SLOVENSKI STANDARD
SIST EN 60127-3:1995

01-december-1995

Miniature fuses - Part 3: Sub miniature fuse-links (IEC 127-3:1988)

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

Geräteschutzsicherungen -- Teil 3: Kleinstsicherungseinsätze

Coupe-circuit miniatures -- Partie 3: Eléments de remplacement subminiatures

Ta slovenski standard je istoveten z: **EN 60127-3:1991**

ICS:

29.120.50	Varovalke in druga medtokovna zaščita	Fuses and other overcurrent protection devices

SIST EN 60127-3:1995 **en**

EUROPEAN STANDARD EN 60127-3

NORME EUROPEENNE

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Descriptors: Miniature fuse, sub-miniature fuse, specification, rated characteristic, dimension, test

ENGLISH VERSION

MINIATURE FUSES
PART 3: SUB-MINIATURE FUSE-LINKS
(IEC 127-3:1988)

Coupe-circuit miniatures
Troisième partie: Eléments de remplacement subminiatures
(CEI 127-3:1988)

Geräteschutzsicherungen
Teil 3: Kleinstsicherungseinsätze

(IEC 127-3:1988)

This European Standard was approved by CENELEC on 1991-02-01. 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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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

CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

Ref. No. EN 60127-3:1991 E

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 127-3:1988 could be accepted without textual changes, has shown that no CENELEC common modifications were necessary for the acceptance as European Standard. The reference document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60127-3 on 1 February 1991.

The following dates were fixed:

- latest date of announcement of the EN at national level	(doa)	1991-09-01
- latest date of publication of an identical national standard	(dop)	1992-03-01
- latest date of withdrawal of conflicting national standards	(dow)	1992-03-01

Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative.

For products which have complied with HD 109.3 S1:1989 before 1992-03-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1997-03-01.

ENDORSEMENT NOTICE

The text of the International Standard IEC 127-3:1988 was approved by CENELEC as a European Standard without any modification.

ANNEX ZA (normative)

OTHER INTERNATIONAL PUBLICATIONS QUOTED IN THIS STANDARD WITH THE REFERENCES OF THE RELEVANT EUROPEAN PUBLICATIONS

IEC Publication	Date	Title	EN/HD	Date
68-2-20	1979	Basic environmental testing procedures Part 2: Tests - Test T: Soldering	HD 323.2.20 S1*	-
68-2-21	1983	Test U: Robustness of terminations and integral mounting devices	HD 323.2.21 S2*	1987
695	-	Fire hazard testing	HD 444	-

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* superseded by:

68-2-20:1979 + A1:1986 + A2:1987	Basic environmental testing procedures - Part 2: Tests Test T: Soldering	HD 323.2.20 S3:1988
68-2-21:1983 + A1:1985	Test U: Robustness of terminations and integral mounting devices	HD 323.2.21 S3:1988

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Международная Электротехническая Комиссия

Coupe-circuit miniatures

Troisième partie: Eléments de remplacement subminiatures

Miniature fuses

Part 3: Sub-miniature fuse-links

Bureau Central de la Commission Electrotechnique Internationale 3, rue de Varembé Genève, Suisse

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

MINIATURE FUSES

Part 3: Sub-miniature fuse-links

FOREWORD

1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.

3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This standard has been prepared by Sub-Committee 32C: Miniature Fuses, of IEC Technical Committee No. 32: Fuses.

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

Six Months' Rule	Report on Voting
32C(CO)49	32C(CO)58

Full information on the voting for the approval of this standard can be found in the Voting Report indicated in the above table.

The following IEC publications are quoted in this standard:

Publications Nos. 68-2-20 (1979): Basic Environmental Testing Procedures, Part 2: Tests — Test T: Soldering.

68-2-21 (1983): Test U: Robustness of Terminations and Integral Mounting Devices.
695: Fire Hazard Testing.

MINIATURE FUSES

Part 3: Sub-miniature fuse-links

INTRODUCTION

The users of miniature fuses express the wish that 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, e.g. equipment specifications.

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

The new IEC Publication 127 series is intended to be subdivided as follows:

Publications Nos 127: Miniature fuses (general title)
127-1: Part 1: Definitions for miniatures fuses and general requirements for miniatures fuse-links.
127-2: Part 2: Cartridge fuse-links.
127-3: Part 3: Subminiature fuse-links.
127-4: Part 4: Universal modular fuse-links.
127-5: Part 5: Guidelines for quality assessment of miniature fuse-links.
127-6: Part 6: Fuse-holders (until now IEC 257).
127-7: (free for further documents).
127-8: (free for further documents).
127-9: Part 9: Test-holders and test-circuits.
127-10: Part 10: User guide.

The third part of this standard covers additional requirements, test equipment and Standard Sheets.

SECTION ONE — ADDITIONAL REQUIREMENTS AND TEST EQUIPMENT

1. Scope

This standard relates to special requirements 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.

Note. — Electrical and electronic circuit designers and printed circuit board manufacturers are advised to allow a 10 mm cube space for all sub-miniature fuse-links.

This standard applies in addition to the requirements of Part 1.

2. Object

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 Part 1.

3. Definitions (see Part 1)

4. General requirements (see Part 1)

5. Standard ratings (see Part 1)

6. Marking

Additionally to the requirements of Clause 6 in Part 1 the following criterion is to be observed:

6.4 The values for "d" and "s" are given in the relevant Standard Sheet.

7. General notes on tests

Additionally to the requirements of Clause 7 in Part 1 the following criteria are to be observed:

7.2.1 The number of sub-miniature fuse-links required in the case of sub-miniature fuse-links in accordance with Standard Sheets 1 and 2 is 66, of which 12 are kept as spares in case some of the tests have to be repeated. The number of sub-miniature fuse-links required in the case of sub-miniature fuse-links in accordance with Standard Sheets 3 and 4 is 51, of which 12 are kept as spares in case some of the tests have to be repeated.

Additionally to the test mentioned in Sub-clause 7.2.1 of Part 1, sub-miniature fuse-links shall be taken and shall be tested or inspected in accordance with the following sub-clause:

5. Sub-miniature fuse-link terminations (Sub-clause 8.3)

7.3 *Fuse-bases for testing*

For tests that require a printed wiring board for mounting and connection of the sub-miniature fuse-link, a standard test board as shown in Figure 1, page 18, shall be used. This standard printed wiring board shall be mounted on the standard test base of Figure 2, page 19. The base material for the board shall be phenolic cellulose paper, copperclad, laminated sheet.

The nominal sheet thickness shall be 1.6 mm.

The nominal thickness of the copper layer shall be 0.035 mm.

Metal parts of the fuse-base shall be made of brass with copper content between 58% and 70%. Contact parts shall be silver-plated.

When two or more sub-miniature fuse-links are tested in series, the fuse-bases shall be located so that there will be a spacing of not less than 50 mm between any two sub-miniature fuse-links under test. The conductor connecting the fuse-bases together and connecting the fuse-bases to the ammeter and the source of supply shall be insulated copper wire. The length of each conductor shall be 250 mm and the diameter of the wire shall be approximately 0.64 mm.

Note. — Fuse-bases for testing having equivalent electrical and thermal properties and providing for quick insertion of sub-miniature fuse-links are under consideration.

7.4 Schedule for testing sub-miniature fuse-links according to Standard Sheets 1 and 2, Table 1, page 15, and according to Standard Sheets 3 and 4, Table 2, page 17.

8. Dimensions and construction

Additionally to the requirements of Clause 8 in Part 1 the following criteria are to be observed: