

Edition 1.0 2018-05

TECHNICAL SPECIFICATION



Photovoltaic (PV) modules – Type approval, design and safety qualification – Retesting

INTERNATIONAL ELECTROTECHNICAL COMMISSION

ICS 27.160 ISBN 978-2-8322-5615-2

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CONTENTS

FC	REWC	DRD	4
1	Scop	pe	6
2	Norn	native references	6
3	Term	ns and definitions	7
4	Rete	sting	7
	4.1	General	7
	4.2	Test programs for crystalline silicon PV modules	
	4.2.1	· · ·	
	4.2.2	Modification to encapsulation system	9
	4.2.3	Modification to cell technology	10
	4.2.4	Modification to cell and string interconnect material or technique	10
	4.2.5		
	4.2.6		
	4.2.7	71	
	4.2.8	,	
	4.2.9	3 3	
	4.2.1	· •	
	4.2.1	- 3	14
	4.2.1	Higher or lower output power (by 10 % or more) with the identical design and size and using the identical cell process	15
	4.2.1		
	4.2.1		
	4.2.1		
	4.3	Test programs for thin-film PV modules	
	4.3.1	Modification to frontsheet	16
	4.3.2	Modification to encapsulation system	16
	4.3.3	Modification to front contact (e. g. TCO)	17
	4.3.4	Modification to cell technology	17
	4.3.5	Modification to cell layout	18
	4.3.6		
	4.3.7	•	
	4.3.8	•	
	4.3.9		
	4.3.1		
	4.3.1	71	
	4.3.1	3 3	
	4.3.1 4.3.1	3	
	4.3.1	·	23
	4.3.1	design and size	23
	4.3.1	•	
	4.3.1	7 Increase of system voltage	23
Ar	nex A	(informative)	25
	A.1	Required retests for crystalline silicon PV modules, tabular overview	25
	A.2	Required retests for thin-film PV modules, tabular overview	
	A.3	Combined test flow IEC 61215 and IEC 61730 (see Figure A.1 and Table A.3)	29
	A.4	Tests for new combinations of material in direct contact with each other	31

Figure A.1 – Combined test flow IEC 61215 and IEC 61730	29
Figure A.2 – Illustration of example for required tests for new material combinations	33
Table A.1 – Required retests for crystalline silicon PV modules	25
Table A.2 – Required retests for thin-film silicon PV modules	27
Table A.3 – IEC identifiers for test sequences	30
Table A.4 – Example for required tests for new material combinations	32

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Technical specifications are subject to review within three years of publication to decide whether they can be transformed into International Standards.

IEC TS 62915, which is a technical specification, has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

The text of this technical specification is based on the following documents:

Enquiry draft	Reports on voting
82/1331/DTS	82/1378A/RVDTS

Full information on the voting for the approval of this technical specification 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.

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

- · transformed into an International standard,
- reconfirmed,
- withdrawn,
- · replaced by a revised edition, or
- · amended.

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PHOTOVOLTAIC (PV) MODULES - TYPE APPROVAL, DESIGN AND SAFETY QUALIFICATION - RETESTING

1 Scope

This document sets forth a uniform approach to maintain type approval, design and safety qualification of terrestrial PV modules that have undergone, or will undergo modification from their originally assessed design.

Changes in material selection, components and manufacturing process can impact electrical performance, reliability and safety of the modified product. This document lists typical modifications and the resulting requirements for retesting based on the different test standards. It provides assistance; at some level engineering judgement may be needed.

The test sequences are selected to identify adverse changes to the modified product.

Those products successfully following the herein defined test sequences are considered to be compliant with the standard against which they have originally been assessed in a full qualification.

The number of samples to be included in the retesting program and the pass/fail criteria are listed in the referenced standards IEC 61215 and IEC 61730.

Tests required by changes from previous to new standard editions of IEC 61215 and IEC 61730 are not covered by this document and are evaluated separately.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

IEC 61215 (all parts), Terrestrial photovoltaic (PV) modules – Design qualification and type approval

IEC 61215-1:2016, Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 1: Test requirements

IEC 61215-2:2016, Terrestrial photovoltaic (PV) modules – Design qualification and type approval – Part 2: Test procedures

IEC 61730 (all parts), Photovoltaic (PV) module safety qualification

IEC 61730-1:2016, Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction

IEC TS 61836, Solar photovoltaic energy systems – Terms, definitions and symbols

IEC 62790, Junction boxes for photovoltaic modules – Safety requirements and tests