
Električni in optični kabli - Preskuševalne metode za nekovinske materiale - 412.
del: Drugi preskusi - Metode termičnega staranja - Staranje v zračni komori

Electric and optical fibre cables - Test methods for non-metallic materials - Part 412:
Miscellaneous tests - Thermal ageing methods - Ageing in an air bomb

Kabel, isolierte Leitungen und Glasfaserkabel - Prüfverfahren für nichtmetallene
Werkstoffe - Teil 412: Sonstige Prüfungen - Thermische Alterungsverfahren - Alterung in
einer Druckkammer

(standards.iteh.ai)

Câbles électriques et câbles à fibres optiques - Méthodes d'essai pour les matériaux non
-métalliques - Partie 412: Essais divers - Méthode de vieillissement thermique -
Vieillessement dans la bombe à air

Ta slovenski standard je istoveten z: EN 60811-412:2012

ICS:

| | | |
|-----------|-------------------------------------|------------------------------------|
| 29.035.01 | Izolacijski materiali na splošno | Insulating materials in general |
| 29.060.20 | Kabli | Cables |

SIST EN 60811-412:2012**en,fr,de**

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60811-412:2012

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60811-412

June 2012

ICS 29.035.01; 29.060.20

Supersedes EN 60811-1-2:1995 (partially) + A2:2000 (partially)

English version

**Electric and optical fibre cables -
Test methods for non-metallic materials -
Part 412: Miscellaneous tests -
Thermal ageing methods -
Ageing in an air bomb
(IEC 60811-412:2012)**

Câbles électriques et à fibres optiques -
Méthodes d'essai pour les matériaux non-
métalliques -
Partie 412: Essais divers -
Méthodes de vieillissement thermique -
Vieillessement dans une bombe à air
(CEI 60811-412:2012)

Kabel, isolierte Leitungen und
Glasfaserkabel -
Prüfverfahren für nichtmetallene
Werkstoffe -
Teil 412: Sonstige Prüfungen -
Thermische Alterungsverfahren -
Alterung in einer Druckkammer
(IEC 60811-412:2012)

[SIST EN 60811-412:2012](https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012)

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012>

This European Standard was approved by CENELEC on 2012-04-16. 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 CEN-CENELEC Management Centre 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 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, 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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 20/1296/FDIS, future edition 1 of IEC 60811-412, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-412:2012.

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) 2013-01-16
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-04-16

This document supersedes 8.2 of EN 60811-1-2:1995 + A2:2000 (partially). Full details of the replacements are shown in Annex A of EN 60811-100:2012.

There are no technical changes with respect to EN 60811-1-2:1995 + A2:2000, but see the Foreword to EN 60811-100:2012.

This standard is to be read in conjunction with EN 60811-100.

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.

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-90e14db6e556/iec-en-60811-412-2012>

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 60811-412:2012 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 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.

| <u>Publication</u> | <u>Year</u> | <u>Title</u> | <u>EN/HD</u> | <u>Year</u> |
|--------------------|-------------|--|--------------|-------------|
| IEC 60811-100 | 2012 | Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General | EN 60811-100 | 2012 |
| IEC 60811-501 | - | Electric and optical fibre cables - Test methods for non-metallic materials - Part 501: Mechanical tests - Tests for determining the mechanical properties of insulating and sheathing compounds | EN 60811-501 | - |

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60811-412:2012

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 60811-412:2012

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012>



IEC 60811-412

Edition 1.0 2012-03

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Electric and optical fibre cables – Test methods for non-metallic materials –
Part 412: Miscellaneous tests – Thermal ageing methods – Ageing in an air
bomb**

**Câbles électriques et à fibres optiques – Méthodes d'essai pour les matériaux
non-métalliques –
Partie 412: Essais divers – Méthodes de vieillissement thermique –
Vieillessement dans une bombe à air**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

J

ICS 29.035.01; 29.060.20

ISBN 978-2-88912-974-4

**Warning! Make sure that you obtained this publication from an authorized distributor.
Attention! Veuillez vous assurer que vous avez obtenu cette publication via un distributeur agréé.**

CONTENTS

| | |
|---|---|
| FOREWORD..... | 3 |
| INTRODUCTION..... | 5 |
| 1 Scope..... | 6 |
| 2 Normative references | 6 |
| 3 Terms and definitions | 6 |
| 4 Test method | 6 |
| 4.1 General..... | 6 |
| 4.2 Apparatus..... | 6 |
| 4.3 Sample and test pieces preparation..... | 6 |
| 4.4 Ageing procedure | 7 |
| 4.5 Measurements..... | 7 |
| 4.6 Expression of the result..... | 7 |
| 5 Test report..... | 8 |
| Bibliography..... | 9 |

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60811-412:2012](https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012)

<https://standards.iteh.ai/catalog/standards/sist/93ae4ca9-6206-4cf2-b0e6-9044db6e5f56/sist-en-60811-412-2012>

INTERNATIONAL ELECTROTECHNICAL COMMISSION

**ELECTRIC AND OPTICAL FIBRE CABLES –
TEST METHODS FOR NON-METALLIC MATERIALS –****Part 412: Miscellaneous tests –
Thermal ageing methods – Ageing in an air bomb**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of 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, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as “IEC Publication(s)”). 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. 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 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 IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user.
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter.
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60811-412 has been prepared by IEC technical committee 20: Electric cables.

This Part 412 of IEC 60811 cancels and replaces 8.2 of IEC 60811-1-2:1985, which is withdrawn. Full details of the replacements are shown in Annex A of IEC 60811-100:2012.

There are no specific technical changes with respect to the previous edition, but see the Foreword to IEC 60811-100:2012.