

SLOVENSKI STANDARD
SIST EN 61034-2:2005/A1:2014
01-februar-2014

Merjenje gostote dima pri gorenju kablov pri določenih pogojih - 2. del: Preskusni postopek in zahteve - Dopnilo A1 (IEC 61034-2:2005/A1:2013)

Measurement of smoke density of cables burning under defined conditions - Part 2: Test procedure and requirements

Messung der Rauchdichte von Kabeln und isolierten Leitungen beim Brennen unter definierten Bedingungen - Teil 2: Prüfverfahren und Anforderungen

Mesure de la densité de fumées dégagées par des câbles brûlant dans des conditions définies - Partie 2: Procédure d'essai et exigences

<https://standards.iteh.ai/catalog/standards/sist/b4e92526-733e-4231-a8f1-faca2d2064cf/sist-en-61034-2-2005-a1-2014>

Ta slovenski standard je istoveten z: EN 61034-2:2005/A1:2013

ICS:

13.220.40	Sposobnost vžiga in obnašanje materialov in proizvodov pri gorenju	Ignitability and burning behaviour of materials and products
29.060.20	Kabli	Cables

SIST EN 61034-2:2005/A1:2014 **en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 61034-2/A1

August 2013

ICS 13.220.40; 29.020; 29.060.20

English version

Measurement of smoke density of cables burning under defined conditions -

Part 2: Test procedure and requirements

(IEC 61034-2:2005/A1:2013)

Mesure de la densité de fumées
dégagées par des câbles brûlant dans des
conditions définies -
Partie 2: Procédure d'essai et exigences
(CEI 61034-2:2005/A1:2013)

Messung der Rauchdichte von Kabeln und
isolierten Leitungen beim Brennen unter
definierten Bedingungen -
Teil 2: Prüfverfahren und Anforderungen
(IEC 61034-2:2005/A1:2013)

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This amendment A1 modifies the European Standard EN 61034-2:2005; it was approved by CENELEC on 2013-06-25. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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 CEN-CENELEC Management Centre 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 20/1429/FDIS, future edition 3 of IEC 61034-2:2005/A1, prepared by IEC TC 20, "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61034-2:2005/A1:2013.

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) 2014-03-25
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2016-06-25

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.

This standard covers the Principle Elements of the Safety Objectives for Electrical Equipment Designed for Use within Certain Voltage Limits (LVD - 2006/95/EC).

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Endorsement notice

The text of the International Standard IEC 61034-2:2005/A1:2013 was approved by CENELEC as a European Standard without any modification.

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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.

Addition to Annex ZA of EN 61034-2:2005:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60811-203	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 203: General tests - Measurement of overall dimensions	EN 60811-203	-

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IEC 61034-2

Edition 3.0 2013-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

**Measurement of smoke density of cables burning under defined conditions –
Part 2: Test procedure and requirements**

**Mesure de la densité de fumées dégagées par des câbles brûlant dans des
conditions définies –
Partie 2: Procédure d'essai et exigences**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

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ICS 13.220.40; 29.020; 29.060.20

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FOREWORD

This amendment has been prepared by IEC technical committee 20: Electric cables.

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

FDIS	Report on voting
20/1429/FDIS	20/1444/RVD

Full information on the voting for the approval of this amendment can be found in the report on voting indicated in the above table.

The committee has decided that the contents of this amendment and the base 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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2 Normative references

[SIST EN 61034-2:2005/A1:2014](https://standards.iteh.ai/catalog/standards/sist/b4e92526-733e-4231-a8f1-faca2d2064cf/sist-en-61034-2-2005-a1-2014)

Add the following new reference: standards.iteh.ai/catalog/standards/sist/b4e92526-733e-4231-a8f1-faca2d2064cf/sist-en-61034-2-2005-a1-2014

IEC 60811-203, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 203: General tests – Measurement of overall dimensions*

5.2.1 Selection of number of test pieces

Add the following new subclause:

5.2.1.0 General

The cable diameter shall be measured using the method given in IEC 60811-203. The measurement shall be made at each of three places, separated by at least 1 m.

The average of the three values obtained shall be rounded to obtain the overall diameter. If the calculation gives 5 or more for the second decimal figure, raise the first to the next number; thus, for example, 5,75 is rounded to 5,8 and 5,74 to 5,7.

The overall diameter obtained shall be used for the selection of the number of test pieces.

5.2.1.1 Cables with an overall diameter of 5 mm or greater

Replace, in the title and in the first line, "of 5 mm or greater" by "greater than 5,0 mm"

Table 1 – Number of test pieces

Amend the overall diameters in Table 1 as follows:

$$D > 40,0$$

$20,0 < D \leq 40,0$

$10,0 < D \leq 20,0$

$5,0 < D \leq 10,0$

5.2.1.2 Cables with an overall diameter of less than 5 mm but not less than 1 mm

Replace, in the title and in the first line "less than 5 mm, but not less than 1 mm" by "less than or equal to 5,0 mm, but not less than 1,0 mm"

5.2.1.3 Non-circular cables

Replace the existing text by the following new text:

The test sample for non-circular cables shall be a flat horizontal unit in which the minor axis of each test piece is presented to the fire source. The unit shall be bound with two turns of approximately 0,5 mm wire in the centre and at every 100 mm each side from the centre (see Figure 3). The number of test pieces required to make up the test sample shall be in accordance with Table 1, except that in the case of cables in which the overall diameter is less than or equal to 5,0 mm, the test pieces shall not be bundled and the number of test pieces in the flat horizontal unit calculated according to the formula $N_1 = 45/D$.

The following criteria for determination of the overall diameter (D) to be used in the determination of the number of test pieces shall apply for cables in which the minor axis is 2,0 mm or greater:

- a) for cables in which the major to minor axis ratio is equal to or less than 3, the nominal minor axis shall be used as the overall diameter (D);
- b) for cables in which the major to minor axis ratio lies between 3 and 16, the overall diameter (D) shall be taken as half the circumference of the cable divided by $3,14 (\pi)$.

For cables in which the minor axis is less than 2,0 mm or the major to minor axis ratio exceeds 16, the test criteria shall be given in the product standard or, if not, agreed between manufacturer and purchaser.

6.6

Add, after "Record the minimum light transmittance" the following new text:

The light transmittance I_t shall be calculated as follows:

$$I_t = I_t/I_0$$

where

I_t is the intensity of transmitted light;

I_0 is the intensity of incident light.

I_t shall be expressed as a percentage.

7 Evaluation of test results

Replace, in the last line of the third paragraph "as the cable light transmittance." by "for determining compliance."

8 Retest procedure

Replace the existing text by the following new text: