

## IEC 61701:2020

## Salt mist corrosion testing of photovoltaic (PV) modules

Confirmation of test results

VDE Renewables File Ref.: 10011/ ET-20221016-187

**Applicant:** Wuxi Suntech Power Co., Ltd.

16 Xin Hua Road, Xinwu District, 214028 Wuxi City, China

**Product:** Crystalline silicon Photovoltaic (PV)-Modules

Type: A) STPXXXS-C72/Nsh+ B) STPXXXS-C54/Nshb+

B) STPXXXS-C54/Nsh+ B) STPXXXS-C54/Nshm+

XXX in the type replace the power in Watt and can be any number between:

545 - 580 for A; 405 - 435 for B

Manufacturer: Wuxi Suntech Power Co., Ltd.

**Standard:** IEC 61701:2020, Salt mist corrosion test

**Test conditions** 

Test method: 6

Testing time: 1344 hrs

Chamber temperature: 40°C

Relative Humidity: 93 %

Mist pH level: 7

Pass criteria

Power degradation: < 5%

Dry Insulation:  $> 40 \text{ M}\Omega\text{m}^2$ 

Wet insulation:  $> 40 \text{ M}\Omega\text{m}^2$ 

Ground continuity:  $< 0.1\Omega$ 

Bypass diode functionality: Shall be functional after test

BIC: DEUTDEFFXXX



## **Summary of test results:**

Maximum power degradation: allowed

measured max. 0.86 %

max. 5 %

The measured degradation is below the allowed degradation.

**Dry insulation resistance:** required min. 15.5 M $\Omega$ 

measured  $>500 M\Omega$ 

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required min. 15.5 M $\Omega$ 

measured  $>500 M\Omega$ 

The measured wet insulation resistance is above the limit.

Visual inspection: No findings

**Ground continuity test:** allowed max.  $0.1\Omega$ 

measured max.  $0.0171\Omega$ 

Bypass diode functionality test: Still functional after test

The complete test results and the relevant bill of materials are given

in Test Report No.: TRPVM-ET-20221016-187-13

**VDE Renewables GmbH** 

Zhiyao Wang

Dean Wen

Shanghai, 2023-02-12

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