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Miniature fuses -
Part 6: Fuse-holders for miniature fuse-links

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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Miniature fuses - Part 6: Fuse-holders for miniature fuse-links

FOREWORD

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This consolidated version of the official IEC Standard and its amendment has been prepared for user convenience.

IEC 60127-6 edition 3.1 contains the third edition (2023-10) [documents 32C/620/FDIS and 32C/623/RVD] and its amendment 1 (2026-09) [documents 32C/687/FDIS and 32C/692/RVD].

In this Redline version, a vertical line in the margin shows where the technical content is modified by amendment 1. Additions are in green text, deletions are in strikethrough red text. A separate Final version with all changes accepted is available in this publication.

IEC 60127-6 has been prepared by subcommittee 32C: Miniature fuses, of IEC technical committee 32: Fuses. It is an International Standard.

This third edition cancels and replaces the second edition published in 2014. This edition constitutes a technical revision.

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

a) enhanced maximum rated current from 16 A to 25 A in Clause 1;
b) adding of IEC 60127-4 and IEC 60127-7 in Clause 1;
c) modification of marking position in Clause 6;
d) modification of rated voltage, rated current and rated power acceptance in Table 2;
e) modification of Table 5, Table 6, Table 7, Table 9, Table 16 and Table A.1.

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

Draft	Report on voting
32C/620/FDIS	32C/623/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/standardsdev/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 and its amendment 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 and subclauses containing general requirements need not be repeated.

To this day, the IEC 60127 series, 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 60127-10, *Miniature fuses – Part 10:User guide for miniature fuses*

This part of IEC 60127 covers requirements, test equipment and test methods for fuse-holders. It is a self-standing document, which refers back to IEC 60127-1 with regard to certain definitions and the atmospheric conditions for test. It also makes reference to other parts of the IEC 60127 series with regard to dimensions and maximum power losses of fuse-links.

1 Scope

This part of IEC 60127 is applicable to fuse-holders for miniature cartridge fuse-links according to IEC 60127-2, sub-miniature fuse-links according to IEC 60127-3, universal modular fuse-links to IEC 60127-4 and miniature fuse-links for special applications to IEC 60127-7 for the protection of electric appliances, electronic equipment and component parts thereof, normally intended for use indoors.

NOTE Requirements for fuse-holders for miniature fuse-links complying with IEC 60127-4 and IEC 60127-7 are under consideration.

It does not apply to fuse holders for fuses completely covered by the subsequent parts of IEC 60269-1.

This document applies to fuse-holders with:

– a maximum rated current of 25 A and

– a maximum rated voltage of 1 500 V DC or 1 000 V AC; and

– for use up to 2 000 m above sea-level, unless otherwise specified.

The object of this document is to establish uniform requirements for safety and the assessment of electrical, mechanical, thermal and climatic properties of fuse-holders and the compatibility between fuse-holders and fuse-links.

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 60050-441, *International Electrotechnical Vocabulary (IEV) – Part 441: Switchgear, controlgear and fuses*

IEC 60050-581, *International Electrotechnical Vocabulary (IEV) – Part 581: Electromechanical components for electronic equipment*

IEC 60068-1:2013, *Environmental testing – Part 1: General and guidance*

IEC 60068-2-6:2007, *Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)*

IEC 60068-2-20:2021, *Environmental testing – Part 2-20: Tests – Tests Ta and Tb: Test methods for solderability and resistance to soldering heat of devices with leads*

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

IEC 60068-2-27:2008, *Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock*

IEC 60068-2-45, *Basic environmental testing procedures – Part 2-45: Tests – Test XA and guidance: Immersion in cleaning solvents*

IEC 60068-2-47, *Environmental testing – Part 2-47: Test – Mounting of specimens for vibration, impact and similar dynamic tests*

IEC 60068-2-75, *Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests*

IEC 60127-1[1]:2006, *Miniature fuses – Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links*
IEC 60127-1:2006/AMD1:2011
IEC 60127-1:2006/AMD2:2015

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

IEC 60127-3:2015, *Miniature fuses – Part 3: Sub-miniature fuse-links*

IEC 60216-1, *Electrical insulating materials – Thermal endurance properties – Part 1: Ageing procedures and evaluation of test results*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

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

IEC 60695-4:2012, *Fire hazard testing – Part 4: Terminology concerning fire tests for electrotechnical products*

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

IEC 60695-11-5:2016, *Fire hazard testing – Part 11-5: Test flames – Needle-flame test method – Apparatus, confirmatory test arrangement and guidance*

IEC 60999-1, *Connecting devices – Electrical copper conductors – Safety requirements for screw-type and screwless-type clamping units – Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm^2 up to 35 mm^2 (included)*

IEC 61210, *Connecting devices – Flat quick-connect terminations for electrical copper conductors – Safety requirements*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-441, IEC 60050-581, IEC 60127-1 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://www.electropedia.org/
- ISO Online browsing platform: available at http://www.iso.org/obp

[1] A consolidated version of this publication exists, comprising IEC 60127-1:2006, IEC 60127-1:2006/AMD 1:2011 and IEC 60127-1:2006/AMD 2:2015.