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High-voltage fuses - Part 1: Current-limiting fuses

Táto norma obsahuje anglickú verziu európskej normy.  
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/20

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**EN IEC 60282-1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

May 2020

ICS 29.120.50

Supersedes EN 60282-1:2009 and all of its amendments  
and corrigenda (if any)

English Version

**High-voltage fuses - Part 1: Current-limiting fuses  
(IEC 60282-1:2020)**Fusibles à haute tension - Partie 1: Fusibles limiteurs de  
courant  
(IEC 60282-1:2020)Hochspannungssicherungen - Teil 1: Strombegrenzende  
Sicherungen  
(IEC 60282-1:2020)

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Comité Européen de Normalisation Electrotechnique  
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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN IEC 60282-1:2020 (E)****European foreword**

The text of document 32A/347/FDIS, future edition 8 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 approved by CENELEC as EN IEC 60282-1:2020.

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) 2021-02-19
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2023-05-19

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The text of the International Standard IEC 60282-1:2020 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 60085:2007	NOTE	Harmonized as EN 60085:2008 (not modified)
IEC 62271-100:2008	NOTE	Harmonized as EN 62271-100:2009 (not modified)
IEC 62271-100:2008/A1:2012	NOTE	Harmonized as EN 62271-100:2009/A1:2012 (not modified)
IEC 62271-100:2008/A2:2017	NOTE	Harmonized as EN 62271-100:2009/A2:2017 (not modified)
IEC 62271-103	NOTE	Harmonized as EN 62271-103
ISO 179 (series)	NOTE	Harmonized as EN ISO 179 (series)

## **Annex ZA** (normative)

### **Normative references to international publications with their corresponding European publications**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: [www.cenelec.eu](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60060-1	2010	High-voltage test techniques - Part 1: General definitions and test requirements	EN 60060-1	2010
IEC 60071-1	-	Insulation co-ordination - Part 1: Definitions, principles and rules	EN IEC 60071-1	-
IEC 60549	-	High-voltage fuses for the external protection of shunt capacitors	EN 60549	-
IEC 60644	-	Specification for high-voltage fuse-links for motor circuit applications	EN 60644	-
IEC 62271-105	-	High-voltage switchgear and controlgear - Part 105: Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV	-	-



IEC 60282-1

Edition 8.0 2020-04

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**High-voltage fuses –  
Part 1: Current-limiting fuses**

**Fusibles à haute tension –  
Partie 1: Fusibles limiteurs de courant**



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IEC Central Office  
3, rue de Varembe  
CH-1211 Geneva 20  
Switzerland

Tel.: +41 22 919 02 11  
[info@iec.ch](mailto:info@iec.ch)  
[www.iec.ch](http://www.iec.ch)

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IEC 60282-1

Edition 8.0 2020-04

# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**High-voltage fuses –  
Part 1: Current-limiting fuses**

**Fusibles à haute tension –  
Partie 1: Fusibles limiteurs de courant**

INTERNATIONAL  
ELECTROTECHNICAL  
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# INTERNATIONAL ELECTROTECHNICAL COMMISSION

## HIGH-VOLTAGE FUSES –

### Part 1: Current-limiting fuses

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International Standard IEC 60282-1 has been prepared by subcommittee 32A: High-voltage fuses, of IEC technical committee 32: Fuses.

This eighth edition cancels and replaces the seventh edition published in 2009.

This edition includes the following significant technical changes with respect to the previous edition:

- additional information concerning thermally operated strikers;
- the division of ratings, characteristics and type tests into those applicable to all fuses and those applicable to particular fuse-link types and applications;
- adjustment of Series II voltages and tests to meet present North American standard system voltages and applications;
- clarification of requirements for fuse-links used in surrounding temperatures above 40 °C; and

- clarification of homogeneous requirements for fuse-links containing one element.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
32A/347/FDIS	32A/349/RVD

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

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

A list of all parts in the IEC 60282 series, published under the general title *High-voltage fuses*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific document. At this date, the document will be

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

## **HIGH-VOLTAGE FUSES – Part 1: Current-limiting fuses**

### **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.

### **2 Normative references**

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 60060-1:2010, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60071-1, *Insulation coordination – Part 1: Definitions, principles and rules*

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

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

IEC 62271-105, *High-voltage switchgear and controlgear – Part 105: Alternating current switch-fuse combinations for rated voltages above 1 kV up to and including 52 kV*

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