

Live working - Electrical insulating blankets

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 61112:2009 sisaldab Euroopa standardi EN 61112:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 31.07.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

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This standard is ratified with the order of Estonian Centre for Standardisation dated 31.07.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English version

**Live working -
Electrical insulating blankets
(IEC 61112:2009)**

Travaux sous tension -
Nappes isolantes électriques
(CEI 61112:2009)

Arbeiten unter Spannung -
Elektrisch isolierende Abdecktücher
(IEC 61112:2009)

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

Foreword

The text of document 78/785/FDIS, future edition 2 of IEC 61112, prepared by IEC TC 78, Live working, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 61112 on 2009-06-01.

This European Standard supersedes CLC/TS 61112:2006.

EN 61112:2009 includes the following significant technical changes with regard to CLC/TS 61112:2006:

- general review of the requirements and test provisions;
- limitation of the scope in terms of the minimum width of electrical insulating blankets in rolls;
- introduction of a definition of electrical insulating blankets including sheeting in various shapes and in rolls;
- introduction of Class 00;
- withdrawal of category S and introduction of category R;
- clarification of the way electrical insulating blankets in rolls are covered by the test procedures;
- specification of standard and alternative types of electrodes for the proof test;
- 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 61112:2009 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).

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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.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
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⁾
ASTM D 3767	2003	Standard Practice for Rubber - Measurement of Dimensions	-	-

¹⁾ Undated reference.

²⁾ Valid edition at date of issue.

CONTENTS

FOREWORD.....	4
INTRODUCTION.....	6
1 Scope.....	7
2 Normative references	7
3 Terms and definitions	8
4 Requirements.....	9
4.1 General.....	9
4.2 Classification.....	9
4.3 Physical requirements	9
4.3.1 Composition	9
4.3.2 Shape and design.....	9
4.3.3 Dimensions and tolerances.....	11
4.3.4 Workmanship and finish	11
4.4 Mechanical, climatic and environmental requirements	12
4.5 Dielectric requirements.....	12
4.6 Marking	12
4.7 Packaging	13
4.8 Instructions for use.....	13
5 Tests.....	13
5.1 General.....	13
5.2 Visual inspection and measurements.....	14
5.2.1 General	14
5.2.2 Classification.....	14
5.2.3 Composition	14
5.2.4 Dimensions, workmanship and finish	14
5.2.5 Thickness	14
5.3 Marking.....	15
5.3.1 Visual inspection and measurement	15
5.3.2 Durability of marking.....	15
5.4 Packaging and instructions for use	15
5.5 Mechanical tests	15
5.5.1 General	15
5.5.2 Tensile strength and elongation at break	15
5.5.3 Mechanical puncture resistance.....	16
5.5.4 Tension set for elastomer material.....	18
5.5.5 Tear resistance test for plastic material	18
5.6 Dielectric tests	19
5.6.1 General	19
5.6.2 Electrodes	20
5.6.3 Test equipment.....	22
5.6.4 Electrical test procedure	23
5.7 Ageing tests	24
5.8 Thermal tests	25
5.8.1 Flame retardance test.....	25
5.8.2 Low temperature folding test (except for category C blankets).....	26
6 Tests on electrical insulating blankets with special properties.....	27

6.1	General	27
6.2	Category A: Acid resistance	27
6.3	Category H: Oil resistance	27
6.4	Category Z: Ozone resistance	27
6.4.1	General	27
6.4.2	Test methods	28
6.5	Category M: Mechanical puncture resistance	29
6.6	Category C: Extremely low temperature folding test	29
7	Conformity assessment of electrical insulating blankets having completed the production phase	29
8	Modifications	30
Annex A (informative) Guidelines for the selection of the class of electrical insulating blankets in relation to nominal voltage of a system		31
Annex B (informative) In-service care and testing		32
Annex C (normative) Suitable for live working ; double triangle (IEC 60417-5216 (2002-10))		34
Annex D (normative) General type test procedure		35
Annex E (normative) Liquid for tests on electrical insulating blankets of category H – Oil resistance		38
Annex F (normative) Classification of defects and tests to be allocated		39
Bibliography		40
Figure 1 – Example of plain design		10
Figure 2 – Example of slotted design		10
Figure 3 – Plan view of the dumb-bell test piece		16
Figure 4 – Test plates and needle for resistance to mechanical puncture		17
Figure 5 – Tear resistance test		19
Figure 6 – Test set-up for voltage proof test of electrical insulating blankets with standard type of electrodes		20
Figure 7 – Test set-up for voltage proof test of electrical insulating blankets with alternative type of electrodes		22
Figure 8 – Test set-up for voltage withstand test		23
Figure 9 – Test set-up for low and extremely low temperature folding tests		26
Figure 10 – Ozone resistance – Method B test set-up		28
Table 1 – Special properties		9
Table 2 – Common lengths and widths for electrical insulating blankets		11
Table 3 – Maximum thickness for electrical insulating blankets		11
Table 4 – Maximum electrode clearance for proof tests		21
Table 5 – Test voltages		24
Table A.1 – Designation maximum use voltage		31
Table D.1 – List and chronological order of type tests		35
Table E.1 – Characteristics of oil no. 1		38
Table F.1 – Classification of defects and associated requirements and tests		39

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.

LIVE WORKING – ELECTRICAL INSULATING BLANKETS

1 Scope

This International Standard is applicable to electrical insulating blankets for the protection of workers from accidental contact with live or earthed electrical conductors, apparatus or circuits and avoidance of short circuits on electrical installations.

Electrical insulating blankets in rolls having a width lower than 50 mm are not covered by this standard.

NOTE 1 For a.c. electrical classification, as well as d.c. use, see 4.2.

NOTE 2 This standard gives a.c. test provisions. There is limited history for use in d.c. applications.

NOTE 3 See Annex A for suggested maximum voltage use.

2 Normative references

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.

IEC 60060-1, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60060-2, *High-voltage test techniques – Part 2: Measuring systems*

IEC 60068-1, *Environmental testing – Part 1: General and guidance*

IEC 60212:1971, *Standard conditions for use prior to and during the testing of solid electrical insulating materials*

IEC 60417, *Graphical symbols for use on equipment*

IEC 61318, *Live working – Conformity assessment applicable to tools, devices and equipment*

IEC 61477, *Live working – Minimum requirements for the utilization of tools, devices and equipment*

ISO 2592, *Determination of flash and fire points – Cleveland open cup method*

ISO 2977, *Petroleum products and hydrocarbon solvents – Determination of aniline point and mixed aniline point*

ISO 3104, *Petroleum products – Transparent and opaque liquids – Determination of kinematic viscosity and calculation of dynamic viscosity*

ASTM D 3767:2003 (reapproved 2008): *Standard practice for rubber – Measurement of dimensions*