SLOVENSKI STANDARD
SIST EN 61730-2:2008/A1:2012

01-april-2012

Varnostne zahteve fotonapetostnih (PV) modulov - 2. del: Zahteve za preskušanje - Dopolnilo A1 (IEC 61730-2:2004/A1:2011)

Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing

Photovoltaik (PV) -Module - Sicherheitsqualifikation - Teil 2: Anforderungen an die Prüfung

Qualification pour la sûreté de fonctionnement des modules photovoltaïques (PV) - Partie 2: Exigences pour les essais

Ta slovenski standard je istoveten z: EN 61730-2:2007/A1:2012

ICS:

27.160	Sončna energija	Solar energy engineering

SIST EN 61730-2:2008/A1:2012 **en**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61730-2/A1

February 2012

ICS 27.160

English version

Photovoltaic (PV) module safety qualification - Part 2: Requirements for testing

(IEC 61730-2:2004/A1:2011)

Qualification pour la sûreté de fonctionnement des modules photovoltaïques (PV) - Partie 2: Exigences pour les essais (CEI 61730-2:2004/A1:2011)

Photovoltaik (PV) -Module - Sicherheitsqualifikation - Teil 2: Anforderungen an die Prüfung (IEC 61730-2:2004/A1:2011)

This amendment A1 modifies the European Standard EN 61730-2:2007; it was approved by CENELEC on 2011-12-19. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 CEN-CENELEC Management Centre or to any CENELEC member.

This amendment 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 CEN-CENELEC Management Centre has the same status as the official versions.

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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

Ref. No. EN 61730-2:2007/A1:2012 E

Foreword

The text of document 82/660/FDIS, future edition 1 of IEC 61730-2:2004/A1, prepared by IEC/TC 82 "Solar photovoltaic energy systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61730-2:2007/A1:2012.

The following dates are fixed:

• latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement	(dop)	2012-09-19
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2014-12-19

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 61730-2:2004/A1:2011 was approved by CENELEC as a European Standard without any modification.

Replace the Annex ZA of EN 61730-2:2007 by:

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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	Year	Title	EN/HD	Year
–	–	Glass in building - Thermally toughened soda lime silicate safety glass – Part 1: Definition and description	EN 12150-1	–
–	–	Datasheet and nameplate information for photovoltaic modules	EN 50380	–
IEC 60060-1	–	High-voltage test techniques – Part 1: General definitions and test requirements	HD 588.1 S1	–
IEC 60068-1	–	Environmental testing – Part 1: General and guidance	EN 60068-1	–
IEC 60243-1	–	Electrical strength of insulating materials - Test methods – Part 1: Tests at power frequencies	EN 60243-1	–
IEC 60410	–	Sampling plans and procedures for inspection by attributes	–	–
IEC 60664-1 + A1 + A2	–	Insulation coordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests	EN 60664-1	–
IEC 60904-2	–	Photovoltaic devices – Part 2: Requirements for reference solar devices	EN 60904-2	–
IEC 61032	–	Protection of persons and equipment by enclosures - Probes for verification	EN 61032	–
IEC 61140	–	Protection against electric shock - Common aspects for installation and equipment	EN 61140	–
IEC 61215	–	Crystalline silicon terrestrial photovoltaic (PV) modules - Design qualification and type approval	EN 61215	–
IEC 61646	–	Thin-film terrestrial photovoltaic (PV) modules - Design qualification and type approval	EN 61646	–
IEC 61730-1 (mod)	–	Photovoltaic (PV) module safety qualification– Part 1: Requirements for construction	EN 61730-1	–
ISO/IEC 17025	–	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	–
ANSI/UL 514C	–	Non-metallic outlet boxes, flush device boxes and covers	–	–

Publication	Year	Title	EN/HD	Year
ANSI/UL 790	–	Tests for Fire Resistance of Roof Covering Materials	–	–
ANSI/UL 1703	–	Flat – Plate Photovoltaic Modules and Panels	–	–
ANSI Z97.1	–	American National Standard for Safety Glazing Materials Used in Buildings - Safety Performance Specifications and Methods of Test	–	–

IEC

IEC 61730-2

Edition 1.0 2011-11

INTERNATIONAL STANDARD

NORME INTERNATIONALE

colour inside

AMENDMENT 1
AMENDEMENT 1

Photovoltaic (PV) module safety qualification –
Part 2: Requirements for testing

Qualification pour la sûreté de fonctionnement des modules photovoltaïques (PV) –
Partie 2: Exigences pour les essais

INTERNATIONAL ELECTROTECHNICAL COMMISSION

COMMISSION ELECTROTECHNIQUE INTERNATIONALE

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FOREWORD

This amendment has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

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

FDIS	Report on Voting
82/660/FDIS	82/678/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.

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.

IMPORTANT – The 'colour inside' logo on the cover page of this publication indicates that it contains colours which are considered to be useful for the correct understanding of its contents. Users should therefore print this document using a colour printer.

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2 Normative references

Delete year information from all referenced standards.

Replace

IEC 60904-2, *Photovoltaic devices – Part 2: Requirements for reference solar cells*

by

IEC 60904-2, *Photovoltaic devices – Part 2: Requirements for reference solar devices*

Delete

IEC 60904-6, *Photovoltaic devices – Part 6: Requirements for reference solar modules*

4.5 Fire hazard tests

Table 4 – Fire hazard tests

Add to: MST 25 test, under IEC 61646 column, 10.18.

5 Application classes and their necessary test procedures

Table 7 – Required tests, depending on the application class

Replace: MST 54 UV resistance *by* MST 54 UV pre-conditioning

8 Testing

Figure 1 – Test sequences

Replace: UV resistance test *by* UV pre-conditioning test.

Remove box: Hot-spot test.

Insert a new box: Hot-spot test into the test sequence, *at right hand side after bypass diode thermal test.*

Remove from box IEC 61215/IEC 61646: 10.2.

Remove 10.2 *previous to MST 23 and MST 32.*

Add a new box MST 13 “Ground continuity test” *between* “Cut susceptibility test” *and* “Accessibility test”, *at the end of test sequence*.

Change MST 34 and MST 25 boxes to blue colour.