

CERTIFICATE

TÜV NORD CERT GmbH

herewith declares that

Solar Fabrik GmbH

Hermann-Niggemann-Straße 7

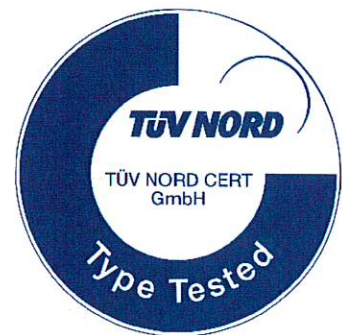
D-63846 Laufach

Germany

is authorized to provide the product mentioned below with the mark as illustrated:

Description of product (details see Annex 2):

Crystalline Silicon Terrestrial Photovoltaic (PV) Modules



Valid from: 2025-02-26

Valid until: 2029-04-15

Certification program:	P12-VA-01 Rev. 17 09.20
Certification fundamental(s):	IEC 61215-1:2021 / EN IEC 61215-1:2021; IEC 61215-1-1:2021 / EN IEC 61215-1-1:2021; IEC 61215-2:2021 / EN IEC 61215-2:2021; IEC 61730-1:2023; IEC 61730-2:2023.
Registered No.:	44 780 24 406749 - 310R1M1
Manufacturer and factory(-ies):	See Annex 1
Test Report No.:	492013321.002
File No.:	PVP01098/25P



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Essen, 2025-02-26

Please also pay attention to the information stated overleaf.

Anlage 1 zum Zertifikat Nr.: / Annex 1 to Certificate No.: 44 780 24 406749 - 310R1M1

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Aktenzeichen: / File reference: PVP01098/25P

2025-02-26

Manufacturer and factory(-ies):

Manufacturer: **Solar Fabrik GmbH**
Hermann-Niggemann-Straße 7, D-63846 Laufach, Germany

Factory: **Coded by debtor no. 55560544**

Factory inspection report no.: 862010664.003

Remark:

Factory inspection is mandatory to be performed annually. Please refer to factory inspection report for detailed information.

A handwritten signature in blue ink, appearing to read "Robert Albrecht".

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Description of product(s):

Module types:

Double Glass PV Modules with Half-cut 182mm TOPCon Mono-crystalline Silicon Solar Cells:

156 cells: S4-DGxxx-156IVP (xxx= 610-635, in steps of 5)

144 cells: S4-DGxxx-144IVP (xxx= 565-605, in steps of 5)

144 cells: S4-DGxxx-144T Secure (xxx= 565-605, in steps of 5)

132 cells: S4-DGxxx-132IVP (xxx= 520-555, in steps of 5)

120 cells: S4-DGxxx-120IVP (xxx= 470-505, in steps of 5)

108 cells: S4-DGxxx-108IVP (xxx= 425-450, in steps of 5)

96 cells: S4-DGxxx-96AVP (xxx= 375-390, in steps of 5)

72 cells: S4-DGxxx-72AVP (xxx= 280-290, in steps of 5)

Remark: xxx indicates rated output power generated from front side only at STC.

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 30A

Electrical protection class: Class II

Pollution degree: 1

98th percentile module operating temperature (T₉₈): 70°C

Design load (positive / negative): 3600Pa / 1600Pa or 4733Pa / 3600Pa, refer CDF for details

Safety factors: 1.5

Fire safety class: Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:

Double Glass PV Modules with Half-cut 210mm TOPCon Mono-crystalline Silicon Solar Cells:

132 cells: S4-DGxxx-132TPrj (xxx=680-730, in steps of 5)

120 cells: S4-DGxxx-120TPrj (xxx=615-660, in steps of 5)

56 cells: S4-DGxxx-56TRP (xxx=285-305, in steps of 5)

48 cells: S4-DGxxx-48TRP (xxx=245-265, in steps of 5)

Remark: xxx indicates rated output power generated from front side only at STC.

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 35A

Electrical protection class: Class II

Pollution degree: 1

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98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	Double Glass PV Modules with Half-cut 182.2mm x 191.6mm TOPCon Mono-crystalline Silicon Solar Cells: 144 cells: S4-DGxxx-144T2 (xxx=595-615, in steps of 5) 132 cells: S4-DGxxx-132T2 (xxx=545-560, in steps of 5) 120 cells: S4-DGxxx-120T2 (xxx=495-510, in steps of 5) 108 cells: S4-DGxxx-108T2 (xxx=445-460, in steps of 5) Remark: xxx indicates rated output power generated from front side only at STC.
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Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Module types:	Double Glass PV Modules with Half-cut 182.2mm x 199mm TOPCon Mono-crystalline Silicon Solar Cells: 144 cells: S4-DGxxx-144T3 (xxx=615-640, in steps of 5) 132 cells: S4-DGxxx-132T3 (xxx=565-585, in steps of 5) 120 cells: S4-DGxxx-120T3 (xxx=515-530, in steps of 5) 108 cells: S4-DGxxx-108T3 (xxx=460-480, in steps of 5) Remark: xxx indicates rated output power generated from front side only at STC.
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Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1



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98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)
Module types:	Double Glass PV Modules with Half-cut 182.2mm x 210mm TOPCon Mono-crystalline Silicon Solar Cells: 132 cells: S4-DGxxx-132TMax (xxx=595-635, in steps of 5) 120 cells: S4-DGxxx-120TMax (xxx= 545-575, in steps of 5) 108 cells: S4-DGxxx-108TMax (xxx= 485-520, in steps of 5) 96 cells: S4-DGxxx-96TMax (xxx=435-460, in steps of 5) 96 cells: S4-DGxxx-96T Secure (xxx=435-460, in steps of 5) Remark: xxx indicates rated output power generated from front side only at STC.
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)
Module types:	Double Glass PV Modules with Half-cut 182.2mm x 169.25mm TOPCon Mono-crystalline Silicon Solar Cells: 156 cells: S4-DGxxx-156TP (xxx=560-595, in steps of 5) 144 cells: S4-DGxxx-144TP (xxx=515-550, in steps of 5) 120 cells: S4-DGxxx-120TP (xxx=430-455, in steps of 5) Remark: xxx indicates rated output power generated from front side only at STC.
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1



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98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)
Module types:	Double Glass PV Modules with Half-cut 182mm x 188mm TOPCon Mono-crystalline Silicon Solar Cells: 144 cells: S4-DGxxx-144T (xxx=580-615, in steps of 5) 132 cells: S4-DGxxx-132T (xxx=530-560, in steps of 5) 120 cells: S4-DGxxx-120T (xxx=485-510, in steps of 5) 108 cells: S4-DGxxx-108T (xxx=435-460, in steps of 5) Remark: xxx indicates rated output power generated from front side only at STC.
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
Pollution degree:	1
98th percentile module operating temperature (T_{98})	70°C
Design load (positive / negative):	3600Pa / 1600Pa, refer CDF for details
Safety factors:	1.5
Fire safety class:	Class A according to ANSI/UL 1703-2018 (as per ANSI/UL 790-2018)

Remark:

For detailed product information, please refer to CDF (Constructional Data Form) attached to test report with same file no.



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