ICS 27.160 SLOVENSKÁ TECHNICKÁ NORMA September 2021

STN	**Terestriálne fotovoltické (PV) moduly Posúdenie návrhu a typové schválenie Časť 1: Skúšobné požiadavky Oprava AC**	**STN EN IEC 61215-1/AC 36 4630**

Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/21

Obsahuje: EN IEC 61215-1:2021/AC Jun.:2021, IEC 61215-1:2021/COR1:2021

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN IEC 61215-1:2021/AC:2021-06

June 2021

ICS 27.160

English Version

Terrestrial photovoltaic (PV) modules - Design qualification and type approval - Part 1: Test requirements (IEC 61215-1:2021/COR1:2021)

Modules photovoltaïques (PV) pour applications terrestres - Qualification de la conception et homologation - Partie 1: Exigences d'essai (IEC 61215-1:2021/COR1:2021)

Terrestrische Photovoltaik(PV)-Module - Bauarteignung und Bauartzulassung - Teil 1: Prüfanforderungen (IEC 61215-1:2021/COR1:2021)

This corrigendum becomes effective on 11 June 2021 for incorporation in the English language version of the EN.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Endorsement notice

The text of the corrigendum IEC 61215-1:2021/COR1:2021 was approved by CENELEC as EN IEC 61215-1:2021/AC:2021-06 without any modification.

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC 61215-1
Edition 2.0 2021-02

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

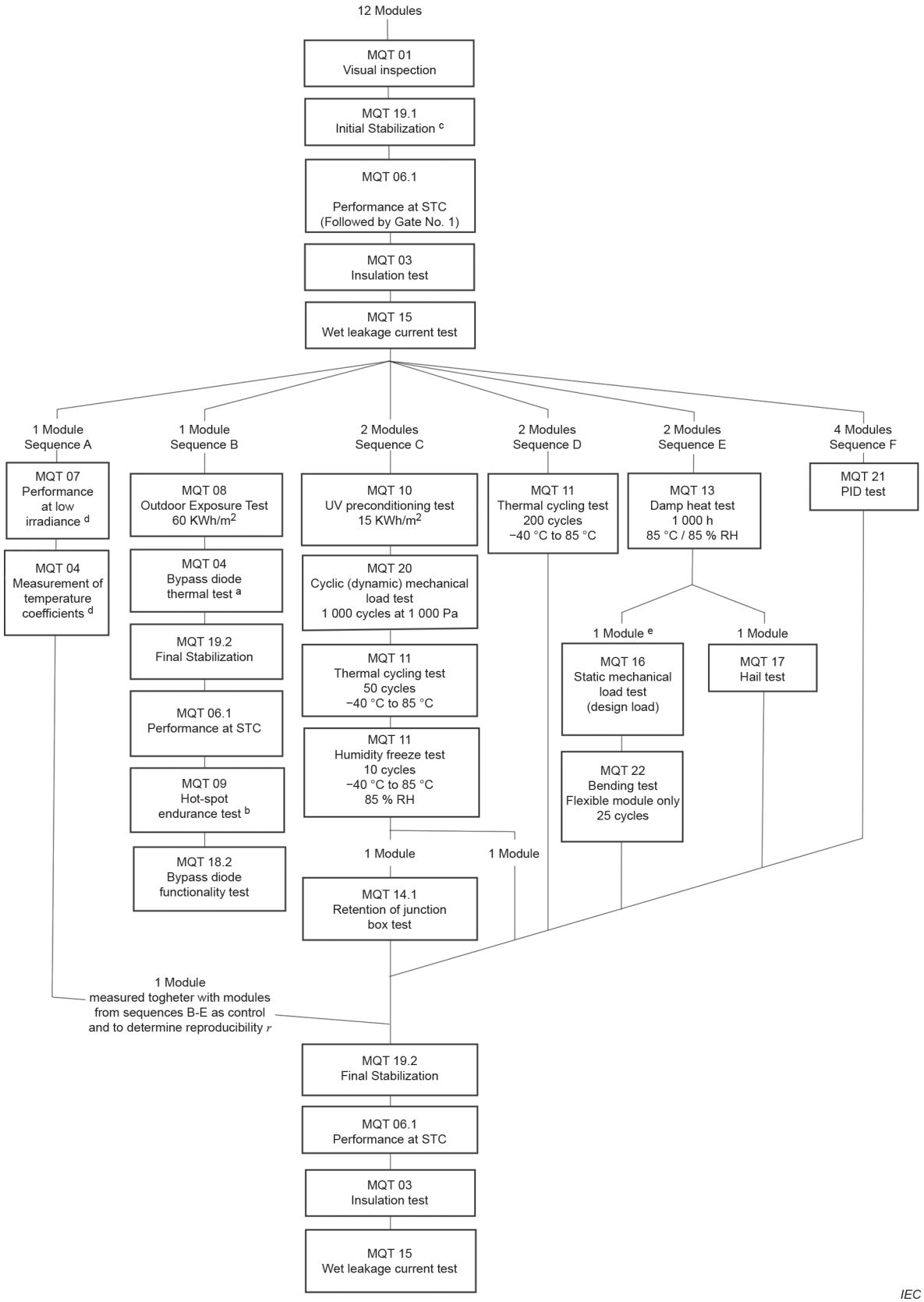
Part 1: Test requirements

CORRIGENDUM 1

This correction applies only to the English version.

Replace the existing Figure 2 by the following new Figure 2.

IEC 61215-1:2021-02/COR1:2021-05(en)


12 Modules
MQT 01 Visual inspection
MQT 19.1 Initial Stabilization c
MQT 06.1 Performance at STC (Followed by Gate No. 1)
MQT 03 Insulation test
MQT 15 Wet leakage current test
1 Module Sequence A
1 Module Sequence B
2 Modules Sequence C
2 Modules Sequence D
2 Modules Sequence E
4 Modules Sequence F
MQT 07 Performance at low irradiance d
MQT 04 Measurement of temperature coefficients d
MQT 08 Outdoor Exposure Test 60 KWh/m2
MQT 04 Bypass diode thermal test a
MQT 19.2 Final Stabilization
MQT 06.1 Performance at STC
MQT 09 Hot-spot endurance test b
MQT 18.2 Bypass diode functionality test
MQT 10 UV preconditioning test 15 KWh/m2
MQT 20 Cyclic (dynamic) mechanical load test 1 000 cycles at 1 000 Pa
MQT 11 Thermal cycling test 50 cycles −40 °C to 85 °C
MQT 11 Humidity freeze test 10 cycles −40 °C to 85 °C 85 % RH
1 Module
MQT 14.1 Retention of junction box test
MQT 11 Thermal cycling test 200 cycles −40 °C to 85 °C
1 Module
MQT 13 Damp heat test 1 000 h 85 °C / 85 % RH
1 Module e
MQT 16 Static mechanical load test (design load)
MQT 22 Bending test Flexible module only 25 cycles
1 Module
MQT 17 Hail test
MQT 21 PID test
1 Module measured togheter with modules from sequences B-E as control and to determine reproducibility r
MQT 19.2 Final Stabilization
MQT 06.1 Performance at STC
MQT 03 Insulation test
MQT 15 Wet leakage current test
IEC

[a] If the bypass diodes are not accessible in the standard modules, a special sample can be prepared for the bypass diode thermal test (MQT 18.1). The bypass diode should be mounted physically as it would be in a standard module, with lead wires attached, as required in MQT 18 of IEC 61215-2:2021. This sample does not have to go through the other tests in the sequence.

[b] In sequence B, a different module may be used for the Hot-spot endurance test (MQT 09) than is used for the bypass thermal diode test (MQT 18.1). For this separate module the following test sequence is permissible:

MQT 01, MQT 19.1, MQT 06.1 (gate 1), MQT 03, MQT 15, MQT 09, and MQT 18.2.

MQT 17

[c] The initial stabilization MQT 19.1 may include the verification of an alternate stabilization procedure (see IEC 61215-2:2021).

[d] In Sequence A, tests MQT 07, and MQT 04 may be performed in any order. These tests may also be performed on separate modules (rather than sequential tests on one module), provided that each module used has proceeded through the entire test flow preceding sequence A.

[e] If representative samples are utilized in Sequence E, one extra module, full-sized, is required, and shall be subjected only to MQT 16 and the requirements therein.

Figure 1 – Full test flow for design qualification and type approval of photovoltaic modules