SLOVENSKI STANDARD

SIST EN 60127-1:1995/A2:2004

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Miniature fuses - Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links - Amendment A2 (IEC 60127-1:1988/A2:2002)

ICS 29.120.50

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EUROPEAN STANDARD **EN 60127-1/A2**

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English version

Miniature fuses
Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links
(IEC 60127-1:1988/A2:2002)

Coupe-circuit miniatures
Partie 1: Définitions pour coupe-circuit miniatures et prescriptions générales pour éléments de remplacement miniatures
(CEI 60127-1:1988/A2:2002)

Geräteschutzsicherungen
Teil 1: Begriffe für Geräteschutzsicherungen und allgemeine Anforderungen an G-Sicherungseinsätze
(IEC 60127-1:1988/A2:2002)

This amendment A2 modifies the European Standard EN 60127-1:1991; it was approved by CENELEC on 2003-02-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 Central Secretariat or to any CENELEC member.

This amendment 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 Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

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

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Foreword

The text of document 32C/322/FDIS, future amendment 2 to IEC 60127-1:1988, prepared by SC 32C, Miniature fuses, of IEC TC 32, Fuses, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60127-1:1991 on 2003-02-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2003-11-01
- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2006-02-01

Endorsement notice

The text of amendment 2:2002 to the International Standard IEC 60127-1:1988 was approved by CENELEC as an amendment to the European Standard without any modification.

NORME INTERNATIONALE

INTERNATIONAL STANDARD

CEI
IEC
60127-1

1988

AMENDEMENT 2
AMENDMENT 2
2002-12

Amendement 2

Coupe-circuit miniatures –

Partie 1:
Définitions pour coupe-circuit miniatures et prescriptions générales pour éléments de remplacement miniatures

Amendment 2

Miniature fuses –

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

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FOREWORD

This amendment has been prepared by subcommittee 32C: Miniature fuses, of IEC technical committee 32: Fuses.

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

FDIS	Report on voting
32C/322/FDIS	32C/331/RVD

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

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- replaced by a revised edition, or
- amended.

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3 Definitions

Add, on page 13, to definition 3.15, the following new text:

Fuse-links are considered as forming an homogeneous series when the characteristics comply with the following:

- The bodies have the same dimensions, material and method of manufacture.
- The caps or other end closures of the body have the same dimensions, materials and method of attachment and sealing.
- The granular filler, if any, of the body is of the same material and completeness of filling. It should be of the same size or any variation of the grain size with current rating should be monotonous.
- The fuse-elements are of the same material with the same principles of design and construction; any changes of fuse-element dimensions with current rating should be monotonous.
- The rated voltage is the same.
- For low-breaking capacity fuse-links it is only necessary to test the highest rated breaking capacity in an homogeneous series.

Page 31 and page 3 of Amendment 1

9.3 Breaking capacity

Replace the existing text of 9.3.1 by the following new text:

9.3.1 Fuse-links shall operate satisfactorily without endangering the surroundings when breaking prospective currents between the conventional non-fusing current and rated breaking capacity in accordance with the relevant standard sheets in subsequent parts.

The recovery voltage shall be between 1,02 and 1,05[1] times the rated voltage of the fuse-links and shall be maintained for 30 s after the fuse has operated.

Typical test circuits are given in subsequent parts.

For breaking capacity test, the current shall be adjusted by changing the series resistance.

The impedance of the a.c. source shall be less than 10 % of the adjusted value of the total impedance of the applicable circuit.

Compliance is checked by either method A or method B.

1) **Method A** (individual ratings)

   a) rated breaking capacity;

   b) prospective currents of approximately 5, 10, 50 and 250 times the rated current, but not exceeding the rated breaking capacity as specified in the relevant standard sheet.

The circuit shall be closed at (30 ± 5)° after the passage of voltage through zero.

2) **Method B** (homogeneous series)

   a) rated breaking capacity with random closing angle;

   b) fuse-links shall be tested at rated breaking capacity.

NOTE 1 The breaking capacity may be lower with d.c. than with a.c. It is influenced by the circuit inductance and, with a.c., additionally by the instant of closing the circuit.

NOTE 2 The d.c. value should be specified by the manufacturer, if required by the purchaser or user.

More details of appropriate tests for the breaking capacity of each type of miniature fuse may be found in the subsequent parts.

[1] This tolerance may be exceeded with the manufacturer's consent.

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Add, after 9.3.3, the following new subclause 9.3.4:

9.3.4 Type test for fuse-links of homogeneous series

Fuse-links having the largest rated current shall be tested completely according to the relevant testing schedule for the maximum ampere rating of a homogeneous series given in the subsequent parts.

Fuse-links having the smallest rated current shall be tested according to the relevant testing schedule for the minimum ampere rating of a homogeneous series given in the subsequent parts.