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

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

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

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

Ta slovenski standard je istoveten z: EN 60317-11:2000

ICS:

29.060.10

Žice

Wires

SIST EN 60317-11:2001**en**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60317-11:2001

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60317-11

February 2000

ICS 29.060.10

Supersedes EN 60317-11:1994 and its amendments

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)

STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60317-11:2001

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

This European Standard 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.

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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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

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.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

Endorsement notice

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

<http://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

Annex ZA (normative)

Normative references to international publications
with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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	1990	Specifications for particular types of winding wires Part 0-1: General requirements Enamelled round copper wire	EN 60317-0-1 ¹⁾	1994
IEC 60317-4	1990	Part 4: Solderable polyurethane enamelled round copper wire, class 130	EN 60317-4	1994
IEC 60851	series	Methods of test for winding wires	EN 60851	series

[SIST EN 60317-11:2001](https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001)

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

1) EN 60317-0-1 includes the corrigendum March 1991 and A1 to IEC 60317-0-1.

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60317-11:2001

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60317-11

Troisième édition
Third edition
1999-10

**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**

(standards.iteh.ai)

**Specifications for particular types
of winding wires**

Part 11:

**Bunched solderable polyurethane enamelled
round copper wires, class 130,
with silk covering**

© IEC 1999 Droits de reproduction réservés — Copyright - all rights reserved

Aucune partie de cette publication ne peut être reproduite ni
utilisée sous quelque forme que ce soit et par aucun procédé,
électronique ou mécanique, y compris la photo-copie et les
microfilms, sans l'accord écrit de l'éditeur.

No part of this publication may be reproduced or utilized in
any form or by any means, electronic or mechanical,
including photocopying and microfilm, without permission in
writing from the publisher.

International Electrotechnical Commission
Telefax: +41 22 919 0300

3, rue de Varembe Geneva, Switzerland
e-mail: inmail@iec.ch IEC web site <http://www.iec.ch>



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

CODE PRIX
PRICE CODE

R

Pour prix, voir catalogue en vigueur
For price, see current catalogue

CONTENTS

	Page
FOREWORD	5
INTRODUCTION	9
Clause	
1 Scope	11
2 Normative references	11
3 Definitions and general notes on methods of test	13
4 Dimensions	15
5 Electrical resistance	19
6 Elongation	23
7 Springiness	23
8 Flexibility and adherence	23
9 Heat shock	23
10 Cut-through	23
11 Resistance to abrasion	23
12 Resistance to solvents	23
13 Breakdown voltage	23
14 Continuity of insulation	25
15 Temperature index	25
16 Resistance to refrigerants	25
17 Solderability	25
18 Heat or solvent bonding	25
19 Dielectric dissipation factor	25
20 Resistance to transformer oil	25
21 Loss of mass	25
22 High temperature failure	27
30 Packaging	27
 Annexe A (informative) Calculation of the nominal overall diameter	 29
Annexe B (informative) Non-preferred combinations	31
Annexe C (informative) Calculation of the resistance	35
Annexe D (informative) Nominal cross-sectional area and resistance of bunched wire	37

INTERNATIONAL ELECTROTECHNICAL COMMISSION

SPECIFICATIONS FOR PARTICULAR TYPES
OF WINDING WIRES –Part 11: Bunched solderable polyurethane enamelled
round copper wires, class 130,
with silk covering

FOREWORD

- 1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60317-11 has been prepared by IEC technical committee 55: Winding wires.

This third edition cancels and replaces the second edition published in 1990, amendment 1 (1993), amendment 2 (1997) as well as consolidated edition 2.2 (1998). This third edition constitutes a technical revision.

The text of this standard is based on the second edition, amendment 1, amendment 2 and the following documents:

FDIS	Report on voting
55/695/FDIS	55/722/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 3.

Annexes A, B, C and D are for information only.

The committee has decided that this publication remains valid until 2004-10. At this date, in accordance with the committee's decision, the publication will be

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

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60317-11:2001

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>

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).

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60317-11:2001

<https://standards.iteh.ai/catalog/standards/sist/d6154d1f-259f-41b4-a30e-c443593e8529/sist-en-60317-11-2001>