



BSI Standards Publication

## **Electric and optical fibre cables - Test methods for non-metallic materials**

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Part 509: Mechanical tests - Test for resistance of insulations and sheaths to cracking (heat shock test)

## National foreword

This British Standard is the UK implementation of EN 60811-509:2012+A1:2017. It is identical to IEC 60811-509:2012, incorporating amendment 1:2017. It supersedes BS EN 60811-509:2012, which will be withdrawn on 25 August 2020.

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.

In the UK, the relationship between the supersessions of the BS EN 60811 series can be summarized as follows.

BS EN 60811-100 together with	Supersedes -
-201, -202, -203, -501	BS EN 60811-1-1:1995
-301, -302, -411, -601, -602, -603, -604	BS EN 60811-5-1:2000
-401, -412	BS EN 60811-1-2:1995
-402, -502, -503, -606	BS EN 60811-1-3:1995
-403, -404, -507	BS EN 60811-2-1:1998
-405, -409	BS EN 60811-3-2:1995
-406, -511, -605, -607	BS EN 60811-4-1:2004
-407, -408, -410, -510, -512, -513	BS EN 60811-4-2:2004
-504, -505, -506	BS EN 60811-1-4:1995
-508, -509	BS EN 60811-3-1:1995

Superseded standards are withdrawn.

The UK participation in its preparation was entrusted by Technical Committee GEL/20, Electric cables, to Subcommittee GEL/20/17, Electric Cables - Low voltage.

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.

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**Amendments/corrigenda issued since publication**

Date	Text affected
28 February 2018	Implementation of IEC amendment 1:2017 with CENELEC endorsement A1:2017



EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

**EN 60811-509:2012**

**+A1**

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English Version

**Electric and optical fibre cables — Test methods for non-metallic materials — Part 509: Mechanical tests — Test for resistance of insulations and sheaths to cracking (heat shock test) (IEC 60811-509:2012/A1:2017)**

Câbles électriques et à fibres optiques — Méthodes d'essai pour les matériaux non-métalliques — Partie 509: Essais mécaniques — Essai de résistance à la fissuration des enveloppes isolantes et des gaines (essai de choc thermique) (IEC 60811-509:2012/A1:2017)

Kabel, isolierte Leitungen und Glasfaserkabel — Prüfverfahren für nichtmetallene Werkstoffe — Teil 509: Mechanische Prüfungen — Prüfung der Rissbeständigkeit von Isolierhüllen und Mänteln (Wärmeschock-Prüfung) (IEC 60811-509:2012/A1:2017)

This European Standard was approved by CENELEC on 2012-04-17. 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.

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## European foreword

The text of document 20/1305/FDIS, future edition 1 of IEC 60811-509, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-509:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level (dop) 2013-01-17  
by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document (dow) 2015-04-17  
have to be withdrawn

This document supersedes Clause 9 of EN 60811-3-1:1995 + A1:1996 + A2:2001 (partially). Full details of the replacements are shown in Annex A of EN 60811-100:2012.

There are no specific technical changes with respect to EN 60811-3-1:1995, 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.

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 60811-509:2012 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60811-3-1:1985 NOTE Harmonized as EN 60811-3-1:1995 (not modified).

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## Foreword to amendment A1

The text of document 20/1737/FDIS, future IEC 60811-509:2012/A1, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-509:2012/A1:2017.

The following dates are fixed:

- latest date by which the document has to be implemented at national level (dop) 2018-05-25  
by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the document (dow) 2020-08-25  
have to be withdrawn

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The text of the International Standard IEC 60811-509:2012/A1:2017 was approved by CENELEC as a European Standard without any modification.