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BSI Standards Publication

Specifications for particular types of winding wires

Part 80: Polyvinyl acetal enamelled rectangular copper wire, class 120, with a bonding layer

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National foreword

This Published Document is the UK implementation of EN IEC 60317-80:2019. It is identical to IEC 60317-80:2019.

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 secretary.

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Amendments/corrigenda issued since publication

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EUROPÄISCHE NORM

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English Version

Specifications for particular types of winding wires - Part 80:
Polyvinyl acetal enamelled rectangular copper wire, class 120,
with a bonding layer
(IEC 60317-80:2019)

Spécifications pour types particuliers de fils de bobinage -
Partie 80: Fil de section rectangulaire en cuivre émaillé
avec acétal de polyvinyle, classe 120, avec une couche
adhérente
(IEC 60317-80:2019)

Technische Lieferbedingungen für bestimmte Typen von
Wickeldrähten - Teil 80: Flachdrähte aus Kupfer, lackisoliert
mit Polyvinylacetal, mit einer Backlackschicht, Klasse 120
(IEC 60317-80:2019)

This European Standard was approved by CENELEC on 2019-09-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

The text of document 55/1790/FDIS, future edition 1 of IEC 60317-80, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60317-80:2019.

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) 2020-06-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-09-25

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 60317-80:2019 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)
IEC 60851 (series)	NOTE	Harmonized as EN 60851 (series)
ISO 6892-1:2016	NOTE	Harmonized as EN ISO 6892-1:2016 (not modified)

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(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-0-2	20XX ¹	Specifications for particular types of winding wires - Part 0-2: General requirements - Enamelled rectangular copper wire	EN IEC 60317-0-2	20XX ²
IEC 60851-4	2016	Winding wires - Test methods - Part 4: Chemical properties	EN 60851-4	2016

¹ Under preparation. Stage at the time of publication: IEC CDV 60317-0-2:2019.

² Under preparation. Stage at the time of publication: prEN IEC 60317-0-2:2019.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 80: Polyvinyl acetal enamelled rectangular copper wire, class 120, with a bonding layer

FOREWORD

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International Standard IEC 60317-80 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
55/1790/FDIS	55/1802/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 read in conjunction with IEC 60317-0-2:2019.

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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.

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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 80: Polyvinyl acetal enamelled rectangular copper wire, class 120, with a bonding layer

1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular copper winding wire of class 120 with a dual coating. The underlying coating is based on polyvinyl acetal resin, which can be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements. The second coating is a bonding layer based on a thermoplastic or thermosetting resin.

NOTE A modified resin is a resin that has undergone a chemical change, or contains one or more additives to enhance certain performance or application characteristics.

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

- width: min. 2,00 mm max. 16,00 mm;
- thickness: min. 0,80 mm max. 5,60 mm.

Wires of grade 1 and grade 2 are included in this specification and apply to the complete range of conductors.

The specified combinations of nominal width and thickness as well as the specified ratio width/thickness are given in IEC 60317-0-2:2019.

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 60317-0-2:2019¹, *Specifications for particular types of winding wires – Part 0-2: General requirements – Enamelled rectangular copper wire*

IEC 60851-4:2016, *Winding wires – Test methods – Part 4: Chemical properties*

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 60317-0-2:2019 apply.

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

¹ Under preparation. Stage at the time of publication: IEC CDV 60317-0-2:2019.