TECHNICAL REPORT

IEC TR 60344

Third edition
2007-02

Calculation of d.c. resistance of plain and coated copper conductors of low-frequency cables and wires – Application guide

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PRICE CODE G

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

CALCULATION OF DC RESISTANCE OF PLAIN AND COATED COPPER CONDUCTORS OF LOW-FREQUENCY CABLES AND WIRES – APPLICATION GUIDE

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IEC 60344, which is a Technical Report, has been prepared by subcommittee 46C: Wires and symmetric cables, of IEC technical committee 46: Cables, wires, waveguides, r.f. connectors, r.f. and microwave passive components and accessories.

The main task of IEC technical committees is to prepare International Standards. However, a technical committee may propose the publication of a technical report when it has collected data of a different kind from that which is normally published as an International Standard, for example "state of the art".

This third edition cancels and replaces the second edition published in 1980 and amendment 1 (1985). This edition constitutes a technical revision.

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

– improvement of the calculation method of the resistance of copper conductors.
– the content was considered more appropriate for the publication of a Technical Report rather than a International Standard.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
46C/761/DTR	46C/795A/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

A bilingual version of this publication may be issued at a later date.

The contents of the corrigendum of February 2012 have been included in this copy.

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1 Scope

This Technical Report applies to low-frequency cables and wires for telecommunication and gives a general method for calculating the resistance of copper conductors.