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High-voltage fuses Part 1: Current-limiting fuses

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60282-1:2010 sisaldab Euroopa standardi EN 60282-1:2009 ingliskeelset teksti.	This Estonian standard EVS-EN 60282-1:2010 consists of the English text of the European standard EN 60282-1:2009.
Standard on kinnitatud Eesti Standardikeskuse 28.02.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 28.02.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
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Hochspannungssicherungen - Teil 1: Strombegrenzende Sicherungen (IEC 60282-1:2009)

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CENELEC

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

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Foreword

The text of document 32A/274/FDIS, future edition 7 of IEC 60282-1, prepared by SC 32A, High-voltage fuses, of IEC TC 32, Fuses, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60282-1 on 2009-11-01.

This European Standard supersedes EN 60282-1:2006.

The changes introduced by this new edition are only editorial.

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)	2010-08-01
– latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2012-11-01

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60282-1:2009 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/TR 60890	NOTE	Harmonized as CLC/TR 60890:2002 (not modified).
IEC 62271-1	NOTE	Harmonized as EN 62271-1:2008 (not modified).
IEC 62271-100	NOTE	Harmonized as EN 62271-100:2009 (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.

Publication	Year	Title	EN/HD	Year
IEC 60060-1	1989	High-voltage test techniques - Part 1: General definitions and test requirements	HD 588.1 S1	1991
IEC 60071-1	2006	Insulation co-ordination - Part 1: Definitions, principles and rules	EN 60071-1	2006
IEC 60085	2007	Electrical insulation - Thermal evaluation and designation	EN 60085	2008
IEC 60265-1	1998	High-voltage switches - Part 1: Switches for rated voltages above 1 kV and less than 52 kV	EN 60265-1	1998
IEC 60549	1976	High-voltage fuses for the external protection of shunt power capacitors	-	-
IEC 60644	1979	Specification for high-voltage fuse-links for motor circuit applications	EN 60644	1993
IEC/TR 60787	2007	Application guide for the selection of high-voltage current-limiting fuse-links for transformer circuits	-	-
IEC 62271-105	2002	High-voltage switchgear and controlgear - Part 105: Alternating current switch-fuse combinations	EN 62271-105	2003
ISO 148-2	-[1)]	Metallic materials - Charpy pendulum impact test - Part 2: Verification of test machines	EN ISO 148-2	2008[2)]
ISO 179	Series	Plastics - Determination of Charpy impact properties	EN ISO 179	Series

[1)] Undated reference.

[2)] Valid edition at date of issue.

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HIGH-VOLTAGE FUSES –

Part 1: Current-limiting fuses

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1 General

1.1 Scope

This part of IEC 60282 applies to all types of high-voltage current-limiting fuses designed for use outdoors or indoors on alternating current systems of 50 Hz and 60 Hz and of rated voltages exceeding 1 000 V.

Some fuses are provided with fuse-links equipped with an indicating device or a striker. These fuses come within the scope of this standard, but the correct operation of the striker in combination with the tripping mechanism of the switching device is outside the scope of this standard; see IEC 62271-105.

1.2 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 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60071-1:2006, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60085:2007, *Electrical insulation – Thermal evaluation and designation*

IEC 60265-1:1998, *High-voltage switches – Part 1: Switches for rated voltages above 1 kV and less than 52 kV*

IEC 60549:1976, *High-voltage fuses for the external protection of shunt power capacitors*

IEC 60644:1979, *Specification for high-voltage fuse-links for motor circuit applications*

IEC/TR 60787:2007, *Application guide for the selection of high-voltage current-limiting fuse-links for transformer circuits*

IEC 62271-105:2002, *High-voltage switchgear and controlgear – Part 105: Alternating current switch-fuse combinations*

ISO 148-2*, Metallic materials – Charpy pendulum impact test – Part 2: Verification of test machines*

ISO 179 (all parts), *Plastics – Determination of Charpy impact properties*

2 Normal and special service conditions

2.1 Normal service conditions

Fuses complying with this standard are designed to be used under the following conditions.