SLOVENSKI STANDARD
SIST EN 61701:2001

01-september-2001

Korozijsko preskušanje fotonapetostnih (PV) modulov v slani megli

Salt mist corrosion testing of photovoltaic (PV) modules

Salznebel-Korrosionsprüfung von photovoltaischen (PV) Modulen

Essai de corrosion au brouillard salin des modules photovoltaïques (PV)

Ta slovenski standard je istoveten z: **EN 61701:1999**

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27.160 Sonį na energija Solar energy engineering

SIST EN 61701:2001 **en**

EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN 61701

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English version

Salt mist corrosion testing of photovoltaic (PV) modules
(IEC 61701:1995)

Essai de corrosion au brouillard salin des modules photovoltaïques (PV) (CEI 61701:1995)

Salznebel-Korrosionsprüfung von photovoltaischen (PV) Modulen (IEC 61701:1995)

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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.

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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

Ref. No. EN 61701:1999 E

Foreword

The text of the International Standard IEC 61701:1995, prepared by IEC TC 82, Solar photovoltaic energy systems, was submitted to the formal vote and was approved by CENELEC as EN 61701 on 1999-05-01 without any modification.

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) 2000-08-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2002-08-01

Annexes designated "normative" are part of the body of the standard.
In this standard, annex ZA is normative.
Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 61701:1995 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

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
IEC 60068-1	1988	Environmental testing Part 1: General and guidance	EN 60068-1[1)]	1994
IEC 60068-2-11	1981	Part 2: Tests - Test Ka: Salt mist	EN 60068-2-11	1999
IEC 60904-1	1987	Photovoltaic devices Part 1: Measurement of photovoltaic current-voltage characteristics	EN 60904-1	1993

1) EN 60068-1 includes the corrigendum October 1988 and A1:1992 to IEC 60068-1.

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Essai de corrosion au brouillard salin des modules photovoltaïques (PV)

Salt mist corrosion testing of photovoltaic (PV) modules

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

SALT MIST CORROSION TESTING OF PHOTOVOLTAIC (PV) MODULES

FOREWORD

1) The IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international cooperation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. 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. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

2) The formal decisions or agreements of the IEC on technical matters, prepared by technical committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.

3) They have the form of recommendations for international use published in the form of standards, technical reports or guides and they are accepted by the National Committees in that sense.

4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.

International Standard IEC 1701 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

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

DIS	Report on voting
82(CO)25	82(CO)42

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

SALT MIST CORROSION TESTING OF PHOTOVOLTAIC (PV) MODULES

1 Scope and object

The purpose of this test is to determine the resistance of the module to corrosion from salt mist.

This test is useful for evaluating the compatibility of materials, and the quality and uniformity of protective coatings.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

IEC 68-1: 1988, *Environmental testing – Part 1: General and guidance*

IEC 68-2-11: 1981, *Environmental testing – Part 2: Tests – Test Ka: Salt mist*

IEC 904-1: 1987, *Photovoltaic devices – Part 1: Measurements of photovoltaic current-voltage characteristics*

3 Initial measurements

- Visual inspection.
- I-V characteristic at STC (in accordance with IEC 904-1).
- Insulation test in accordance with the relevant IEC standards (under consideration).

4 Procedure

Carry out the test in accordance with IEC 68 -1 and IEC 68 -2-11, Test Ka, subject to the following requirements:

- Preconditioning: not required
- Conditioning: specimen position: the inclination to the vertical of the face of the module normally exposed to solar irradiance shall be 15° to 30°
- Duration of the test: 96 h