



SLOVENSKI STANDARD

SIST EN 62109-2:2011

01-november-2011

Varnost močnostnih pretvornikov, ki se uporabljajo v fotonapetostnih sistemih - 2. del: Posebne zahteve za razsmernike (IEC 62109-2:2011)

Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters (IEC 62109-2:2011)

Sicherheit von Leistungsumrichtern zur Anwendung in photovoltaischen Energiesystemen - Teil 2: Besondere Anforderungen an Wechselrichter (IEC 62109-2:2011)

Sécurité des convertisseurs de puissance utilisés dans les systèmes photovoltaïques - Partie 2: Exigences particulières pour les onduleurs (CEI 62109-2:2011)

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 62109-2

September 2011

ICS 27.160

English version

**Safety of power converters for use in photovoltaic power systems -
Part 2: Particular requirements for inverters
(IEC 62109-2:2011)**

Sécurité des convertisseurs de puissance
utilisés dans les systèmes
photovoltaïques -
Partie 2: Exigences particulières pour les
onduleurs
(CEI 62109-2:2011)

Sicherheit von Leistungsumrichtern zur
Anwendung in photovoltaischen
Energiesystemen -
Teil 2: Besondere Anforderungen an
Wechselrichter
(IEC 62109-2:2011)

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

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CENELEC

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

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 82/636/FDIS, future edition 1 of IEC 62109-2, prepared by IEC TC 82, "Solar photovoltaic energy systems", was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62109-2 on 2011-07-28.

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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) 2012-04-28
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2014-07-28

The requirements in this Part 2 are to be used with the requirements in Part 1, and supplement or modify clauses in Part 1. When a particular clause or subclause of Part 1 is not mentioned in this Part 2, that clause of Part 1 applies. When this Part 2 contains clauses that add to, modify, or replace clauses in Part 1, the relevant text of Part 1 is to be applied with the required changes.

Subclauses, figures and tables additional to those in Part 1 are numbered in continuation of the sequence existing in Part 1.

All references to "Part 1" in this Part 2 shall be taken as dated references to EN 62109-1:2010.

Annex ZA has been added by CENELEC.

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Endorsement notice

The text of the International Standard IEC 62109-2:2011 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 60364-7-712	NOTE	Harmonized as HD 60364-7-712.
IEC 61008-1	NOTE	Harmonized as EN 61008-1.
IEC 61727	NOTE	Harmonized as EN 61727.
IEC 61730-1	NOTE	Harmonized as EN 61730-1.
IEC 62116	NOTE	Harmonized as EN 62116.

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.

Addition to EN 62109-1:2010:

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62109-1	2010	Safety of power converters for use in photovoltaic power systems - Part 1: General requirements	EN 62109-1	2010

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Safety of power converters for use in photovoltaic power systems –
Part 2: Particular requirements for inverters**

**Sécurité des convertisseurs de puissance utilisés dans les systèmes
photovoltaïques –
Partie 2: Exigences particulières pour les onduleurs**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SAFETY OF POWER CONVERTERS FOR USE IN PHOTOVOLTAIC POWER SYSTEMS –

Part 2: Particular requirements for inverters

FOREWORD

- 1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
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International Standard IEC 62109-2 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

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

FDIS	Report on voting
82/636/FDIS	82/648A/RVD

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

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

The requirements in this Part 2 are to be used with the requirements in Part 1, and supplement or modify clauses in Part 1. When a particular clause or subclause of Part 1 is not mentioned in this Part 2, that clause of Part 1 applies. When this Part 2 contains clauses that add to, modify, or replace clauses in Part 1, the relevant text of Part 1 is to be applied with the required changes.

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All references to “Part 1” in this Part 2 shall be taken as dated references to IEC 62109-1:2010.

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

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INTRODUCTION

This Part 2 of IEC 62109 gives requirements for grid-interactive and stand-alone inverters. This equipment has potentially hazardous input sources and output circuits, internal components, and features and functions, which demand different requirements for safety than those given in Part 1 (IEC 62109-1:2010).

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