



TS IEC 62804-1:2015

Photovoltaic (PV) Modules - Test Methods for the detection of potential-induced degradation

Part 1: Crystalline silicone

Ref.: 5017538-3972-0001
10018/2016-40250

Applicant: REC Solar Pte Ltd, 20 Tuas South Avenue 14, 637312
Singapore

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type:

| | |
|-----------------------|--------------------------------------|
| A) RECxxxPE# | REC Peak Energy Series |
| A) RECxxxPE Plus# | REC Peak Energy Plus Series |
| A) RECxxxPED# | REC Peak Energy Dark Series |
| A) RECxxxPEI# | REC Peak Energy Integrated Series |
| A) RECxxxPE-EU# | REC Peak Energy EU Series |
| A) RECxxxPE2# | REC Peak Energy 2 Series |
| A) RECxxxPE Z-Link# | REC Peak Energy Z-Link Series |
| A) RECxxxPE Z-Link-S# | REC Peak Energy Z-Link-S Series |
| A) RECxxxPEM# | REC Peak Energy Mono Series |
| A) RECxxxPE Z-Link-M# | REC Peak Energy Z-Link-M Series |
| A) RECxxxPE2M# | REC Peak Energy 2 Mono Series |
| B) RECxxxPE 72# | REC Peak Energy 72 Series |
| B) RECxxxPEM 72# | REC Peak Energy Mono 72 Series |
| B) RECxxxPE2 72# | REC Peak Energy 2 72 Series |
| B) RECxxxPE2M 72# | REC Peak Energy 2 Mono 72 Series |
| B) RECxxxPE2S 72# | REC Peak Energy 2S 72 Series |
| B) RECxxxPE2SM 72# | REC Peak Energy 2S Mono 72 Series |
| C) RECxxxTP# | REC TwinPeak Series |
| C) RECxxxTP2# | REC TwinPeak 2 Series |
| C) RECxxxTP2L# | REC TwinPeak 2L Series |
| C) RECxxxTP2M# | REC TwinPeak 2 Mono Series |
| C) RECxxxTP2SM# | REC TwinPeak 2S Mono Series |
| C) RECxxxTP2SL# | REC TwinPeak 2SL Series |
| D) RECxxxPE 72 XV# | REC Peak Energy 72 XV Series |
| D) RECxxxPE2 72 XV# | REC Peak Energy 2 72 XV Series |
| D) RECxxxPE2M 72 XV# | REC Peak Energy 2 Mono 72 XV Series |
| D) RECxxxPE2S 72 XV# | REC Peak Energy 2S 72 XV Series |
| D) RECxxxPE2SM 72 XV# | REC Peak Energy 2S Mono 72 XV Series |
| E) RECxxxTP 72# | REC TwinPeak 72 Series |
| E) RECxxxTP2M 72# | REC TwinPeak 2 Mono 72 Series |
| E) RECxxxTPM 72# | REC TwinPeak Mono 72 Series |
| E) RECxxxTP2 72# | REC TwinPeak 2 72 Series |
| E) RECxxxTP2S 72# | REC TwinPeak 2S 72 Series |
| E) RECxxxTP2SM 72# | REC TwinPeak 2S Mono 72 Series |
| F) RECxxxTP 72 XV# | REC TwinPeak 72 XV Series |
| F) RECxxxTP2 72 XV# | REC TwinPeak 2 72 XV Series |
| F) RECxxxTP2M 72 XV# | REC TwinPeak 2 Mono 72 XV Series |
| F) RECxxxTP2S 72 XV# | REC TwinPeak 2S 72 XV Series |
| F) RECxxxTP2SM 72 XV# | REC TwinPeak 2S Mono 72 XV Series |

xxx in the type number replaces the power in Watt at STC and can be any number between: 205 – 295 for A), 285 – 370 for B) & D), 260 – 310 for C), 310 – 380 for E) & F)

in the type number can be with or without any of the following suffixes or a combination of these: ECO, BLK, BLK2, IQ





TS IEC 62804-1:2015

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

Manufacturer: REC Solar Pte Ltd
Standard: TS IEC 62804-1:2015, modified

Test conditions

Testing time: 600 h
Chamber temperature: 85°C
Relative Humidity: 85 %
Potential to ground: - 1500 V

Pass criteria

Power degradation: < 5%

Summary of test results:

Maximum power degradation: required max. 5 %
measured max. 1.15 %

The measured degradation is below the allowed degradation.

Visual inspection: No findings

The complete test results are given in Test Report No.: TRPVM-2016-40250-1, TRPVM-2016-40250-2 and TRPVM-2016-40250-3.

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE Testing and Certification Institute
Fachgebiet ET2 / Section ET2

Akio Sato

Arnd Roth

63069 Offenbach, 2017-01-13





TS IEC 62804-1:2015

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

Ref.: 10018/2017-40431

Applicant: REC Solar Pte., Ltd.
20 Tuas South Avenue 14, 637312 Singapore

Product: Crystalline Silicon Photovoltaic (PV)-Modules

Type: RECxxxNP

XXX in the type replaces the power in Watt at STC and can be any number between 295 – 330.

Optional the type can also include at the end any of the following suffixes, or a combination of these: ECO, BLK, BLK2, IQ

Manufacturer: REC Solar Pte Ltd

Standard: TS IEC 62804-1:2015

Test conditions

Testing time: 600 h

Chamber temperature: 85°C

Relative Humidity: 85 %

Potential to ground: +1000 V/-1000 V

Pass criteria:

Power degradation: < 5%

Summary of test results:

Maximum power degradation: allowed max. 5 %
measured max. 3.85 %

The measured degradation is below the allowed degradation.

Visual inspection: No findings

The complete test results and the relevant BOM are given in Test Report No.: TRPVM-2017-40432-1

VDE Renewables GmbH

Akio Sato

Arnd Roth

63755 Alzenau, 2018-08-13