

TECHNICAL REPORT

Overhead electrical conductors – Calculation methods for stranded bare conductors





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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**OVERHEAD ELECTRICAL CONDUCTORS – CALCULATION
METHODS FOR STRANDED BARE CONDUCTORS**

FOREWORD

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IEC TR 61597 has been prepared by IEC technical committee 7: Overhead electrical conductors. It is a Technical Report.

This second edition cancels and replaces the first edition published in 1995. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Addition of Clause 2 and Clause 3 since the “Normative references” and “Terms and definitions” clauses are mandatory elements of the text according to the new IEC template.
- b) In Clause 6, addition of new kinds of aluminium alloy and aluminium clad steel and their values of temperature coefficients of resistance.
- c) In Clause 6, addition of guidelines for the calculation of AC resistance taken into account hysteresis and eddy current losses.

- d) In Clause 7, addition of the values of coefficient of linear expansion of aluminium alloy conductor aluminium-clad steel reinforced series.
- e) Deletion of Clause 8 “Calculation of maximum conductor length on drums” in the last version.
- f) Annex A, replaced by “A practical example of CCC calculation”.
- g) Annex B, replaced by “Indicative conditions for CCC calculation”.

The text of this Technical Report is based on the following documents:

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The language used for the development of this Technical Report is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications.

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