

INTERNATIONAL STANDARD

IEC 60269-2

Third edition
2006-11

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 I

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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 I**

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 60269-2 has been prepared by subcommittee 32B: Low-voltage fuses, of IEC technical committee 32: Fuses.

This third edition cancels and replaces the second edition published in 1986, Amendment 1 (1995) and Amendment 2 (2001) as well as IEC 60269-2-1 (2004) and constitutes a minor revision.

The general re-organization of the IEC 60269 series has led to the creation of this new edition.

This part is to be used in conjunction with IEC 60269-1:2006, Part 1: General requirements.

This Part 2 supplements or modifies the corresponding clauses or subclauses of Part 1.

Where no change is necessary, this Part 2 indicates that the relevant clause or subclause applies.

Tables and figures which are additional to those in Part 1 are numbered starting from 101.

The text of this standard is based on following documents:

FDIS	Report on voting
32B/487/FDIS	32B/493/RVD

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

IEC 60269 consists of the following parts, under the general title *Low-voltage fuses*:

Part 1: General requirements

NOTE This part includes IEC 60269-1 (third edition, 1998) and parts of IEC 60269-2 (second edition, 1986) and IEC 60269-3 (second edition, 1987).

Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) – Examples of standardized systems of fuses A to I

NOTE This part includes parts of IEC 60269-2 (second edition, 1986) and all of IEC 60269-2-1 (fourth edition, 2004).

Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household or similar application) – Examples of standardized systems of fuses A to F

NOTE This part includes parts of IEC 60269-3 (second edition, 1987) and all of IEC 60269-3-1 (second edition, 2004).

Part 4: Supplementary requirements for fuse-links for the protection of semiconductor devices

NOTE This part includes IEC 60269-4 (third edition, 1986) and IEC 60269-4-1 (first edition, 2002).

Part 5: Guidance for the application of low-voltage fuses

NOTE Currently IEC/TR 61818 (2003).

For reasons of convenience, when a part of this publication has come from other publications, a remark to this effect has been inserted in the text.

The committee has decided that the contents of this publication will remain unchanged until the maintenance result 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.

INTRODUCTION

A reorganization of the different parts of the IEC 60269 series has been carried out, in order to simplify its use, especially by the laboratories which test the fuses.

IEC 60269-1, IEC 60269-2, IEC 60269-3 and IEC 60269-3-1 have been integrated into either the new part 1 or the new parts 2 or 3, according to the subjects considered, so that the clauses which deal exclusively with “fuses for authorized persons” are separated from the clauses dealing with “fuses for unauthorized persons”.

As far as IEC 60269-4 and IEC 60269-4-1 are concerned, they have been integrated into the new part 4 which deals with the fuse-links used for semiconductor protection.

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 I

1 General scope

Fuses for use by authorized persons are generally designed to be used in installations where the fuse-links are accessible to, and may be replaced by, authorized persons only.

Fuses for use by authorized persons according to the following fuse systems also comply with the requirements of the subclauses of IEC 60269-1, unless otherwise defined in this standard.

This standard is divided into fuse systems, each dealing with a specific example of standardized fuses for use by authorized persons:

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

Remark: previously this system was described in Section I of IEC 60269-2-1

Fuse system B: Fuses with striker fuse-links with blade contacts (NH fuse system)

Remark: previously this system was described in Section IA of IEC 60269-2-1

Fuse system C: Fuse-rails (NH fuse system)

Remark: previously this system was described in Section IB of IEC 60269-2-1

Fuse system D: Fuse-bases for busbar mounting (NH fuse system)

Remark: previously this system was described in Section IC of IEC 60269-2-1

Fuse system E: Fuses with fuse-links for bolted connections (BS bolted fuse system)

Remark: previously this system was described in Section II of IEC 60269-2-1

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

Remark: previously this system was described in Section III of IEC 60269-2-1

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

Remark: previously this system was described in Section IV of IEC 60269-2-1

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

Remark: previously this system was described in Section V of IEC 60269-2-1

Fuse system I: gU fuse-links with wedge tightening contacts

Remark: previously this system was described in Section VI of IEC 60269-2-1

NOTE The following fuse systems are standardized systems in respect to their safety aspects. The National Committees may select from the examples of standardized fuses one or more systems for their own standards.

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 60112: *Method for the determination of the proof and the comparative tracking indices of solid insulating materials*

IEC 60269-1: *Low-voltage fuses – Part 1: General requirements*

IEC 60664-1: *Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60999 (all parts): *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units*

ISO 6988: *Metallic and other non organic coatings – Sulfur dioxide test with general condensation of moisture*