UL 2459

STANDARD FOR SAFETY

Insulated Multi-Pole Splicing Wire Connectors

UL Standard for Safety for Insulated Multi-Pole Splicing Wire Connectors, UL 2459

First Edition, Dated August 22, 2008

Summary of Topics

This revision of ANSI/UL 2459 includes the following changes in requirements:

Minimum Spacings Table 4

Intermateability of Connectors

Use of Multi-Pole Splicing Wire Connectors as Disconnects in LED Applications

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated May 4, 2018.

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Commitment for Amendments

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This Standard is subject to review within five years from the date of publication, and suggestions for its improvement will be referred to the appropriate committee. To submit a proposal for change, please send the following information to inquires@csagroup.org and include "Proposal for change" in the subject line: Standard designation (number); relevant clause, table, and/or figure number; wording of the proposed change; and rationale for the change.

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This ANSI/UL Standard for Safety consists of the First edition including revisions through September 20, 2018. The most recent designation of ANSI/UL 2459 as an American National Standard (ANSI) occurred on September 20, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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Preface

This is the harmonized CSA Group and UL standard for insulated multi-pole splicing wire connectors. It is the first edition of CSA C22.2 No. 2459 and the first edition of UL 2459. This harmonized standard has been jointly revised on September 20, 2018.

This harmonized standard was prepared by the CSA Group and Underwriters Laboratories Inc. (UL). The efforts and support of the Technical Harmonization Committee for Connectors, of the Council on the Harmonization of Electrotechnical Standards of the Nations of the Americas (CANENA), are gratefully acknowledged.

This standard is considered suitable for use for conformity assessment within the stated scope of the standard.

This standard was reviewed by the CSA Integrated Committee on Electrical Connectors, under the jurisdiction of the CSA Technical Committee on Wiring Products and the CSA Strategic Steering Committee on Requirements for Electrical Safety, and has been formally approved by the CSA Technical Committee.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: Although the intended primary application of this standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

Level of harmonization

This standard uses the IEC format but is not based on, nor is it considered equivalent to, an IEC standard.

This standard is published as an equivalent standard for CSA Group and UL.

An equivalent standard is a standard that is substantially the same in technical content, except as follows: Technical national differences are allowed for codes and governmental regulations as well as those recognized as being in accordance with NAFTA Article 905, for example, because of fundamental climatic, geographical, technological, or infrastructural factors, scientific justification, or the level of protection that the country considers appropriate. Presentation is word for word except for editorial changes.

Reasons for differences from IEC

At present there is no IEC standard for insulated multi-pole splicing wire connectors. Therefore, this standard does not employ any IEC standard for base requirements.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

INSULATED MULTI-POLE SPLICING WIRE CONNECTORS

1 Scope

1.1 This Standard covers insulated multi-pole mating or non-mating splicing wire connectors intended for field wiring and factory wiring for use in accordance with the Canadian Electrical Code, Part I, in Canada, and NFPA 70, National Electrical Code, in the United States.

1.2 These wire connectors are intended to facilitate the connection of devices, such as prefabricated wiring assemblies, smoke detectors, and lighting products, to the branch circuit conductors of buildings.

1.2A The dimensions of these connectors are not defined in any national or international technical standard, as such, mating connectors are identified and tested with compatible mating part (or parts, if multiple exist) and are to be of the same manufacturer.

1.3 These requirements also cover luminaire disconnects that are used;

(a) internal to luminaires to facilitate replacement of the ballast or LED driver, or

(b) for LED retrofit applications where connected on the line side of the LED driver.

Luminaire disconnects are not to be directly attached to the branch circuit conductors for the purpose of interrupting (making and breaking) branch circuit conductors. Luminaire disconnects may have one or more conductors per contact.

1.4 These wire connectors are suitable for use with 30 to 6 AWG (0.05 to 13.3 mm^2) stranded copper conductors and 30 to 10 AWG (0.05 to 5.3 mm^2) solid copper conductors.

1.5 These wire connectors are suitable for currents not exceeding the ampacity of insulated conductors or as rated by the manufacturer.

Note: *The ampacity of insulated conductors 14 AWG (2.1 mm^2) and larger is determined in accordance with the values in the "Assigned maximum ampere rating" column, under the heading "Copper", in Table 7 of CAN/CSA-C22.2 No. 65 or UL 486A-486B. In Canada, the maximum ampacity of insulated conductors 14 AWG (2.1 mm^2) and smaller is determined in accordance with Table 12 of the Canadian Electrical Code, Part I.*

1.6 These wire connectors are suitable for voltages not exceeding 600 V.

1.7 This Standard does not apply to

(a) splicing wire connectors intended for direct burial;

(b) insulated splicing wire connectors intended for use at voltage levels exceeding 600 V (1000 V in a sign or luminaire);

(c) terminal wire connectors;

(d) wire binding screw terminals;

(e) built-in terminal connectors on devices having integral cable clamps;

(f) flat quick-connect terminals;

(g) devices, such as wire connectors and soldering lugs, that are covered by

(i) CAN/CSA-C22.2 No. 65 or UL 486A-486B;

(ii) CAN/CSA-C22.2 No. 188 or UL 486C; or

(iii) UL 486E;

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