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**Niskonapetostne varovalke - 2. del: Dodatne zahteve za varovalke, ki jih uporabljajo strokovne osebe (uporaba varovalk zlasti v industriji) - Primeri tipov standardiziranih varovalk od A do K - Dopolnilo A1 (IEC 60269-2:2013/A1:2016)**

Low-voltage fuses - Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to K (IEC 60269-2:2013/A1:2016)

Niederspannungssicherungen - Teil 2: Zusätzliche Anforderungen an Sicherungen zum Gebrauch durch Elektrofachkräfte bzw. elektrotechnisch unterwiesene Personen (Sicherungen überwiegend für den industriellen Gebrauch) - Beispiele für genormte Sicherungssysteme A bis K (IEC 60269-2:2013/A1:2016)

Fusibles basse tension - Partie 2: Exigences supplémentaires pour les fusibles destinés à être utilisés par des personnes habilitées (fusibles pour usages essentiellement industriels) - Exemples de systèmes de fusibles normalisés A à K (IEC 60269-2:2013/A1:2016)

**Ta slovenski standard je istoveten z: HD 60269-2:2013/A1:2022**

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**ICS:**

29.120.50	Varovalke in druga nadtokovna zaščita	Fuses and other overcurrent protection devices
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**SIST HD 60269-2:2013/A1:2023** en,fr,de



ICS 29.120.50

English Version

Low-voltage fuses - Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to K (IEC 60269-2:2013/A1:2016)

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This amendment A1 modifies the Harmonization Document HD 60269-2:2013; it was approved by CENELEC on 2016-09-09. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this amendment at national level.

Up-to-date lists and bibliographical references concerning such national implementations may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This amendment exists in three official versions (English, French, German).

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

**HD 60269-2:2013/A1:2022 (E)****European foreword**

The text of document 32B/641/CDV, future IEC 60269-2/A1, prepared by SC 32B "Low-voltage fuses" of IEC/TC 32 "Fuses" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as HD 60269-2:2013/A1:2022.

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) 2023-05-11
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2025-11-11

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Any feedback and questions on this document should be directed to the users' national committee. A complete listing of these bodies can be found on the CENELEC website.

**Endorsement notice**

iTeh STANDARD PREVIEW

The text of the International Standard IEC 60269-2:2013/A1:2016 was approved by CENELEC as a European Standard without any modification.

[SIST HD 60269-2:2013/A1:2023](https://standards.iteh.ai/catalog/standards/sist/937c25ce-37fa-42e9-8ce1-5baa124fc1b0/sist-hd-60269-2-2013-a1-2023)

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# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

AMENDMENT 1  
AMENDEMENT 1

**Low-voltage fuses –  
Part 2: Supplementary requirements for fuses for use by authorized persons  
(fuses mainly for industrial application) – Examples of standardized systems of  
fuses A to K**

**Fusibles basse tension –  
Partie 2: Exigences supplémentaires pour les fusibles destinés à être utilisés par  
des personnes habilitées (fusibles pour usages essentiellement industriels) –  
Exemples de systèmes de fusibles normalisés A à K**

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## FOREWORD

This amendment has been prepared by subcommittee 32B: Low Voltage Fuses, of IEC technical committee 32: Fuses.

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

CDV	Report on voting
32B/641/CDV	32B/648/RVC

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

The committee has decided that the contents of this amendment and the base publication will remain unchanged until the stability date indicated on the IEC website 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.

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SIST HD 60269-2:2013/A1:2023

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## 1.1 Scope

*Replace*

Fuses System H: Fuses with fuse-links having "gD" and "gN" characteristic (class J class L time delay and non time delay fuse types)

*by the following new text:*

Fuses System H: Fuses with fuse-links having "gD" and "gN" characteristic (class J class L and class T time delay and non time delay fuse types)

## Fuse system A – Fuses with fuse-links with blade contacts (NH fuse system)

### 7.1.3 Fuse-contacts

*Replace the first paragraph of Subclause 7.1.3 by the following new text:*

The contact surfaces of fuse-links and fuse-bases should be silver-plated; If the surface plating of the blade contacts of a fuse-link or the contacts of the fuse-base is other than silver, the test according to 8.10 shall be conducted with dummy fuse-links as described in 8.10.1. Permissible combinations of surface plating shall be defined by the manufacturer.

**8.3.1 Arrangement of the fuse**

*Replace the second paragraph of Subclause 8.3.1 by the following new text:*

In case the test arrangement contains more than one fuse, the test specimens are mounted in the conventional service position on a wooden plate or other insulating material at a distance between centre lines of 3 times  $e_2$  according to Figure 101.

**8.7.4 Verification of overcurrent distribution**

*Replace the second paragraph of Subclause 8.7.4 by the following new text:*

The samples are arranged as for the breaking capacity test according to 8.5 and Table 20, column No.2, of IEC 60269-1:2014 regarding the test circuit and tolerance of current.

*Replace the fourth and fifth paragraphs of Subclause 8.7.4 by the following new text:*

The test voltage for all fuses is  $\frac{1,1 \cdot U_n}{\sqrt{3}}$  with tolerances of  $-3\%$  /  $+2\%$ .

*Add, at the end of Subclause 8.7.4, the following new text:*

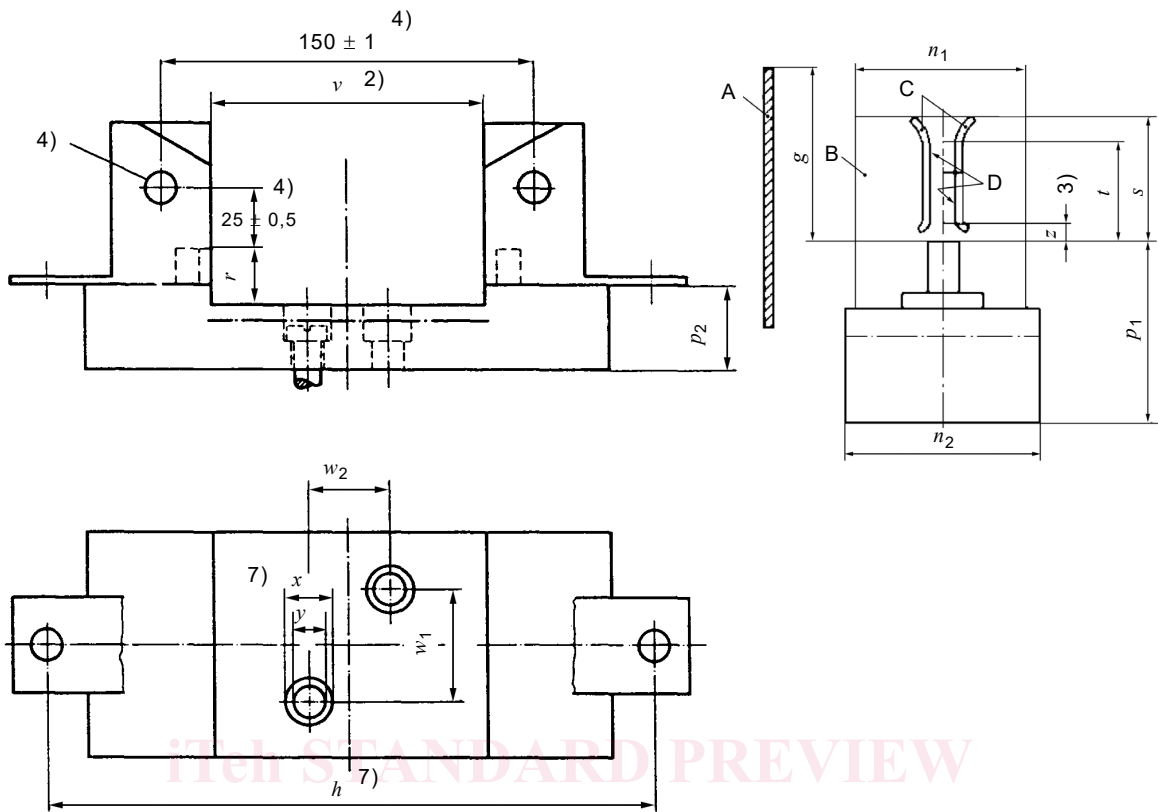
Prospective currents for minimum pre-arcing  $I^2t$  and maximum operating  $I^2t$  are  $\pm 5\%$ .

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**Figure 102 – Fuse-bases for fuse-links with blade contacts**

*Replace the existing Figure 102 with the following new Figure 102:*

**Key**

- A partition wall  
 B see note 1)  
 C contacts  
 D contact surface, see note 5)

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IEC

## Fuse system F – Fuses with fuse-links having cylindrical contact caps (NF cylindrical fuse system)

### 1.1 Scope

Replace the first sentence of the scope by the following new text:

The following additional requirements apply to fuse-links having cylindrical caps with or without striker, complying with the dimensions specified in Figures 601 and 603. Such fuses have rated currents not exceeding 125 A and rated voltages up to and including 1 000 V a.c. or 1 500 V d.c.

### Table 605 – Conventional time and current for "gG" fuse-links with rated current lower than 16 A

Replace, in the second row, third column of Table 605 the term " $I_n$ " by " $I_{nf}$ ".

### 8.7.4 Verification of overcurrent discrimination

Replace the fourth and fifth paragraphs of Subclause 8.7.4 by the following new text:



The test voltage for all fuses is  $\frac{1,1 \cdot U_n}{\sqrt{3}}$  with tolerances of –3 % / +2 %.

### 8.9 Verification of resistance to heat

Add, at the beginning of Subclause 8.9, the following new text:

These tests apply to fuse-links and fuse-bases.

#### Figure 601 – Fuse-links with cylindrical caps

In the third row, second column of the table in Figure 601, replace "38 ± 0,6" by "+0,9 / –0,6".

#### Figure 602 – Fuse-links with cylindrical contact caps with striker – Additional dimensions for sizes 14 × 51 and 22 × 58 only

Add the word "NOTE" at the beginning of the sentence immediately following Figure 602.

#### Figure 603 – Base for fuse-links with cylindrical caps

In the second row, second column of the table in part 1 of Figure 603, replace "16" by "25",

In the third row, second column of the table in part 1 of Figure 603, replace "25" by "32".

<https://standards.iteh.ai/catalog/standards/sist/937c25ce-37fa-42e9-8ce1-5baa124fc1b0/sist-hd-60269-2-2013-a1-2023>

#### Fuse system G – Fuses with fuse-links with offset blade contacts (BS clip-in fuse system)

##### Figure 704 – Time-current zones for "gG" fuse-links

Delete the phrase "Dimensions in millimeters".

#### Fuse system H – Fuses with fuse-links having "gD" and "gN" characteristics (class J, class T, and class L time delay and non time delay fuse types)

### 6.1 Markings of fuse-holders

Replace the text of Subclause 6.1 by the following new text:

"In addition to IEC 60269-1, the following marking applies:

– size or reference."

#### Figure 802 – Class L fuse-links (700 A to 6 000 A)

In row E, fifth column of the table in Figure 802, replace "130" by "128".

**Figure 803 – Fuse-base and contacts for class J fuse-links 1 A to 600 A**

Replace the last two columns of the table in Figure 803 with the following new columns:

<i>i</i>	–
Diameter clearance hole	Diameter of stud
–	–
–	–
6,75	6,0
6,75	6,0
10,5	10,0
12,5	12,0

**Figure 806 – Fuse-base and contacts for class T fuse-links 1 A to 1 200 A**

Replace the table in Figure 806 by the following new table:

Drawing	<i>I<sub>n</sub></i> Max A	Dimensions mm										
		<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i>	<i>f</i>	<i>g</i>	<i>h</i>	<i>i</i>	<i>j</i>	
		Minimum width contact clips	Distance between contact clips	Minimum distance between end stops	Nominal diameter fuse-link	Minimum width of rejection slot	Minimum width of end stop	Max.	Clearance hole spacing	Diameter clearance hole	Minimum clearance	Diameter of stud
A	30	7,3	23,6	39,12	14,30	–	3,18	–	–	–	–	–
	60	9,9	18,8	40,64	20,62	1,72	3,18	–	–	–	–	–
B	100	–	–	–	–	–	–	8,46	6,35	7,14	76,02	6,47
	200	–	–	–	–	–	–	10,41	63,67	8,94	83,57	7,93
	400	–	–	–	–	–	–	12,19	69,06	10,31	93,10	9,47
	600	–	–	–	–	–	–	14,22	11,11	12,29	102,21	11,45
	800	–	–	–	–	–	–	16,0	12,70	13,89	110,95	13,03
	1200	–	–	–	–	–	–	15,03	14,29	15,47	134,68	14,63

**Fuse system J – Fuses with fuse-links having "gD class CC" and "gN class CC" characteristics (class CC time delay and non-time delay fuse types)****1.1 Scope**

Delete, in the first paragraph of Subclause 1.1, the references to Figures 1003 and 1004.

**6.1 Markings of the fuse-holders**

Replace the text of Subclause 6.1 by the following new text:

"In addition to IEC 60269-1, the following marking applies:

- size or reference."