





# **CERTIFICATE OF COMPLIANCE**

SEISMIC DESIGN OF NONSTRUCTURAL COMPONENTS AND SYSTEMS



Certification No.

# VMA-54256-01C (Revision 0)

Expiration Date: 01/31/2026

## **Certification Parameters:**

The nonstructural products (mechanical and/or electrical components) listed on this certificate are CERTIFIED<sup>1</sup> FOR SEISMIC APPLICATIONS in accordance with the following building code<sup>2</sup> releases.

## IBC 2021, 2018

The following model designations, options, and accessories are included in this certification. Reference report number VMA-54256-01 as issued by VMC Group for a complete list of certified models, included accessories/options, and certified installation methods.

### LS ELECTRIC; Low Voltage Switchgear (Ganged) USG-xxxx; 254-635V

The above referenced equipment is **APPROVED** for seismic application when properly installed<sup>3</sup>, used as intended, and contains a Seismic Certification Label referencing this Certificate of Compliance. Approval is limited by the tabulated values, grade, and roof-level installations as shown in the chart below. Equipment Importance Factor assigned is  $I_P$ =1.5. The equipment is qualified by ISO Accredited Product Certification Agency, VMC Group via structural analysis of worst-case representative sample of certified product.

Certified Seismic Design Levels					
Certified	<b>Importance I</b> ⊵ <b>≤ 1.5</b> Soil Classes A-E	z/h ≤ 1.0	z/h = 0.0		
IBC	Risk Categories I-IV Design Categories A-F	S <sub>DS</sub> ≤ 1.98 g	S <sub>DS</sub> ≤ 3.00 g		

# **Certified Seismic Installation Methods**

Rigid Mounting From Unit Base To Rigid Structure

### HEADQUARTERS

113 Main Street Bloomingdale, NJ 07403 Phone: 973.838.1780 Toll Free: 800.569.8423 Fax: 973.492.8430

#### 102S-105387 Rev00

CALIFORNIA 180 Promenade Circle Suite 300 Sacramento, CA 95834 Phone: 916.634.7771

### TEXAS

11930 Brittmoore Park Drive Houston, TX 77041 Phone: 713.466.0003 Fax: 713.466.1355 thevmcgroup.com











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## **Certified Product Table:**

Model	ACB	Overall Dimensions [ in ]			Voltage Range	Weight
	Туре	Width	Depth Range	Height	[V]	[ in ]
USG-D4G2	D G	66	63	98	254-635	6,018
USG-D4D4	D	40	62-119	98	254-635	6,930
USG-D4E4	E D	42	62-119	98	254-635	7,645
USG-E2G1	E G	68	119	98	254-635	8,057
USG-E4E4	E,	44	62-119	98	254-635	8,360
USG-D4G2	G D	64	62-119	98	254-635	8,863
USG-E4G2	G E	66	62-119	98	254-635	8,863
USG-G2G2	G	88	62-119	98	254-635	8,863

Group	Туре	S <sub>DS</sub> (z/h=0)	S <sub>DS</sub> (z/h=1)	A <sub>Flex-H</sub>	A <sub>Rig-H</sub>	A <sub>Flex-V</sub>	A <sub>Rig-V</sub>	F <sub>p</sub> /W <sub>p</sub>
Seismic	AC156	3.00	1.98	3.17	2.38	2.00	0.80	1.49

This certification includes Low Voltage Switchgear and included factory supplied options. This certification only covers accessories and options directly mounted to the switchgear. The switchgear and applicable options shall be installed per the manufacturer supplied seismic installation instructions. For a list of certified configurations and options please directly contact the manufacturer. This certification excludes all non-factory supplied accessories and options, including but not limited to isolation/restraint devices, other electrical/mechanical components and all connections for electrical configurations not detailed in the above charts. Flexibility in the connections must be maintained as to not transmit load into the equipment. Design specials are outside the scope of this certification.



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# CERTIFICATE OF COMPLIANCE SEISMIC DESIGN OF NONSTRUCTURAL COMPONENTS AND SYSTEMS

### Notes and Comments:

- 1. All equipment listed herein successfully passed the seismic acceptance criteria for shake testing non-structural components and systems as set forth in the ICC AC-156. The Test Response Spectrum (TRS) enveloped the Required Response Spectrum (RRS) for all units tested. The test units were representative samples of a contingent of models and all remained captive and structurally sound after the seismic shake simulation. The units also remained functionally operational after the simulation testing as functional testing was completed by the equipment manufacturer before and after the seismic simulations. Although a seismic qualified unit inherently contains some wind resisting capacity, that capacity is undetermined and is excluded from this certification. Snow/Ice loads have been neglected and thus limit the unit to be installed both indoors (covered by an independent protective structure) and out of doors (exposed to accumulating snow/ice) for ground snow loads greater than 30 psf for all applications.
- The following building codes are addressed under this certification: IBC 2021 – referencing ASCE7-16 and ICC-ES AC-156 IBC 2018 – referencing ASCE7-16 and ICC-ES AC-156
- 3. Refer to the manufacturer supplied installation drawings for anchor requirements and mounting considerations for seismic applications. Required anchor locations, size, style, and load capacities (tension and shear) may be specified on the installation drawings or specified by a 3rd party. Mounting requirement details such as anchor brand, type, embedment depth, edge spacing, anchor-to-anchor spacing, concrete strength, special inspection, wall design, and attachment to non-building structures must be outlined and approved by the Engineer of Record for the project or building. Structural walls, structural floors, and housekeeping pads must also be seismically designed and approved by the project or building Structural Engineer of Record to withstand the seismic anchor loads as defined on the installation drawings. The installing contractor is responsible for ensuring the proper installation of all anchors and mounting hardware.
- 4. For this certificate and certification to remain valid, this certificate must correspond to the "Seismic Certification Label" found affixed to the unit by the factory. The label ensures the manufacturer built the unit in conformance to the IBC seismic design criteria set forth by the Certified Seismic Qualification Agency, the VMC Group, and meets the seismic design levels claimed by this certificate.
- This certificate applies to units manufactured at: 68 Wolmyeong-ro 201, Heung deok-gu, Cheongju-si, Chungcheongbuk-do, Republic of Korea
- 6. This certification follows VMC Group's ISO-17065 Scheme for Product Certification of Nonstructural Components.

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John P. Giuliano, PE President, The VMC Group



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