SVENSK STANDARD SS-EN 61215-1-2

Fastställd	Utgåva	Sida	Ansvarig kommitté
2017-10-18	1	1 (1+11)	SEK TK 82

Solcellsanläggningar – Konstruktions- och typgodkännande av solcellsmoduler – Del 1-2: Särskilda fordringar för provning av moduler med celler av kadmiumtellurid (CdTe)

Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 1-2: Special requirements for testing of cadmium telluride (CdTe) photovoltaic (PV) modules

Som svensk standard gäller europastandarden EN 61215-1-2:2017. Den svenska standarden innehåller den officiella engelska språkversionen av EN 61215-1-2:2017.

Nationellt förord

Europastandarden EN 61215-1-2:2017

består av:

– **europastandardens ikraftsättningsdokument,** utarbetat inom CENELEC

– **IEC 61215-1-2, First edition, 2016 - Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of cadmium telluride (CdTe) photovoltaic (PV) modules**

utarbetad inom International Electrotechnical Commission, IEC.

Standarden ska användas tillsammans med SS-EN 61215-1, utgåva 1, 2017 och SS-EN 61215-2, utgåva 1, 2017.

Tidigare fastställd svensk standard SS-EN 61646, utgåva 2, 2008, gäller ej fr o m 2020-04-28.

ICS 27.160.00

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 61215-1-2

April 2017

ICS 27.160

Supersedes EN 61646:2008

English Version

Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules (IEC 61215-1-2:2016)

Modules photovoltaïques (PV) pour applications terrestres - Qualification de la conception et homologation - Partie 1-2: Exigences particulières d'essai des modules photovoltaïques (PV) au tellurure de cadmium (CdTe) à couches minces
(IEC 61215-1-2:2016)

Terrestrische kristalline Silizium-Photovoltaik-(PV)-Module - Bauarteignung und Bauartzulassung - Teil 1-2: Besondere Anforderungen für Prüfungen von Cadmiumtellurid-(CdTe)-Photovoltaik-(PV)-Modulen
(IEC 61215-1-2:2016)

This European Standard was approved by CENELEC on 2017-01-11. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 61215-1-2:2017 E

SEK Svensk Elstandard

European foreword

The text of document 82/1182/FDIS, future edition 1 of IEC 61215-1-2, prepared by IEC/TC 82 “Solar photovoltaic energy systems" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 61215-1-2:2017.

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)	2017-10-28
• latest date by which the national standards conflicting with the document have to be withdrawn	(dow)	2020-04-28

This document supersedes EN 61646:2008.

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Endorsement notice

The text of the International Standard IEC 61215-1-2:2016 was approved by CENELEC as a European Standard without any modification.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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FOREWORD

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International Standard IEC 61215-1-2 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

This edition cancels and replaces the second edition of IEC 61646, issued in 2008, and constitutes a technical revision.

This edition constitutes a technical revision for thin-Film CdTe based terrestrial photovoltaic modules.

This standard is to be read in conjunction with IEC 61215-1:2016 and IEC 61215-2:2016.

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

FDIS	Report on voting
82/1182/FDIS	82/1206/RVD

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

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

A list of all parts in the IEC 61215 series, published under the general title *Terrestrial photovoltaic (PV) modules – Design qualification and type approval,* can be found on the IEC website.

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

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

TERRESTRIAL PHOTOVOLTAIC (PV) MODULES – DESIGN QUALIFICATION AND TYPE APPROVAL –

Part 1-2: Special requirements for testing of thin-film Cadmium Telluride (CdTe) based photovoltaic (PV) modules

1 Scope and object

This part of IEC 61215 lays down IEC requirements for the design qualification and type approval of terrestrial photovoltaic modules suitable for long-term operation in general open-air climates, as defined in IEC 60721-2-1. This document is intended to apply to all thin-film CdTe based terrestrial flat plate modules. As such, it addresses special requirements for testing of this technology supplementing IEC 61215-1:2016 and IEC 61215-2:2016 requirements for testing.

This document does not apply to modules used with concentrated sunlight although it may be utilized for low concentrator modules (1 to 3 suns). For low concentration modules, all tests are performed using the current, voltage and power levels expected at the design concentration.

The object of this test sequence is to determine the electrical and thermal characteristics of the module and to show, as far as possible within reasonable constraints of cost and time, that the module is capable of withstanding prolonged exposure in climates described in the scope. The actual lifetime expectancy of modules so qualified will depend on their design, their environment and the conditions under which they are operated.

This document defines PV technology dependent modifications to the testing procedures and requirements per IEC 61215-1:2016 and IEC 61215-2:2016.

2 Normative references

The normative references of IEC 61215-1:2016 and IEC 61215-2:2016 are applicable without modifications.