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## **Finsäkringar – Säkerhet – Del 3: Särskilda fordringar på miniatyrfinsäkringar**

*Miniature fuses –  
Part 3: Sub-miniature fuse-links*

Som svensk standard gäller europastandarden EN 60127-3:2015. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60127-3:2015.

### **Nationellt förord**

Europastandarden EN 60127-3:2015

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60127-3, Third edition, 2015 - Miniature fuses - Part 3: Sub-miniature fuse-links**

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare fastställd svensk standard SS-EN 60127-3, utgåva 2, 1996 och SS-EN 60127-3/A2, utgåva 1, 2003, gäller ej fr o m 2018-02-24.

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

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English Version

**Miniature fuses - Part 3: Sub-miniature fuse-links  
(IEC 60127-3:2015)**

Coupe-circuit miniatures - Partie 3: Éléments de  
remplacement subminiatures  
(IEC 60127-3:2015)

Geräteschutzsicherungen - Teil 3:  
Kleinstsicherungseinsätze  
(IEC 60127-3:2015)

This European Standard was approved by CENELEC on 2015-02-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Foreword

The text of document 32C/501/FDIS, future edition 3 of IEC 60127-3, 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 60127-3:2015.

The following dates are fixed:

- latest date by which the document has to be (dop) 2015-11-24  
implemented at national level by  
publication of an identical national  
standard or by endorsement
- latest date by which the national (dow) 2018-02-24  
standards conflicting with the  
document have to be withdrawn

This document supersedes EN 60127-3:1996.

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## Endorsement notice

The text of the International Standard IEC 60127-3:2015 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, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE 1 When 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 60068-2-21     | -           | Environmental testing -- Part 2-21: Tests - Test U: Robustness of terminations and integral mounting devices                                                                                                                   | EN 60068-2-21                            | -           |
| IEC 60127-1        | 2006        | Miniature fuses -- Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links                                                                                                                   | EN 60127-1                               | 2006        |
| IEC 60695-11-5     | -           | Fire hazard testing -- Part 11-5: Test flames - Needle-flame test method - Apparatus, confirmatory test arrangement and guidance                                                                                               | EN 60695-11-5                            | -           |
| IEC 61249-2-7      | -           | 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                             | -           |
|                    |             |                                                                                                                                                                                                                                | +EN 61249-2-7:2002/corrigendum Sep. 2005 | 2005        |
| ISO 3              | -           | Preferred numbers; Series of preferred numbers                                                                                                                                                                                 | -                                        | -           |

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

## MINIATURE FUSES –

## Part 3: Sub-miniature fuse-links

## 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 60127-3 has been prepared by subcommittee 32C: Miniature fuses, of IEC technical committee 32: Fuses.

This third edition of IEC 60127-3 cancels and replaces the second edition published in 1988, its Amendment 1 (1991) and Amendment 2 (2002).

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

- a) add a rectangular shape fuse-link as alternative in standard sheets 3 and 4;
- b) add a small cartridge fuse-link as alternative in standard sheets 2, 3 and 4;
- c) add the rated currents up to 10A in standard sheets 2, 3 and 4;
- d) add Subclause 6.5;
- e) add Subclause 9.7;

- f) the extra samples for termination test (E1 to E6) will be chosen by random and not sorted by voltage drop in Table 1, 2, 3, and 4.

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

| FDIS         | Report on voting |
|--------------|------------------|
| 32C/501/FDIS | 32C/506/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.

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

This International Standard is to be used in conjunction with IEC 60127-1:2006, *Miniature fuses – Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links* and its Amendment 1 (2011).

The clauses of this standard supplement, modify or replace the corresponding clauses in IEC 60127-1.

Where there is no corresponding clause or subclause in this standard, the clause or subclause of IEC 60127-1 applies without modification as far as is reasonable. When this standard states “addition” or “replacement”, the relevant text in IEC 60127-1 is to be adapted accordingly.

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 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.



## INTRODUCTION

According to the wish expressed by the users of miniature fuses, all standards, recommendations and other documents relating to miniature fuses should 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 and subclauses containing general requirements need not be repeated.

The new IEC 60127 series is thus subdivided as follows:

IEC 60127, *Miniature fuses* (general title)

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, (Free for further documents)

IEC 60127-9, (Free for further documents)

IEC 60127-10, *Miniature fuses – Part 10: User guide for miniature fuses*

This part of IEC 60127 covers additional requirements, test equipment and standard sheets.

The SI system of units is used throughout this standard.

## **MINIATURE FUSES –**

### **Part 3: Sub-miniature fuse-links**

#### **1 Scope**

This part of IEC 60127 is applicable to sub-miniature fuse-links adapted to printed circuits and used for the protection of electric appliances, electronic equipment and component parts thereof, normally intended to be used indoors.

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

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

The object of this standard is to define special and additional test methods for sub-miniature fuse-links applying in addition to the requirements of IEC 60127-1.

#### **2 Normative references**

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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, *Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices*

IEC 60127-1:2006, *Miniature fuses – Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links*  
Amendment 1:2011

IEC 60695-11-5, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 61249-2-7, *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, *Preferred numbers – Series of preferred numbers*