ANSI C119.1-2016

American National Standard for Electric Connectors— Sealed Insulated Underground Connector Systems Rated 600 Volts

Secretariat:

National Electrical Manufacturers Association

Approved: March 16, 2017

American National Standards Institute, Inc.

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Foreword (This foreword and the informative annexes are not part of American National Standard C119.1)

The standard covers electrical, mechanical, and sealing requirements of connectors rated 600 V and installed underground.

This standard was initially developed by an EEI-NEMA Joint Committee on Underground Distribution Connectors and Connector Systems and published by the American National Standards Institute in 1974.

This revision has been reorganized to follow international formatting and improve the organization of information throughout the document when compared to the previous version.

Substantive changes to the standard have been made in the C119.1-2016 version of the standard. A substantive change is one that directly and materially affects performance of a product and which requires testing or retesting to meet the current edition of a standard. The substantive changes to the standard are:

This revision includes the addition of spreadsheet files in Annex B which can be used to collect current cycle test data, calculate connector stability, generate graphs of the data and print the data to provide test results as part of the test report. The spreadsheets are provided to give test laboratories a standardized method to collect, calculate and report test data and prepare test reports. These spreadsheets were not part of earlier editions.

This revision also includes the addition a spreadsheet file for Integrity of Seal Data in Annex C and a spreadsheet file for Impact Data in Annex D. The spreadsheets are provided to give a standardized format to collect, calculate and report test data and test results. These spreadsheets were not part of earlier editions.

Addition of torque strength requirements for set screws, impact test (for direct burial qualification), re-sealability test, reusability test and current cycle temperature stability calculation.

Suggestions for improvement of this standard are welcome.

They should be sent to:

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This standard was processed and approved for submittal to ANSI by the Accredited Standards Committee on Connectors for Electrical Utility Applications, C119. Committee approval of this standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the ANSI ASC C119 Committee had the following members:

Harry Hayes, Chairman
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Paul Orr, Secretary

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1 Scope and Purpose

1.1 Scope

This standard covers sealed, insulated underground connector systems rated at 600 V for utility applications and establishes electrical, mechanical, and sealing requirements for sealed insulated underground connector systems.