

# INTERNATIONAL STANDARD

# IEC 60127-1

Second edition  
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## Miniature fuses –

### Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links

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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

### MINIATURE FUSES –

#### **Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links**

#### FOREWORD

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International Standard IEC 60127-1 has been prepared by subcommittee 32C: Miniature fuses, of IEC technical committee 32: Fuses.

This second edition cancels and replaces the first edition (1988), together with amendment 1 (1999) and amendment 2 (2002), and constitutes a technical revision.

The major technical changes with regard to the first edition concern subclause 9.2.3 where the nature of the current source has been clarified; in addition, IEC 60038: *IEC standard voltages*, has been added to the list of normative references.

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

FDIS	Report on voting
32C/387/FDIS	32C/390/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 Part 1 of the IEC 60127 series covers definitions, general requirements and tests applicable to all types of miniature fuses (e.g. cartridge fuse-links, sub-miniature fuse-links and universal modular fuse-links). All subsequent parts of the complete series should be read in conjunction with this Part 1.

IEC 60127 consists of the following parts, under the general heading *Miniature fuses*:

- Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links
- Part 2: Cartridge fuse-links
- Part 3: Sub-miniature fuse-links
- Part 4: Universal modular fuse-links (UMF) – Through-hole and surface mount types
- Part 5: Guidelines for quality assessment of miniature fuse-links
- Part 6: Fuse-holders for miniature fuse-links
- Part 7: (Free for further documents)
- Part 8: (Free for further documents)
- Part 9: (Free for further documents)
- Part 10: User guide for miniature fuses

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.

A bilingual version of this publication may be issued at a later date.

## MINIATURE FUSES –

### Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links

#### 1 Scope and object

This part of IEC 60127 covers the general requirements and tests applicable to all types of miniature fuse-links (e.g. cartridge fuse-links, sub-miniature fuse-links and universal modular fuse-links) for the protection of electric appliances, electronic equipment and component parts thereof normally intended to be used indoors.

Specific details covering each major subdivision are given in subsequent parts.

This standard does not apply to fuses for appliances intended to be used under special conditions, such as in a corrosive or explosive atmosphere.

The object of this standard is

- a) to establish uniform requirements for miniature fuses so as to protect appliances or parts of appliances in the most suitable way,
- b) to define the performance of the fuses, so as to give guidance to designers of electrical appliances and electronic equipment and to ensure replacement of fuse-links by those of similar dimensions and characteristics,
- c) to define methods of testing,
- d) to define maximum sustained dissipation of fuse-links to ensure good compatibility of stated power acceptance when used with fuse-holders according to this standard (see IEC 60127-6).

#### 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 60038, *IEC standard voltages*

IEC 60127-6:1994, *Miniature fuses – Part 6: Fuse-holders for miniature fuse-links*  
Amendment 1 (1996)  
Amendment 2 (2003)