



Armada

Surge Protection

Installation Guide

Galeos *Series 6DELTA*

■ ■ English

armadasurge.com



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Safety Instructions

Thank you for choosing Armada! Please retain these instructions for future reference.

Warnings

PLEASE READ ALL INFORMATION IN THIS MANUAL CAREFULLY BEFORE INSTALLATION. THE PROCEDURES DESCRIBED IN THIS DOCUMENT DO NOT SUPERSEDE ANY APPLICABLE LOCAL OR NATIONAL ELECTRICAL CODES. CONSULT AND FOLLOW ALL APPLICABLE ELECTRICAL REGULATIONS TO ENSURE YOUR INSTALLATION IS COMPLIANT.

ALL LOCAL AND NATIONAL ELECTRICAL CODE REQUIREMENTS MUST BE FOLLOWED AT ALL TIMES.

The Armada Galeos Series 6 provides protection against transient voltages and electrical surges. Proper installation is essential to maximize the performance and effectiveness of the surge protection device.

IMPORTANT

This device DOES NOT protect against sustained overvoltage conditions or direct lightning strikes.

■ QUALIFICATION

This device must be installed by a qualified, licensed electrician or technician. The installer must follow the procedures outlined in this manual to ensure a compliant installation.

This manual provides the instructions required to install the Armada Galeos Series 6 DELTA Surge Protective Device (SPD). The device can be installed using either of the following two methods:

- The preferred method is to mount the SPD directly to the exterior of the electrical panel using the conduit fitting located on the SPD enclosure.
- The SPD may also be mounted adjacent to the electrical panel or on a wall using installer-supplied mounting hardware.

The second method requires conduit and additional installation materials, which are not included.

The Armada Galeos Series 6 DELTA is listed to UL 1449, 4th Edition. The product is suitable for installation on electrical distribution equipment.

■ ENERGIZATION

The Armada Galeos Series 6 DELTA must NOT be energized until the electrical installation has been completed, connected, inspected, and tested. All conductors must be properly connected and verified before energizing the device.

Notice

FAILURE TO FOLLOW THE RECOMMENDATIONS IN THIS MANUAL MAY RESULT IN ABNORMALLY HIGH VOLTAGE AT THE SPD AND MAY CAUSE THE ARMADA GALEOS SERIES 6 DELTA TO FAIL. DAMAGE CAUSED BY IMPROPER INSTALLATION IS NOT COVERED BY THE WARRANTY.

■ HIGH-POTENTIAL (HIPOT) TESTING

Do not perform high-potential testing on the electrical system while the SPD is connected. Failure to disconnect the SPD before high-voltage testing may damage the surge suppression components and/or other electrical equipment.

Safety Information

Do not install this device during an electrical storm. This device is certified NEMA 4X and is suitable for indoor and outdoor installations. To maintain a watertight connection, the installer must seal the SPD conduit fitting to the electrical panel using appropriate watertight gaskets or sealing components (not included).

Operation

Armada surge protection devices do not normally require servicing. However, an electrical anomaly or malfunction may change the device's operating status and require corrective action. If the device must be removed or replaced, the work must be performed by a qualified electrician or other qualified professional.

■ INSPECTION

If the SPD circuit breaker trips while the system is energized, always inspect the Armada device.

If soot is visible around the 2-inch conduit nipple, do not reset the circuit breaker or re-energize the SPD. The device must be replaced.

If the device appears normal, contact your Armada representative for technical support before resetting the circuit breaker.

The device automatically disconnects at the end of its service life. Electrical power will remain available, but the installation will no longer be protected against surges. Follow the manufacturer's instructions to replace the surge protection device.

Installation Instructions

Requirements

The Armada Galeos Series 6 DELTA is a Type 2 SPD. It is a permanently connected surge protective device intended for installation on the load side of the service equipment overcurrent protection.

The SPD must be connected through the specified external three-pole, 30 A circuit breaker. It is suitable for installation at the main distribution panel or downstream distribution panels.

- **Comply with all applicable local and national regulations.**
- Verify that the system voltage matches the SPD voltage rating. A 120 V SPD will be immediately damaged if installed on a 240 V, 277 V, or higher-voltage system.
- Mount the SPD as close as possible to the electrical panel or protected equipment. For all wiring connections, refer to **Torque Table 1.1**.
- **Important: Use conductors ranging from 10 to 6 AWG.**
- Ensure that all phase and grounding conductors are as short and straight as possible.
Use a circuit breaker located as close as possible to the SPD and connect the grounding conductor to the nearest suitable ground bar in the panel.
- The circuit breaker must be rated **30 A, 3-pole**.
- Before energizing the SPD, verify that the grounding system resistance is **below 100 Ω** and that the system is free of faults or abnormalities.
- Never perform high-potential (hipot) testing on the SPD, as this may cause premature degradation.
- Ensure that the Armada product’s 2-inch conduit nipple remains securely attached to the electrical panel at all times.

Table 1.1: Wiring Connection Torque Specifications

Connexion	Conductor Size	Torque
Grounding Terminal	6 AWG	26,55 lbf-in 3,5 Nm
	10 à 8 AWG	17,70 lbf-in 2,3 Nm
Line Terminal — Line Side	8 à 10 AWG	40 lbf-in 4,52 Nm
	6 AWG	120 lbf-in 13,56 Nm

Installation Steps

WARNING: DO NOT MODIFY THE SPD ENCLOSURE. DOING SO MAY DAMAGE THE SPD AND ENDANGER PERSONNEL AND EQUIPMENT.

■ SPECIFIC WARNINGS — SERIES 6 DELTA

Do not remove the screws from the hinged panel inside the SPD. Do not modify the unit's internal wiring.
The Armada device is a one-port SPD with no load-current rating and must not be installed as a two-port device.

- 1** Use a voltmeter to verify the system voltages and ensure they are compatible with the SPD ratings. Refer to the product datasheet for the device specifications.
- 2** Determine the SPD installation location.
- 3** De-energize the electrical panel.
- 4** Identify the location of the SPD circuit breaker inside the electrical panel.
- 5** Mount the SPD (refer to the wiring diagram):
 - Remove an appropriately sized knockout from the electrical panel.
 - Secure the SPD enclosure to the wall using the mounting brackets, as close as possible to the electrical panel.
 - Open the SPD enclosure.
 - Remove the protective plastic covers from the SPD terminal blocks.
 - Route the conductors between the SPD and the electrical panel.
 - Connect the three phase conductors and the grounding conductor to their designated terminals. Keep all conductors as short and straight as possible.
 - Tighten each terminal connection to the torque specified in Table 1.1.
 - Reinstall the protective plastic covers on the terminal blocks.
 - Close the enclosure and tighten each of the three screws to 30 lbf-in.
- 6** IGround: **Green** | Phase Conductors: **Red or Black**
- 7** Before energizing the SPD, ensure that the 600 V Delta HRG system and its grounding configuration comply with the Canadian Electrical Code (CEC), CSA C22.1.
An improper system configuration or connection may damage the SPD. Installation must be performed by a qualified electrician.
- 8** Energize the system and verify that the circuit breaker remains engaged.
- 9** Register your product online at armadasurge.com or by email at register@armadasurge.com to receive full technical support and activate your **25-year warranty**.

Maintenance

Once installed, Galeos devices require no specific maintenance. However, regularly verify that the SPD circuit breaker in the electrical panel remains engaged. If the circuit breaker cannot be reset, the surge protection device must be replaced.

INFORMATION

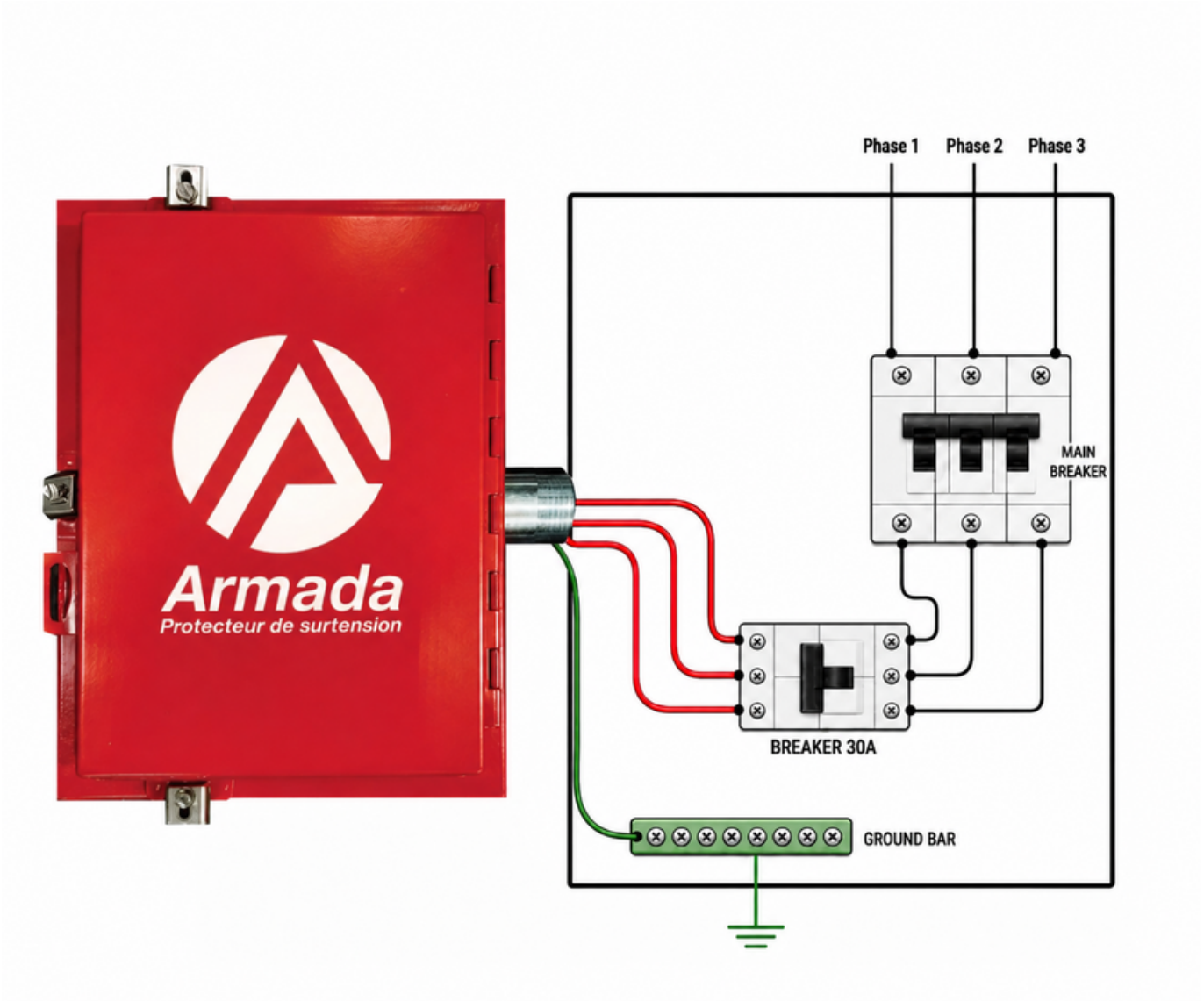
This unit contains no user-serviceable parts.

— CAUTION! —

**VERIFY THAT ALL ELECTRICAL CIRCUITS ARE DE-ENERGIZED
BEFORE MAKING ANY CONNECTIONS.**

Pour un manuel canadien, il faut remplacer NEC® par CEC :
All electrical connections must be performed by a qualified electrician or technician. All wiring must comply with the **Canadian Electrical Code (CEC), CSA C22.1, and all applicable local regulations.**

External Wiring Diagram



Internal Wiring Diagram



After completing the wiring, reinstall the plastic covers on both terminal blocks and close the enclosure by tightening each of the three screws to 30 lbf-in.