

Title: President

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

APPLICATION FOR HCAI SPECIAL SEISMIC	OFFICE USE ONLY
CERTIFICATION PREAPPROVAL (OSP)	APPLICATION #: OSP-0498
HCAI Special Seismic Certification Preapproval (OSP)	
Type: New X Renewal	
Manufacturer Information	
Manufacturer: Kohler Power Systems	
Manufacturer's Technical Representative: Brady Eifrid	
Mailing Address: N 7650 Lakeshore Road, Sheboygan, WI 53083	
Telephone: (920) 457-4441 Email: brady.eifrid@koh	hler.com
EOR CODE CO	A
Product Information	MD,
Product Name: UPS and Batteries	
Product Type: Battery Chargers	7
Product Model Number: GM87448	
General Description: Units are Single Phase 90-265VAC Input Battery C	hargers with an Output of 12/24VDC and 10 A
Mounting Description: Unit mounted with and without supports, rigid wall with supports, flexible floor mounted with supports	mounted, flexible wall mounted, rigid floor mounted
Tested Seismic Enhancements: None	
Applicant Information	<u> </u>
Applicant Company Name: The VMC Group	
Contact Person: John Giuliano	
Mailing Address: 113 Main Street, Bloomingdale, NJ 07403	
Telephone: (973) 838-1780 Email: john giuliano@th	nevmcaroup com





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

California Licensed Structural Engineer Responsible for the Engineering and Test Report(s)								
Company Name: THE VMC GROUP								
Name: Kenneth Tarlow California License Number: S2851								
Mailing Address: 980 9th Street, 16th Floor, Sacramento, CA 95814								
Telephone: (832) 627-2214 Email: ken.tarlow@thevmcgroup.com								
Certification Method								
GR-63-Core X ICC-ES AC156 IEEE 344 IEEE 693 NEBS 3								
Other (Please Specify):								
COR CODE CO								
Testing Laboratory								
Company Name: DYNAMIC CERTIFICATION LABORATORY (DCL)								
Contact Person: Kelly Laplace								
Mailing Address: 1315 Greg St., Ste 109, Sparks NV 89431								
Telephone: (775) 358-5085 Email: Kelly@shaketest.com								
DATE: 02/24/2022								







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

### **Seismic Parameters**

Design Basis of Equipment or Components (Fp/Wp) = 1.50 @ SDS = 2.0g; 1.13 @ SDS = 2.5g

SDS (Design spectral response acceleration at short period, g) = 2.0 @ z/h = 1.0; 2.5 @ z/h = 0.0

ap (Amplification factor) = 2.5

 $R_p$  (Response modification factor) = 6.0

 $\Omega_0$  (System overstrength factor) = 2.0

 $I_p$  (Importance factor) = 1.5

z/h (Height ratio factor) =

Natural frequencies (Hz) = See Attachment

Overall dimensions and weight = See Attachment

## HCAI Approval (For Office Use Only) - Approval Expires on 02/24/2028

Date: 2/24/2022 OSP-0498

Name: Mohammad Karim Title: Supervisor, Health Facilities

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

Condition of Approval (if applicable): DATE 02/24/2022





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**Table 1 - Certified Product Matrix** 

Model	Input	Output	<b>Output Current</b>	Outer	Dimension	s [ in ]	Weight	Attachment	Mounting	UUT									
wodei	Voltage [ V	Voltage [ V DC	[ amp ]	Height	Width	Depth	[ lb ]	Scenario	Configuration	001									
								Case 1	Rigid	UUT-01A-R, UUT-01B-R									
								Case 1	Isolated	UUT-01A-F, UUT-01B-F									
			OPC	ODE a			Case 2	Rigid	UUT-02A-R, UUT-02B-R										
	(ED	FOR		OMp.		Case 2	Isolated	UUT-02A-F, UUT-02B-F											
GM87448	90-265	265 12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	12 or 24	A MED A	2.8	10.0	6.0	8.0	Case 3	Rigid	UUT-03A-R, UUT-03B-R
OMO7440	30-203 12 01 24		REL		P-0498	0.0	CE	Ouse o	Isolated	UUT-03A-F, UUT-03B-F									
				(A)			Case 4	Rigid	UUT-04-R										
		BY	': Mohammad Karim	arim		Case 4	Isolated	UUT-04-F											
								Case 5	Rigid	UUT-05-R									
			A Marie		0.10.4.10.0			Case 5	Isolated	UUT-05-F									
			E DY	AIE: 02	2/24/20	22	979	Case 6	Rigid	UUT-06A-R, UUT-06B-R									
			150				<b>V</b>	Case o	Isolated	UUT-06A-F, UUT-06B-F									

Case 1: battery charger wall mounted to junction box

Case 2: battery charger and GM103340 support bracket wall mounted to junction box

Case 3: battery charger and GM78810 support bracket wall mounted to junction box

Case 4: battery charger and GM94448 support bracket wall mounted to junction box

Case 5: battery charger and GM95027 bracket base mounted to skid

Case 6: battery charger and GM95037 bracket base mounted to skid



**UUT-1A-R** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

**UUT Properties** 

Weight	ru i			Lowest Nat. Freq. [ Hz ]		
[ lbs ]	l Length W	Width	Height	F-B	S-S	V
8	10.0	09P-0498	2.8	N/A	N/A	N/A
	UUT Hi	ghest Passed Seismic Run	Information			

#### UUT Highest Passed Seismic Run Informatio

<b>Building Code</b>	Test <mark>Criter</mark> ia	RVS <sub>DS/loh</sub>	aminad	Karlm	A <sub>FLX-H</sub>	$A_{RIG-H}$	A <sub>FLX-V</sub>	$A_{RIG-V}$
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
OBC 2019	ICC-ES AC 130	2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT-1A-R was wall mounted to the junction box using (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.



UUT-01A-R



**UUT-1A-F** 

Test Report: VMA-50682-01E

1.68

0.68

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

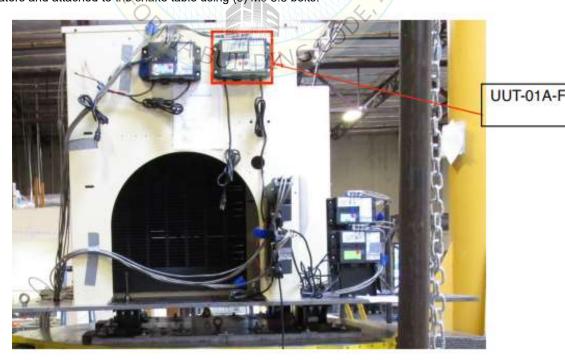
DC Output: 10 Amps, 12/24 VDC

IIIIT Properties

			<u> </u>	A********						
Weight		Dimensions [ in ]						Lowest Nat. Freq. [ Hz ]		
[ lbs ]	Length	Wi	dth	H	eight /	F-B	S-S	V		
8	10.0	069P-049		98	8 2.8		N/A	N/A		
	UUT	Highest Pas	sed Seismi	c Run Info	rmation					
Building Code	Test <mark>Criter</mark> ia	S <sub>DS/O</sub>	am <b>z/h</b>	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>		
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-		

### **Test Mounting Details**

UUT-1A-F was wall mounted to the junction box using (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8) M6 8.8 bolts.





UUT-1B-R

Test Report: VMA-50682-01E

1.68

UUT-01B-R

0.68

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

ICC-ES AC156

DC Output: 10 Amps, 12/24 VDC

**CBC 2019** 

IIIIT Properties

				XXXX						
Weight	Dimensions [ in ]						Lowest Nat. Freq. [ Hz ]			
[lbs]	Length	Wie	dth	Hei	ght /	F-B	S-S	V		
8	10.0	(6)	069P-0498 2.8 C		.8	N/A	N/A	N/A		
	UUT	Highest Pass	sed Seismic F	Run Inforn	nation		-			
Building Code	Test <mark>Criter</mark> ia	BVS <sub>DS/Oh</sub>	am <mark>z/h</mark> ad K	arm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>		
		2.00	1.0	1.5	3 20	2.40				

## Test Mounting Details

UUT-1B-R was wall mounted to the junction box using (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.

2.50





UUT-1B-F

1.68

0.68

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

IIIIT Properties

Weight		Dimensions [ in ]						Lowest Nat. Freq. [ Hz ]		
[lbs]	Length	Width		Height		F-B	S-S	V		
8	10.0	0.0 P-049		98	8 2.8		N/A	N/A		
	UUT	Highest Pas	sed Seismi	c Run Info	ormation					
Building Code	Test <mark>Criter</mark> ia	S <sub>DS/O</sub>	am <b>z/h</b>	Karm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>		
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-		

### **Test Mounting Details**

2.50

UUT-1B-F was wall mounted to the junction box using (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8) M6 8.8 bolts.





UUT-2A-R

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

### **Product Construction Summary**

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

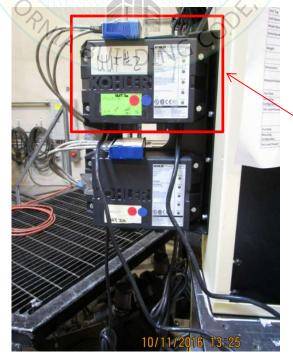
	IT			

Weight	43	Lowest Nat. Freq. [ Hz ]				
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	C9P-0498	2.8	N/A	N/A	N/A
	UUT Hiç	hest Passed Seismic Rui	n Information			

<b>Building Code</b>	Test <mark>Criter</mark> ia	RVS <sub>DS/loh</sub>	aminad	Karlm	A <sub>FLX-H</sub>	$A_{RIG-H}$	A <sub>FLX-V</sub>	$A_{RIG-V}$
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
OBC 2019	ICC-ES AC 130	2.50	0.0	1.5	-	-	1.68	0.68

## Test Mounting Details

UUT-2A-R was attached to support bracket GM103340 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.



UUT-2A-R



**UUT-2A-F** 

1.68

0.68

Test Report: VMA-50682-01E

Model Line	Model Line Model Number			
Battery Charger	GM87448	Kohler		

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

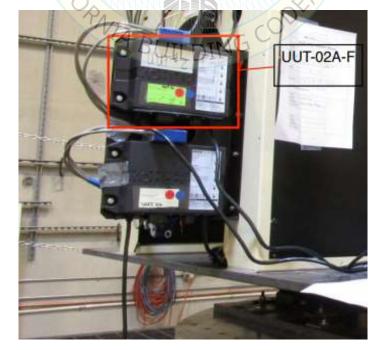
DC Output: 10 Amps, 12/24 VDC

	IT			

Weight		Dimensions [ in ]					Lowest Nat. Freq. [ Hz ]			
[lbs]	Length	Wi	dth	Н	eight	F-B	S-S	V		
8	10.0	(6)	9P-049	18	2.8	N/A	N/A	N/A		
	UUT I	lighest Pas	sed Seismi	Run Info	rmation					
Building Code	Test <mark>Criter</mark> ia	Systoh	am <mark>z/h</mark> ad	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>		
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-		

### Test Mounting Details

UUT-2A-F was attached to support bracket GM103340 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8) M6 8.8 bolts.





UUT-2B-R

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

#### **Product Construction Summary**

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

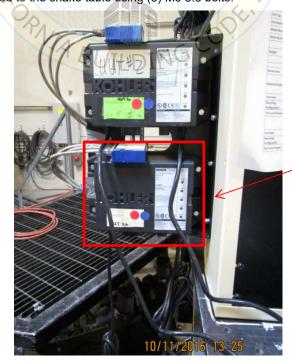
DC Output: 10 Amps, 12/24 VDC

Weight	4	Dimensions [ in ]					
[ lbs ]	Length	Width	Height	F-B	S-S	V	
8	10.0	C9P-0498	2.8	N/A	N/A	N/A	
	UUT Hi	ghest Passed Seismic Run	Information				

<b>Building Code</b>	Test <mark>Criter</mark> ia	RVS <sub>DS/loh</sub>	aminad	Karlm	A <sub>FLX-H</sub>	$A_{RIG-H}$	A <sub>FLX-V</sub>	$A_{RIG-V}$
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
OBC 2019	ICC-ES AC 130	2.50	0.0	1.5	-	-	1.68	0.68

## Test Mounting Details

UUT-2B-R was attached to support bracket GM103340 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.



UUT-2B-R



UUT-2B-F

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

**CBC 2019** 

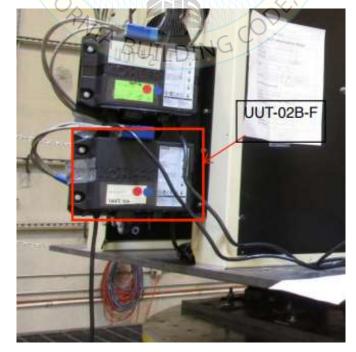
UUT Properties										
	c	Δ	rti	n	rn	P	т	Ш	ш	

Weight	Dimensions [ in ]					Lowe	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Wi	dth	H	eight	F-B	S-S	V
8	10.0	<u></u>	9P-049	18	2.8	N/A	N/A	N/A
	UUT	Highest Pas	sed Seismi	c Run Info	rmation			
Building Code	Test <mark>Criter</mark> ia	S S DS   OF	aminad	Karm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
	(X/Y/V/X/Y				N SERVICE CONTROL OF THE PERSON OF THE PERSO			

ICC-ES AC156 2.00 1.0 1.5 3.20 2.40 - - - - 1.68 0.68

Test Mounting Details

UUT-2B-F was attached to support bracket GM103340 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8) M6 8.8 bolts.





UUT-3A-R

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

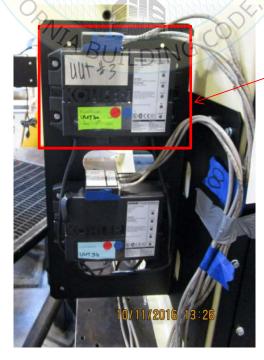
DC Output: 10 Amps, 12/24 VDC

Weight	47.	Dimensions [ in ]		Lowe	st Nat. Freq	. [ Hz ]
[lbs]	Length	Width	Height	F-B	S-S	V
8	10.0	09P-0498	2.8	N/A	N/A	N/A
	UUTH	ighest Passed Seismic Ru	un Information			

<b>Building Code</b>	Test <mark>Criter</mark> ia	Spsloh	amrhad	Karm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	•
CBC 2019   ICC-E	ICC-ES AC 150	2.50	0.0	1.5	-	-	1.68	0.68

## Test Mounting Details

UUT-3A-R was attached to support bracket GM78810 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.



UUT-3A-R



UUT-3A-F

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

UUT Properties										
	c	Δ	rti	n	rn	P	т	Ш	ш	

Weight		Dimensions [ in ]		Lowe	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	C9P-0498	2.8	N/A	N/A	N/A
	UUT Hig	ghest Passed Seismic R	un Information			
Building Code	Test Criteria	\/Sect   Z/h	Ι- Δ γ	Δ	Δ	Δ212.1

 Building Code
 Test Criteria
 S<sub>DS</sub>
 z/h
 I<sub>P</sub>
 A<sub>FLX-H</sub>
 A<sub>RIG-H</sub>
 A<sub>FLX-V</sub>
 A<sub>RIG-V</sub>

 CBC 2019
 ICC-ES AC156
 2.00
 1.0
 1.5
 3.20
 2.40

 2.50
 0.0
 1.5
 1.68
 0.68

Test Mounting Details

UUT-3A-F was attached to support bracket GM78810 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8)

M6 8.8 bolts.





UUT-3B-R

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

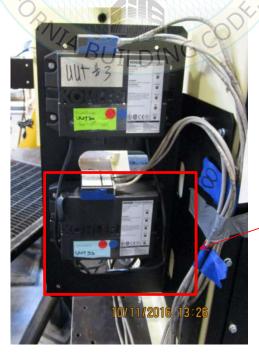
**UUT Properties** 

Weight		Dimensions [ in ]		Lowe	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	060P-0498	2.8	N/A	N/A	N/A
	UUT Hi	ghest Passed Seismic F	Run Information	•	•	-
Building Code	Tost Critoria	\\S 7/h	- Ι Δ	Δ	Δ	Δ

<b>Building Code</b>	Test <mark>Criter</mark> ia	Spslot	am <b>z/h</b>	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
OBC 2019		2.50	0.0	1.5	- 1	-	1.68	0.68

### Test Mounting Details

UUT-3B-R was attached to support bracket GM78810 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.



UUT-3B-R



UUT-3B-F

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

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11111	T Dr	ana	rties
uu		uue	I HES

Weight		Dimensio	ns [ in ]			Lowe	st Nat. Fred	ղ. [ Hz ]
[ lbs ]	S-S	V						
8	10.0	6.0	P-049	8 2.8		N/A	N/A	N/A
	UUT	Highest Pass	ed Seismic	Run Informatio	n		-	
Puilding Code	Toot Critoria	- 0	=/la	1 1		Λ.	Α	Ι

**Building Code** Test Criteria VS<sub>DS/</sub> A<sub>FLX-H</sub> A<sub>RIG-H</sub> A<sub>FLX-V</sub> A<sub>RIG-V</sub> 2.00 1.0 1.5 3.20 2.40 **CBC 2019** ICC-ES AC156 2.50 0.0 1.5 1.68 0.68

Test Mounting Details

UUT-3B-F was attached to support bracket GM78810 with (4) M6 8.8 bolts and wall mounted to the junction box with (4) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8)

M6 8.8 bolts.





**UUT-4R** 

Test Report: VMA-50682-01E

1.68

0.68

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

UUT Properties										
	c	Δ	rti	n	rn	P	т	Ш	ш	

				A X X Y V V						
Weight	Dimensions [ in ]						Lowest Nat. Freq. [ Hz ]			
[ lbs ]	Length	Wie	dth	He	ight	F-B	S-S	V		
8	10.0	(6)	9P-049	8 2	2.8	N/A	N/A	N/A		
	UUT	Highest Pass	sed Seismic	Run Infor	mation					
Building Code	Test Criteria	BVSps/ob	am <b>z/h</b> ad	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>		
CDC 2040	100 50 40450	2.00	1.0	1.5	3.20	2.40	-	-		
CBC 2019	ICC-ES AC156	W AMANGAGAGA								

### Test Mounting Details

1.5

2.50

UUT-4R was attached to support bracket GM94448 with (4) M6 8.8 bolts and wall mounted to the junction box with (2) M6 8.8 bolts. The junction box was rigidly attached to the shake table using (8) M6 8.8 bolts.





UUT-4F

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

$\overline{}$	П	П	П	$\neg$		λĀ	т	ΥV	7/1	/\/	M	X V-
	ı	П	П	т		٠.	_	-	^	-4	ia	S
	L	J	u	, .	16	1	u	U	е	ľŁ	ш	

Weight		Dimensions [ in ]		Lowe	st Nat. Freq	j. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	09P-0498	2.8	N/A	N/A	N/A
	UUT High	hest Passed Seismic R	Run Information		•	-
D O .						

**Building Code** Test Criteria /Sps/  $A_{RIG-H}$  $A_{RIG-V}$ z/h A<sub>FLX-H</sub> A<sub>FLX-V</sub> 2.00 1.0 1.5 3.20 2.40 **CBC 2019** ICC-ES AC156 2.50 0.0 1.5 1.68 0.68

Test Mounting Details

UUT-4F was attached to support bracket GM94448 with (4) M6 8.8 bolts and wall mounted to the junction box with (2) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators and attached to the shake table using (8) M6

8.8 bolts.





**UUT-5R** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

Weight							
[ lbs ]	Length	Width	Height	F-B	S-S	V	
8	10.0	09P-0498	2.8	N/A	24.0	N/A	
	IIIITH	inhest Passed Seismic Ru	in Information	-	-		

<b>Building Code</b>	Test <mark>Criter</mark> ia	RVS <sub>DS/loh</sub>	aminad	Karlm	A <sub>FLX-H</sub>	$A_{RIG-H}$	A <sub>FLX-V</sub>	$\mathbf{A}_{RIG-V}$
CBC 2010	ICC ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
CBC 2019	ICC-ES AC156	2.50	0.0	1.5	-	-	1.68	0.68

Test Mounting Details

UUT-5R was attached to support bracket GM95027 with (4) M6 8.8 bolts and rigid base mounted to the shake table using (2) M6 8.8





**UUT-5F** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

### **Product Construction Summary**

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

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 IT	Dea	MX	rtios

Weight	43.	Dimensions [ in ]		Lowes	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	٧
8	10.0	C9P-0498	2.8	23.0	18.8	8.8
	UUT Hig	hest Passed Seismic Run	Information			

<b>Building Code</b>	Test <mark>Criter</mark> ia	RVS <sub>DS/loh</sub>	aminad	Karlm	A <sub>FLX-H</sub>	$A_{RIG-H}$	A <sub>FLX-V</sub>	$\mathbf{A}_{RIG-V}$
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
OBC 2019	ICC-ES AC 130	2.50	0.0	1.5	-	-	1.68	0.68

### Test Mounting Details

UUT-5F was attached to support bracket GM95027 with (4) M6 8.8 bolts and base mounted to the shake table interface plate using (2) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators.





**UUT-6A-R** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

IIIIT Properties

Weight		Dimensions [ in ]		Lowes	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	C69P-0498	2.8	N/A	10.8	N/A

#### **UUT Highest Passed Seismic Run Information**

<b>Building Code</b>	Test <mark>Criter</mark> ia	Spsloh	aminad	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2019	ICC-ES AC156	2.00	1.0	1.5	3.20	2.40	-	-
CBC 2019		2.50	0.0	1.5	<b>V</b> -	-	1.68	0.68

Test Mounting Details

UUT-6A-R was attached to support bracket GM95037 with (4) M6 8.8 bolts and rigid base mounted to the shake table using (2) M6 8.8 bolts.





**UUT-6A-F** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

#### **Product Construction Summary**

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

UUT Properties										
	c	Δ	rti	n	rn	P	т	Ш	ш	

Weight		Dimensions [ in ]		Lowe	st Nat. Freq	ı. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	C69P-0498	2.8	23.0	10.3	N/A
	UUT Hig	hest Passed Seismic Ru	n Information	_		
			_	_	_	1 -

/Sps/ **Building Code Test Criteria** A<sub>FLX-H</sub>  $\mathbf{A}_{\mathsf{RIG-H}}$ A<sub>FLX-V</sub> A<sub>RIG-V</sub> z/h 2.00 1.0 1.5 3.20 2.40 **CBC 2019** ICC-ES AC156 2.50 0.0 1.5 1.68 0.68

## Test Mounting Details

UUT-6A-F was attached to support bracket GM95037 with (4) M6 8.8 bolts and base mounted to the shake table interface plate using (2) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators.





**UUT-6B-R** 

Test Report: VMA-50682-01E

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

**Product Construction Summary** 

Plastic housing

**Options / Subcomponent Summary** 

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

DC Output: 10 Amps, 12/24 VDC

UUT Properties										
	c	Δ	rti	n	rn	P	т	Ш	ш	

Weight	4	Dimensions [ in ]		Lowe	st Nat. Freq	. [ Hz ]
[ lbs ]	Length	Width	Height	F-B	S-S	V
8	10.0	C69P-0498	2.8	N/A	10.8	N/A
	LIUT His	nheet Passed Seismic Rur	Information	-		

<b>Building Code</b>	Test <mark>Criter</mark> ia	S S DS LOL	aminad	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>
CBC 2019	ICC-E <mark>S AC1</mark> 56	2.00	1.0	1.5	3.20	2.40	-	•
		2.50	0.0	1.5	-	-	1.68	0.68

## Test Mounting Details

UUT-6B-R was attached to support bracket GM95037 with (4) M6 8.8 bolts and rigid base mounted to the shake table using (2) M6 8.8 bolts.





**UUT-6B-F** 

Test Report: VMA-50682-01E

1.68

0.68

Model Line	Model Number	Manufacturer
Battery Charger	GM87448	Kohler

### **Product Construction Summary**

Plastic housing

## **Options / Subcomponent Summary**

AC Input: 100-260VAC, 50/60 Hz, 3.7 Amps RMS

ICC-ES AC156

DC Output: 10 Amps, 12/24 VDC

**CBC 2019** 

UUT Propertie	2	ti	r	Δ	n	1	'n	P	т	П	H	

Weight		Lowest Nat. Freq. [ Hz ]							
[ lbs ]	Length	Wi	dth	Height		F-B	S-S	V	
8	10.0	0.0 P-049		8 2.8		N/A	N/A	N/A	
	UUT I	lighest Pas	sed Seismi	c Run Info	rmation				
Building Code	Test <mark>Criter</mark> ia	System	am <b>z/h</b> ad	Karlm	A <sub>FLX-H</sub>	A <sub>RIG-H</sub>	A <sub>FLX-V</sub>	A <sub>RIG-V</sub>	
070000		2.00	1.0	1.5	3.20	2.40	-	-	

## Test Mounting Details

1.5

UUT-6B-F was attached to support bracket GM95037 with (4) M6 8.8 bolts and base mounted to the shake table interface plate using (2) M6 8.8 bolts. The system was externally isolated using (4) VMC MSSH-1E-2990N spring isolators.

2.50

