

INTERNATIONAL STANDARD

NORME INTERNATIONALE

AMENDMENT 1
AMENDEMENT 1

Low-voltage fuses – **STANDARD PREVIEW**
Part 4: Supplementary requirements for fuse-links for the protection of
semiconductor devices **(standards.iteh.ai)**

Fusibles basse tension – [IEC 60269-4:2009/AMD1:2012](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-106d75-115e-4e53-a560)
Partie 4: Exigences supplémentaires concernant les éléments de remplacement
utilisés pour la protection des dispositifs à semiconducteurs



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Fusibles basse tension – Partie 4: Exigences supplémentaires concernant les éléments de remplacement utilisés pour la protection des dispositifs à semiconducteurs

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

G

ICS 29.120.50

ISBN 978-2-88912-066-6

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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/579/CDV	32B/586A/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 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- withdrawn,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.

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[IEC 60269-4:2009/AMD1:2012](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-62bbc193fd53/iec-60269-4-2009-amd1-2012)

<https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-62bbc193fd53/iec-60269-4-2009-amd1-2012>

1.1 Scope and object

Add after Note 2

NOTE 3 IEC 60269-6 (Low-voltage fuses – Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems) is dedicated to the protection of solar photovoltaic energy systems.

1.2 Normative references

Replace the reference to “IEC 60269-3:2006, Low-voltage fuses – Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications) – Examples of standardized systems of fuses A to F” by the following:

IEC 60269-3, Low-voltage fuses – Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications) – Examples of standardized systems of fuses A to F

Replace “I” by “J” at the end of the following reference:

IEC 60269-2:2006, Low-voltage fuses – Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) – Examples of standardized systems of fuses A to I

5.6.1.3 Operating time-current characteristics

Delete the word "maximum" in the last sentence of this subclause

Table 101 – Conventional times and currents for “gR” and “gS” fuse links

In the third column of Table 101 replace "1,1 I_n" by "1,13 I_n".

Add the following note to Table 101:

NOTE For explanation of gR and gS see 5.7.1.

5.8.2.1 Pre-arcing I^2t characteristics

In the note delete "certain".

Table 102 – List of complete tests

In Note a of Table 102 replace "20 °C ± 5 °C" by "between 10 °C and 30 °C"

Table 106 – Values for breaking-capacity tests on VSI fuse-links

This correction applies to the French text only.

Figure 103 – Example of a conventional test arrangement for blade contact fuse-links

This correction applies to the French text only.

Figure CC.1 – Single body fuse-links

In the table heading replace "Typical voltage rating V" by "Typical voltage rating V a.c." and replace "Typical maximum current rating A" by "Preferred maximum current rating A".

Add the following note to the key:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.2 – Double body fuse-links

In the table heading replace "Typical voltage rating V" by "Typical voltage rating V a.c." and replace "Typical maximum current rating A" by "Preferred maximum current rating A".

Add the following note to the key:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.3 – Twin body fuse-links

In the table heading replace "Typical voltage rating V" by "Typical voltage rating V a.c." and replace "Typical maximum current rating A" by "Preferred maximum current rating A".

Add the following note to the key: [IEC 60269-4:2009/AMD1:2012](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-100000000000/iec-60269-4-2009-amd1-2012)

[https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-100000000000/iec-60269-4-2009-amd1-2012)

NOTE For d.c. and VSI voltage ratings consult the manufacturer. [100000000000/iec-60269-4-2009-amd1-2012](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-100000000000/iec-60269-4-2009-amd1-2012)

Figure CC.4 – Striker fuse-links

In the table heading replace "Typical voltage rating V" by "Typical voltage rating V a.c."

Add the following note to the key:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.6 – Fuse-links with bolted connections, type B, body sizes 0, 1, 2, and 3

In the key for body size 3 add two additional lines underneath the existing lines for 80 and 110 mm with:

e = 170 a1 = 210 a2 = 140

e = 210 a1 = 250 a2 = 180

Figure CC.7 – Bolted fuse-links, type C

In the table heading replace "Voltage rating V" by "Typical voltage rating V a.c." and replace "Current rating A" by "Preferred current rating A".

Add the following note to the key:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.8 – Flush end fuse-links, type A

In the table heading replace "Preferred maximum voltage rating V" by "Typical voltage rating V a.c."

Add the following note to the key:

NOTE 3 For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.9 – Flush end fuse-links, type B

In the table heading replace "Voltage rating V" by "Typical voltage rating V a.c." and replace "Current rating A" by "Preferred current rating A".

Add the following note to the key: [IEC 60269-4:2009/AMD1:2012
https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-621bc193f153/iec-60269-4-2009-amd1-2012](https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-621bc193f153/iec-60269-4-2009-amd1-2012)

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.10 – Fuse-links with cylindrical contact caps, type A

In the table heading replace "Maximum voltage rating V" by "Typical voltage rating V a.c." and replace "Maximum current rating A" by "Preferred maximum current rating A".

Add the following note to the key:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Table CC.3 – Preferred rated voltages and rated currents

Modify the table title to "Typical rated voltages and preferred maximum rated currents".

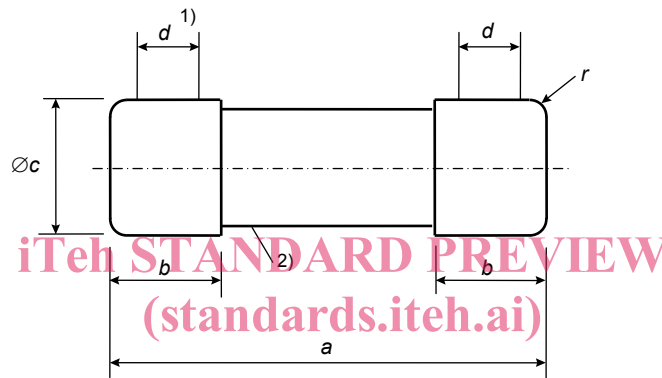
In the table heading replace "Preferred rated voltages V" by "Typical voltage rating V a.c." and replace "Preferred maximum rated currents A" by "Preferred maximum current rating A".

Add the following note to the table:

NOTE For d.c. and VSI voltage ratings consult the manufacturer.

Figure CC.11 – Fuse-links with cylindrical contact caps, type B

Replace Figure CC.11 by the following:



IEC 60269-4:2009/AMD1:2012

IEC 332/12

<https://standards.iteh.ai/catalog/standards/sist/ea106d75-115e-4e53-a560-62bbc193fd53/iec-60269-4-2009-amd1-2012>

Dimensions in millimetres

The drawings are not intended to govern the design of fuse-links except as regards the notes and dimensions shown.

Size	a	b max.	c	d min.	r
10 × 38	38 ^{+0,9} _{-0,6}	10,5	10,3 ± 0,1	6	1,5 ± 0,5
14 × 51	51 ^{+0,6} ₋₁	13,8	14,3 ± 0,1	7,5	2 ± 1
22 × 58	58 ^{+0,1} ₋₂	16,2	22,2 ± 0,1	11	2 ± 1
27 × 60	60.3 ± 0.8	16.3	27 ± 0,2	14	1,7 ± 1
20 × 127	127 ± 1 ³⁾	16.2	20.6 ± 0,2	10.8	2 ± 1
20 × 190	188 ± 2 ³⁾	16,2	20,6 ± 0,2	10,8	2 ± 1
22 × 127	127 ± 2 ³⁾	16,2	22,2 ± 0,1	11	2 ± 1
36 × 127	127 ± 1 ³⁾	27	36,3 ± 1	24.7	2 ± 1
36 × 190	188 ± 2 ³⁾	27	36,3 ± 1	24.7	2 ± 1

1) Cylindrical part within which the specified tolerances shall not be exceeded.

2) The diameter of the cartridge between the end caps shall not exceed diameter c.

3) For striker versions, the tolerance is ± 1.

Bibliography

Add the following new references to the Bibliography:

IEC/TR 60269-5, *Low voltage fuses – Guidance for the application of low-voltage fuses*

IEC 60269-6, *Low-voltage fuses – Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems*

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