BS EN IEC 60317-0-4:2020

BSI Standards Publication

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

bsi.

National foreword

This British Standard is the UK implementation of EN IEC 60317-0-4:2020. It is identical to IEC 60317-0-4:2020. It supersedes BS EN 60317-0-4:2016, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee L/-/99, Miscellaneous Standards - Electrical.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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EUROPEAN STANDARD

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Supersedes EN 60317-0-4:2016 and all of its amendments and corrigenda (if any)

English Version

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 (IEC 60317-0-4:2020)

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)

Technische Lieferbedingungen für bestimmte Typen von Wickeldrähten - Teil 0-4: Allgemeine Anforderungen - Flachdrähte aus Kupfer, umsponnen mit Glasgewebe, blank oder lackisoliert, imprägniert mit Harz oder Lack (IEC 60317-0-4:2020)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

The text of document 55/1835A/FDIS, future edition 4 of IEC 60317-0-4, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60317-0-4:2020.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2021-03-01
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-01

This document supersedes EN 60317-0-4:2016 and all of its amendments and corrigenda (if any).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60317-0-4:2020 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60264 (series)	NOTE	Harmonized as EN 60264 (series)
IEC 60317 (series)	NOTE	Harmonized as EN 60317 (series)

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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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.

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).

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

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