Elektrilised kaablid ja optilised kiudkaablid. Mittemetallmaterjalide katsetusviisid. Osa 408: Mitmesugused katsetused. Polüeteen- ja polüpropeenkompaundide pikaajalise stabiilsuse katsetamine

Electric and optical fibre cables - Test methods for non-metallic materials - Part 408: Miscellaneous tests - Long-term stability test of polyethylene and polypropylene compounds

EESTI STANDARDIKESKUS
ESTONIAN CENTRE FOR STANDARDISATION

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 60811-408:2012 sisaldab Euroopa standardi EN 60811-408:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 60811-408:2012 consists of the English text of the European standard EN 60811-408:2012.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.06.2012.	Date of Availability of the European standard is 15.06.2012.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 29.035.01, 29.060.20

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 60811-408

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ICS 29.035.01; 29.060.20

Supersedes EN 60811-4-2:2004 (partially)

English version

Electric and optical fibre cables - Test methods for non-metallic materials - Part 408: Miscellaneous tests - Long-term stability test of polyethylene and polypropylene compounds

(IEC 60811-408:2012)

Câbles électriques et à fibres optiques - Méthodes d'essai pour les matériaux non-métalliques - Partie 408: Essais divers - Essai de stabilité à long terme pour les mélanges polyéthylène et polypropylène (CEI 60811-408:2012)

Kabel, isolierte Leitungen und Glasfaserkabel - Prüfverfahren für nichtmetallene Werkstoffe - Teil 408: Sonstige Prüfungen - Langzeit(Lebensdauer)-Prüfung für Polyethylen- und Polypropylenmischungen (IEC 60811-408:2012)

CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 60811-408:2012 E

Foreword

The text of document 20/1292/FDIS, future edition 1 of IEC 60811-408, prepared by IEC/TC 20 "Electric cables" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60811-408:2012.

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 Annex A of EN 60811-4-2:2004 (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 60811-4-2:2004, 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 60811-408:2012 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 60811-601 NOTE Harmonized as EN 60811-601.

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	Year	Title	EN/HD	Year
IEC 60811-100	2012	Electric and optical fibre cables - Test methods for non-metallic materials - Part 100: General	EN 60811-100	2012
IEC 60811-410	-	Electric and optical fibre cables - Test methods for non-metallic materials - Part 410: Miscellaneous tests - Test method for copper-catalyzed oxidative degradation of polyolefin insulated conductors	EN 60811-410	-
ISO 188	-	Rubber, vulcanized or thermoplastic - Accelerated ageing and heat-resistance tests	-	-

CONTENTS

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.

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

Part 408: Miscellaneous tests – Long-term stability test of polyethylene and polypropylene compounds

1 Scope

This Part 408 of IEC 60811 gives the procedure to establish as to whether or not the quality of a cable's components will be satisfactory over the proposed life of a communication cable.

This test is considered only as a material selection test to ensure that the chosen materials are satisfactory for the intended life of the cable. The test duration makes the test unsuitable for routine quality control testing; one method found suitable for monitoring raw materials is given in IEC 60811-410.

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 60811-100:2012, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 100: General*

IEC 60811-410, *Electric and optical fibre cables – Test methods for non-metallic materials – Part 410: Miscellaneous tests – Test method for copper-catalyzed oxidative degradation of polyolefin insulated conductors*

ISO 188, *Rubber, vulcanized or thermoplastic – Accelerated ageing and heat resistance tests*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60811-100 apply.

4 Test method

4.1 Test method for unfilled cables

4.1.1 General

This part of IEC 60811 shall be used in conjunction with IEC 60811-100.

NOTE This test method is only applicable to communication cables containing copper pairs. A similar test method applicable to electric cables for power distribution is under consideration.

The need to establish whether or not the quality of a cable's components will be satisfactory over the proposed life of the cable is well recognized. In particular, polyolefin insulation shall have sufficient resistance to ageing in service.

The definition of test duration, temperature, atmosphere and failure criteria shall be carefully chosen.