BRITISH STANDARD

BS EN 60127-1:1991

Incorporating Amendments Nos. 1 and 2

Miniature fuses —

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

The European Standard EN 60127-1:1991, with the incorporation of amendments A1:1999 and A2:2003, has the status of a British Standard

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This British Standard was published under the authority of the Standards Board and comes into effect on
31 July 1991

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The following BSI references relate to the work on this standard:
Committee reference PEL 32
Draft for comment 86/24677 DC

Amendments issued since publication

Amd. No.	Date	Comments
13832	13 September 2002	See national foreword
14382	20 May 2003	See national foreword

ISBN 0 580 18404 8

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National foreword

This British Standard has been prepared under the direction of the Power Electrical Engineering Standards Policy Committee and is the English language version of EN 60127-1, 'Miniature fuses. Part 1 : Definitions for miniature fuses and general requirements for miniature fuse-links', including amendments A1 : 1999 and A2 : 2003, which endorses IEC 60127-1:1988, 'Miniature fuses. Part 1 : Definitions for miniature fuses and general requirements for miniature fuse-links', including amendments 1 : 1999 and 2 : 2002, published by the International Electrotechnical Commission (IEC).

The start and finish of text introduced or altered by amendment is indicated in the text by tags ▌A1⟩ ⟨A1▐. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by ▌A1⟩ ⟨A1▐.

This British Standard is one of a series. Together the standard supersedes BS 4265 which is withdrawn. The new standards are as follows.

BS EN 60127-1	Definitions for miniature fuses and general requirements for miniature fuse-links
BS EN 60127-2	Specification for cartridge fuse-links
BS EN 60127-3	Specification for sub-miniature fuse-links
BS EN 60127-5	Guide for the quality assessment of miniature fuse-links

It is anticipated that when IEC 60127-4 and IEC 60127-6 are published they will be approved by CENELEC as EN 60127-4 and EN 60127-6 respectively. IEC 127-4TTD : 1989 is identical with DD 183 : 1989 'Specification for universal modular fuses'.

The foreword and preface of IEC 60127-1 : 1988 which do not form part of the text of EN 60127-1 have been quoted in national appendix NA.

Annexes designated 'normative' are part of the body of the standard. Annexes designated 'informative' are given for information only. National appendices are designated 'informative'.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the *BSI Catalogue* under the section entitled "International Standards Correspondence Index", or by using the "Search" facility of the *BSI Electronic Catalogue* or of British Standards Online.

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Compliance with a British Standard does not itself confer immunity from legal obligations.

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

NORME EUROPÉENNE March 1991 February 2003

EUROPÄISCHE NORM **+ A1**

May 1999

UDC 621.316.923-18

Supersedes HD 109.1 S1 : 1989
Incorporates Corrigendum March 1990

Descriptors: Miniature fuse, fuse-link, specification, rated characteristic, marking, construction, test, colour coding

English version

Miniature fuses
Part 1: Definitions for miniature fuses and general requirements for minature fuse-links
(includes amendments A1 : 1999 and A2 : 2003)
(IEC 60127-1 : 1988 + A1 : 1999 + A2 : 2002)

Coupe-circuit miniatures
Première partie. Définitions pour coupe-circuit miniatures et prescriptions générales pour éléments de remplacement miniatures
(inclut les amendements A1 : 1999 et A2 : 2003)
(CEI 60127-1 : 1988 + A1 : 1999 + A2 : 2002)

Geräteschutzsicherungen
Teil 1: Begriffe für die Geräteschutzsicherungen und allgemeine Anforderungen an G-Sicherungseinsätze
(enthält Änderungen A1 : 1999 und A2 : 2003)
(IEC 60127-1 : 1988 + A1 : 1999 + A2 : 2002)

This European Standard was approved by CENELEC on 1 February 1991. Amendment A1 was approved by CENELEC on 1999-05-01. Amendment A2 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 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, 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

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Foreword

The CENELEC questionnaire procedure, performed for finding out whether or not the International Standard IEC 127 – 1 : 1988, as corrected by corrigendum March 1990, could be accepted without textual changes, has shown that no CENELEC common modifications were necessary for the acceptance as European Standard. The references document was submitted to the CENELEC members for formal vote and was approved by CENELEC as EN 60127-1 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 the HD 109.1 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 127-1 : 1988 with its corrigendum March 1990 was approved by CENELEC as a European Standard without any modification.

Foreword to amendment A1

The text of document 32C/221/FDIS, future amendment 1 to IEC 60127-1, 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 A1 to EN 60127-1 : 1988 on 1999-05-01.

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)	2000-02-01
— latest date by which the national standards conflicting with the amendment have to be withdrawn	(dow)	2002-05-01

Endorsement notice

The text of amendment 1 : 1999 to the International Standard IEC 60127-1 : 1988 was approved by CENELEC as an amendment to the European Standard without any modification.

Foreword to amendment A2

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.

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MINIATURE FUSES –

Part 1: Definitions for miniature fuses and general requirements for 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, for example, 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 60127 series is thus divided as follows:

IEC 60127: *Miniature fuses* (general title)

IEC 60127-1, *Part 1: Definitions for miniature fuses and general requirements for miniature fuse-links*

IEC 60127-2, *Part 2: Cartridge fuse-links*

IEC 60127-3, *Part 3: Sub-miniature fuse-links*

IEC 60127-4, *Part 4: Universal modular fuse-links*

IEC 60127-5, *Part 5: Guidelines for quality assessment of miniature fuse-links*

IEC 60127-6, *Part 6: Fuse-holders* (until now IEC 60257)

IEC 60127-7: (Free for further documents)

IEC 60127-8: (Free for further documents)

IEC 60127-9, *Part 9: Test-holders and test-circuits*

IEC 60127-10, *Part 10: User guide*

The first part of the complete standard covers the general requirements and tests applicable to all types of miniature fuses (e.g., cartridge fuse-links, sub-miniature fuses, universal modular fuses).

The SI system of units is used throughout this standard.

1 Scope

This standard relates to miniature fuses for the protection of electric appliances, electronic equipment and component parts thereof normally intended to be used indoors.

It relates to general requirements applicable to all fuses which fall under the category of miniature fuses. Specific details covering each major subdivision are given in subsequent parts.

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

2 Object

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 tests.

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).

3 Definitions

The following definitions apply for the purpose of this standard.

3.1
fuse
a device that, by the fusing of one or more of its specially designed and proportioned components, opens the circuit in which it is inserted by breaking the current when this exceeds a given value for a sufficient time. The fuse comprises all the parts that form the complete device

3.2
miniature fuse
a fuse in which the fuse-link is a miniature fuse-link

3.3
fuse-link
the part of a fuse including the fuse-element(s) intended to be replaced after the fuse has operated