	1.22	0.49
		1.83	0.0					

Test Mounting Details: *(Test Report: JID 19-00067 Rev.3 (UUT17))*





The UUT17 was base mounted - rigid to an aluminum plate using eight (8) 1/2"-13 Grade 5 bolts, washers, and lock washers torqued to 55 ft./lbs. The aluminum plate was base mounted - rigid to the shake table. Mounting brackets were attached to the UUT using (16) M8x20 Class 8.8 bolts.
Unit maintained structural integrity and remained functional per manufacturer requirement after shake table test. Contents were included in testing per operating conditions.