



Document Title:
Dead-End Straight-Line Clamp for Copper Conductors

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Department
Distribution

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Author

Miguel J. Rios López, PE (Lic. 16636)
General Engineer, Distribution Standards & Materials

Signature and Date

Jul 22, 2024

Reviewer

Rodolfo A. Flores Ortiz, PE (Lic. 27131)
General Engineer, Distribution Standards & Materials

Signature and Date

Jul 22, 2024

Approver

Ricardo Castro Gómez, PE (Lic. 12135)
Manager, Distribution Standards & Materials

Signature and Date

Jul 22, 2024

Management Approval (If apply)

Approver

Name
Position

Signature and Date

N/A

Related/Referenced Documents

N/A

Version History

Version	Date	Revision Comments
1	May. 24, 2022	Initial release.
2	Jul. 22, 2024	General format modifications, TOC updated, Section 4 modified, and sections order rearranged.



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Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-83040	83040	2	7/22/2024
002-83041	83041	2	7/22/2024



1. Introduction

This is a general specification that covers the minimum requirements for hot dip galvanized dead-end straight-line clamps 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 electrical and mechanical 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 the LUMA's general warehouse (O11) at Palo Seco, Puerto Rico. Shipping will include transportation and unloading at the indicated warehouse.

3. Literature

Descriptive and technical literature must be supplied by the 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. If required by LUMA, final drawings shall be submitted by the vendor before the manufacturing and shipping process for approval.

4. Compatible with

For compatible manufacturers and models, see Table 1. These models are examples of the equipment/materials described in this document and do not represent a preference. LUMA will evaluate equally any models 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. Packaging labels and tags shall be waterproof.

6. Packaging

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.

7. Number Per Package (Logistics)

7.1. Fifteen (15) units per box for item 1 or as requested by LUMA.

7.2. Ten (10) units per box for item 2 or as requested by LUMA.

8. Acceptance Criteria

8.1. Test required: certified by external 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. ANSI C119.4: Electric connectors for use between aluminum-to-aluminum and aluminum-to-copper conductors designed for normal operation at or below 93°C and copper-to-copper conductors designed for normal operation at or below 100°C.

b. ASTM A36: For carbon steel shapes, plates, and bars of structural quality for use in riveted, bolted, or welded construction of bridges and buildings, and for general structural purposes.

c. ASTM A153: For hot dip galvanized process on iron and steel hardware.

8.4. If any other standard 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. Used for clamping and tension mounting on copper conductors.

9.2. The dead-end straight-line clamp shall have the following characteristics:

a. For clamping range, measures, minimum ultimate strength, and U-bolts see table 1.

b. Body and Keeper: hot dip galvanized high steel strength, as per ANSI/ASTM A153, or ductile iron.

c. Hardware: hot dip galvanized steel as per ASTM A153.

d. Cotter Pin: stainless-steel (302).

e. Pulling eye shall be designed to accommodate come-along hook or shackle.

f. Shall have clevis at one end of clamp to provide for mounting and installation.

9.3. Clamping range and ultimate strength information shall be stamped on the clamp body.

10. Inspection

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.

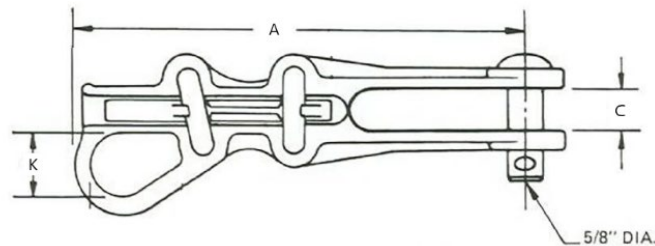
11. Proposal Information

11.1. Submitted proposals must include:

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

12. Table 1: Warehouse and Asset Suite Identification Number

Item	Warehouse Catalog #	Asset Suite #	Clamping Range	Approximate Dimensions (A, C, K)	Minimum Ultimate Strength	U-Bolts	Compatible Manufacturer & Model
1	002-83040	83040	6 solid - 2/0 stranded (0.16" – 0.46")	7.00, 0.69, 1.38" (17.8, 1.8, 3.5 cm)	8,000 lbf (35.6 kN)	2 - 1/2" (2 - 1.27 cm)	MacLean (SDE-46-F)
2	002-83041	83041	2 - 300 stranded (0.25" – 0.73")	9.13, 0.69, 1.50" (23.2, 1.8, 3.8 cm)	10,000 lbf (44.5 kN)	2 - 1/2" (2 - 1.27 cm)	MacLean (SDE-73-F)



— End of Specification —



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Appendix



Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	The Proponent complies with the specification document 4350.087.		
2	The Proponent complies with the industry standards established in the specification document. (ANSI/ASTM)		
3	Tech. info., tests & drawings provided.		
4	Hardware: hot dip galvanized steel		
5	Body & Keeper: hot dip galvanized high steel strength or ductile iron.		
6	Cotter Pin: Stainless Steel 302		
7	Hot dip galvanizing procedure as per ASTM A153.		
8	Pulling eye for come-along hook or shackle.		
9	Dimensions as per Table 1.		
10	Min. Ultimate Strength	Shall be stamped on clamp body. • 002-83040: 8,000 lbf • 002-83041: 10,000 lbf	
11	Clamping Range	Shall be stamped on clamp body. • 002-83040: #6 solid - 2/0 stranded • 002-83041: #2 - 300 MCM stranded	
12	U - Bolts & Diameter	• 002-83040: 2 & 1/2" dia. • 002-83041: 2 & 1/2" dia.	

NOTE: This table is only a checklist for reference. The compliance shall be with the complete document. Marking a PASS in the table won't be accepted as a compliance without the technical information required to certify it.











4350.087 Dead End Straight Line Clamp, CU (7-22-24)

Final Audit Report

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