SLOVENSKI STANDARD
SIST EN 61111:2009

01-oktober-2009

Nadomešča:
SIST-TS CLC/TS 61111:2007

Delo pod napetostjo - Podloge iz izolacijskega materiala za uporabo v elektrotehniki (IEC 61111:2009)

Live working - Electrical insulating matting

Arbeiten unter Spannung – Elektrisch isolierende Matten

Travaux sous tension - Tapis isolants électriques

Ta slovenski standard je istoveten z: EN 61111:2009

ICS:

13.260	Varstvo pred električnim udarom. Delo pod napetostjo	Protection against electric shock. Live working

SIST EN 61111:2009 **en,fr**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61111

June 2009

ICS 13.260; 29.260.99

Supersedes CLC/TS 61111:2006

English version

Live working - Electrical insulating matting (IEC 61111:2009)

Travaux sous tension -
Tapis isolants électriques
(CEI 61111:2009)

Arbeiten unter Spannung -
Elektrisch isolierende Matten
(IEC 61111:2009)

This European Standard was approved by CENELEC on 2009-06-01. 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, Bulgaria, 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 and the United Kingdom.

CENELEC

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

Central Secretariat: Avenue Marnix 17, B - 1000 Brussels

Ref. No. EN 61111:2009 E

Foreword

The text of document 78/784/FDIS, future edition 2 of IEC 61111, prepared by IEC TC 78, Live working, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61111 on 2009-06-01.

This European Standard supersedes CLC/TS 61111:2006.

EN 61111:2009 includes the following significant technical changes with regard to CLC/TS 61111:2006:

– general review of the requirements and test provisions;

– modification of the test procedure for slip resistance;

– specification of standard and alternative types of electrodes for the proof test;

– increase of the conditioning time for low temperature folding test to 4 hours;

– modification of the test procedures for low and extremely low temperature by replacing the dielectric proof test by a withstand test in the sanction;

– modification of the test procedures for acid and oil resistance by specifying the use of test pieces and by replacing the dielectric proof test by a withstand test in the sanction;

– specification of liquid 102 for the oil resistance test and harmonisation of the mechanical test sanction with the acid resistance test;

– preparation of the elements of evaluation of defects, and general application of EN 61318:2008;

– revision of existing annexes;

– deletion of Annexes D and F, not applicable according to EN 61318:2008;

– introduction of a new normative Annex F on classification of defects.

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)	2010-03-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-06-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61111:2009 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 60743 + A1	NOTE Harmonized as EN 60743:2001 + A1:2008 (not modified).

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 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 60060-1	-[1)]	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991[2)]
IEC 60060-2	-[1)]	High-voltage test techniques - Part 2: Measuring systems	EN 60060-2	1994[2)]
IEC 60068-1	-[1)]	Environmental testing - Part 1: General and guidance	EN 60068-1	1994[2)]
IEC 60212	1971	Standard conditions for use prior to and during the testing of solid electrical insulating materials	HD 437 S1	1984
IEC 60417	Data-base	Graphical symbols for use on equipment	-	-
IEC 61318	-[1)]	Live working - Conformity assessment applicable to tools, devices and equipment	EN 61318	2008[2)]
IEC 61477	-[1)]	Live working - Minimum requirements for the utilization of tools, devices and equipment	EN 61477	2009[2)]
ISO 2592	-[1)]	Determination of flash and fire points - Cleveland open cup method	EN ISO 2592	2001[2)]
ISO 2977	-[1)]	Petroleum products and hydrocarbon solvents - Determination of aniline point and mixed aniline point	-	-
ISO 3104	-[1)]	Petroleum products - Transparent and opaque liquids - Determination of kinematic viscosity and calculation of dynamic viscosity	EN ISO 3104	1996[2)]
ISO 5904	1981	Gymnastic equipment - Landing mats and surfaces for floor exercises - Determination of resistance to slipping	-	-
ASTM D 3767	2003	Standard Practice for Rubber - Measurement of Dimensions	-	-

[1)] Undated reference.

[2)] Valid edition at date of issue.

IEC 61111

Edition 2.0 2009-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Live working – Electrical insulating matting

Travaux sous tension – Tapis isolants électriques

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

PRICE CODE
CODE PRIX V

ICS 13.260; 29.260.99

ISBN 2-8318-1036-3

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LIVE WORKING – ELECTRICAL INSULATING MATTING

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.
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International Standard IEC 61111 has been prepared by IEC technical committee 78: Live Working.

This second edition cancels and replaces the first edition, published in 1992, and its Amendment 1 (2002). This edition constitutes a technical revision.

It includes the following significant technical changes with regard to the previous edition:

- general review of the requirements and test provisions;
- modification of the test procedure for slip resistance;
- specification of standard and alternative types of electrodes for the proof test;
- increase of the conditioning time for low temperature folding test to 4 hours;
- modification of the test procedures for low and extremely low temperature by replacing the dielectric proof test by a withstand test in the sanction;
- modification of the test procedures for acid and oil resistance by specifying the use of test pieces and by replacing the dielectric proof test by a withstand test in the sanction;

- specification of liquid 102 for the oil resistance test and harmonisation of the mechanical test sanction with the acid resistance test;
- preparation of the elements of evaluation of defects, and general application of IEC 61318 Ed.3;
- revision of existing annexes;
- deletion of Annexes D and F, not applicable according to IEC 61318 Ed.3;
- introduction of a new normative Annex F on classification of defects.

The text of this standard is based on the following documents:

FDIS	Report on voting
78/784/FDIS	78/798/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This International Standard has been prepared according to the requirements of IEC 61477 where applicable.

The product covered by this standard may have an impact on the environment during some or all stages of its life cycle. These impacts can range from slight to significant, be of short-term or long-term, and occur at the global, regional or local level.

Except for a disposal statement in the instructions for use, this standard does not include requirements and test provisions for the manufacturers of the product, or recommendations to the users of the product for environmental improvement. However, all parties intervening in its design, manufacture, packaging, distribution, use, maintenance, repair, reuse, recovery and disposal are invited to take account of environmental considerations.