




Document Title:
Jumper Loop Compression Splices for ACSR and AAAC Conductors

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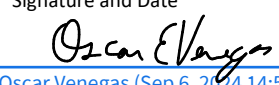
Author
Rodolfo A Flores Ortiz, PE (Lic. 27131)
General Engineer, Distribution Standards & Materials

Signature and Date
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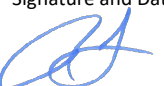
Reviewer
Miguel J. Rios Lopez, PE (Lic. 16636)
General Engineer, Distribution Standards & Materials

Signature and Date
 Sep 6, 2024

Reviewer
Oscar E. Venegas, PE (Lic. 23125)
Supervisor, Line Engineering Standards

Signature and Date

[Oscar Venegas \(Sep 6, 2024 14:53 EDT\)](#) Sep 6, 2024

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

Signature and Date
 Sep 6, 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 | Jul. 13, 2021 | Initial Release. |
| 2 | Nov. 8, 2022 | Codes 002-83690 and 002-83691 added. Table #1 modified |
| 3 | Dec. 21, 2022 | Clarifying: Second code in the table below is 002-83691, not 002-93691 as listed in the previous version. |
| 4 | Aug. 2, 2023 | General format and TOC revision. Item 002-09478 shared with Transmission. |
| 5 | Sep. 6, 2024 | Substitute Warehouse number 002-09460 with 002-83228. Format corrections, TOC update, Section 4 modified, and sections order rearranged. |



Item Version History

| Warehouse Catalog # | Asset Suite # | Version | Date |
|---------------------|---------------|---------|------------|
| 002-83690 | 83690 | 3 | 09/06/2024 |
| 002-83691 | 83691 | 3 | 09/06/2024 |
| 002-83034 | 83034 | 7 | 09/06/2024 |
| 002-83035 | 83035 | 7 | 09/06/2024 |
| 002-09429 | 54365 | 7 | 09/06/2024 |
| 002-83228 | 83632 | 7 | 09/06/2024 |
| 002-09886 | 83633 | 7 | 09/06/2024 |
| 002-05450 | 55450 | 7 | 09/06/2024 |
| *002-09478 | 54366 | 7 | 09/06/2024 |
| 002-09502 | 83634 | 7 | 09/06/2024 |



1. Introduction

This is a general specification that covers the minimum requirements for jumper loop compression splice for ACSR and AAAC conductors used in the distribution and transmission 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 (011) 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/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. Package(s) to be delivered at warehouse shall be clearly marked with manufacturer and item information (part number, serial number, quantity, etc.)
- 5.3. 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)

Minimum pack quantity: One (1) unit per box 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 Class 2 – partial tension
 - b. RUS
 - c. RoHS
- 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. Single sleeve, aluminum, partial tension compression connector used for splice ACSR and AAAC conductors on jumper loop in overhead lines.
- 9.2. Sleeve must be designed to withstand jumper loop tensile and vibration stresses.
- 9.3. Sleeve must have cable stop.
- 9.4. Must be installed with standard tooling and dies. For die index see Table 1.
- 9.5. Splice connector must have permanent marking showing model, conductor size range, and die index.
- 9.6. Shall be furnished pre-filled with an oxide inhibiting compound strip sealed and capped.

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

| Warehouse Catalog # | Asset Suite # | Compatible Manufacturer | Model | Length | Die Index/Die Sets | Conductor Size Range (ACSR) |
|---------------------|---------------|-------------------------|---------|------------|--|---------------------------------|
| 002-83690 | 83690 | Burndy | YSS6RG2 | 4.00 in | BG 5/8 or 243 / W-BG (3), BG (6), U-BG (3) | #6 (6/1) |
| 002-83691 | 83691 | Burndy | YSS4R | 3.78 in | BG 5/8 / W-BG (3), BG (6), U-BG (3) | #4 (6/1) |
| 002-83034 | 83034 | Burndy | YCS2R | 4.91 in. | 239/W239, U239 | #2 (6/1) (7/1) |
| 002-83035 | 83035 | Burndy | YCS25R | 7.09 in. | 243/W-BG, W243, U243 | 1/0 (6/1) |
| 002-09429 | 54365 | Burndy | YCS27R | 5.75 in. | W247, U247 | 3/0 (6/1) |
| 002-83228 | 83632 | Burndy | YCS28R | 5.75 in. | 249/W249, U249, L249 | 4/0 (6/1) |
| 002-09886 | 83633 | Burndy | YCS30R | 6.5 in. | 251/W251, U251, L251 | 266.8 (26/7) |
| 002-05450 | 55450 | Burndy | YCS321R | 6.5 in. | 490/U490, L490 | 366.4 (18/1) |
| *002-09478 | 54366 | Burndy | YCS39R | 10.75 in. | 608/U608, L608 | 556.5 (24/7), AAAC 652.4 (19) |
| 002-09502 | 83634 | Burndy | YCS45R | 10.625 in. | 352/S352, L352 | 795.0 (26/7) AAAC 927.2 (37) |

* The item 002-09478 is also used in the 38kv transmission system.

— End of Specification —



Appendix



Appendix 1: Table of Compliance

| Line | Criteria | Description | Pass/Fail (P/F) | Comments |
|------|----------------------|--|-----------------|----------|
| 1 | Specification | The Proponent complies with the corresponding specification document (4350.165). | | |
| 2 | Industry Standards | The Proponent complies with the industry standards established in the specification document (ANSI). | | |
| 3 | Type | Jumper loop, single sleeve, partial tension for aluminum conductor. | | |
| 4 | Material | Aluminum | | |
| 5 | Product Requirement | Must be designed to withstand jumper loop tensile and vibration stresses | | |
| | | Come pre-filled with an oxide inhibiting compound strip sealed and capped. | | |
| | | Sleeve must have cable stop | | |
| | | Must be installed with standard tooling and dies | | |
| | | Splice connector must have permanent marking showing model, conductor size range, and die index | | |
| 6 | Conductor Size Range | As per Table 1 | | |

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.











4350.165 Jumper Loop Compression Splice (9-6-2024)


Final Audit Report

2024-09-06


| | |
|-----------------|---|
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