



Document Title:
Neutral Bus Bar

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Material Specifications

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4350.263

Department:
Distribution Standards & Materials

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Sep. 1, 2022	Initial Release.

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038-83390	1	09/01/2022



Equipment Specification

Document No.: 4350.263

Item No.: 038-83390

Asset Suite: 83390

Originating Department: Distribution Engineering



Neutral Bus Bar

1. Introduction

This is a general specification that covers the minimum requirements for the neutral bus bar to be used in the distribution system in Puerto Rico. Further information will be provided by LUMA Energy at the time of order placement regarding on site specific conditions, quantity, and other requirements. This document includes the general electrical and mechanical characteristics of the material.

2. Special Requirements

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

3. Quantity/Literature

Descriptive and technical literature must be supplied by vendor at time of bidding. This literature may include, but is not limited to details of material, drawings, documented testing, and instructions for use and installation. Failure to submit documents on time will cause bidder disqualification. For products described in this specification as requiring qualification, awards will be made only for such products that, prior to the time for opening of bids, had been tested and/or approved by LUMA. Evidence of PREPA's and/or LUMA Energy's approval of the equipment or material shall be supplied by vendor if requested by LUMA Energy.

4. Markings

- 4.1. Containers shall be marked outside with LUMA Energy purchase order and item number.
- 4.2. Packaging labels and tags shall be waterproof.

5. Equal or Approved Equal to

Burndy, catalog number: BCBX144364K

6. Packaging

All material and equipment 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.



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7. Number Per Package (Logistics)

One per package or as requested by LUMA Energy

8. Acceptance Criteria

- 8.1. Test required: certified by external laboratories.
- 8.2. Shall comply with the latest applicable codes, standards, and other regulations.

9. Description

9.1. Copper bus bar for neutral connections to be used in electrical equipment.

9.2. Material shall be solid copper.

9.3. Dimensions:

- a. Length: 36 in (91.44 cm)
- b. Width: 4 in (10.16 cm)
- c. Thickness: 0.25 in (0.64 cm)
- d. Thousand Circular Mils Equivalent Area: 1270 MCM

9.4. The bus bar must have 17 positions conforming to NEMA standard CC 1, with the following dimensions:

The bus bar shall be manufactured with 17 columns of three (3) holes each. The vertical spacing shall be 0.75 in (1.91 cm) between the top hole and middle hole, and 1 inch (2.54 cm) between the middle hole and the bottom hole. The horizontal spacing shall be 2 inches (5.1 cm) between each column. All dimensions are center-to-center of holes. See Figure 1 for further details.

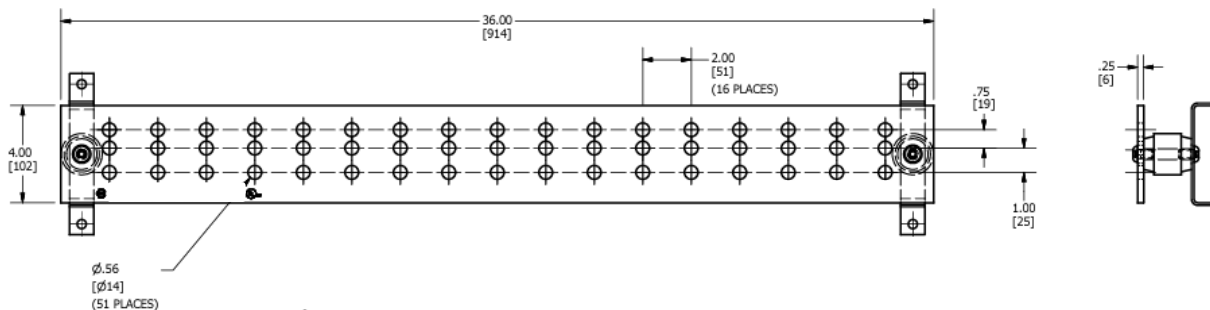


Figure 1: Dimensions



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- 9.5. Holes shall be 0.56-inch (1.42 cm) diameter, compatible with 1/2-inch bolts.
- 9.6. The bus bar shall be provided with two insulators, two mounting brackets, and four self-locking screws. The bus bar and all necessary hardware shall be delivered in a single package.
- 9.7. Bus bar must withstand at least 1250 A at 60 Hz with 30° C temperature rise.

10. Inspection

The acceptance of any material or equipment 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 materials were found later to be defective.

11. Proposal Information

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

— End of Specification —



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Appendix



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Appendix 1: Table of Compliance

Line	Criteria	Description	Pass/Fail (P / F)	Comments
1	Specification	The Proponent complies with the corresponding specification document (4350.XXX).		
2	Industry Standards	The Proponent complies with the industry standards established in the specification document.		
3	Material	Solid copper		
4	Bus bar dimensions	<ul style="list-style-type: none">Length: 36 in (91.44 cm)Width: 4 in (10.16 cm)Thickness: 0.25 in (0.64 cm)Circular Mils Equivalent Area: 1270 MCM		
5	Hole Pattern	17 positions compatible with 1.75 in spacing NEMA standard CC 1.		
6	Holes Diameter	0.56 inch		
7	Accessories	Two insulators, two mounting brackets, four self-locking screws.		
8	Electrical Characteristics	Withstand at least 1250 Amp		











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Final Audit Report

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