BS EN 60317-28:2014

BSI Standards Publication

Specifications for particular types of winding wires

Part 28: Polyesterimide enamelled rectangular copper wire, class 180

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National foreword

This British Standard is the UK implementation of EN 60317-28:2014. It is identical to IEC 60317-28:2013. It supersedes BS EN 60317-28:1997 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/55, Winding wires.

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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Compliance with a British Standard cannot confer immunity from legal obligations.

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EUROPEAN STANDARD

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EN 60317-28

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Supersedes EN 60317-28:1996 + A1:1998 + A2:2007

English version

Specifications for particular types of winding wires - Part 28: Polyesterimide enamelled rectangular copper wire, class 180

(IEC 60317-28:2013)

Spécifications pour types particuliers de fils de bobinage -
Part 28: Fil de section rectangulaire en cuivre émaillé avec polyesterimide, classe 180
(CEI 60317-28:2013)

Festlegungen für bestimmte Typen von Wickeldrähten -
Teil 28: Flachdrähte aus Kupfer, lackisoliert mit Polyesterimid, Klasse 180
(IEC 60317-28:2013)

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 55/1415/FDIS, future edition 2 of IEC 60317-28, prepared by IEC/TC 55 "Winding wires" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60317-28:2014.

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)	2014-08-14
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2016-11-14

This document supersedes EN 60317-28:1996.

EN 60317-28:2014 includes the following significant technical changes with respect to EN 60317-28:1996:

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

– revision to references to EN 60317-0-2:2014 to clarify that their application is normative;

– new 3.3, Appearance;

– deletion of Clause 22, High temperature failure;

– modification to Clause 23, Pin hole test.

This standard is to be read in conjunction with EN 60317-0-2:2014.

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.

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

Endorsement notice

The text of the International Standard IEC 60317-28:2013 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 (not modified).
IEC 60317 Series	NOTE	Harmonized as EN 60317 Series (not modified).
IEC 60851 Series	NOTE	Harmonized as EN 60851 Series (not modified).

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 60317-0-2	2013	Specifications for particular types of winding wires - Part 0-2: General requirements - Enamelled rectangular copper wire	EN 60317-0-2	2014

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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).

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 28: Polyesterimide enamelled rectangular copper wire, class 180

1 Scope

This part of IEC 60317 specifies the requirements of enamelled rectangular copper winding wire of class 180 with a sole coating based on polyesterimide resin, which may be modified providing it retains the chemical identity of the original resin and meets all specified wire requirements.

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.

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

– width: min. 2,0 mm max. 16,0 mm;
– thickness: min. 0,80 mm max. 5,60 mm.

Wires of grade 1 and grade 2 are included in this specification and apply to the complete range of conductors.

The specified combinations of width and thickness as well as the specified width/thickness ratio are given in IEC 60317-0-2:2013.

2 Normative references

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 60317-0-2:2013, *Specifications for particular types of winding wires – Part 0-2: General requirements – Enamelled rectangular copper wire*

3 Terms, definitions, general notes and appearance

3.1 Terms and definitions

Subclause 3.1 of IEC 60317-0-2:2013 applies.

3.2 General notes

3.2.1 Methods of test

In case of inconsistencies between IEC 60317-0-2 and this standard, IEC 60317-28 shall prevail.

3.2.2 Winding wire

Class 180 is a thermal class that requires a minimum temperature index of 180 and a heat shock temperature of at least 200 °C.