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Irish Standard
I.S. EN 60317-46:2014

Specifications for particular types of winding wires -- Part 46: Aromatic polyimide enamelled round copper wire, class 240

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1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60317-46

February 2014

ICS 29.060.10

Supersedes EN 60317-46:1997

English version

Specifications for particular types of winding wires - Part 46: Aromatic polyimide enamelled round copper wire, class 240

(IEC 60317-46:2013)

Spécifications pour types particuliers de fils de bobinage -
Partie 46: Fil de section circulaire en cuivre émaillé avec polyimide aromatique, classe 240
(CEI 60317-46:2013)

Technische Lieferbedingungen für bestimmte Typen von Wickeldrähten -
Teil 46: Runddrähte aus Kupfer, lackisoliert mit aromatischen Polyimiden, Klasse 240
(IEC 60317-46:2013)

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Ref. No. EN 60317-46:2014 E

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Foreword

The text of document 55/1420/FDIS, future edition 2 of IEC 60317-46, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60317-46:2014.

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)	2014-08-18
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-11-18

This document supersedes EN 60317-46:1997.

EN 60317-46:2014 includes the following significant technical changes with respect to EN 60317-46:1997:

– deletion of the “in some countries” statement in the scope;

– new subclause containing general notes on winding wire, formerly a part of the scope;

– new subclause containing requirements for appearance;

– revision to the notes in Clause 19, Dielectric dissipation factor;

– new Clause 23, Pin-hole test.

This standard is to be read in conjunction with EN 60317-0-1:2014.

The numbering of clauses in this standard is not continuous from Clauses 20 and 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

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The text of the International Standard IEC 60317-46:2013 was approved by CENELEC as a European Standard without any modification.

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IEC 60264 Series	NOTE	Harmonized as EN 60264 Series (not modified).
IEC 60317 Series	NOTE	Harmonized as EN 60317 Series (not modified).
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Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	Year	Title	EN/HD	Year
IEC 60317-0-1	2013	Specifications for particular types of winding wires - Part 0-1: General requirements - Enamelled round copper wire	EN 60317-0-1	2014

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IEC 60317-46

Edition 2.0 2013-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Specifications for particular types of winding wires – Part 46: Aromatic polyimide enamelled round copper wire, class 240

Spécifications pour types particuliers de fils de bobinage – Partie 46: Fil de section circulaire en cuivre émaillé avec polyimide aromatique, classe 240

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

Tel.: +41 22 919 02 11
Fax: +41 22 919 03 00
info@iec.ch
www.iec.ch

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IEC 60317-46

Edition 2.0 2013-10

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Specifications for particular types of winding wires – Part 46: Aromatic polyimide enamelled round copper wire, class 240

Spécifications pour types particuliers de fils de bobinage – Partie 46: Fil de section circulaire en cuivre émaillé avec polyimide aromatique, classe 240

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 46: Aromatic polyimide enamelled round copper wire, class 240

FOREWORD

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International Standard IEC 60317-46 has been prepared by IEC technical committee 55: Winding wires.

This second edition cancels and replaces the first edition published in 1997. This edition constitutes a technical revision.

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

– deletion of the "in some countries" statement in the scope;
– new subclause containing general notes on winding wire, formerly a part of the scope;
– new subclause containing requirements for appearance;
– revision to the notes in Clause 19, Dielectric dissipation factor;
– new Clause 23, Pin-hole test.

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

FDIS	Report on voting
55/1420/FDIS	55/1441/RVD

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 the IEC 60317-0-1:2013.

The numbering of clauses in this standard is not continuous from Clauses 20 and 30 in order to reserve space for possible future wire requirements prior to those for wire packaging.

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 committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

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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);
2) Specifications for particular types of winding wires (IEC 60317);
3) Packaging of winding wires (IEC 60264).

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SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 46: Aromatic polyimide 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 sole coating of aromatic polyimide resin.

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

– grade 1: 0,020 mm up to and including 2,000 mm;
– grade 2: 0,020 mm up to and including 5,000 mm.

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

2 Normative reference

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

Subclause 3.1 of IEC 60317-0-1:2013 applies.

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 60317-0-1:2013 and this standard, the latter shall prevail.

3.2.2 Winding wire

Class 240 is a thermal class that requires a minimum temperature index of 240 and 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, and 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.

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