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Low-voltage fuses - Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems (IEC 60269-6:2010+ corrigendum Dec. 2010)

Niederspannungssicherungen Teil 6. Zusätzliche Anforderungen an Sicherungseinsätze für den Schutz von solaren photovoltaischen Energieerzeugungssystemen (IEC 60269-6:2010+ corrigendum Dec. 2010)

Fusibles basse tension 7 Partie 6: Exigences supplémentaires concernant les éléments de remplacement utilisés pour la protection des systèmes de production d'énergie solaire photovoltaïque (CEI 60269-6:2010+ corrigendum Dec. 2010)

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Fuses and other overcurrent protection devices

SIST EN 60269-6:2011

en



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Low-voltage fuses -Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems

(IEC 60269-6:2010 + corrigendum Dec. 2010)

Fusibles basse tension -Partie 6: Exigences supplémentaires concernant les éléments de remplacement utilisés pour la protection des systèmes d'énergie solaire photovoltaïque (CEI 60269-6:2010 + corrigendum Dec. 2010) Niederspannungssicherungen -Teil 6: Zusätzliche Anforderungen an Sicherungseinsätze für den Schutz von solaren photovoltaischen Energieerzeugungssystemen (IEC 60269-6:2010 + corrigendum Dec.

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

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Foreword

The text of document 32B/561/FDIS, future edition 1 of IEC 60269-6, prepared by IEC/SC 32B, Low-voltage fuses, of IEC TC 32, Fuses, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60269-6 on 2011-04-01.

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The following dates were fixed:

-	latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2012-01-01
-	latest date by which the national standards conflicting with the EN have to be withdrawn	(dow)	2014-04-01

This part is to be used in conjunction with EN 60269-1:2007, Low-voltage fuses, Part 1: General requirements.

This Part 6 supplements or modifies the corresponding clauses or subclauses of Part 1.

Where no change is necessary, this Part 6 indicates that the relevant clause or subclause applies.

Tables and figures which are additional to those in Part 1 are numbered starting from 101.

Additional annexes are lettered AA (Standards.iteh.ai)

Annex ZA has been added by CENELEC_{SIST EN 60269-6:2011}

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Endorsement notice

The text of the International Standard IEC 60269-6:2010 + corrigendum December 2010 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 60269 series	NOTE	Harmonized in EN 60269 series (partially modified).
IEC 60269-3	NOTE	Harmonized as HD 60269-3.
IEC 60269-4	NOTE	Harmonized as EN 60269-4.
IEC 60364-7-712	NOTE	Harmonized as HD 60364-7-712.
IEC 61215	NOTE	Harmonized as EN 61215.
IEC 61646	NOTE	Harmonized as EN 61646.
IEC/TS 61836:2007	NOTE	Harmonized as CLC/TS 61836:2009 (not modified).

Annex ZA

(normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application 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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

Publication	<u>Year</u>	Title	<u>EN/HD</u>	Year
IEC 60269-1 + A1	2006 2009	Low-voltage fuses - Part 1: General requirements	EN 60269-1 + A1	2007 2009
IEC 60269-2 - Low-voltage fuses - HD 60269-2 Part 2: Supplementary requirements for fuses for use by authorized persons (fuses mainly for industrial application) - Examples of standardized systems of fuses A to J			HD 60269-2	-
ISO 3 - iTe Preferred numbers A Series of preferred IEW (standards.iteh.ai)			-	
	1etter av//ata	<u>SISTEN 60269-6:2011</u>	0740	
	nups7/sta	nuarus.nen.avcataiog/stanuarus/sist/a0085/10-5190-401;	D-0/U0-	

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

Low-voltage fuses Teh STANDARD PREVIEW

Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems

SIST EN 60269-6:2011

Fusibles basse tensionards.iteh.ai/catalog/standards/sist/a00837f0-3f9d-4b13-87d8-

Partie 6: Exigences supplémentaires concernant les éléments de remplacement utilisés pour la protection des systèmes d'énergie solaire photovoltaïque

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CONTENTS

- 2 -

FO	REWC	RD		4			
1	Gene	ral		6			
	1.1	1 Scope and object					
	1.2	Normati	ive references	6			
2	Term	s and de	finitions	7			
	22	Genera	lterms	7			
3	Cond	itions for	r operation in service	10			
Ū	2 1	Voltago		10			
	3.4		Pated voltage	10			
	35	Curront	Raleu Voltage	10			
	3.5		Potod Current	10			
	26	5.5.1	Raleu Guilein	10			
	3.0			10			
		3.0.1 2.6.2	Prequency	10			
		3.0.Z		10			
	2 10	3.0.3 Tompor		10			
4	3.10 Class	remper	ature inside an enclosure	11			
4	Class	incation		11			
5	Chara	acteristic	cs of fusesSTANDARD PREVIEW	11			
	5.1	Summa	ry of characteristics	11			
		5.1.2	Fuse-links (Stanuar us.iten.ar)	11			
	5.2	5.2 Rated voltage					
	5.5	.5 Rated power dissipation of the fuse-link (state) 2404 (112, 274)					
	5.6	Limits o	f time-current characteristics 400car95101/sist-en-60269-6-2011	11			
		5.6.1	Time-current characteristics, time-current zones	11			
		5.6.2	Conventional times and currents	11			
		5.6.3	Gates	12			
	5.7	Breakin	g range and breaking capacity	12			
		5.7.1	Breaking range and utilization category	12			
		5.7.2	Rated breaking capacity	12			
6	Marki	ings		12			
	6.2	Marking	gs on fuse-links	12			
7	Stand	dard con	ditions for construction	12			
	7.5 Breaking capacity						
8	Tests		о , , , , , , , , , , , , , , , , , , ,	13			
8.1 General				13			
	0.1	814	Arrangement of the fuse and dimensions	13			
		815	Testing of fuse-links	13			
	83	Verifica	tion of temperature rise limits and power dissipation	14			
	0.0	831	Arrangement of the fuse-link	14			
		833	Measurement of nower dissipation of the fuse-link	14			
		835	Accentability of test results	14			
	8 /	Verifica	tion of operation	15			
	О.т	8 <u>/</u> 1	Arrangement of fuse-link	15			
		843	Test method and accentability of test results	15			
	85	Verifica	tion of the breaking canacity	15			
	0.0		Arrangement of the fuse	15			
		0.0.1	Arrangement of the fuse	10			

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	8.5.5	Test method	16
Q 11	0.0.0 Mechar	nical and miscellaneous tests	10
Annex AA	(norma aic ener	itive) Examples of standardized fuse-links for the protection of solar gy systems	19
Annex BB with fuse-	8 (inform links de	ative) Guidance for the protection of Photovoltaic string and array signed for PV applications	27
Bibliograp	ohy		28
Figure 10	1 – Cur	ent of test cycling	18
Figure AA	.1 – Fu	se-links with cylindrical contact caps, type A	20
Figure AA dimensior	.2 – Fu ns for si	se-links with cylindrical contact caps type A with striker – Additional zes 14 \times 51, 20 \times 127 and 22 \times 127 only	21
Figure AA 600 A	A.3 – No	rth American cylindrical fuse-links with blade contacts – Sizes 61-	22
Figure AA system A	.4 – Fu (NH fus	se-links with blade contacts, type C, C referring IEC 60269-2 "Fuse e system)"	24
Figure AA	.5 – Fu	se-links with long blade contacts, type D	26
Table 101	l – Conv	entional times and currents for "gPV" fuse-links	12
Table 102 tested	2 – Surv	ey of complete tests on fuse-links and number of fuse-links to be	13
Table 103 homogen	3 – Surv eous se	ey of tests on fuse-links of the smallest rated current of a ries and number of fuse-links(to(be)tested	14
Table 104	↓ – Valu	es ^h för breaking ^{il} caplacity tests oh/sig PV ⁹⁸ fuse-links ^{b13-87d8-} 4dddcaf951d1/sist-en-60269-6-2011	16

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE FUSES -

Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems

FOREWORD

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International Standard IEC 60269-6 has been prepared by subcommittee 32B: Low-voltage fuses, of IEC technical committee 32: Fuses.

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

FDIS	Report on voting	
32B/561/FDIS	32B/569/RVD	

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

This part is to be used in conjunction with IEC 60269-1:2006, *Low-voltage fuses, Part 1: General requirements.*

This Part 6 supplements or modifies the corresponding clauses or subclauses of Part 1.

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Where no change is necessary, this Part 6 indicates that the relevant clause or subclause applies.

Tables and figures which are additional to those in Part 1 are numbered starting from 101.

Additional annexes are lettered AA, BB, etc.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts of the IEC 60269 series, under the general title: *Low-voltage fuses*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC web site under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

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

The contents of the corrigendum of December 2010 have been included in this copy. (standards.iteh.ai)

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LOW-VOLTAGE FUSES –

Part 6: Supplementary requirements for fuse-links for the protection of solar photovoltaic energy systems

1 General

IEC 60269-1 applies with the following supplementary requirements.

Fuse-links for the protection of solar photovoltaic (PV) energy systems shall comply with all requirements of IEC 60269-1, if not otherwise indicated hereinafter, and shall also comply with the supplementary requirements laid down below.

NOTE The abbreviation "PV" (photovoltaic) is used in this document.

1.1 Scope and object

These supplementary requirements apply to fuse-links for protecting PV strings and PV arrays in equipment for circuits of nominal voltages up to 1 500 V d.c.

Their rated voltage may be up to 1 500 V d cA RD PREVIEW

NOTE 1 Such fuse-links are commonly referred to as "PV fuse-links". 21)

NOTE 2 In most cases, a part of the associated equipment serves the purpose of a fuse-base. Owing to the great variety of equipment, no general rules can be given the suitability of the associated equipment to serve as a fuse-base should be subject to agreement between the manufacturer and the user. However, if separate fuse-bases or fuse-holders are used, they should comply with the appropriate requirements of IEC 60269 series.

NOTE 3 PV fuse-links protect down stream inverter components such as capacitors or the discharge of capacitors back into the arrays or array wiring up to the rated breaking capacity.

The object of these supplementary requirements is to establish the characteristics of PV fuselinks in such a way that they can be replaced by other fuse-links having the same characteristics, provided that their dimensions are identical. For this purpose, this standard refers in particular to

a) the following characteristics of fuses:

- 1) their rated values;
- 2) their utilisation category;
- 3) their temperature rises in normal service;
- 4) their power dissipation;
- 4) their time-current characteristics;
- 6) their breaking capacity;
- 7) their dimensions or size (if applicable).
- b) type tests for verification of the characteristics of fuses;
- c) the markings on fuses.

1.2 Normative references

The following referenced documents are indispensable for the application 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.