



**NSAI**  
Standards

Irish Standard  
I.S. EN IEC 60317-61:2020

Specifications for particular types of winding wires - Part 61: Polyester glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180

**I.S. EN IEC 60317-61:2020**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document is based on:*

EN IEC 60317-61:2020

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## National Foreword

I.S. EN IEC 60317-61:2020 is the adopted Irish version of the European Document EN IEC 60317-61:2020, Specifications for particular types of winding wires - Part 61: Polyester glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180

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*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

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EUROPEAN STANDARD

**EN IEC 60317-61**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2020

ICS 29.060.10

Supersedes EN 60317-61:2012 and all of its amendments and corrigenda (if any)

English Version

**Specifications for particular types of winding wires - Part 61:  
Polyester glass-fibre wound, resin or varnish impregnated, bare  
or enamelled rectangular copper wire, temperature index 180  
(IEC 60317-61:2020)**

Spécifications pour types particuliers de fils de bobinage -  
Partie 61: Fil de section rectangulaire en cuivre nu ou  
émaillé, guipé de fibres de verre polyester imprégnées de  
résine ou de vernis, d'indice de température 180  
(IEC 60317-61:2020)

Technische Lieferbedingungen für bestimmte Typen von  
Wickeldrähten - Teil 61: Flachdrähte aus Kupfer, blank oder  
lackisoliert und umhüllt mit Polyester Glasgewebe,  
imprägniert mit Harz oder Lack oder unimprägniert,  
Temperaturindex 180  
(IEC 60317-61:2020)

This European Standard was approved by CENELEC on 2020-06-12. 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.

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Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

## **EN IEC 60317-61:2020 (E)**

### **European foreword**

The text of document 55/1771/CDV, future edition 2 of IEC 60317-61, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60317-61:2020.

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) 2021-03-12
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-06-12

This document supersedes EN 60317-61:2012 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.

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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

## Annex ZA (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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-0-8	2019	Specifications for particular types of winding wires - Part 0-8: General requirements - Polyester glass-fibre wound unvarnished and fused, or resin or varnish impregnated, bare or enamelled rectangular copper wire	EN IEC 60317-0-8	2019

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**IEC 60317-61**

Edition 2.0 2020-05

# **INTERNATIONAL STANDARD**

# **NORME INTERNATIONALE**

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**Specifications for particular types of winding wires –  
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enamelled rectangular copper wire, temperature index 180**

**Spécifications pour types particuliers de fils de bobinage –  
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de verre polyester imprégnées de résine ou de vernis, d'indice  
de température 180**



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**IEC 60317-61**

Edition 2.0 2020-05

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# **NORME INTERNATIONALE**

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de température 180**

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –****Part 61: Polyester glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180**

## FOREWORD

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International Standard IEC 60317-61 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition published in 2012. This edition constitutes a technical revision.

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

- a) revision of the title of the standard;
- b) revision to Clause 1, Scope;
- c) revision to the descriptions of grades of thickness of polyester glass-fibre coverings in 3.2.2.

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

CDV	Report on voting
55/1771/CDV	55/1819/RVC

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 the IEC 60317-0-8:2019.

A list of all the 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 20 and 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 61: Polyester glass-fibre wound, resin or varnish impregnated, bare or enamelled rectangular copper wire, temperature index 180

#### 1 Scope

This part of IEC 60317 specifies the requirements of polyester glass-fibre wound, resin or varnish impregnated bare, grade 1 or grade 2 enamelled rectangular copper winding wires, temperature index 180. The impregnating agent can be, for instance, epoxy, polyester, or polyesterimide resin based.

NOTE For this type of wire, the heat shock test is inappropriate and therefore a heat shock temperature cannot be established. Consequently, a class based on the requirements for temperature index and heat shock temperature cannot be specified.

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

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

The specified combinations of width and thickness as well as the specified width/thickness ratio are according to IEC 60317-0-8.

#### 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 60317-0-8:2019, *Specifications for particular types of winding wires – Part 0-8: General requirements – Polyester glass-fibre wound unvarnished and fused, or resin or varnish impregnated, bare or enamelled rectangular copper wire*

#### 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 60317-0-8 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>

##### 3.2 General notes

###### 3.2.1 Methods of test

Subclause 3.2.1 of IEC 60317-0-8:2019 applies. In case of inconsistencies between IEC 60317-0-8 and this document, the latter shall prevail.



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