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IEC 60317-57

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CONSOLIDATED VERSION

# INTERNATIONAL STANDARD



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**Specifications for particular types of winding wires –  
Part 57: Polyamide-imide enamelled round copper wire, class 220**

INTERNATIONAL  
ELECTROTECHNICAL  
COMMISSION

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

#### Part 57: Polyamide-imide enamelled round copper wire, class 220

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**In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.**

International Standard IEC 60317-57 has been prepared by IEC technical committee 55: Winding wires.

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

This standard is to be read in conjunction with IEC 60317-0-1-~~(2008)~~:2013 and its Amendment 1:2019.

The numbering of clauses in this standard is not continuous from Clauses 23 to 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

A list of all the parts in the IEC 60317 series, under the general title *Specifications for particular types of winding wires*, can be found on the IEC website.

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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) test methods (IEC 60851);
- 2) specifications for particular types of winding wire (IEC 60317);
- 3) packaging of winding wires (IEC 60264).

## SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

### Part 57: Polyamide-imide enamelled round copper wire, class 220

#### 1 Scope

This part of IEC 60317 specifies the requirements of an enamelled round copper winding wire of class 220 with a sole coating based on polyamide-imide resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements.

Class 220 is a thermal class that requires a minimum temperature index of 220 and a heat shock temperature of at least 240 °C.

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

The range of nominal conductor diameters covered by this standard is as follows:

- Grade 1: 0,071 mm up to and including 1,600 mm;
- Grade 2: 0,071 mm up to and including 1,600 mm.

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

#### 2 Normative references

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IEC 60317-0-1:2008<sup>1</sup>2013, *Specifications for particular types of winding wires – Part 0-1: General requirements – Enamelled round copper wire*.  
IEC 60317-0-1:2013/AMD1:2019

<sup>1</sup> There exists a consolidated edition 4.1:2021 that includes IEC 60317-0-1:2013 and its Amendment 1:2019.

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

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