



UL 486A-486B

STANDARD FOR SAFETY

Wire Connectors

UL Standard for Safety for Wire Connectors, UL 486A-486B

Third Edition, Dated April 27, 2018

Summary of Topics

This revision of ANSI/UL 486A-486B dated May 5, 2021 includes the following changes in requirements:

- ***Remove "Number of Strands" from Marking Requirement; [10.12](#)***
- ***Add Specification that the Current-Cycling Test Shall be Performed with an 60 Hz ac Source; [7.2.1](#), [Table 7](#), [Table 8](#) and [Table 13](#)***
- ***Sizing and Lubricating Bushings During Secureness Test; [9.3.2.1](#) and [Table 26](#)***
- ***Correction to [Table 13](#)***
- ***Testing with Metric and Non-Standard Size Conductors; [1.2](#), [2.1.7](#), [3.2](#), [6.3.5](#), [7.1.6A](#), [7.1.7](#), [8.1.6](#), [8.1.9](#), [8.1.10](#), [8.1.11](#), [9.1.5.1](#), [9.1.5.1A](#), [9.1.5.1B](#), [9.1.5.3](#) – [9.1.5.5](#), [9.1.9.4](#), [10.7](#), [10.8](#), [10.10](#), [10.19](#), [10.34](#), [10.39](#), [Table 7](#) – [Table 9](#), [Table 13](#), [Table 14](#), [Table 14A](#), [Table 15](#) – [Table 17](#), [Table 19](#), [Table 21](#), [Table 26](#), [Table 27](#), [Annex A](#), [Section C.4](#) and [Annex F](#)***
- ***Testing with Aluminum Wire with AA-8000 Alloy Conductors; [7.2.2](#), [7.2.3](#), [7.3.1](#), [Table 15](#) and [Annex A](#)***
- ***Use of Shear Head Bolts; [9.1.9.4](#), [9.1.9.5](#) and [9.1.9.5A](#)***
- ***Sample Length Change; [B.1.2](#)***
- ***Exothermically Welded Wire Connectors; [1.1](#) and [10.42](#)***

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 October 2, 2020 and January 22, 2021.

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Association of Standardization and Certification
NMX-J-543-ANCE
Fourth Edition



CSA Group
CAN/CSA-C22.2 No. 65-18
Sixth Edition



Underwriters Laboratories Inc.
UL 486A-486B
Third Edition

Wire Connectors

April 27, 2018

(Title Page Reprinted: May 5, 2021)



ANSI/UL 486A-486B-2021



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This ANSI/UL Standard for Safety consists of the Third Edition including revisions through May 5, 2021. The most recent designation of ANSI/UL 486A-486B as an American National Standard (ANSI) occurred on May 5, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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CONTENTS

PREFACE	5
1 Scope	7
2 Reference Publications	9
2.1 Normative references	9
2.2 Informative references	10
3 Units of Measurement	10
4 Definitions	10
5 Symbols and Abbreviations	11
6 Construction Requirements	12
6.1 General	12
6.2 Materials	13
6.3 Soldering lugs	13
7 Test Requirements	14
7.1 General	14
7.2 Current-cycling	15
7.3 Static-heating sequence	16
7.4 Mechanical sequence	17
7.5 Dielectric-withstand test sequence	17
7.6 Secureness of insulation	17
7.7 Drop	17
7.8 Dielectric withstand after drop	17
7.9 Flexing	17
7.10 Low temperature installation	18
7.11 Moisture absorption	18
7.12 Stress corrosion/moist ammonia (NH ₄)	18
7.13 Stress corrosion/mercurous nitrate (HgNO ₃)	18
8 Sampling Requirements	18
8.1 General	18
8.2 Current-cycling	19
8.3 Static-heating sequence	20
8.4 Mechanical sequence	21
8.5 Dielectric withstand	21
8.6 Secureness of insulation	21
8.7 Drop	21
8.8 Dielectric withstand after drop	22
8.9 Flexing	22
8.10 Low temperature installation	22
8.11 Moisture absorption	22
8.12 Stress corrosion/moist ammonia (NH ₄)	22
8.13 Stress corrosion/mercurous nitrate (HgNO ₃)	22
9 Test Methods	22
9.1 General	22
9.2 Current-cycling	29
9.3 Static-heating sequence	30
9.4 Mechanical sequence	32
9.5 Dielectric withstand	32
9.6 Secureness of insulation	34
9.7 Drop	34
9.8 Dielectric voltage-withstand after drop	35
9.9 Flexing	35
9.10 Low temperature installation	35
9.11 Moisture absorption	35

9.12	Stress corrosion/moist ammonia (NH ₄).....	35
9.13	Stress corrosion/mercurous nitrate (HgNO ₃).....	36
10	Marking, Labeling, and Packaging	36

ANNEX A – Informative References (Informative)

ANNEX B – Flammability Test (Material V-2 and VTM-2) (Normative)

B.1	General	72
B.2	Reference Publications.....	72
B.3	Apparatus.....	72
B.1	Test Specimens	73
B.1.1	General	73
B.1.2	V-2	73
B.1.3	VTM-2	73
B.5	Specimen Conditioning.....	73
B.6	Test Method.....	74
B.7	Results.....	74

ANNEX C – Examples (Informative)

C.1	Examples from Clause 7.1.4	76
C.2	Example from Clause 8.3.2 (ampere-rated, non-parallel)	76
C.3	Example from Clause 8.3.3 (ampere-rated, both parallel and non-parallel)	77
C.4	Example from Clauses 1.2 (e) and 7.1.6A (testing with both AWG/kcmil and metric conductors).....	77

ANNEX D – Stability Factor Calculation (Informative)

ANNEX E – Marking Locations Guide (Informative)

ANNEX F – AWG/kcmil Vs. Metric Conductors (Normative)

F.1	General	81
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PREFACE

This is the harmonized ANCE, CSA Group, and UL standard for Wire Connectors. It is the fourth edition of NMX-J-543-ANCE, the sixth edition of CSA-C22.2 No. 65, and the third edition of UL 486A-486B. This edition of NMX-J-543-ANCE supersedes the previous edition published on January 11, 2013. This edition of CSA-C22.2 No. 65 supersedes the previous edition published on January 11, 2013. This edition of UL 486A-486B supersedes the previous edition published on January 11, 2013.

This harmonized standard has been jointly revised on May 5, 2021. For this purpose, CSA Group and UL are issuing revision pages dated May 5, 2021, and ANCE is issuing a new edition dated May 5, 2021.

This harmonized standard was prepared by the Association of Standardization and Certification (ANCE), 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.

The present Mexican standard was developed by the SC 20D – Conectores part of the CT 20 – Conductores from the Comité de Normalización de la Asociación de Normalización y Certificación, A.C., CONANCE, with the collaboration of the connectors manufacturers and users.

This standard was reviewed by the CSA Subcommittee on Wiring Devices for Household and General Use, 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.

This standard has been developed in compliance with Standards Council of Canada requirements for National Standards of Canada. It has been published as a National Standard of Canada by CSA Group.

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 ANCE, 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.