



**BSI Standards Publication**

## **Specifications for particular types of winding wires**

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Part 72: Polyester glass-fibre wound silicone resin/varnish impregnated,  
bare or enamelled round copper wire, temperature index 200

## National foreword

This British Standard is the UK implementation of EN IEC 60317-72:2020. It is identical to IEC 60317-72:2020. It supersedes [BS EN 60317-72:2017](#), which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee L/-/99, Miscellaneous Standards - Electrical.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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### Amendments/corrigenda issued since publication

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EUROPEAN STANDARD  
NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN IEC 60317-72**

June 2020

ICS 29.060.10

Supersedes EN 60317-72:2017 and all of its  
amendments and corrigenda (if any)

English Version

**Specifications for particular types of winding wires - Part 72:  
Polyester glass-fibre wound silicone resin/varnish impregnated,  
bare or enamelled round copper wire, temperature index 200  
(IEC 60317-72:2020)**

Spécifications pour types particuliers de fils de bobinage -  
Partie 72: Fil de section circulaire en cuivre nu ou émaillé,  
guipé de fibres de verre polyester imprégnées de vernis ou  
de résine silicone, d'indice de température 200  
(IEC 60317-72:2020)

Technische Lieferbedingungen für bestimmte Typen von  
Wickeldrähten - Teil 72: Runddrähte aus Kupfer, blank  
oder lackiert, mit Polyesterfasern umspinnen, mit Silikon-  
Harz oder Lack imprägniert, Klasse 200  
(IEC 60317-72:2020)

This European Standard was approved by CENELEC on 2020-05-28. 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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European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

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

## European foreword

The text of document 55/1768/CDV, future edition 2 of IEC 60317-72, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60317-72:2020.

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) 2021-02-28
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-28

This document supersedes EN 60317-72:2017 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.

## Endorsement notice

The text of the International Standard IEC 60317-72:2020 was approved by CENELEC as a European Standard without any modification.

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)

## CONTENTS

FOREWORD .....	3
INTRODUCTION .....	5
1 Scope .....	6
2 Normative references .....	6
3 Terms, definitions, general notes and appearance .....	6
3.1 Terms and definitions .....	6
3.2 General notes .....	6
3.2.1 Methods of test .....	6
3.2.2 Winding wire .....	6
3.3 Appearance .....	7
4 Dimensions .....	7
5 Electrical resistance .....	7
6 Elongation .....	7
7 Springiness .....	7
8 Flexibility and adherence .....	7
9 Heat shock .....	7
10 Cut-through .....	7
11 Resistance to abrasion .....	8
12 Resistance to solvents .....	8
13 Breakdown voltage .....	8
14 Continuity of insulation .....	8
15 Temperature index .....	8
16 Resistance to refrigerants .....	8
17 Solderability .....	8
18 Heat or solvent bonding .....	8
19 Dielectric dissipation factor .....	8
20 Resistance to transformer oil .....	8
21 Loss of mass .....	8
23 Pin hole test .....	8
30 Packaging .....	9
Bibliography .....	10

## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –****Part 72: Polyester glass-fibre wound silicone resin/varnish impregnated,  
bare or enamelled round copper wire, temperature index 200**

## FOREWORD

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International Standard IEC 60317-72 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition published in 2017. The document 55/1768/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
55/1768/CDV	55/1817/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.

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. 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 72: Polyester glass-fibre wound silicone resin/varnish impregnated, bare or enamelled round copper wire, temperature index 200

#### 1 Scope

This part of IEC 60317 specifies the requirements of polyester glass-fibre wound silicone resin/varnish impregnated, bare, grade 1 or grade 2 enamelled round copper winding wire, temperature index 200.

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*

#### 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 60317-0-10 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 60317-0-10:2017 applies. In case of inconsistencies between IEC 60317-0-10 and this document, the latter shall prevail.

###### 3.2.2 Winding wire

The fibre covering shall consist of a combination of polyester and glass fibres. The glass fibres shall be electrical-grade continuous-filament glass yarn. The polyester fibre shall be a high-grade yarn resulting from the linear polymerization of ethylene glycol and terephthalic acid. The maximum content by weight of polyester fibre in the yarn shall not exceed 50 %.