IEC 60317-0-4

Edition 4.0 2020-04

INTERNATIONAL STANDARD

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Specifications for particular types of winding wires –
Part 0-4: General requirements – Glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire

Spécifications pour types particuliers de fils de bobinage –
Partie 0-4: Exigences générales – Fil de section rectangulaire en cuivre nu ou émaillé, guipé de fibres de verre imprégnées de vernis ou de résine



IEC 60317-0-4:2020-04(en-fr)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

ICS 29.060.10

ISBN 978-2-8322-8220-5

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 0-4: General requirements – Glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire

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International Standard IEC 60317-0-4 has been prepared by IEC technical committee 55: Winding wires.

This fourth edition cancels and replaces the third edition published in 2015. This edition constitutes a technical revision.

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

a) addition of dimensional requirements for grade 1 enamelled wire in Table 4;
b) addition of dielectric breakdown requirements for grade 1 enamelled wire in Table 7.
c) addition of requirement for the adherence test in 8.2.1 and 8.2.2.

The text of this publication is based on the following documents:

FDIS	Report on voting
55/1835A/FDIS	55/1852/RVD

Full information on the voting for the approval of this document 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.

This standard is to be read in conjunction with the IEC 60851 series. The clause numbers used in this standard are identical with the respective test numbers of the IEC 60851 series.

In the case of inconsistencies between IEC 60851 and this standard, the latter prevails.

The numbering of clauses in this standard is not continuous from Clauses 21 through 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

A list of all parts in the IEC 60317 series, published under the general title *Specifications for particular types of winding wires*, can be found on the IEC website.

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

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

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INTRODUCTION

This part of IEC 60317 belongs to a series of standards which deals with insulated wires used for windings in electrical equipment. It is composed of the following series:

1) *Winding wires – Test methods* (IEC 60851 series);
2) *Specifications for particular types of winding wires* (IEC 60317 series);
3) *Packaging of winding wires* (IEC 60264 series).

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 0-4: General requirements – Glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire

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1 Scope

This part of IEC 60317 specifies general requirements of glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire.

The range of nominal conductor dimensions is given in 4.1 and the relevant specification sheet.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60851 (all parts), *Winding wires – Test methods*

ISO 3, *Preferred numbers – Series of preferred numbers*

EN 1977, *Copper and copper alloys – Copper drawing stock (wire rod)*

ISO 1190-1, *Copper and copper alloys − Code of designation – Part 1: Designation of materials for code of designation*

ASTM B49, *Standard Specification for Copper Rod for Electrical Purposes*

3 Terms, definitions, general notes and appearance

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

3.1.1
coating
material that is deposited on a conductor or wire by a suitable means and then dried and/or cured

3.1.2
conductor
bare metal after removal of the insulation