



UL 61730-2:2025

(IEC 61730-2:2016, MOD)

STANDARD FOR SAFETY

Photovoltaic (PV) Module Safety
Qualification – Part 2: Requirements for
Testing



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UL Standard for Safety for Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, UL 61730-2

Second Edition, Dated October 28, 2022

Summary of Topics

This revision of ANSI/UL 61730-2 dated June 2, 2025 includes the Reorganization of Section, 10.17DV.4 Fire Type Testing, including New Fire Type Additions to an Expanded Annex DVB, Type Tests for Fire Performance Characterization of Modules Independent of Roof Coverings; [10.17DV.4.2](#), [10.17DV.4.3](#) – [10.17DV.4.5.8](#), [10.17DV.4.6](#), [Table 10.17DV.4.6.1](#), [DVB.1](#), and [Table DVB.1.2](#)

UL 61730-2 second edition is an adoption of IEC 61730-2, Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing (Second Edition, issued by the IEC August 2016). Please note that the National Difference document incorporates all of the U.S. national differences for UL 61730-2.

Text that has been changed in any manner or impacted by ULSE's electronic publishing system is marked with a vertical line in the margin.

The new and revised requirements are substantially in accordance with Proposal(s) on this subject dated April 11, 2025.

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OCTOBER 28, 2022
(Title Page Reprinted: June 2, 2025)



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UL 61730-2:2025
(IEC 61730-2:2016, MOD)

Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing

First Edition –December, 2017

Second Edition

October 28, 2022

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through June 2, 2025.

The most recent designation of ANSI/UL 61730-2 as an American National Standard (ANSI) occurred on June 2, 2025. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

Comments or proposals for revisions on any part of the Standard may be submitted to ULSE at any time. Proposals should be submitted via a Proposal Request in ULSE's Collaborative Standards Development System (CSDS) at <https://csds.ul.com>.

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PREFACE

This ULSE Standard is based on IEC Publication IEC 61730-2: Second edition Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing. IEC publication IEC 61730-2 is copyrighted by the IEC.

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Note – Although the intended primary application of this Standard is stated in its Scope, it is important to note that it remains the responsibility of the users of the Standard to judge its suitability for their particular purpose.

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NATIONAL DIFFERENCES

National Differences from the text of International Electrotechnical Commission (IEC) Publication IEC 61730-2, Photovoltaic (PV) Module Safety Qualification – Part 2: Requirements for Testing, copyright 2016, are indicated by notations (differences) and are presented in bold text.

There are five types of National Differences as noted below. The difference type is noted on the first line of the National Difference in the standard. The standard may not include all types of these National Differences.

DR – These are National Differences based on the **national regulatory requirements**.

D1 – These are National Differences which are based on **basic safety principles and requirements**, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing **safety practices**. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

DC – These are National Differences based on the **component standards** and will not be deleted until a particular component standard is harmonized with the IEC component standard.

DE – These are National Differences based on **editorial comments or corrections**.

Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

Modification / Modify - A modification is an altering of the existing base IEC text such as the addition, replacement or deletion of certain words or the replacement of an entire clause, subclause, table, figure, or annex of the base IEC text.

Deletion / Delete - A deletion entails complete deletion of an entire numbered clause, subclause, table, figure, or annex without any replacement text.

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FOREWORD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

PHOTOVOLTAIC (PV) MODULE SAFETY QUALIFICATION – Part 2: Requirements for testing

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). 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 nongovernmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 61730-2 has been prepared by IEC technical committee 82: Solar photovoltaic energy systems.

This second edition cancels and replaces the first edition of IEC 61730-2, issued in 2004 and its amendment 1 (2011), and constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) Rearrange test sequences.
- b) MST 01: Visual inspection: added nameplate requirement and modified pass criteria.
- c) Added sharp edge test MST 06.
- d) Added insulation thickness test MST 04.

- e) MST 11: Accessibility test: defined force for test finger.
- f) MST 12: Cut susceptibility test: defined blade radius for cut test.
- g) MST 14: removed preconditioning requirement TC200 from [Figure 1](#).
- h) MST 15: Partial discharge test removed.
- i) Renamed dielectric breakdown test MST 16 to insulation test.
- j) MST 21: Temperature test: rewritten test procedure; removed short circuit mode; allow alternative indoor test method.
- k) MST 23: Fire test: subclause rewritten; fire test requirements related to national building codes; moved optional test description to informative annex.
- l) Added ignitability test MST 24.
- m) MST 26: Reverse current overload test: changed specification of wooden board.
- n) MST 32: Module breakage test: defined new dimensions of impactor to allow other filling compounds; consider variety of mounting techniques for glass breakage test; reduced impact height to only 300 mm; corrected diameter of opening according to referenced standard (65 cm² instead of 6,5 cm²).
- o) Added screw connection test MST 33.
- p) Added peel test MST 35 for proof of cemented joints.
- q) Added lap shear strength test MST 36 for proof of cemented joints.
- r) Added materials creep test MST 37.
- s) Added PV module test sequence with moisture and UV to stress polymers to [Figure 1](#). The new UV sequence was added as a response to the Kyoto meeting, where it was decided to add a coupon test and a PV module test sequence. As it is not possible to perform the ISO UV test on PV modules (no affordable equipment available) it was decided to rely on already available PV module test equipment. R&D work has shown that cycling UV and HF are best to age polymers in PV modules.
- t) Added new sequence for Pollution Degree (PD) testing (sequence B1).
- u) Added annex: Recommendations for testing of PV modules from production.

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

FDIS	Report on voting
82/1129/FDIS	82/1147/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.

This publication 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

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

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PHOTOVOLTAIC (PV) MODULE SAFETY QUALIFICATION – Part 2:

Requirements for Testing

1 Scope

The scope of IEC 61730-1 is also applicable to this part of IEC 61730. While IEC 61730-1 outlines the requirements of construction, this part of the standard lists the tests a PV module is required to fulfill for safety qualification. IEC 61730-2 is applied for safety qualification only in conjunction with IEC 61730-1.

The sequence of tests required in this standard may not test for all possible safety aspects associated with the use of PV modules in all possible applications. This standard utilizes the best sequence of tests available at the time of its writing. There are some issues – such as the potential danger of electric shock posed by a broken PV module in a high voltage system – that should be addressed by the system design, location, restrictions on access and maintenance procedures.

The objective of this standard is to provide the testing sequence intended to verify the safety of PV modules whose construction has been assessed by IEC 61730-1. The test sequence and pass criteria are designed to detect the potential breakdown of internal and external components of PV modules that would result in fire, electric shock, and/or personal injury. The standard defines the basic safety test requirements and additional tests that are a function of the PV module end-use applications. Test categories include general inspection, electrical shock hazard, fire hazard, mechanical stress, and environmental stress.

The additional testing requirements outlined in relevant ISO standards, or the national or local codes which govern the installation and use of these PV modules in their intended locations, should be considered in addition to the requirements contained within this standard.

2 Normative references

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.

IEC 60060-1, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60068-2-1, *Environmental testing – Part 2-1: Tests – Test A: Cold*

IEC 60068-2-2, *Environmental testing – Part 2-2: Tests – Test B: Dry heat*

IEC 60068-3-5, *Environmental testing – Part 3-5: Supporting documentation and guidance; Confirmation of the performance of temperature chambers*

IEC 60598-1:2014, *Luminaires – Part 1: General requirements and tests*

IEC 60664-1:2007, *Insulation co-ordination for equipment within low-voltage systems – Part 1: Principles, requirements and tests*

IEC 60695-2-10, *Fire hazard testing – Part 2-10: Glowing/hot-wire based test methods – Glow-wire apparatus and common test procedure*

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

IEC 60904-9, *Photovoltaic devices – Part 9: Solar simulator performance requirements*

IEC 60950-1:2005, *Information technology equipment – Safety – Part 1: General requirements*

IEC 61010-1, *Safety requirements for electrical equipment for measurement, control and laboratory use – Part 1: General requirements*

IEC 61032:1997, *Protection of persons and equipment by enclosures – Probes for verification*

IEC 61140, *Protection against electric shock – Common aspects for installation and equipment*

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

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

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

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

ISO/IEC 17025, *General requirements for the competence of testing and calibration laboratories*

ISO 813, *Rubber, vulcanized or thermoplastic – Determination of adhesion to a rigid substrate – 90 degree peel method*

ISO 4046-4, *Paper, board, pulps and related terms – Vocabulary – Part 4: Paper and board grades and converted products*

ISO 4587:2003, *Adhesives – Determination of tensile lap-shear strength of rigid-to-rigid bonded assemblies*

ISO 5893, *Rubber and plastics test equipment – Tensile, flexural and compression types (constant rate of traverse) – Specification*

ISO 8124-1, *Safety of toys – Part 1: Safety aspects related to mechanical and physical properties*

ISO 11925-2:2010, *Reaction to fire tests – Ignitability of products subjected to direct impingement of flame – Part 2: Single-flame source test*

ISO 23529, *Rubber – General procedures for preparing and conditioning test pieces for physical test methods*

ANSI Z97.1:2009, *Standard – Safety Glazing Materials Used in Buildings – Safety Performance Specifications and Methods of Test*

ANSI/UL 1703: 2015, *Flat-Plate Photovoltaic Modules and Panels*

2DV DR Addition of the following:

UL 790, *Standard Test Methods for Fire Tests of Roof Coverings*

UL 2703, Mounting Systems, Mounting Devices, Clamping/Retention Devices, and Ground Lugs for Use with Flat-Plate Photovoltaic Modules and Panels

UL 62915, Photovoltaic (PV) Modules – Type Approval, Design and Safety Qualification – Retesting

ANSI/NFPA 70, National Electrical Code

3 Terms and definitions

The Clause of Part 1 applies.

4 Test categories

4.1 General

The hazards described in the following subclause might influence the safety of PV modules. In accordance with these hazards, test procedures and criteria are described. The specific tests to which a PV module will be subjected will depend on the end-use application for which the minimum tests are specified in Clause 5.

NOTE Module safety tests are labelled MST.

Table 1 to Table 5 show the origin of the required tests. For some tests, the third column shows for information the origin of the tests, but the appropriate test requirements are given in Clauses 10.1 and 10.32. The other tests are based on or are identical to the module qualification tests MQT defined in the IEC 61215 series. References to the relevant tests are given in the last column. Some of the IEC 61215-based tests were modified for IEC 61730-2 and are included in 10.1 through 10.32.

4.2 Environmental stress tests

Table 1
Environmental stress tests

Test	Title	Referenced Standards	Based on
			IEC 61215-2
MST 51	Thermal cycling (TC50 or TC200)	–	MQT 11
MST 52	Humidity freeze (HF10)	–	MQT 12
MST 53	Damp heat (DH1000)	–	MQT 13
MST 54	UV preconditioning test	–	MQT 10
MST 55	Cold conditioning	IEC 60068-2-1	–
MST 56	Dry hot conditioning	IEC 60068-2-2	–

4.3 General inspection

Table 2
General inspection test

Test	Title	Referenced Standards	Based on
			IEC 61215-2
MST 01	Visual inspection	–	MQT 01
MST 02	Performance at STC	–	MQT 6.1
MST 03	Maximum power determination	–	MQT 02
MST 04	Insulation thickness	IEC 60950-1	–
MST 05	Durability of markings	ISO 8124-1	–
MST 06	Sharp edge test	–	–
MST 07	Bypass diode functionality test	–	–

Table 2DV D2 Modification of Table 2:

Delete the line for MST 04.

4.4 Electric shock hazard tests

These tests are designed to assess the risk to persons due to shock or injury from contact with parts of a PV module that are electrically energised as a result of design, construction, or faults caused by environment or operation.

Table 3
Electrical shock hazard tests

Test	Title	Referenced standards	Based on
			IEC 61215-2
MST 11	Accessibility test	IEC 61032	–
MST 12	Cut susceptibility test	ANSI/UL 1703:2015	–
MST 13	Continuity test for equipotential bonding	ANSI/UL 1703:2015	–
MST 14	Impulse voltage test	IEC 60664-1	–
MST 16	Insulation test	–	MQT 03
MST 17	Wet leakage current test	–	MQT 15
MST 42	Robustness of terminations test	IEC 62790	MQT 14

4.5 Fire hazard tests

These tests assess the potential fire hazard due to the operation of a PV module or failure of its components.

Table 4
Fire hazard tests

Test	Title	Referenced standards	Based on
			IEC 61215-2
MST 21	Temperature test	ANSI/UL 1703:2015	–
MST 22	Hot-spot endurance test	–	MQT 09
MST 23*	Fire test	–	National/Local code
MST 24	Ignitability test	ISO 11925-2	–
MST 25	Bypass diode thermal test	–	MQT 18
MST 26	Reverse current overload test	ANSI/UL 1703:2015	–
* Fire tests are locally regulated and typically only required for building integrated or building added products, typically to verify their ability to resist fire from external sources.			

Table 4DV DR Modification of Table 4:

Delete the line for MST 24.

4.6 Mechanical stress tests

These tests are to minimise potential injury due to mechanical failure.

Table 5
Mechanical stress tests

Test	Title	References in Standards	Based on
			IEC 61215-2
MST 32	Module breakage test	ANSI Z97.1	–
MST 33	Screw connection test	IEC 60598-1	–
MST 34	Mechanical load test	–	MQT 16
MST 35	Peel test	ISO 5893	–
MST 36	Lap shear strength test	ISO 4587:2003	–
MST 37	Materials creep test	–	–
MST 42	Robustness of terminations test		MQT 14

5 Classes and their necessary test procedures

The specific tests to which a PV module will be subjected, depending on the Class defined in IEC 61730-1 referring to IEC 61140, are described in [Table 6](#). The order in which the tests are carried out shall be in accordance with [Figure 1](#). Some tests shall be carried out as preconditioning tests.

Table 6
Required tests, depending on the Class

Class according to IEC 61140			Tests
II	0	III	
X	X	X	Environmental stress tests:
X	X	X	MST 51 Thermal cycling (T50 or T200)
X	X	X	MST 52 Humidity freeze (HF10)
X	X	X	MST 53 Damp heat (DH200 or DH1000)
X	X	X	MST 54 UV pre-conditioning (15 kWh/m ² or 60 kWh/m ²)
X ¹	X ¹	X ¹	MST 55 Cold conditioning
X ¹	X ¹	X ¹	MST 56 Dry hot conditioning
X	X	X	General inspection test:
X	X	X	MST 01 Visual Inspection
X	X	X	MST 02 Performance at STC
X	X	X	MST 03 Maximum power determination
X	X	–	MST 04 Insulation thickness
X	X	X	MST 05 Durability of markings
X	X	X	MST 06 Sharp edge test
X	X	–	Electrical shock hazard tests:
X	X	–	MST 11 Accessibility test
X	X	–	MST 12 Cut susceptibility test
X	X	–	MST 13 Continuity test for equipotential bonding
X	X	–	MST 14 Impulse voltage test
X	X	X	MST 16 Insulation test
X	X	–	MST 17 Wet leakage current test
X	X	X	MST 42 Robustness of terminations test
X	X	X	Fire hazard tests:
X	X	X	MST 21 Temperature test
X	X	X	MST 22 Hot-spot endurance test
X ²	X ²	X ²	MST 23 Fire test
X	X	X	MST 24 Ignitability test
X	X	X	MST 25 Bypass diode thermal test
X	X	–	MST 26 Reverse current overload test
X	–	X	Mechanical stress tests:
X	X	X	MST 32 Module breakage test
X	X	X	MST 33 Screw connection test
X	X	X	MST 34 Mechanical load test
X ^{3,5}	X ^{3,5}	X ^{3,5}	MST 35 Peel test
X ^{4,5}	X ^{4,5}	X ^{4,5}	MST 36 Lap shear strength test
X	X	X	MST 37 Materials creep test
X Test required.			
– Test needs not be carried out.			

Table 6 Continued on Next Page



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Table 6 Continued

Class according to IEC 61140			Tests
II	0	III	
¹ Only required to prove reduction of Pollution Degree PD=2 to PD=1.			
² Fire tests are nationally regulated and typically only required for building integrated or building added products. Hence, the applicability of a fire test does not depend on the Class, but on the mounting location.			
³ This test is not applicable to rigid-to-rigid bonded assemblies (e.g. glass/glass PV modules).			
⁴ This test is not applicable to rigid-to-flexible or flexible-to-flexible bonded assemblies.			
⁵ Only required for proof of cemented joints around the PV module edges.			

Table 6DV D2 Modification of Table 6:

Delete the line for MST 04 and also delete the line for MST 24.

6 Sampling

Nine PV modules and one unframed PV module are used for safety testing (plus spares as desired). In order to prove reduction of Pollution Degree to PD 1, one additional PV module is required.

If cemented joints are to be qualified the following is required:

- An unframed PV module is tested in sequence B (one additional unframed PV module is required) for glass/flexible or flexible/flexible.
- For glass/glass constructions 20 additional samples according to [10.25.2](#) are required for the lap shear strength test (MST 36) to prove cemented joints.

All specimens shall be technically identical (same components). For MST 24, MST 32, and MST 37 PV modules complete in every detail, but not functioning or of low power, etc., are acceptable.

All test specimens except for MST 24, MST 32, MST 35, MST 36, and MST 37 shall be taken at random from a production batch or batches.

Additional PV modules for MST 23 might be necessary (PV modules complete in every detail, but not functioning or of low power, etc., are acceptable).

The PV modules shall have been manufactured from specified materials and components in accordance with the relevant drawings and process sheets and have been subjected to the manufacturer’s normal inspection, quality control and production acceptance procedures. The PV modules shall be complete in every detail and shall be accompanied by the manufacturer’s handling, mounting, and connection instructions. When the PV modules to be tested are prototypes of a new design and not from production, this fact shall be noted in the test report (see [Clause 7](#)).

7 Test report

The results of the assessment against IEC 61730-1 and IEC 61730-2 shall be laid down in one combined or two separate test reports according to ISO/IEC 17025. The results shall be reported, normally in a test report and shall include all the information requested by the client and necessary for the interpretation of the test and all information required by the method used:

- a) a title;
- b) name and address of the test laboratory and location where the tests were carried out;
- c) unique identification of the report and of each page;
- d) name and address of client, where appropriate;
- e) description and identification of the item tested;
- f) characterization and condition of the test item;
- g) date of receipt of test item and date(s) of test, where appropriate;
- h) identification of test method used;
- i) reference to sampling procedure, where relevant;
- j) any deviations from, additions to or exclusions from the test method, and any other information relevant to specific tests, such as environmental conditions or test method or procedure;
- k) measurements, examinations and derived results supported by tables, graphs, sketches and photographs as appropriate including maximum systems voltage, Class according to IEC 61140, mounting technique and any failures observed;
- l) a statement indicating whether the impulse voltage test was performed on PV module or laminate (PV module without a frame);
- m) a statement of the estimated uncertainty of the test results (where relevant);
- n) a signature and title, or equivalent identification of the person(s) accepting responsibility for the content of the report, and the date of issue;
- o) where relevant, a statement to the effect that the results relate only to the items tested;
- p) a statement that the report shall not be reproduced except in full, without the written approval of the laboratory.

A copy of this report shall be kept by the manufacturer for reference purposes.

8 Testing

The PV modules shall be divided into groups and subjected to the safety tests shown in [Figure 1](#), carried out in the order specified. The PV modules shall be selected such that the environmental stress tests of [4.2](#) are met. Each box in [Figure 1](#) refers to the corresponding subclause as described in Clause [4](#).

Spare PV modules may be included in the safety test program provided that they have been appropriately environmentally tested to meet the necessary prerequisites.

Test procedures and criteria, including initial and final measurements where necessary, are detailed in [10.2](#) through [10.33](#). Some tests are identical to tests in IEC 61215-2 and are referenced in Clause [4](#). In

carrying out these tests, the manufacturer's handling, mounting, and connection instructions shall be strictly observed.

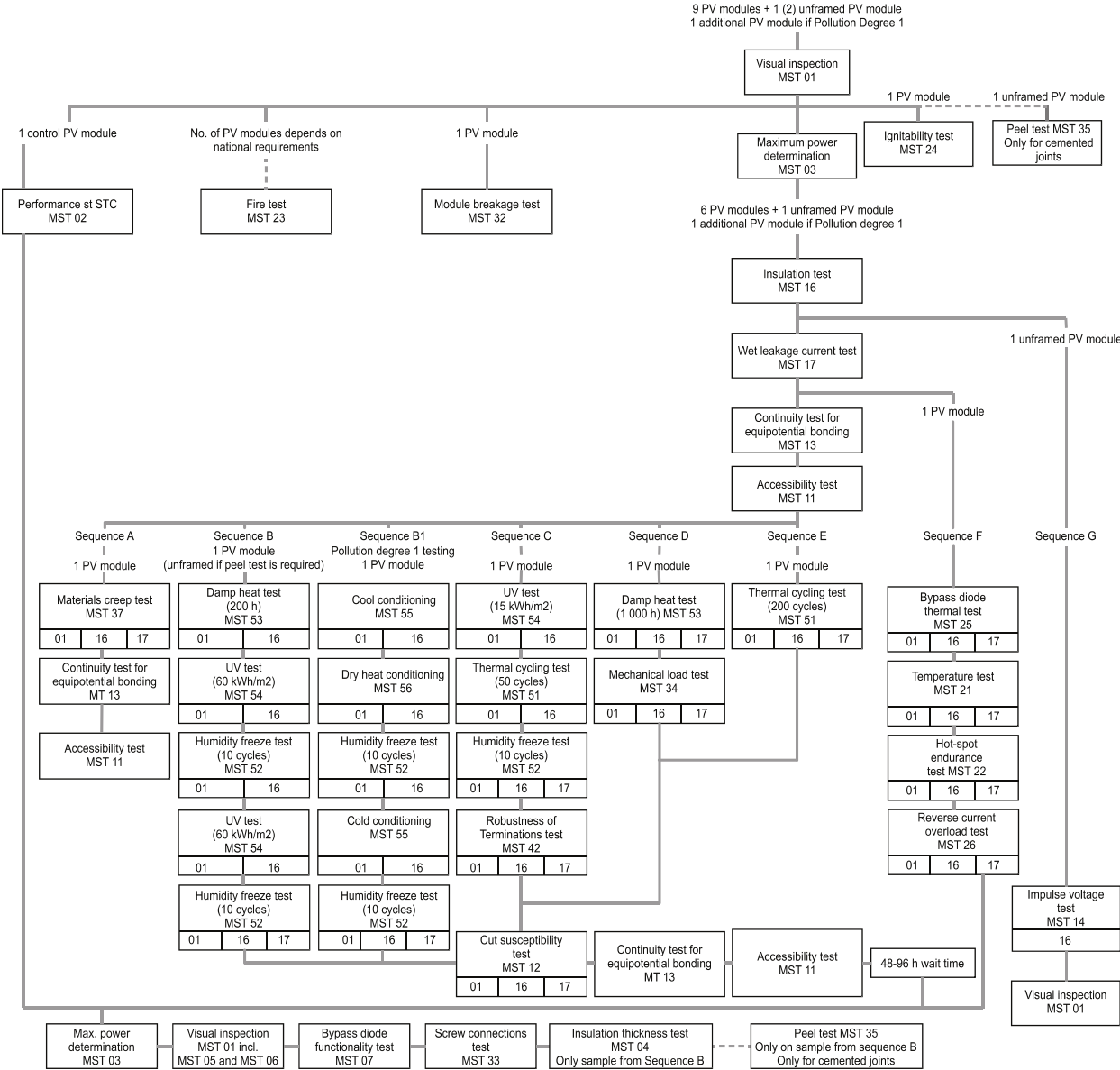
The PV module for sequence B shall be irradiated during the first 60 kWh/m² cycle from the front side of the specimen and from the backside during the second 60 kWh/m² cycle (MST 54). By doing so, the front side and back side of the PV module will be exposed to the same UV dose.

The intermediate control measurements (MST 01, MST 16, MST 17) after each stress test are informative and may be skipped. Final measurements are required.

The wait time (48 h to 96 h) at the end of the sequence shall ensure that a minimum time between the immediate control inspection after completion of each environmental test (time counter starts after completion of MST 51, MST 52 and MST 53) and a second visual inspection is maintained. This is due to possible variation in visual defects apparent a few hours versus several days after an environmental stress test. The wait time does not apply to any other control check other than the visual inspection.

The tests in sequence F may be performed on separate modules. The tests for MST 21 and MST 25 may be performed on specially prepared samples (e.g. thermocouples within the laminate or junction box). If any of the individual tests of the sequence impacts the outcome of one of the subsequent tests, a separate sample shall be used. Potential impact on module output can be verified by MST 02.

The number of PV modules required for the fire test MST 23 will depend on the relevant test procedure.



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Figure 1
Test sequences

Figure 1DV D2 Modification of Figure 1:

Delete the box for MST 04 and also delete the box for MST 24.

9 Pass criteria

The product under evaluation shall be judged to have passed the safety qualification test, if the test samples meet all of the criteria of each individual test and no loss of electrical continuity occurs during testing in sequences A through F. The product is deemed not to comply with this standard if any sample fails in one or more of the tests.

In case of failure the manufacturer is recommended to prepare a failure analysis and propose corrective actions. Depending on the proposed modification(s), a re-evaluation program can be defined before testing (IEC TS 62915), including design review to IEC 61730-1.

9DV D1 Modification in accordance with the following:

Replace the reference to IEC TS 62915 with UL 62915 in the second paragraph.

10 Test procedures**10.1 General**

If not otherwise specified, all applied forces in N shall have an accuracy of 5 %.

If not otherwise specified, all torques (Nm) shall have an accuracy of 5 %.

10.2 Visual inspection MST 01**10.2.1 Purpose**

To detect and document any visual defects and changes in the PV module.

10.2.2 Procedure

This test is identical with MQT 01 of IEC 61215-2 with the additional inspection criteria of

- any other conditions which may affect safety;
- during final inspection check compliance of markings with 5.2 of IEC 61730-1:2016 subsequent to the Durability of markings test (MST 05) as described in [10.6](#).
- during final inspection check for sharp edges as described in [10.7](#) (MST 06).
- during final inspection check of minimum distances as defined in Tables 3 and 4 of IEC 61730-1:2016. See [Figure 2a](#) and [Figure 2b](#) for examples of creepage distance measurement. Bubbles are assumed to be conductive for this evaluation. For clearance and creepage assessment check Figure B.2 of IEC 61730-1:2016.