

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

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**Specifications for particular types of winding wires –  
Part 59: Polyamide-imide enamelled round copper wire, class 240**

**Spécifications pour types particuliers de fils de bobinage –  
Partie 59: Fil de section circulaire en cuivre émaillé avec polyamide-imide,  
classe 240**





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

Tel.: +41 22 919 02 11  
Fax: +41 22 919 03 00  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –****Part 59: Polyamide-imide enamelled round copper wire, class 240**

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International Standard IEC 60317-59 has been prepared by IEC technical committee 55: Winding wires.

The text of this standard is based on the following documents:

CDV	Report on voting
55/1502/CDV	55/1529/RVC

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

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

This International Standard is to be read in conjunction with IEC 60317-0-1:2013.

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 between 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 publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
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- replaced by a revised edition, or
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## INTRODUCTION

This part of IEC 60317 is one of a series which deals with insulated wires used for windings in electrical equipment. The series has three groups describing:

- 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 59: Polyamide-imide enamelled round copper wire, class 240

#### 1 Scope

This part of IEC 60317 specifies the requirements of enamelled round copper winding wire of class 240 with a single coating of polyamide-imide resin.

The range of nominal conductor diameters covered by this part of IEC 60317 is:

- grade 1: 0,180 mm up to and including 1,600 mm;
- grade 2: 0,180 mm up to and including 1,600 mm.

The nominal conductor diameters are specified in Clause 4 of IEC 60317-0-1:2013.

#### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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*

#### 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 60317-0-1:2013 apply.

##### 3.2 General notes

###### 3.2.1 Methods of test

Subclause 3.2.1 of IEC 60317-0-1:2013 applies. In case of inconsistencies between IEC 60317-0-1 and this part of IEC 60317, the latter shall prevail.

###### 3.2.2 Winding wire

Class 240 is a thermal class that requires a minimum temperature index of 240 and a heat shock temperature of at least 260 °C.

The temperature in degrees Celsius corresponding to the temperature index is not necessarily that at which it is recommended that the wire be used. This will depend on many factors, including the type of equipment involved.

##### 3.3 Appearance

Subclause 3.3 of IEC 60317-0-1:2013 applies.