

INTERNATIONAL STANDARD



**Specifications for particular types of winding wires –
Part 71: Polyester glass-fibre wound **fused** and resin or varnish impregnated,
bare or enamelled round copper wire, temperature index 180**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Part 71: Polyester glass-fibre wound ~~fused~~ and resin or varnish impregnated, bare or enamelled round copper wire, temperature index 180

FOREWORD

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International Standard IEC 60317-71 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition published in 2017. The document 55/1767/CDV, circulated to the National Committees as Amendment 1, led to the publication of this new edition.

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

- modification of the title;
- revision to the Scope;
- revision to 3.2.2.

The text of this standard is based on the first edition, its Amendment 1 and the following documents:

CDV	Report on voting
55/1767/CDV	55/1816/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.

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.

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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. 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 71: Polyester glass-fibre wound ~~fused~~ and resin or varnish impregnated, bare or enamelled round copper wire, temperature index 180

1 Scope

This part of IEC 60317 specifies the requirements of polyester glass-fibre wound ~~fused~~ resin ~~or~~ varnish impregnated, bare, grade 1 or grade 2 enamelled round copper winding wire, 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 nominal conductor diameters are specified in IEC 60317-0-10:2017, Clause 4.

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 60317-0-10:2017, *Specifications for particular types of winding wires – Part 0-10: General requirements – Polyester glass-fibre wound fused, unvarnished, or resin or varnish impregnated, bare or enamelled round copper wire*

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Specifications for particular types of winding wires –
Part 71: Polyester glass-fibre wound and resin or varnish impregnated, bare or
enamelled round copper wire, temperature index 180**

**Spécifications pour types particuliers de fils de bobinage –
Partie 71: Fil de section circulaire en cuivre nu ou émaillé, guipé de fibres de
verre polyester imprégnées de vernis ou de résine, d'indice de température 180**

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 71: Polyester glass-fibre wound and resin or varnish impregnated, bare or enamelled round copper wire, temperature index 180

1 Scope

This part of IEC 60317 specifies the requirements of polyester glass-fibre wound resin/varnish impregnated, bare, grade 1 or grade 2 enamelled round copper winding wire, temperature index 180.

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 nominal conductor diameters are specified in IEC 60317-0-10:2017, Clause 4.

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.

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

SPÉCIFICATIONS POUR TYPES PARTICULIERS DE FILS DE BOBINAGE –

Partie 71: Fil de section circulaire en cuivre nu ou émaillé, guipé de fibres de verre polyester imprégnées de vernis ou de résine, d'indice de température 180

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La Norme internationale IEC 60317-71 a été établie par le comité d'études 55 de l'IEC: Fils de bobinage.

Cette deuxième édition de l'IEC 60317-71 annule et remplace la première édition parue en 2017. Le document 55/1767/CDV, circulé comme Amendement 1 auprès des Comités nationaux de l'IEC, a conduit à la publication de cette nouvelle édition.

Cette édition inclut les modifications techniques majeures suivantes par rapport à l'édition précédente:

- modification du titre;

- révision du Domaine d'application;
- révision du 3.2.2.

Le texte de cette norme est issu des documents suivants:

CDV	Rapport de vote
55/1767/CDV	55/1816/RVC

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de l'IEC 60317, publiées sous le titre général *Spécifications pour types particuliers de fils de bobinage*, peut être consultée sur le site web de l'IEC.

La numérotation des articles de la présente norme n'est pas continue entre les Articles 21 et 30 afin de réserver un espace pour d'éventuelles futures exigences applicables au fil avant celles applicables au conditionnement du fil.

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INTRODUCTION

La présente partie de l'IEC 60317 appartient à l'une des séries de normes qui traitent des fils isolés utilisés pour les enroulements des appareils électriques. L'ensemble est composé des trois séries de normes suivantes:

- 1) *Fils de bobinage – Méthodes d'essai* (série IEC 60851);
- 2) *Spécifications pour types particuliers de fils de bobinage* (série IEC 60317);
- 3) *Conditionnement des fils de bobinage* (série IEC 60264).

SPÉCIFICATIONS POUR TYPES PARTICULIERS DE FILS DE BOBINAGE –

Partie 71: Fil de section circulaire en cuivre nu ou émaillé, guipé de fibres de verre polyester imprégnées de vernis ou de résine, d'indice de température 180

1 Domaine d'application

La présente partie de l'IEC 60317 spécifie les exigences relatives au fil de bobinage de section circulaire en cuivre nu ou émaillé de grade 1 ou de grade 2, guipé de fibres de verre polyester imprégnées de vernis ou de résine, d'indice de température 180.

NOTE Pour ce type de fil, l'essai de choc thermique n'est pas approprié et c'est la raison pour laquelle il n'est pas possible d'établir une température de choc thermique. Par conséquent, il n'est pas possible de spécifier une classe fondée sur les exigences d'indice de température et de température de choc thermique.

Les diamètres nominaux du conducteur sont spécifiés à l'Article 4 de l'IEC 60317-0-10:2017.

2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60317-0-10:2017, *Spécifications pour types particuliers de fils de bobinage – Partie 0-10: Exigences générales – Fil de section circulaire en cuivre nu ou émaillé, guipé de fibres de verre polyester fondues, non vernies ou imprégnées de vernis ou de résine*