

INTERNATIONAL STANDARD



Specifications for particular types of winding wires –
Part 27-2: Paper tape covered round aluminium wire



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 27-2: Paper tape covered round aluminium wire

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60317-27-2 edition 1.1 contains the first edition (2020-06) [documents 55/1839/FDIS and 55/1858/RVD] and its amendment 1 (2024-05) [documents 55/1985/CDV and 55/2021/RVC].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

International Standard IEC 60317-27-2 has been prepared by IEC technical committee 55: Winding wires.

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

This International Standard is to be used in conjunction with IEC 60317-0-3:2008, IEC 60317-0-3:2008/AMD1:2013 and IEC 60317-0-3:2008/AMD2:2019.

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 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.

The committee has decided that the contents of this document and its amendments 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- withdrawn, or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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be essential for the correct understanding of its contents. Users should therefore print this document using a colour printer.

INTRODUCTION

This part of IEC 60317 forms an element of 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 27-2: Paper tape covered round aluminium wire

1 Scope

This part of IEC 60317 specifies the requirements of paper tape covered round aluminium winding wires. This covering consists of two or more layers of paper tape and is primarily intended for winding coils for oil immersed transformers.

The range of nominal conductor diameters covered by this document is:

- 0,500 mm up to and including 5,000 mm.

The nominal conductor diameters are specified in Clause 4 of IEC 60317-0-3:2008 and IEC 60317-0-3:2008/AMD1:2013.

The paper tapes included in this document are restricted to those covered in IEC 60554-1 and IEC 60554-3-5.

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 60317-0-3:2008, *Specifications for particular types of winding wires – Part 0-3: General requirements – Enamelled round aluminium wire*

IEC 60317-0-3:2008/AMD1:2013

IEC 60317-0-3:2008/AMD2:2019

IEC 60554-1, *Specification of cellulosic papers for electrical purposes – Part 1: Definitions and general requirements*

IEC 60554-3-5, *Specification for cellulosic papers for electrical purposes – Part 3: Specifications for individual materials – Sheet 5: Special papers*

3 Terms, definitions, general notes and appearance

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60317-0-3:2008, IEC 60317-0-3:2008/AMD1:2013 and the following 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>