

<b>STN</b>	<b>Špecifikácie jednotlivých typov vodičov na vinutia</b> <b>Časť 93: Medený vodič pravouhlého prierezu lakovaný polyesterom alebo polyesterimidom, s vonkajšou vrstvou z polyamid-imidu, trieda 220</b>	<b>STN</b> <b>EN IEC 60317-93</b>  34 7307
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Specifications for particular types of winding wires - Part 93: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular copper wire, class 220

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/23

Obsahuje: EN IEC 60317-93:2023, IEC 60317-93:2023

**137667**

EUROPEAN STANDARD

**EN IEC 60317-93**

NORME EUROPÉENNE

EUROPÄISCHE NORM

September 2023

ICS 29.060.10

English Version

Specifications for particular types of winding wires - Part 93:  
Polyester or polyesterimide overcoated with polyamide-imide  
enamelled rectangular copper wire, class 220  
(IEC 60317-93:2023)

Spécifications pour types particuliers de fils de bobinage -  
Partie 93: Fil de section rectangulaire en cuivre émaillé au  
polyamide-imide, avec émail sous-jacent en polyester ou  
polyestérimide, classe 220  
(IEC 60317-93:2023)

Technische Lieferbedingungen für bestimmte Typen von  
Wickeldrähten - Teil 84: Flachdrähte aus Kupfer, lackisoliert  
mit Polyester oder Polyesterimid und darüber mit  
Polyamidimid, Klasse 220  
(IEC 60317-93:2023)

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

## EN IEC 60317-93:2023 (E)

### European foreword

The text of document 55/1940/CDV, future edition 1 of IEC 60317-93, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60317-93:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-06-04 level by publication of an identical national standard or by endorsement
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IEC 60264 (series)	NOTE	Approved as EN 60264 (series)
IEC 60317 (series)	NOTE	Approved as EN 60317 (series)
IEC 60851 (series)	NOTE	Approved as EN 60851 (series)

## **Annex ZA** (normative)

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NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cencenelec.eu](http://www.cencenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-0-2	2020	Specifications for particular types of winding wires - Part 0-2: General requirements - Enamelled rectangular copper wire	EN IEC 60317-0-2	2020



IEC 60317-93

Edition 1.0 2023-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**Specifications for particular types of winding wires –  
Part 93: Polyester or polyesterimide overcoated with polyamide-imide enamelled  
rectangular copper wire, class 220**

**Spécifications pour types particuliers de fils de bobinage –  
Partie 93: Fil de section rectangulaire en cuivre émaillé au polyamide-imide, avec  
émail sous-jacent en polyester ou polyestérimide, classe 220**



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IEC Secretariat  
 3, rue de Varembe  
 CH-1211 Geneva 20  
 Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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IEC 60317-93

Edition 1.0 2023-07

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –****Part 93: Polyester or polyesterimide overcoated with polyamide-imide  
enamelled rectangular copper wire, class 220**

## FOREWORD

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

Draft	Report on voting
55/1940/CDV	55/1973/RVC

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 International Standard is to be used in conjunction with IEC 60317-0-2:2020.

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.

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](http://www.iec.ch/members_experts/refdocs). The main document types developed by IEC are described in greater detail at [www.iec.ch/publications](http://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.

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- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

## INTRODUCTION

This part of IEC 60317 belongs to 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 93: Polyester or polyesterimide overcoated with polyamide-imide enamelled rectangular copper wire, class 220

#### 1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular copper winding wire of class 220 with a dual coating. The underlying coating is based on polyester or polyesterimide resin, which be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements. The superimposed coating is based on polyamide-imide 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 standard is:

- width: min. 2,0 mm max. 25,0 mm;
- thickness: min. 0,80 mm max. 10,0 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 width and thickness as well as the specified width/thickness ratio are given in IEC 60317-0-2.

#### 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 60317-0-2:2020, *Specifications for particular types of winding wires – Part 0-2: General requirements – Enamelled rectangular copper wire*

**koniec náhľadu – text ďalej pokračuje v platenej verzii STN**