Elektrilised kaablid ja optilised kiudkaablid. Mittemetallmaterjalide katsetusviisid. Osa 100: Üldnõuded

Electric and optical fibre cables - Test methods for non-100 OCCUPATION OF THE PROPERTY metallic materials - Part 100: General



### **EESTI STANDARDI EESSÕNA**

### **NATIONAL FOREWORD**

See Eesti standard EVS-EN 60811-100:2012	This Estonian standard EVS-EN 60811-100:2012
sisaldab Euroopa standardi EN 60811-100:2012	consists of the English text of the European standard
ingliskeelset teksti.	EN 60811-100:2012.
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,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	This standard has been endorsed with a notification
avaldamisega EVS Teatajas.	published in the official bulletin of the Estonian Centre for Standardisation.
	Tor Startuardisation.
Euroopa standardimisorganisatsioonid on teinud	Date of Availability of the European standard is
,	08.06.2012.
kättesaadavaks 08.06.2012.	
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for
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Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <a href="mailto:standardiosakond@evs.ee">standardiosakond@evs.ee</a>.

ICS 29.035.01, 29.060.20

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### **EUROPEAN STANDARD**

### EN 60811-100

### NORME EUROPÉENNE EUROPÄISCHE NORM

June 2012

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Supersedes EN 60811-1-1:1995 (partially) + A1:2001 (partially), EN 60811-1-2:1995 (partially) + A2:2000 (partially), EN 60811-1-3:1995 (partially) + A1:2001 (partially), EN 60811-1-4:1995 (partially) + A2:2001 (partially), EN 60811-2-1:1998 (partially) + A1:2001 (partially), EN 60811-3-1:1995 (partially) + A1:1996 (partially) + A2:2001 (partially), EN 60811-3-2:1995 (partially) + A2:2004 (partially), EN 60811-4-1:2004 (partially), EN 60811-4-1:2004 (partially), EN 60811-4-2:2004 (partially) + A1:2004 (partially)

English version

# Electric and optical fibre cables Test methods for non-metallic materials Part 100: General

(IEC 60811-100:2012)

Câbles électriques et à fibres optiques -Méthodes d'essai pour les matériaux nonmétalliques -Partie 100: Généralités (CEI 60811-100:2012)

Kabel, isolierte Leitungen und Glasfaserkabel -Prüfverfahren für nichtmetallene Werkstoffe -Teil 100: Allgemeines (IEC 60811-100:2012)

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### **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 20/1279/FDIS, future edition 1 of IEC 60811-100, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-100:2012.

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
- latest date by which the national standards conflicting with the document have to be withdrawn

This document supersedes EN 60811-1-1:1995 (partially) + A1:2001 (partially), EN 60811-1-2:1995 (partially) + A2:2000 (partially), EN 60811-1-3:1995 (partially) + A1:2001 (partially), EN 60811-1-4:1995 (partially) + A2:2001 (partially), EN 60811-2-1:1998 (partially) + A1:2001 (partially), EN 60811-3-1:1995 (partially) + A1:1996 (partially) + A2:2001 (partially), EN 60811-3-2:1995 (partially) + A2:2004 (partially), EN 60811-4-1:2004 (partially), EN 60811-5-1:1999 (partially) + A1:2004 (partially).

EN 60811-100:2012 collects together general matters that apply to the restructured EN 60811 series. A detailed explanation is provided in the Introduction. Annex A provides full information on the relation between the current and the previous series.

This revised series of EN 60811 is based upon the principle of "one test – one part". One significant technical change that now applies throughout the series is a defined minimum scheme for the presentation of test reports.

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 60811-100:2012 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.

Publication	<u>Year</u>	Title	EN/HD	<u>Year</u>
IEC 00030-401		Part 461: Electric cables	-	-
IEC 60050-461 IEC 60502-1		Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_m$ = 1,2 kV) up to 30 kV ( $U_m$ = 36 kV) - Part 1: Cables for rated voltages of 1 kV ( $U_m$ 1,2 kV) and 3 kV ( $U_m$ = 3,6 kV)	=	

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### INTRODUCTION

The IEC 60811 series specifies the test methods to be used for testing non-metallic materials of all types of cables. These test methods are intended to be referenced in standards for cable construction and for cable materials.

NOTE 1 Non-metallic materials are typically used for insulating, sheathing, bedding, filling or taping within cables.

NOTE 2 These test methods are accepted as basic and fundamental and have been developed and used over many years principally for the materials in all energy cables. They have also been widely accepted and used for other cables, in particular optical fibre cables, communication and control cables and cables for ships and offshore applications.

d in ex A, nation. 1 of the corr. Each test method is contained in a separately numbered part. These respective parts are identified in Table A.1 of Annex A, with the corresponding clauses from the previous version of this part given for information. Table A.2 of Annex A lists the clauses of the previous version, to facilitate location of the corresponding part in the current version.

### ELECTRIC AND OPTICAL FIBRE CABLES – TEST METHODS FOR NON-METALLIC MATERIALS –

Part 100: General

### 1 Scope

This Part 100 of IEC 60811 describes general requirements and considerations that are applicable to all the test methods given in the particular parts, unless otherwise specified.

### 2 Normative references

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.

IEC 60050-461, International Electrotechnical Vocabulary – Part 461: Electric cables

IEC 60502-1, Power cables with extruded insulation and their accessories for rated voltages from 1 kV ( $U_{\rm m}$  = 1,2 kV) up to 30 kV ( $U_{\rm m}$  = 36 kV) – Part 1: Cables for rated voltages of 1 kV ( $U_{\rm m}$  = 1,2 kV) and 3 kV ( $U_{\rm m}$  =3,6 kV)

#### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-461, together with the following, apply.

#### 3.1

### median value

when several test results have been obtained and ordered in an increasing (or decreasing) succession, the median value is the middle value if the number of available values is odd, and the mean of the two middle values if the number is even

### 4 Test values

Full test conditions (such as temperatures, durations, etc.) and full test requirements are not specified in the particular parts of IEC 60811. It is intended that they should be specified by the standard dealing with the relevant type of cable.

Rounding rules as specified in IEC 60502-1 shall be used, unless specified in particular parts.

Any test requirements which are given in the particular parts of IEC 60811 may be modified by the relevant cable standard to suit the needs of a particular type of cable.

### 5 Applicability

Conditioning values and testing parameters are specified where appropriate for the most common types of insulating and sheathing compounds and of cables.