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Compression Cross Grid Connector

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N/A**Related/Referenced Documents**

N/A

Version History

Version	Date	Revision Comments
1	Jan. 11, 2022	Initial release for code 002-14460.
2	Sep. 22, 2022	Added new code. General format corrections for both codes.
3	Jul. 23, 2024	Format corrections, TOC update, Section 4 modified, Engineers license number was added, and sections order rearranged.



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Item Version History

Warehouse Catalog #	Asset Suite #	Version	Date
002-14460	14460	4	07/23/2024
002-83499	83499	2	07/23/2024



1. Introduction

This is a general specification that covers the minimum requirements for compression cross grid connectors 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 (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 manufacturer and model see Table 3. 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, item number, name and size, net and gross weight, manufacturer's name, and lot 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)

Standard package: Twenty-five (10) units per box or as requested by LUMA Energy.

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. ANSI/NEMA:
 - b. UL 467 - Standard for grounding and bonding.
 - c. UL 96 Listed for lightning protection
 - d. IEEE- 837 - Direction and methods for qualifying permanent connections used for substation grounding
 - e. CSA Approved
 - f. ROHS Compliance.
- 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. An irreversible compression ground grid cross connector for cable to cable, cable to ground rod or cable to rebar which allows adjustment of the compression elements prior to installation.
- 9.2. Table 1: Cable range

Item	Warehouse Catalog #	Asset Suite #	Element A	Element B
1	002-14460	59063	#2 AWG str. -250 kcmil, 1/2" – 5/8" ground rod	#2 AWG str. -250 kcmil
2	002-83499	83499	250 kcmil – 500 kcmil, 5/8" – 3/4" ground rod	250 kcmil – 500 kcmil

9.3. Table 2: Dimensions

Item	"L"	"B"	"C-C"	"D"	"R"
1	2.50"	0.75"	1.66"	0.50"	0.50"
2	2.94"	1.10"	2.28"	0.75"	0.75"

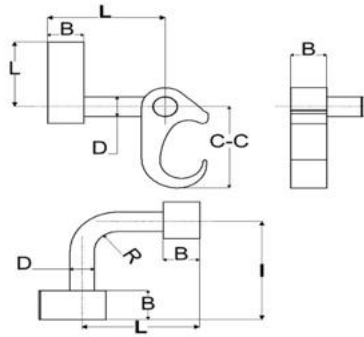


Figure 1: Dimensions

9.4. Must be acceptable for direct burial in ground and concrete.

9.5. Must be prefilled with oxide inhibitor compound and strip sealed.

9.6. Product Material: Copper, Unplated.

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:

- Technical information
- Table of Compliance completed by the bidder with reference (see Appendix 1).

12. Table 3: Warehouse and Asset Suite Identification Number

Item	Warehouse Catalog #	Asset Suite #	Compatible Manufacturer	Model
1	002-14460	59063	Burndy	YGL29C29
2	002-83499	83499	Burndy	YGL34C34

— End of Specification —



Appendix

Appendix 1: Table of Compliance

Line	Description	Pass/Fail (P / F)	Comments
1	The Proponent complies with the corresponding specification document (4350.170).		
2	The Proponent complies with the industry standards established in the specification document. (ASME, ASTM & UL)		
3	Tech. info., tests & drawings provided.		
4	Overhead primary hot line tap clamp		
5	<ul style="list-style-type: none">• Copper, unplated• Must be acceptable for direct burial in ground and concrete.• Must be prefilled with oxide inhibitor compound and strip sealed.		
6	Complied with Section 9.3. dimensions requirements		
7	Complied with Section 9.2. conductor compatibility requirement.		

NOTE: This table is only a check list 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.











4350.170 Compression Cross Grid Connector(July 2024)

Final Audit Report

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