

Specifications for particular types of winding wires —

Part 11: Bunched solderable polyurethane enamelled round copper wires, class 130, with silk covering

The European Standard EN 60317-11:2000 has the status of a
British Standard

ICS 29.060.10

National foreword

This British Standard is the official English language version of EN 60317-11:2000. It is identical with IEC 60317-11:1999. It supersedes BS EN 60317-11:1996 which is withdrawn.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.

From 1 January 1997, all IEC publications have the number 60000 added to the old number. For instance, IEC 27-1 has been renumbered as IEC 60027-1. For a period of time during the change over from one numbering system to the other, publications may contain identifiers from both systems.

Cross-references

Attention is drawn to the fact that CEN and CENELEC Standards normally include an annex which lists normative references to international publications with their corresponding European publications. The British Standards which implement these international or European publications may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 20, an inside back cover and a back cover.

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English version

Specifications for particular types of winding wires
Part 11: Bunched solderable polyurethane enamelled round copper wires,
class 130, with silk covering
(IEC 60317-11:1999)

Spécifications pour types particuliers
de fils de bobinage
Partie 11: Fils de section circulaire,
en cuivre émaillé avec polyuréthane
brasable, classe 130, toronné,
recouvert de soie
(CEI 60317-11:1999)

Technische Lieferbedingungen für
bestimmte Typen von Wickeldrähten
Teil 11: Runddrähte aus Kupfer,
verzinnbare Litzen, lackisoliert mit
Polyurethan und mit Seide umhüllt,
Klasse 130
(IEC 60317-11:1999)

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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.

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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 55/695/FDIS, future amendment to IEC 60317-11, prepared by IEC TC 55, Winding wires, was submitted to the IEC-CENELEC parallel vote.

The text of this document, together with that of IEC 60317-11:1990 and its amendments 1:1993 and 2:1997, was approved by CENELEC as EN 60317-11 on 2000-01-01.

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) 2000-10-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2003-01-01

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 annexes A, B, C and D are informative.

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60317-11:1999 was approved by CENELEC as a European Standard without any modification.

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INTRODUCTION

This International Standard is one of a series which deals with insulated wires used for windings in electrical equipment. The series has three groups describing:

- 1) methods of test (IEC 60851);
- 2) specifications (IEC 60317);
- 3) packaging (IEC 60264).

SPECIFICATIONS FOR PARTICULAR TYPES OF WINDING WIRES –

Part 11: Bunched solderable polyurethane enamelled round copper wires, class 130, with silk covering

1 Scope

This International Standard specifies the requirements of bunched solderable polyurethane enamelled round copper winding wires, class 130, with silk covering.

This covering consists of one or two layers of silk.

The single wire is a solderable polyurethane enamelled round copper winding wire, class 130 (IEC 60317-4).

When reference is made to a winding wire according to the present standard, the following information is given in the description:

- reference to IEC specification;
- number of wires and the nominal diameter of one wire in millimetres.

EXAMPLE: IEC 60317-11 – 25 × 0,071

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 60317-0-1:1990, *Specifications for particular types of winding wires – Part 0: General requirements – Section 1: Enamelled round copper wire*

IEC 60317-4:1990, *Specifications for particular types of winding wires – Part 4: Solderable polyurethane enamelled round copper wire, class 130*

IEC 60851, *Methods of test for winding wires*

3 Definitions and general notes on methods of test

3.1 Definitions

3.1.1

bunched wire

a wire consisting of a number of small diameter insulated wires laid-up together without predetermined geometrical position and with or without additional covering

3.1.2

class

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

3.1.3

coating

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

3.1.4

conductor

the bare metal after removal of the insulation

3.1.5

covering

a material which is wound, wrapped or braided around a bare or insulated conductor

3.1.6

enamelled wire

a wire coated with an insulation of cured resin

3.1.7

grade

the range of thickness of the insulation of a wire

3.1.8

insulation

a coating or covering on the conductor with the specific function of withstanding voltage

3.1.9

nominal conductor dimension

the designation of the conductor size in accordance with IEC 60317

3.1.10

winding wire

a wire used for winding a coil to provide a magnetic field

3.1.11

wire

a conductor coated or covered with an insulation