

SLOVENSKI STANDARD SIST EN 60904-2:2001/A1:2001

01-september-2001

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Photovoltaic devices -- Part 2: Requirements for reference solar cells

Photovoltaische Einrichtungen -- Teil 2: Anforderungen an Referenz-Solarzellen

Dispositifs photovoltaïques — Partie 2: Exigences relatives aux cellules solaires de référence (standards.iteh.ai)

Ta slovenski standard je istoveten z: EN 60904-2:1993/A1:1998

9720b00188b4/sist-en-60904-2-2001-a1-2001

ICS:

27.160 Ù[} } æÁ\}^* ãæ Solar energy engineering

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SIST EN 60904-2:2001/A1:2001 https://standards.iteh.ai/catalog/standards/sist/fc5a8b18-4a19-4aef-b225-9720b00188b4/sist-en-60904-2-2001-a1-2001

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 60904-2/A1

April 1998

UDC 621.38:621.317.083 ICS 27.160

Descriptors: Photovoltaic devices, solar cells, reference cell, primary cell, secondary cell, requirements

English version

Photovoltaic devices Part 2: Requirements for reference solar cells (IEC 60904-2:1989/A1:1998)

Dispositifs photovoltaïques Partie 2: Exigences relatives aux cellules solaires de référence (CEI 60904-2:1989/A1:1998) Photovoltaische Einrichtungen Teil 2: Anforderungen an Referenz-Solarzellen (IEC 60904-2:1989/A1:1998)

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This amendment A1 modifies the European Standard EN 60904-2:1993; it was approved by CENELEC on 1998-04-01. 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 Central Secretariat 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 Central Secretariat 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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

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Foreword

The text of document 82/182/FDIS, future amendment 1 to IEC 60904-2:1989, prepared by IEC TC 82, Solar photovoltaic energy systems, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60904-2:1993 on 1998-04-01.

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) 1999-01-01

 latest date by which the national standards conflicting with the amendment have to be withdrawn

(dow) 2001-01-01

Endorsement notice

The text of amendment 1:1998 to the International Standard IEC 60904-2:1989 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME INTERNATIONALE INTERNATIONAL STANDARD CEI IEC 60904-2

1989

AMENDEMENT 1 AMENDMENT 1 1998-02

Amendement 1

Dispositifs photovoltaïques -

Partie 2:

Exigences relatives aux cellules solaires de référence

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Photovoltaic devices AT 2001

https://spndards.jch.ai/catalog/standards/sist/fc5a8b18-4a19-4aef-b225-9720b00188b4/sist-ep-60904-2-2001-a1-2001 Requirements for reference solar cells

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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 |
|-------------|------------------|
| 82/182/FDIS | 82/191/RVD |

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

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1 Scope

Delete "crystalline silicon" from the sentence.

3 Selection

Delete the first paragraph and replace by the following new paragraph:

At least three solar cells shall be selected for calibration as reference cells so that each solar cell can be compared with at least two other solar cells. Their short-circuit current shall vary linearly with irradiance, as defined in IEC 60904-10 $^{1)}$, over the range of interest. Their spectral response shall be such that errors in performance measurement due to the spectral response mismatch between each of the reference cells and the test specimen are less than ± 1 %. The spectral mismatch error shall be calculated by the method described in IEC 60904-7 $^{2)}$.

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9.3 Single cell package

Add, after subclause 9.3.4, the following new subclause 9.3.5:

The protective window may embody a filter to match the spectral response of the reference cell to that the test specimen, provided that the other requirements of clause 3 are met.

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10 Care of reference cells

Replace the sentence "The calibration shall be cross-checked at intervals of ... same irradiance" by the following new sentence: "The calibration of reference cells in frequent use shall be cross-checked against a stable reference cell at intervals of no more than one month by comparing their short-circuit currents under the same irradiance".

¹⁾ IEC 60904-10:1998, Photovoltaic devices – Part 10: Methods of linearity measurement.

²⁾ IEC 60904-7:1995, Photovoltaic devices – Part 7: Computation of spectral mismatch error introduced in the testing of a photovoltaic device.