



IEC 61701:2011
Photovoltaic (PV) modules
- Salt mist corrosion testing -
Confirmation of test results

VDE Renewables File Ref.: 10460/2019-40178

Applicant: GCLE-EXE Energy Industry Co. Ltd.
501-2 Manufacturing Park, 65 Dacang Road,
213000 Zhonglou, Jiangsu, China

Product: Crystalline silicon Photovoltaic (PV)-Modules

Type: **A) A-MXXX/60**
B) A-PXXX/60
C) A-HCMXXX/120

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

300 – 340 for A)
280 – 295 for B)
310 – 345 for C)

Manufacturer: GCLE-EXE Industry Co. Ltd, Jiangsu Nantong
China

Standard IEC 61701:2011, Salt Mist Corrosion Testing
of Photovoltaic (PV) Modules

Test conditions

Severity level: 1
Total testing time: 672 h
Chamber temperature: 40°C
Relative Humidity: 93 %
Mist pH level: 7

Pass criteria

Power degradation: < 5%
Dry Insulation: > 40 MΩm²
Wet insulation: > 40 MΩm²
Ground continuity: < 0.1Ω
Visual Inspection: No findings

Bypass diode functionality: Shall be functional after test



Summary of test results:

Maximum power degradation: allowed max. 5 %
measured max. 0.64 %

The measured degradation is below the allowed degradation.

Dry insulation resistance: required min. 24.46 M Ω
measured >1000 M Ω

The measured dry insulation resistance is above the limit.

Wet insulation resistance: required min. 24.46 M Ω
measured >1000 M Ω

The measured wet insulation resistance is above the limit.

Ground continuity test: required max. 0.1 Ω
measured max. 0.0017 Ω


Visual inspection: No findings

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-2019-40178-5.

VDE Renewables GmbH


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63755 Alzenau, 2020-01-28