IEC TS 62804-1:2015

Photovoltaic (PV) Modules - Test Methods for the detection of potential-induced degradation
Part 1: Crystalline silicone
Confirmation of test results

Ref.: 10311/2023-40045

Applicant: Zhejiang Beyondsun Green Energy Technology Co., Ltd.
No.888, Zhili Section of G318 Zhili Town, Huzhou City, Zhejiang province, China.

Product: Crystalline silicon Photovoltaic (PV)-Modules

Type:

BZ) TSHNMXXX-144HV	CA) TSHNMXXX-132HV
CB) TSHNMXXX-120HV	CC) TSHNMXXX-108HV
CD) TSBHNMXXX-144HVG	CE) TSBHNMXXX-132HVG
CF) TSBHNMXXX-120HVG	CG) TSBHNMXXX-108HVG

XXX in the type replaces the power in watt and can be any number between:

560 – 595 for BZ),CD)	515 – 545 for CA),CE)
470 – 495 for CB),CF)	420 – 445 for CC),CG)

Manufacturer: Zhejiang Beyondsun Green Energy Technology Co., Ltd.

Standard: IEC TS 62804-1:2015

Test conditions

Testing time:	192 h
Chamber temperature:	85°C
Relative Humidity:	85 %
Potential to ground:	- 1500 V / +1500V

Pass criteria

Power degradation:	< 5%
Dry Insulation:	> 40 MΩm²
Wet insulation:	> 40 MΩm²

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Summary of test results:

Maximum power degradation:	allowed	max. 5 %
	measured	max. 0.99 %

The measured degradation is below the allowed degradation.

Dry insulation resistance:	required	min. 40 MΩm²
	measured	>1500 MΩ

The measured dry insulation resistance is above the minimum required dry insulation resistance.

Wet insulation resistance:	required	min. 40 MΩm²
	measured	>1500 MΩ

The measured wet insulation resistance is above the minimum required wet insulation resistance.

Visual inspection: No findings

The complete test results and the relevant bill of materials are given in Test Report No.: TRPVM-2023-40045-3, dated 2023-07-14.

VDE Renewables GmbH

Dean Wen ***Thomas Hartmann***

63755 Alzenau, 2023-07-14