



BSI Standards Publication

Measurement of smoke density of cables burning under defined conditions

Part 2: Test procedure and requirements

National foreword

This British Standard is the UK implementation of EN 61034-2:2005+A2:2020. It is identical to IEC 61034-2:2005, incorporating amendment 1:2013 and amendment 2:2019. It supersedes BS EN 61034-2:2005+A1:2013, which will be withdrawn on 27 December 2022.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee GEL/20/18, Electric Cables - Fire testing.

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.

© The British Standards Institution 2020
Published by BSI Standards Limited 2020

ISBN 978 0 539 00988 0

ICS 13.220.40; 29.020; 29.060.20

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

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 21 October 2005.

Amendments/corrigenda issued since publication

Date	Text affected
31 October 2013	Implementation of IEC amendment 1:2013 with CENELEC endorsement A1:2013. Annex ZA updated
31 March 2020	Implementation of IEC amendment 2:2019 with CENELEC endorsement A2:2020

English version

**Measurement of smoke density of cables
burning under defined conditions
Part 2: Test procedure and requirements
(IEC 61034-2:2005)**

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)

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

This European Standard was approved by CENELEC on 2005-06-01. 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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, 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

European Foreword

The text of document 20/755/FDIS, future edition 3 of IEC 61034-2, prepared by IEC TC 20, Electric cables, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61034-2 on 2005-06-01.

The principal changes with respect to EN 50268-2 are as follows:

- a) inclusion of non-circular cables;
- b) addition of guidance on testing cables above 80 mm diameter;
- c) delineation of elements of the test report;
- d) addition of guidance on the calculation for other parameters for fire safety engineering purposes.

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) | 2006-03-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2008-06-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

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

In the official version, for Bibliography, the following note has to be added for the standard indicated:

IEC 60695-6-1 NOTE Harmonized as EN 60695-6-1:2005 (not modified).

European foreword to amendment A1

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).

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.

European foreword to amendment A2

The text of document 20/1886/FDIS, future IEC 61034-2/A2, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61034-2:2005/A2:2020.

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) 2020-09-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-12-27

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

Endorsement notice

The text of the International Standard IEC 61034-2:2005/A2:2019 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 Where 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 60695-4	2005	Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products	-	-
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	-
IEC 61034-1	2005	Measurement of smoke density of cables burning under defined conditions Part 1: Test apparatus	EN 61034-1	2005
IEC Guide 104	1997	The preparation of safety publications and the use of basic safety publications and group safety publications	-	-
ISO 13943	2000	Fire safety - Vocabulary	EN ISO 13943	2000

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