

**Specifications for particular types of winding wires -
Part 13: Polyester or polyesterimide overcoated with
polyamide-imide, enamelled round copper wire,
class 200**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60317-13:2010 sisaldab Euroopa standardi EN 60317-13:2010 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.05.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.02.2010.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 60317-13:2010 consists of the English text of the European standard EN 60317-13:2010.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.05.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Date of Availability of the European standard text 12.02.2010.

The standard is available from Estonian standardisation organisation.

ICS 29.060.10

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**Specifications for particular types of winding wires -
Part 13: Polyester or polyesterimide overcoated with polyamide-imide
enamelled round copper wire, class 200
(IEC 60317-13:2010)**

Spécifications pour types particuliers
de fils de bobinage -
Partie 13: Fil de section circulaire
en cuivre émaillé avec polyester
ou polyesterimide et avec surcouche
polyamide-imide, classe 200
(CEI 60317-13:2010)

Technische Lieferbedingungen
für bestimmte Typen von Wickeldrähten -
Teil 13: Runddrähte aus Kupfer,
lackisoliert mit Polyester
oder Polyesterimid und darüber
mit Polyamidimid, Klasse 200
(IEC 60317-13:2010)

This European Standard was approved by CENELEC on 2010-05-01. 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.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

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Foreword

The text of document 55/1179/FDIS, future edition 3 of IEC 60317-13, prepared by IEC TC 55, Winding wires, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60317-13 on 2010-05-01.

This European Standard supersedes EN 60317-13:1994 + A1:1997 + A2:1998.

The main changes with respect to EN 60317-13:1994 and its amendments are listed below:

- new requirements for appearance;
- reference to new resistance to refrigerants test in IEC 60851-4;
- deletion of high temperature failure requirement;
- new pin hole test requirements.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) | 2011-02-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-05-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60317-13:2010 was approved by CENELEC as a European Standard without any modification.

Annex ZA
(normative)

**Normative references to international publications
with their corresponding European publications**

The following referenced documents are indispensable for the application 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.

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60317-0-1	2008	Specifications for particular types of winding wires - Part 0-1: General requirements - Enamelled round copper wire	EN 60317-0-1	2008
IEC 60851-4	1996	Winding wires - Test methods -	EN 60851-4	1996
+ A1	1997	Part 4: Chemical properties	+ A1	1997
+ A2	2005		+ A2	2005

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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 methods of test (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 13: Polyester or polyesterimide overcoated with polyamide-imide enamelled round copper wire, class 200

1 Scope

This Part of IEC 60317 specifies the requirements of enamelled round copper winding wire of class 200 with a dual coating. The underlying coating is based on polyester or polyesterimide resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements. The superimposed coating is based on polyamide-imide resin.

NOTE A modified resin is a resin that has undergone a chemical change, or contains one or more additives to enhance certain performance or application characteristics.

Class 200 is a thermal class that requires a minimum temperature index of 200 and a heat shock temperature of at least 220 °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 a nominal conductor diameters covered by this standard is as follows:

- Grade 1: 0,050 mm up to and including 2,000 mm;
- Grade 2: 0,050 mm up to and including 5,000 mm

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

2 Normative references

The following referenced documents are indispensable for the application 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 60317-0-1:2008, *Specifications for particular types of winding wires – Part 0-1: General requirements – Enamelled round copper wire*

IEC 60851-4:1996, *Methods of test for winding wires – Part 4: Chemical properties*

Amendment 1 (1997)

Amendment 2 (2005)

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

3.1 Terms and definitions

For terms and definitions, see 3.1 of IEC 60317-0-1. In case of inconsistencies between IEC 60317-0-1 and this standard, IEC 60317-13 shall prevail.