

Specifications for particular types of winding wires —

Part 0-3: General requirements — Enamelled round aluminium wire

The European Standard EN 60317-0-3:1998, with the incorporation of amendments A1:2000 and A2:2004, has the status of a British Standard

ICS 29.060.10

National foreword

This British Standard is the English language version of EN 60317-0-3:1998, including amendments A1:2000 and A2:2004. It is identical with IEC 60317-0-3:1997, including amendment 1:1999. It supersedes BS EN 60317-0-3:1996 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/55, Winding wires, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled “International Standards Correspondence Index”, or by using the “Search” facility of the *BSI Electronic Catalogue* or of British Standards Online.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 15 and a back cover.

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Amendments issued since publication

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10902	April 2001	
15530	March 2005	Amendment to Introduction, clauses 2 , 3 and 10 and Tables 4 and 5 . Addition of Clause 22 . Deletion of Annex B and all references to Annex B.

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Specifications for particular types of winding wires — Part 0-3: General requirements — Enamelled round aluminium wire

(includes amendments A1:2000 and A2:2004)

(IEC 60317-0-3:1997 + A1:1999 and A2:2004)

Spécifications pour types particuliers
de fils de bobinage —
Partie 0-3: Prescriptions générales —
Fil de section circulaire en aluminium émaillé
(inclut l'amendements A1:2000 et A2:2004)
(CEI 60317-0-3:1997 + A1:1999 et A2:2004)

Technische Lieferbedingungen für
bestimmte Typen von Wickeldrähten —
Teil 0-3: Allgemeine Anforderungen —
Lackisolierte Runddrähte aus Aluminium
(enthält Änderung A1:2000 und A2:2004)
(IEC 60317-0-3:1997 + A1:1999 und A2:2004)

This European Standard was approved by CENELEC on 1998-01-01. Amendment A1 was approved by CENELEC on 2000-01-01. 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.

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CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Strassart 35, B-1050 Brussels

Foreword

The texts of documents 55/559/FDIS and 55/610/FDIS, future amendments to IEC 60317-0-3:1990, prepared by IEC TC 55, Winding wires, were submitted to the IEC-CENELEC parallel vote.

These texts, together with those of IEC 60317-0-3:1990 and its amendments 1:1992 and 2:1993, were published by IEC as the second edition of IEC 60317-0-3 and were approved by CENELEC as EN 60317-0-3 on 1998-01-01.

This European Standard supersedes EN 60317-0-3:1994 and its amendments.

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1998-10-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1998-10-01

Annexes designated “normative” are part of the body of the standard.

Annexes designated “informative” are given for information only.

In this standard, Annex ZA is normative and Annex A, Annex B, Annex C, Annex D and Annex E are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60317-0-3:1997 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 55/690/FDIS, future amendment 1 to IEC 60317-0-3, prepared by IEC TC 55, Winding wires, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60317-0-3:1998 on 2000-01-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2000-10-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2003-01-01

Foreword to amendment A2

The text of document 55/690/FDIS, future amendment 2 to IEC 60317-0-3, prepared by IEC TC 55, Winding wires, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60317-0-3:1998 on 2004-10-01.

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- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2005-08-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2007-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of amendment 2:2004 to the International Standard IEC 60317-0-3:1997 was approved by CENELEC as an amendment to the European Standard without any modification.

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

1 Scope

This International Standard specifies the general requirements of enamelled round aluminium winding wires with or without a bonding layer.

The range of nominal conductor diameters is given in the relevant specification sheet.

When reference is made to a winding wire according to a standard of the IEC 60317 series mentioned under clause 2, the following information is given in the description:

- reference to IEC specification;
- nominal conductor diameter in millimetres;
- grade.

EXAMPLE: IEC 60317-14 – 0,500 Grade 1.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of IEC 60317. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of IEC 60317 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60172, *Test procedure for the determination of the temperature index of enamelled winding wires*.

IEC 60317-14, *Specifications for particular types of winding wires — Part 14: Polyvinyl acetal enamelled round aluminium wire, class 105*.

IEC 60317-25, *Specifications for particular types of winding wires — Part 25: Polyester or polyesterimide overcoated with polyamide-imide enamelled round aluminium wire, class 200*.

IEC 60851 (all parts), *Winding wires — Test methods*.

ISO 3, *Preferred numbers — Series of preferred numbers*.

3 Terms and definitions, general notes on methods of tests and appearance

3.1 Definitions

bonding layer

a material which is deposited on an enamelled wire and which has the specific function of bonding wires together

class

the thermal performance of a wire expressed by the temperature index and the heat shock temperature

coating

a material which is deposited on a conductor or wire by a suitable means and then dried and/or cured

conductor

the bare metal after removal of the insulation

crack

an opening in the insulation which exposes the conductor to view at the stated magnification