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Air Break Switch Guard for Wildlife Protection

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Related/Referenced Documents

N/A

Version History

Version	Date	Revision
01	Aug. 7, 2023	Initial release
02	Aug. 7, 2025	Added item 072-87696 and eliminated items 072-85098 and 072-85173. Modified sections 1, 3-12, Appendix (TOC) and Title. Changed Document Number (Legacy Number: 4350.320) to new Engineering Records nomenclature number 4300.50.320.

Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
072-87696	87696	01	08/07/2025



1. Introduction

This is a general specification that covers the minimum requirements for the Air Break Switch Guard for Wildlife Protection to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement and will provide information on site specific conditions, quantity, and other requirements. This document includes the general characteristics of the equipment/material.

2. Special Requirements

Samples shall be furnished as requested by LUMA Energy. Vendors that have supplied this equipment/material to LUMA on previous orders, will not have to furnish samples at bid opening. The equipment/material will be received at LUMA's general warehouse (011) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

- 3.1. Descriptive and technical literature must be supplied by the vendor at time of bidding. This literature must include, but is not limited to, details of material, drawings, documented testing, and instructions for use and installation. **The literature must be an official document from and certified by the manufacturer.** Failure to submit documents on time and duly certified by the manufacturer will cause bidder disqualification.
- 3.2. If required by LUMA, final drawings and documentation shall be submitted by the vendor before the manufacturing and shipping process for approval.

4. Compatible with

For compatible manufacturers and models see Table 2 on page 6. These models are examples of the equipment/material described in this document and do not represent a preference. LUMA will evaluate equally any model not listed here during any acquisition event.

5. Markings

- 5.1. Containers shall be marked outside with LUMA Energy's purchase order and item number.
- 5.2. Individual package(s) shall be clearly marked with manufacturer name and item information (part number, serial number, quantity, etc.).
- 5.3. Packaging labels and tags shall be waterproof.

6. Packaging

- 6.1. All equipment/material shall be packaged and marked in such a way as to facilitate handling and protection from damage and that the receiving warehouse can readily identify it and send it, in one complete unit, to a field location without opening crates or boxes to sort items and/or parts.
- 6.2. A list of all parts included in the container and/or package must be provided at the time of delivery so that the receiving personnel can verify that everything requested is present, avoiding any delay in the receiving process.

7. Number Per Package (Logistics)

Standard package: One unit per box or as requested by LUMA.

8. Acceptance Criteria

- 8.1. Test required: certified by external qualified laboratories.
- 8.2. Product shall be manufactured in accordance with the latest issue below (section 8.3). When conflicts occur between purchaser's specifications and the latest issue below, the purchaser's specification shall prevail.
- 8.3. Latest applicable codes, standards, and other regulations:
 - a. IEEE 1656: provides a guide for testing the electrical, mechanical, and durability performance of wildlife protective devices on overhead power distribution systems rated up to 38 kV.

b. UL 94: is a safety standard to determine the flammability of plastic materials. The standard defines several classifications, with the most common being HB, V-2, V-1, V-0, 5VB, and 5VA. These classifications are determined by how quickly a material self-extinguishes after being ignited and whether it drips flaming particles.

8.4. If any other standards different from the ones indicated in this document are used, the supplier must provide information showing compatibility with the required ones.

9. Description

9.1. The Air Break Switch Guard for Wildlife Protection is designed for installation on air break switches to minimize animal access to live parts of the switch and isolate them from making phase to ground contact.

9.2. The guard comprises an interlaced circular structure resembling a mesh with an entry port that allows insertion on the insulator.

9.3. The guard shall be made of crosslinked polyethylene or an equivalent material.

9.4. It shall be suitable for installation on polymeric insulators.

9.5. It must provide a mechanism to secure the guard to the air break switch insulator by means of non-conducting bolts or other similar means.

9.6. Minimum voltage class shall be 15 kV.

9.7. The guard shall be designed to allow installation using a hot stick.

9.8. It shall accept insulators with core diameters up to 2.5 in. with the possibility of increasing the guard inner diameter if needed.

9.9. Outer diameter shall be approximately 16 inches.

9.10. The guard color shall be gray.

9.11. It shall have a UL 94 classification of V-0, 5VB or 5VA.

10. Inspection

10.1. Upon inspection of incoming equipment/material, the purchaser reserves the right to refuse product shipments and to determine the acceptability or rejection of the product received. The supplier shall be liable for all costs incurred for a product that is rejected.

10.2. The acceptance of any equipment/material shall in no way relieve the vendor from his responsibility to meet all the requirements of this specification, and it would not prevent subsequent rejection if such equipment/materials were found later to be defective.

11. Proposal Information

- 11.1. Submitted proposals must include:
 - a. Technical information, drawings, and tests.
 - b. Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 2: Warehouse and Asset Suite Identification Number

Item	Warehouse Catalog #	Asset Suite #	Compatible Manufacturer & Model
Air Break Switch Guard for Wildlife Protection	072-87696	87696	Reliaguard PD0616

—End of Specification —

Appendix

Appendix 1: Table of Compliance

Criteria	Description	Pass/Fail	Comments
Industry Standards	Complies with IEEE 1656		
Material	Crosslinked polyethylene or equivalent material		
Features	Hot stick installable		
	UL 94 classification: V-0, 5VB or 5VA		
	Minimum voltage class shall be 15 kV		
	Comprises a circular mesh with an entry port that allows insertion on the insulator		
	Shall accept insulators with core diameters up to 2.5 in. with the possibility of increasing the diameter if needed		
	Mechanism to secure the guard to the air break switch insulator by means of non-conducting bolts or similar means		
Outer Diameter	16 inches		
Color	Gray		
Conclusion	Complies with Specification (Doc. No. 4300.50.320)		

NOTE: This table is only a checklist for reference. The compliance must be with the complete document. Filling out the table with “PASS” won’t be accepted as a compliance without the technical information required to certify it.











4300.50.320 Air Break Switch Guard for Wildlife Protection

Final Audit Report

2025-08-07

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