

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Specifications for particular types of winding wires –
Part 27-1: Paper tape covered round copper wire**

**Spécifications pour types particuliers de fils de bobinage –
Partie 27-1: Fil de section circulaire en cuivre recouvert de ruban papier**





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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.060.10

ISBN 978-2-8322-8397-4

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 27-1: Paper tape covered round copper wire

FOREWORD

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International Standard IEC 60317-27-1 has been prepared by IEC technical committee 55: Winding wires.

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

FDIS	Report on voting
55/1838/FDIS	55/1863/RVD

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

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 60317-0-1:2013 and IEC 60317-0-1:2013/AMD1:2019.

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 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- withdrawn,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 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).

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 27-1: Paper tape covered round copper wire

1 Scope

This part of IEC 60317 specifies the requirements of paper tape covered round copper 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 60317-0-1:2013.

The paper tapes included in this document are restricted to those specified 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 60317-0-1:2013, *Specifications for particular types of winding wires – Part 0-1: General requirements – Enamelled round copper wire*
IEC 60317-0-1:2013/AMD1:2019

IEC 60554-1, *Specification for 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 60317-0-1 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>

3.1.1 covering

material which is wound, wrapped or braided around a bare or insulated conductor