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STN	**Miniatúrne poistky Časť 9: Miniatúrne poistkové vložky na špeciálne použitie s vypínacou schopnosťou v čiastkovom rozsahu**	**STN EN IEC 60127-9** 35 4730

Miniature fuses - Part 9: Miniature fuse-links for special applications with partial-range breaking capacity

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. 12/25

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NORME EUROPÉENNE

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EN IEC 60127-9

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English Version

Miniature fuses - Part 9: Miniature fuse-links for special applications with partial-range breaking capacity (IEC 60127-9:2025)

Coupe-circuits miniatures - Partie 9: Éléments de remplacement miniatures pour applications spéciales à pouvoir de coupure partiel (IEC 60127-9:2025)

Geräteschutzsicherungen - Teil 9: G-Sicherungseinsätze für besondere Anwendungen mit Teilbereichsausschaltvermögen (IEC 60127-9:2025)

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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

Ref. No. EN IEC 60127-9:2025 E

European foreword

The text of document 32C/667/FDIS, future edition 1 of IEC 60127-9, prepared by SC 32C "Miniature fuses" of IEC/TC 32 "Fuses" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 60127-9:2025.

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) 2026-10-31
•	latest date by which the national standards conflicting with the document have to be withdrawn	(dow) 2028-10-31

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

This document is read in conjunction with EN IEC 60127-1:2024.

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

The text of the International Standard IEC 60127-9:2025 was approved by CENELEC as a European Standard without any modification.

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.cencenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC 60068-2-21	2021	Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices	EN IEC 60068-2-21	2021
IEC 60127-1	2023	Miniature fuses - Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links	EN IEC 60127-1	2024
IEC 60127-6	2023	Miniature fuses - Part 6: Fuse-holders for miniature fuse-links	EN IEC 60127-6	2024
IEC 60664-1	2020	Insulation coordination for equipment within low-voltage supply systems - Part 1: Principles, requirements and tests	EN IEC 60664-1	2020
IEC 60695-2-12	2021	Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials	EN IEC 60695-2-12	2021
IEC 60695-2-13	2021	Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials	EN IEC 60695-2-13	2021
IEC 60695-4	2021	Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products	EN IEC 60695-4	2021
IEC 61249-2-7	2002	Materials for printed boards and other interconnecting structures - Part 2-7: Reinforced base materials clad and unclad - Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test), copper-clad	EN 61249-2-7	2002
-	-		+ AC	2005
ISO 3	1973	Preferred numbers - Series of preferred numbers	-	-

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INTERNATIONAL STANDARD

Miniature fuses -
Part 9: Miniature fuse-links for special applications with partial-range breaking capacity

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Miniature fuses - Part 9: Miniature fuse-links for special applications with partial-range breaking capacity

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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8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
9) IEC draws attention to the possibility that the implementation of this document may involve the use of (a) patent(s). IEC takes no position concerning the evidence, validity or applicability of any claimed patent rights in respect thereof. As of the date of publication of this document, IEC had not received notice of (a) patent(s), which may be required to implement this document. However, implementers are cautioned that this may not represent the latest information, which may be obtained from the patent database available at https://patents.iec.ch. IEC shall not be held responsible for identifying any or all such patent rights.

IEC 60127-9 has been prepared by subcommittee 32C: Miniature Fuses, of IEC technical committee 32: Fuses. It is an International Standard.

This International Standard is to be used in conjunction with IEC 60127-1:2023.

This part of IEC 60127 is to be read in conjunction with Part 1. It supplements or modifies the corresponding clauses of Part 1. Where the text indicates an "addition" to or a "replacement" of the relevant provision of Part 1, these changes are made to the relevant text of Part 1. When a particular subclause of Part 1 is not mentioned in this part, that subclause applies as far as is reasonable.

Additional specific provisions to those in Part 1, given as individual clauses or subclauses, are numbered starting from 101.

NOTE The following numbering system is used:

– subclauses, tables and figures that are numbered starting from 101 are additional to those in Part 1;

– unless notes are in a new subclause or involve notes in Part 1, they are numbered starting from 101, including those in a replaced clause or subclause;

– additional annexes are lettered AA, BB, etc.

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

Draft	Report on voting
32C/667/FDIS	32C/670/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 60127 series, published under the general title *Miniature 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 webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

INTRODUCTION

According to the wish expressed by the users of miniature fuses, all standards, recommendations and other documents relating to miniature fuses have the same publication number in order to facilitate reference to fuses in other specifications, for example, equipment specifications.

Furthermore, a single publication number and subdivision into parts would facilitate the establishment of new standards, because clauses containing general requirements need not be repeated.

The IEC 60127 series, under the general heading *Miniature fuses*, is thus subdivided as follows:

IEC 60127-1, *Miniature fuses - Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links*

IEC 60127-2, *Miniature fuses - Part 2: Cartridge fuse-links*

IEC 60127-3, *Miniature fuses - Part 3: Sub-miniature fuse-links*

IEC 60127-4, *Miniature fuses - Part 4: Universal modular fuse-links (UMF) - Through-hole and surface mount types*

IEC 60127-5, *Miniature fuses - Part 5: Guidelines for quality assessment of miniature fuse-links*

IEC 60127-6, *Miniature fuses - Part 6: Fuse-holders for miniature fuse-links*

IEC 60127-7, *Miniature fuses - Part 7: Miniature fuse-links for special applications*

IEC 60127-8, *Miniature fuses - Part 8: Fuse resistors with particular overcurrent protection*

IEC 60127-9, *Miniature fuses - Part 9: Miniature fuse-links for special applications with partial-range breaking capacity*

1 Scope

This part of IEC 60127 covers requirements for miniature fuse-links for special applications with partial-range breaking capacity.

This document is applicable to fuse-links with a rated voltage not exceeding 1 000 V, a rated current not exceeding 150 A and a rated breaking capacity not exceeding 50 kA.

Miniature fuse-links with partial-range breaking capacity are used only to operate under short circuit conditions. They cannot be applied under overload conditions.

The design engineer needs to ensure no overload conditions can be seen by the fuse approved under this document.

This document does not apply to fuses completely covered by IEC 60127-7 or the subsequent parts of IEC 60269-1.

It does not apply to miniature fuse-links for appliances intended to be used under special conditions, such as in corrosive or explosive atmospheres.

This part of IEC 60127 applies in addition to the requirements of IEC 60127-1.

Miniature fuse-links for special applications with partial-range breaking capacity are not intended to be replaced by the end-user of an electrical / electronic appliance.

The object of this document is to establish uniform test methods for miniature fuse-links for special applications with partial-range breaking capacity, so as to allow verification of the values (for example melting time and breaking capacity values) specified by the manufacturer.

WARNING – If this fuse is used without additional protection in the forbidden overload partial current range it will catch fire, explode and will not interrupt the current. As a user of this product, you must ensure this scenario can be excluded in all cases.

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 60068-2-21:2021, *Environmental testing - Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices*

IEC 60127-1:2023, *Miniature fuses - Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links*

IEC 60127-6:2023, *Miniature fuses - Part 6: Fuse-holders for miniature fuse-links*

IEC 60664-1:2020, *Insulation coordination for equipment within low-voltage systems - Part 1: Principles, requirements and tests*

IEC 60695-2-12:2021, *Fire hazard testing - Part 2-12: Glowing/hot-wire based test methods - Glow-wire flammability index (GWFI) test method for materials*
IEC 60695-2-12:2010/AMD1:2014

IEC 60695-2-13:2021, *Fire hazard testing - Part 2-13: Glowing/hot-wire based test methods - Glow-wire ignition temperature (GWIT) test method for materials*
IEC 60695-2-13:2010/AMD1:2014

IEC 60695-4:2021, *Fire hazard testing - Part 4: Terminology concerning fire tests for electrotechnical products*

IEC 61249-2-7:2002, *Materials for printed boards and other interconnecting structures - Part 2-7: Reinforced base materials clad and unclad - Epoxide woven E-glass laminated sheet of defined flammability (vertical burning test), copper-clad*

ISO 3:1973, *Preferred numbers - Series of preferred numbers*