SLOVENSKI STANDARD
SIST EN 60127-5:1995

01-december-1995

Miniature fuses - Part 5: Guidelines for quality assessment of miniature fuse-links (IEC 127-5:1988)

Miniature fuses -- Part 5: Guidelines for quality assessment of miniature fuse-links

Geräteschutzsicherungen -- Teil 5: Leitlinien für die Gütebestätigung von G-Sicherungseinsätzen

Coupe-circuit miniatures -- Partie 5: Directives pour l'évaluation de la qualité des éléments de remplacement miniatures

Ta slovenski standard je istoveten z: **EN 60127-5:1991**

ICS:

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

SIST EN 60127-5:1995 **en**

EUROPEAN STANDARD EN 60127-5

NORME EUROPEENNE

EUROPÄISCHE NORM April 1991

UDC 621.316.923-18:658.562 Supersedes HD 109.5 S1:1989

Descriptors: Miniature fuse, quality assessment, type test, lot-by-lot inspection, acceptance criteria

ENGLISH VERSION

MINIATURE FUSES
PART 5: GUIDELINES FOR QUALITY ASSESSMENT OF MINIATURE FUSE-LINKS
(IEC 127-5:1988)

Coupe-circuit miniatures
Cinquième partie: Directives pour l'évaluation de la qualité des éléments de remplacement miniatures
(CEI 127-5:1988)

Geräteschutzsicherungen
Teil 5: Leitlinien für die Gütebestätigung von G-Sicherungseinsätzen
(IEC 127-5:1988)

This European Standard was approved by CENELEC on 1991-03-15. 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 60127-5:1991 E

FOREWORD

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 127-5:1988 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 60127-5 on 15 March 1991.

The following dates were fixed:

- 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

For products which have complied with HD 109.5 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 127-5:1988 was approved by CENELEC as a European Standard without any modification.

A

NORME INTERNATIONALE
INTERNATIONAL STANDARD

CEI
IEC
127-5

Première édition
First edition
1988

Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Coupe-circuit miniatures

Cinquième partie: Directives pour l'évaluation de la qualité des éléments de remplacement miniatures

Miniature fuses

Part 5: Guidelines for quality assessment of miniature fuse-links

Publication
127-5: 1988

DESKRIPTORJI: VAROVALKE, MINIATURNE VAROVALKE, ZAGOTAVLJANJE KAKOVOSTI, NAVODILA

CONTENTS

INTERNATIONAL ELECTROTECHNICAL COMMISSION

MINIATURE FUSES

Part 5: Guidelines for quality assessment of 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 rues should, as far as possible, be clearly indicated in the latter.

4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

PREFACE

This standard has been prepared by Sub-Committee 32C: Miniature Fuses, of IEC Technical Committee No. 32: Fuses. It forms Part 5 of IEC 127.

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

Six Months' Rule	Report on Voting
32C(CO)44	32C(CO)55

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

MINIATURE FUSES

Part 5: Guidelines for quality assessment of miniature fuse-links

---

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 containing general requirements need not be repeated.

The new IEC 127 series is thus subdivided as follows:

IEC 127 : Miniature fuses (general title).
IEC 127-1 : Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links.

IEC 127-2 : Part 2: Cartridge fuse-links.
IEC 127-3 : Part 3: Sub-miniature fuse-links.
IEC 127-4 : Part 4: Universal modular fuse-links.
IEC 127-5 : Part 5: Guidelines for quality assessment of miniature fuse-links.

IEC 127-6 : Part 6: Fuse-holders (until now IEC 257).
IEC 127-7 : (Free for further documents.)
IEC 127-8 : (Free for further documents.)
IEC 127-9 : Part 9: Test-holders and test-circuits.
IEC 127-10: Part 10: User guide.

1. Scope

This standard gives a guide for tests for assessing the quality of miniature fuse-links other than type tests, for the case where there is no complete agreement between the user and the manufacturer on what such tests should be.

2. Object

To provide guidelines and limits generally acceptable for quality control purposes by large scale users and manufacturers of miniature fuse-links. This standard has validity for large scale series with lot sizes of 10 000 and more. It is also applicable for smaller lot sizes, if necessary.

Periodic inspections by reduced type tests (Clause 6) are intended to be carried out periodically in order to ensure that the level of technical performance previously verified by complete type tests as given in subsequent parts of IEC 127 is maintained. The frequency of periodic inspections in relation to lot-by-lot inspections is not established in this standard.

3. Reference documents

(IEC 127:	Miniature fuses.)
IEC 127-1 (1988): Part 1:	Definitions for miniature fuses and general requirements for miniature fuse-links.
IEC 127-2: Part 2:	Cartridge fuse-links. (In preparation.)
IEC 127-3 (1988): Part 3:	Sub-miniature fuse-links.
IEC 127-4: Part 4:	Universal modular fuse-links. (Under consideration.)
IEC 410 (1973):	Sampling plans and procedures for inspection by attributes.
IEC 419 (1973):	Guide for the inclusion of lot-by-lot and periodic inspection procedures in specifications for electronic components (or parts).
IEC Guide 102 (1979):	Specification structures for the quality assessment of electronic components.

4. Lot-by-lot inspection

4.1 *Test conditions*

The sample appropriate to the acceptable quality level (AQL) and the inspection level shall be as designated in IEC 410.

4.2 *Non-destructive tests*

TABLE I

Primary characteristics (inspection level II)

(Samples may be returned to the lot after inspection)

Category	Test	Sub-clause of IEC 127-1	Classification of defects		AQL	
			Major	Minor	Each defect	Total / category
Marking	Fuse-links Colour codes	6.1 6.4	×	—	0.25	—
Mechanical	Terminations*	8.3	×	—	0.25	0.65
	Alignment	8.4	×	—		
	Dimensions	8.1	×	—		
	Cracked insulation (visible)	—	×	—		
Electrical continuity	Cold resistance**		×	—	0.25	

* Without being immersed in water.

** Limiting values given by the manufacturer and based upon voltage drop measured in accordance with Sub-clause 9.1 of IEC 127-1 but with a current not greater than 10% of the rated current of the fuse.

Note. – If defective units are found in any category which will also result in a defective status in another category, these units will be replaced by new units. This procedure should be applied only when the AQL in that category has not been exceeded.