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PRE-RELEASE VERSION (FDIS)

Specifications for particular types of winding wires – Part 0-3: General requirements – Enamelled round aluminium wire

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FINAL DRAFT INTERNATIONAL STANDARD (FDIS)

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| United States of America | Mr Mike Leibowitz | |
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TITLE:

Specifications for particular types of winding wires - Part 0-3: General requirements - Enamelled round aluminium wire

PROPOSED STABILITY DATE: 2026

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NOTE FROM TC/SC OFFICERS:

In response to comment PL-1 in 55/2013/RVC, the breakdown voltages for nominal conductor diameters larger than 2,500 mm and up to and including 5,000 mm are proposed to match those of IEC 60317-0-1 for enameled round copper wire of the same conductor diameter range, since breakdown voltage is a function of the enamel chemistry and not of the conductor metal.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES -

Part 0-3: General requirements – Enamelled round aluminium wire

FOREWORD

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IEC 60317-0-3 has been prepared by IEC technical committee 55: Winding wires. It is an International Standard.

This fourth edition cancels and replaces the third edition published in 2008, Amendment 1:2013 and Amendment 2:2019. This edition constitutes a technical revision.

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

- a) Revision to Clause 7, designating the test as inappropriate;
- b) Revision to Clause 10, designating the test as inappropriate.

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The text of this International Standard is based on the following documents:

| Draft | Report on voting |
|------------|------------------|
| 55/XX/FDIS | 55/XX/RVD |

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

The language used for the development of this International Standard 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/publications.

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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

The International Electrotechnical Commission (IEC) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent. IEC takes no position concerning the evidence, validity, and scope of this patent right.

The holder of this patent right has assured IEC that s/he is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with IEC. Information may be obtained from the patent database available at patents.iec.ch/.

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

This part of IEC 60317 is one of a series that deals with insulated wires used for windings in electrical equipment. The series has three groups describing

- 1) winding wires and test methods (IEC 60851);
- 2) specifications for particular types of winding wires (IEC 60317);
- 3) packaging of winding wires (IEC 60264).

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 0-3: General requirements – Enamelled round aluminium wire

1 Scope

This part of IEC 60317 specifies the general requirements of enamelled round aluminium winding wires with or without a bonding layer.

The range of nominal conductor diameters is given in 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 60172, Test procedure for the determination of the temperature index of enamelled and tape wrapped winding wires

IEC 60317 (all parts), Specifications for particular types of winding wires

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

ISO 3, Preferred numbers – Series of preferred numbers

ASTM B233-97, Standard Specification for Aluminum 1350 Drawing Stock for Electrical Purposes

EN 1715-2, Aluminium and aluminium alloys – Drawing stock – Part 2: Specific requirements for electrical applications