

Certificate

This certifies that the company:

Shanghai JA Solar Technology Co., Ltd.
No. 118, Lane 3111, West Huancheng Road,
Fengxian District, Shanghai, 201401,
P.R. China

is authorized to provide the product(s) mentioned below with the mark as illustrated.

Manufacturer and factory(-ies): See Annex 1

Description of product(s) **Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**
(details see Annex 2):

Certification program: P12-VA-01 Rev. 17 / 09.20

Certification fundamental(s): IEC 62716:2013 / EN 62716:2013

It is certified by TÜV NORD CERT GmbH that the product(s) described above has(have) been assessed according to the certification program mentioned above and found in compliance with the requirements of above specified certification fundamental(s). This certification is based on evaluation results as documented in test report(s) referenced below and production site(s) audit results as documented in factory inspection report(s) referenced in Annex 1. This certificate is valid in conjunction with these quoted report(s).

Registration no.: 44 780 23 406749 - 192R14A8M15

Report no.: 492012552.017

Valid from: 2025-09-08

File no.: PVP03180/25P-02

Valid until: 2026-09-29



Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Please also pay attention to the information stated overleaf.

TÜV®



Visit our database to
verify the validity of
this certificate.

Annex 1

to certificate registration no. 44 780 23 406749 - 192R14A8M15

Manufacturer:	Shanghai JA Solar Technology Co., Ltd. No. 118, Lane 3111, West Huancheng Road, Fengxian District Shanghai 201401, P.R. China
Factory 1:	Shanghai JA Solar Technology Co., Ltd. No. 118, Lane 3111, West Huancheng Road, Fengxian District Shanghai 201401, P.R. China
Factory inspection report no.:	862010153.013
Factory 2:	Hefei JA Solar Technology Co., Ltd. No. 999, Chang Ning Road, Hi-tech Zone, Hefei 230088, P.R. China
Factory inspection report no.:	862010241.012
Factory 3:	JA Solar (Xingtai) Co., Ltd. No. 1688, Chang An Road, Xingtai Economic Development Area Xingtai City, Hebei Province, 054001, P.R. China
Factory inspection report no.:	862010290.010
Factory 4:	JA Solar New Energy Yangzhou Co., Ltd. No.1, Jinhui Road, Economic Development Zone Yangzhou, Jiangsu Province, 225131, P.R. China.
Factory inspection report no.:	862010496.006
Factory 5:	Yiwu JA Solar Technology Co., Ltd. No. 165, Tongze Road, Yiting Town, Yiwu City, Zhejiang Province, 322000, P.R. China.
Factory inspection report no.:	862010513.006
Factory 6:	JA Solar Viet Nam Company Limited Lot G, Quang Chau Industrial park, Nenh Ward, Bac Ninh Province Vietnam
Factory inspection report no.:	862010560.004

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Page 1 of 2

Factory 7:	JA Solar New Energy Yangzhou Co., Ltd. (Jingshan Park) No.123, Jinshan Road, Economic Development Zone, Yangzhou, Jiangsu Province, 225131, P.R. China.
Factory inspection report no.:	862010584.005
Factory 8:	Dongtai JA Solar Technology Co., Ltd. No.8 Zaofeng North Road, Dongtai High-tech Zone, Dongtai City, 224248 Yancheng City, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA
Factory inspection report no.:	862010802.003
Factory 9:	QuJing JA Solar Technology Co., Ltd. North of Nanhai Avenue and East of Shaoxi Road, Qujing Economic and Technological Development Zone, 655000 Qujing City, Yunnan Province, PEOPLE'S REPUBLIC OF CHINA
Factory inspection report no.:	862010866.002
Factory 10:	Inner Mongolia JA Solar PV Technology Co., Ltd. No.21, Zhuangbei Avenue, Xin Guihua Area, Equipment park, Qingshan District, 014000 Baotou, Inner Mongolia Autonomous Region, PEOPLE'S REPUBLIC OF CHINA
Factory inspection report no.:	862010874.002
Factory 11:	Ordos JA Solar Technology Co., Ltd. Room 2007, Office Building, High-tech Industrial Development Zone, Dongsheng District Equipment Manufacturing Base, 017000 Ordos City, Inner Mongolia, PEOPLE'S REPUBLIC OF CHINA
Factory inspection report no.:	862011003.002
Factory 12:	Inner Mongolia JA Naoer New Energy Co., Ltd. No.4 Xinhua East Street, Economic and Technological Development Zone, Bayannur City 015000 Inner Mongolia Autonomous Region, PEOPLE'S REPUBLIC OF CHINA
Factory inspection report no.:	862011027.002
Factory 13:	MEM PANEL SOLAR ENERJI SANAYI VETICARET A.S Organized Industrial Site 3. Street No: 4 Onikisubat, 46050 Kahramanmaraş, TURKIYE
Factory inspection report no.:	862011040.001
Factory 14:	American Panel Solutions LLC 1975 South 99th Avenue, Phoenix, AZ85353, USA
Factory inspection report no.:	862011080.001

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

Essen, 2025-09-08

Certification Body - Consumer Products



TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Annex 2

to certificate registration no. 44 780 23 406749 - 192R14A8M15

Description of product(s):

Module types:

PV Modules with Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAM6(L)-72- xxx (xxx=295-335, in steps of 5)
72 cells: JAM6-72- xxx/SI (xxx=285-325, in steps of 5)
72 cells: JAM6(R)-72-xxx (xxx=295-340, in steps of 5)
72 cells: JAM6(R)-72-xxx/PR (xxx=330-350, in steps of 5)
72 cells: JAM6-72-xxx/PR (xxx=325-345, in steps of 5)
72 cells: JAM6(L)-72-xxx/PR (xxx=325-345, in steps of 5)
72 cells: JAM6(K)-72-xxx/4BB (xxx=320-345, in steps of 5)
72 cells: JAM6(K)-72-xxx/PR (xxx=325-370, in steps of 5)
72 cells: JAM72S02-xxx/PR (xxx=325-390, in steps of 5)
72 cells: JAM72S01-xxx/PR/1000V (xxx=345-390, in steps of 5)
72 cells: JAM72S01-xxx/SC/1000V (xxx=320-365, in steps of 5)
72 cells: JAM72S01-xxx/MR/1000V (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/PR/1000V (xxx=370-405, in steps of 5)
72 cells: JAM72S09-xxx/BP/1000V (xxx=375-385, in steps of 5)
72 cells: JAM72S02-xxx/PR/1000V (xxx=345-390, in steps of 5)
72 cells: JAM72S02-xxx/SC/1000V (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/MR/1000V (xxx=365-385, in steps of 5)
72 cells: JAM72S12-xxx/PR/1000V (xxx=365-385, in steps of 5)
60 cells: JAM6(L)-60-xxx (xxx=255-280, in steps of 5)
60 cells: JAM6-60-xxx/SI (xxx=235-280, in steps of 5)
60 cells: JAM6(FA)-60-xxx/SI (xxx=255-275, in steps of 5)
60 cells: JAM6(R)(FA)-60-xxx (xxx=260-280, in steps of 5)
60 cells: JAM6(R)-60-xxx (xxx=255-280, in steps of 5)
60 cells: JAM6(R)-60-xxx/PR (xxx=280-300, in steps of 5)
60 cells: JAM6-60-xxx/PR (xxx=275-295, in steps of 5)
60 cells: JAM6(L)-60-xxx/PR (xxx=270-295, in steps of 5)
60 cells: JAM6(K)-60-xxx/4BB (xxx=265-285, in steps of 5)
60 cells: JAM6(K)-60-xxx/PR (xxx=275-310, in steps of 5)
60 cells: JAM60S02-xxx/PR (xxx=280-325, in steps of 5)
60 cells: JAM60S01-xxx/PR/1000V (xxx=285-325, in steps of 5)
60 cells: JAM60S01-xxx/SC/1000V (xxx=265-305, in steps of 5)
60 cells: JAM60S01-xxx/MR/1000V (xxx=305-320, in steps of 5)
60 cells: JAM60S09-xxx/PR/1000V (xxx=310-335, in steps of 5)
60 cells: JAM60S09-xxx/BP/1000V (xxx=315-320, in steps of 5)
60 cells: JAM60S02-xxx/PR/1000V (xxx=285-325, in steps of 5)



Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 1 of 19

Maximum system voltage:	1000V
Maximum overcurrent protection rating:	20A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with 125mm Mono-crystalline Silicon Solar Cells: 72 cells: JAM5-72-xxx/SI (xxx=180-210, in steps of 5) 72 cells: JAM5(L)-72-xxx/SI (xxx=180-220, in steps of 5) 72 cells: JAM5(R)-72-xxx (xxx=195-220, in steps of 5)
Maximum system voltage:	1000V
Maximum overcurrent protection rating:	10A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm): 72 cells: JAM72S03-xxx/PR/1000V (xxx=360-395, in steps of 5) 72 cells: JAM72S10-xxx/PR/1000V (xxx=380-410, in steps of 5) 72 cells: JAM72S10-xxx/BP/1000V (xxx=385-400, in steps of 5) 72 cells: JAM72S10-xxx/MR/1000V (xxx=390-430, in steps of 5) 72 cells: JAM72S10-xxx/MB/1000V (xxx=395-415, in steps of 5) 72 cells: JAM72S08-xxx/PR/1000V (xxx=360-395, in steps of 5) 72 cells: JAM72S17-xxx/PR/1000V (xxx=380-390, in steps of 5) 72 cells: JAM72S17-xxx/MR/1000V (xxx=390-430, in steps of 5) 72 cells: JAM72S17-xxx/GR/1000V (xxx=385-400, in steps of 5) 60 cells: JAM60S03-xxx/PR/1000V (xxx=300-330, in steps of 5) 60 cells: JAM60S10-xxx/PR/1000V (xxx=315-345, in steps of 5) 60 cells: JAM60S10-xxx/BP/1000V (xxx=320-330, in steps of 5) 60 cells: JAM60S10-xxx/MR/1000V (xxx=325-355, in steps of 5) 60 cells: JAM60S10-xxx/MB/1000V (xxx=330-345, in steps of 5) 60 cells: JAM60S08-xxx/PR/1000V (xxx=300-330, in steps of 5) 60 cells: JAM60S17-xxx/PR/1000V (xxx=315-325, in steps of 5) 60 cells: JAM60S17-xxx/MR/1000V (xxx=315-355, in steps of 5) 78 cells: JAM78S10-xxx/MR/1000V (xxx=435-465, in steps of 5)

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Maximum system voltage:	66 cells: JAM66S10-xxx/MR/1000V (xxx=345-390, in steps of 5) 1000V
Maximum overcurrent protection rating:	20A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C

Module types:

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):

72 cells: JAM72S20-xxx/MR/1000V (xxx=430-470, in steps of 5)
72 cells: JAM72S20-xxx/MB/1000V (xxx=450-465, in steps of 5)
60 cells: JAM60S20-xxx/MR/1000V (xxx=355-390, in steps of 5)
60 cells: JAM60S21-xxx/MR/1000V (xxx=355-390, in steps of 5)
60 cells: JAM60S20-xxx/MB/1000V (xxx=375-390, in steps of 5)
Maximum system voltage: 1000V
Maximum overcurrent protection rating: 25A
Electrical protection class: Class II
98 th percentile module operating temperature (T ₉₈): 70°C

Module types:

PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:

60 cells: JAM60S30-xxx/MR/1000V (xxx=435-460, in steps of 5)
66 cells: JAM66S30-xxx/MR/1000V (xxx=470-510, in steps of 5)
72 cells: JAM72S30-xxx/MR/1000V (xxx=510-560, in steps of 5)
78 cells: JAM78S30-xxx/MR/1000V (xxx=580-605, in steps of 5)
54 cells: JAM54S30-xxx/MR/1000V (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR/1000V (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR/1000V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR/1000V (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR/1000V (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR/1000V (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR/1000V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR/1000V (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR/1000V (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR/1000V (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR/1000V (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR/1000V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR/1000V (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR/1000V (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR/1000V (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR/1000V (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR/1000V (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR/1000V (xxx=450-480, in steps of 5)
54 cells: JAM54S40-xxx/GR/1000V (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR/1000V (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR/1000V (xxx=495-525, in steps of 5)



Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbHAm TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Page 3 of 19

60 cells: JAM60S41-xxx/GR/1000V (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR/1000V (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR/1000V (xxx=555-580, in steps of 5)
54 cells: JAM54S30-xxx/LR/1000V (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR/1000V (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB/1000V (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB/1000V (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB/1000V (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB/1000V (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB/1000V (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB/1000V (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR/1000V (xxx=560-590, in steps of 5)

Maximum system voltage: 1000V
Maximum overcurrent protection rating: 25A
Electrical protection class: Class II
98th percentile module operating temperature (T₉₈): 70°C

Module types: **PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:**

50 cells: JAM50S40-xxx/MR/1000V (xxx=490-500, in steps of 5)
66 cells: JAM66S35-xxx/MR/1000V (xxx=650-670, in steps of 5)
60 cells: JAM60S35-xxx/MR/1000V (xxx=590-610, in steps of 5)

Maximum system voltage: 1000V
Maximum overcurrent protection rating: 25A
Electrical protection class: Class II
98th percentile module operating temperature (T₉₈): 70°C

Module types: **PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:**

76 cells: JAM76S11-xxx/PR(B)/1000V (xxx=395-415, in steps of 5)

Maximum system voltage: 1000V
Maximum overcurrent protection rating: 25A
Electrical protection class: Class II
98th percentile module operating temperature (T₉₈): 70°C

Essen, 2025-09-08



Certification Body - Consumer Products

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Module types:

PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAP6-72-xxx/3BB (xxx=250-330, in steps of 5)
72 cells: JAP6-72-xxx/4BB (xxx=305-330, in steps of 5)
72 cells: JAP6-72-xxx/RE (xxx=305-330, in steps of 5)
72 cells: JAP6-72-xxx/4BB/RE (xxx=305-330, in steps of 5)
72 cells: JAP6(K)-72-xxx/4BB (xxx=310-330, in steps of 5)
72 cells: JAP72S01-xxx/SC/1000V (xxx=310-345, in steps of 5)
72 cells: JAP72S01-xxx/PR/1000V (xxx=330-345, in steps of 5)
72 cells: JAP72S09-xxx/SC/1000V (xxx=320-345, in steps of 5)
72 cells: JAP72S01-xxx/MS/1000V (xxx=325-340, in steps of 5)
72 cells: JAP72S02-xxx/SC/1000V (xxx=310-345, in steps of 5)
72 cells: JAP72S02-xxx/PR/1000V (xxx=330-345, in steps of 5)
60 cells: JAP6-60-xxx/3BB (xxx=240-275, in steps of 5)
60 cells: JAP6(FA)-60-xxx/3BB (xxx=250-270, in steps of 5)
60 cells: JAP6-60-xxx/4BB (xxx=250-275, in steps of 5)
60 cells: JAP6-60-xxx/RE (xxx=255-280, in steps of 5)
60 cells: JAP6-60-xxx/4BB/RE (xxx=255-280, in steps of 5)
60 cells: JAP6(K)-60-xxx/4BB (xxx=255-275, in steps of 5)
60 cells: JAP60S01-xxx/SC/1000V (xxx=255-290, in steps of 5)
60 cells: JAP60S01-xxx/PR/1000V (xxx=275-285, in steps of 5)
60 cells: JAP60S09-xxx/SC/1000V (xxx=265-290, in steps of 5)
60 cells: JAP60S01-xxx/MS/1000V (xxx=270-280, in steps of 5)
60 cells: JAP60S02-xxx/SC/1000V (xxx=255-290, in steps of 5)
60 cells: JAP60S02-xxx/PR/1000V (xxx=275-285, in steps of 5)
54 cells: JAP54S01-xxx/SC (xxx=245-255, in steps of 5)
48 cells: JAP6(FA)-48-xxx/3BB (xxx=200-220, in steps of 5)
48 cells: JAP6-48-xxx/3BB (xxx=200-220, in steps of 5)

Maximum system voltage:

1000V

Maximum overcurrent protection rating:

20A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):

72 cells: JAP72S03-xxx/SC/1000V (xxx=320-345, in steps of 5)
72 cells: JAP72S03-xxx/PR/1000V (xxx=335-355, in steps of 5)
72 cells: JAP72S10-xxx/SC/1000V (xxx=335-350, in steps of 5)
72 cells: JAP72S03-xxx/MS/1000V (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/SC/1000V (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/PR/1000V (xxx=335-355, in steps of 5)
60 cells: JAP60S03-xxx/SC/1000V (xxx=270-290, in steps of 5)
60 cells: JAP60S03-xxx/PR/1000V (xxx=280-295, in steps of 5)
60 cells: JAP60S10-xxx/SC/1000V (xxx=275-290, in steps of 5)
60 cells: JAP60S03-xxx/MS/1000V (xxx=270-285, in steps of 5)
60 cells: JAP60S08-xxx/SC/1000V (xxx=270-290, in steps of 5)
60 cells: JAP60S08-xxx/PR/1000V (xxx=280-295, in steps of 5)

Maximum system voltage:

1000V

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 5 of 19

Maximum overcurrent protection rating:

20A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAM6(K)-72-xxx/PR/1500V (xxx=345-370, in steps of 5)
72 cells: JAM6(K)-72-xxx/4BB/1500V (xxx=320-345, in steps of 5)
72 cells: JAM72S01-xxx/PR (xxx=345-390, in steps of 5)
72 cells: JAM72S01-xxx/SC/1500V (xxx=320-365, in steps of 5)
72 cells: JAM72S01-xxx/MR/1500V (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/PR/1500V (xxx=370-405, in steps of 5)
72 cells: JAM72S09-xxx/BP/1500V (xxx=375-385, in steps of 5)
72 cells: JAM72S02-xxx/PR/1500V (xxx=345-390, in steps of 5)
72 cells: JAM72S02-xxx/SC/1500V (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/MR/1500V (xxx=365-385, in steps of 5)
72 cells: JAM72S12-xxx/PR/1500V (xxx=365-385, in steps of 5)
60 cells: JAM6(K)-60-xxx/PR/1500V (xxx=285-310, in steps of 5)
60 cells: JAM6(K)-60-xxx/4BB/1500V (xxx=265-285, in steps of 5)
60 cells: JAM60S01-xxx/PR/1500V (xxx=285-325, in steps of 5)
60 cells: JAM60S01-xxx/SC/1500V (xxx=265-305, in steps of 5)
60 cells: JAM60S01-xxx/MR/1500V (xxx=305-320, in steps of 5)
60 cells: JAM60S09-xxx/PR/1500V (xxx=310-335, in steps of 5)
60 cells: JAM60S09-xxx/BP/1500V (xxx=315-320, in steps of 5)
60 cells: JAM60S02-xxx/PR/1500V (xxx=285-325, in steps of 5)
60 cells: JAM60S02-xxx/SC/1500V (xxx=265-305, in steps of 5)
60 cells: JAM60S02-xxx/MR/1500V (xxx=305-320, in steps of 5)
60 cells: JAM60S12-xxx/PR/1500V (xxx=305-330, in steps of 5)
72 cells: JAM6(K)(DG)-72-xxx/PR/1500V (xxx=330-365, in steps of 5)
72 cells: JAM6(K)(DG)-72-xxx/4BB/1500V (xxx=320-340, in steps of 5)
72 cells: JAM72D00-xxx/PR (xxx=340-385, in steps of 5)
72 cells: JAM72D00-xxx/PR/1500V (xxx=340-385, in steps of 5)
72 cells: JAM72D00-xxx/SC (xxx=320-340, in steps of 5)
72 cells: JAM72D00-xxx/BP (xxx=330-385, in steps of 5)
72 cells: JAM72D00-xxx/BP/1500V (xxx=330-385, in steps of 5)
72 cells: JAM72D00-xxx/MB (xxx=370-380, in steps of 5)
72 cells: JAM72D00-xxx/MB/1500V (xxx=370-380, in steps of 5)
72 cells: JAM72D09-xxx/BP (xxx=360-400, in steps of 5)
72 cells: JAM72D09-xxx/BP/1500V (xxx=360-400, in steps of 5)
60 cells: JAM6(DG)-60-xxx/1500V (xxx=250-270, in steps of 5)
60 cells: JAM6(K)(DG)-60-xxx/4BB/1500V (xxx=260-285, in steps of 5)
60 cells: JAM6(K)(DG)-60-xxx/PR/1500V (xxx=270-305, in steps of 5)
60 cells: JAM6(DG)-60-xxx/4BB/1500V (xxx=260-280, in steps of 5)
60 cells: JAM60D00-xxx/PR (xxx=285-320, in steps of 5)
60 cells: JAM60D00-xxx/PR/1500V (xxx=285-320, in steps of 5)
60 cells: JAM60D00-xxx/SC (xxx=260-285, in steps of 5)
60 cells: JAM60D00-xxx/BP (xxx=275-320, in steps of 5)



Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 6 of 19

Maximum system voltage: 1500V
Maximum overcurrent protection rating: 20A
Electrical protection class: Class II
98th percentile module operating temperature (T₉₈): 70°C
Module types:

60 cells: JAM60D00-xxx/BP/1500V (xxx=275-320, in steps of 5)
60 cells: JAM60D00-xxx/MB (xxx=310-315, in steps of 5)
60 cells: JAM60D00-xxx/MB/1500V (xxx=310-315, in steps of 5)
60 cells: JAM60D09-xxx/BP (xxx=300-340, in steps of 5)
60 cells: JAM60D09-xxx/BP/1500V (xxx=300-340, in steps of 5)

1500V

20A

Class II

70°C

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):
72 cells: JAM72S03-xxx/PR/1500V (xxx=360-395, in steps of 5)
72 cells: JAM72S10-xxx/PR/1500V (xxx=380-410, in steps of 5)
72 cells: JAM72S10-xxx/BP/1500V (xxx=385-400, in steps of 5)
72 cells: JAM72S10-xxx/MR/1500V (xxx=390-430, in steps of 5)
72 cells: JAM72S10-xxx/MB/1500V (xxx=395-415, in steps of 5)
72 cells: JAM72S08-xxx/PR/1500V (xxx=360-395, in steps of 5)
72 cells: JAM72S17-xxx/PR/1500V (xxx=380-390, in steps of 5)
72 cells: JAM72S17-xxx/MR/1500V (xxx=390-430, in steps of 5)
72 cells: JAM72S17-xxx/GR/1500V (xxx=385-400, in steps of 5)
60 cells: JAM60S03-xxx/PR/1500V (xxx=300-330, in steps of 5)
60 cells: JAM60S10-xxx/PR/1500V (xxx=315-345, in steps of 5)
60 cells: JAM60S10-xxx/BP/1500V (xxx=320-330, in steps of 5)
60 cells: JAM60S10-xxx/MR/1500V (xxx=325-355, in steps of 5)
60 cells: JAM60S10-xxx/MB/1500V (xxx=330-345, in steps of 5)
60 cells: JAM60S20-xxx/MR/1500V (xxx=355-390, in steps of 5)
60 cells: JAM60S21-xxx/MR/1500V (xxx=355-390, in steps of 5)
60 cells: JAM60S08-xxx/PR/1500V (xxx=300-330, in steps of 5)
60 cells: JAM60S17-xxx/PR/1500V (xxx=315-325, in steps of 5)
60 cells: JAM60S17-xxx/MR/1500V (xxx=315-355, in steps of 5)
78 cells: JAM78S10-xxx/MR/1500V (xxx=435-465, in steps of 5)
66 cells: JAM66S10-xxx/MR/1500V (xxx=345-390, in steps of 5)
72 cells: JAM72D10-xxx/MB (xxx=385-430, in steps of 5)
72 cells: JAM72D10-xxx/MB/1500V (xxx=385-430, in steps of 5)
60 cells: JAM60D10-xxx/MB (xxx=320-355, in steps of 5)
60 cells: JAM60D10-xxx/MB/1500V (xxx=320-355, in steps of 5)
72 cells: JAM72D10-xxx/BP (xxx=385-415, in steps of 5)
72 cells: JAM72D10-xxx/BP/1500V (xxx=385-415, in steps of 5)
60 cells: JAM60D10-xxx/BP (xxx=320-345, in steps of 5)
60 cells: JAM60D10-xxx/BP/1500V (xxx=320-345, in steps of 5)
78 cells: JAM78D10-xxx/MB (xxx=435-455, in steps of 5)
78 cells: JAM78D10-xxx/MB/1500V (xxx=435-455, in steps of 5)
66 cells: JAM66D10-xxx/MB (xxx=360-380, in steps of 5)
66 cells: JAM66D10-xxx/MB/1500V (xxx=360-380, in steps of 5)
72 cells: JAM72D20-xxx/MB (xxx=430-465, in steps of 5)
72 cells: JAM72D20-xxx/MB/1500V (xxx=430-465, in steps of 5)



Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 7 of 19

60 cells: JAM60D20-xxx/MB (xxx=355-385, in steps of 5)
60 cells: JAM60D20-xxx/MB/1500V (xxx=355-385, in steps of 5)
72 cells: JAM72D10-xxx/TB (xxx=400-420, in steps of 5)
72 cells: JAM72D10-xxx/TB/1500V (xxx=400-420, in steps of 5)
60 cells: JAM60D10-xxx/TB (xxx=335-350, in steps of 5)
60 cells: JAM60D10-xxx/TB/1500V (xxx=335-350, in steps of 5)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 20A

Electrical protection class: Class II

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

Module types:

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):

72 cells: JAM72S20-xxx/MR/1500V (xxx=430-470, in steps of 5)
72 cells: JAM72S20-xxx/MB/1500V (xxx=450-465, in steps of 5)
60 cells: JAM60S20-xxx/MB/1500V (xxx=375-390, in steps of 5)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 25A

Electrical protection class: Class II

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

Module types:

PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:

78 cells: JAM78S30-xxx/MR/1500V (xxx=580-605, in steps of 5)
72 cells: JAM72S30-xxx/MR/1500V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/MR/1500V (xxx=470-510, in steps of 5)
60 cells: JAM60S30-xxx/MR/1500V (xxx=435-460, in steps of 5)
54 cells: JAM54S30-xxx/MR/1500V (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR/1500V (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR/1500V (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR/1500V (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR/1500V (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR/1500V (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR/1500V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR/1500V (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR/1500V (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR/1500V (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR/1500V (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR/1500V (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR/1500V (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR/1500V (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR/1500V (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR/1500V (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR/1500V (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR/1500V (xxx=450-480, in steps of 5)

Essen, 2025-09-08

Certification Body - Consumer Products



TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 8 of 19

54 cells: JAM54S40-xxx/GR/1500V (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR/1500V (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR/1500V (xxx=495-525, in steps of 5)
60 cells: JAM60S41-xxx/GR/1500V (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR/1500V (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR/1500V (xxx=555-580, in steps of 5)
54 cells: JAM54S30-xxx/LR/1500V (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR/1500V (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB/1500V (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB/1500V (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB/1500V (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB/1500V (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB/1500V (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB/1500V (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR/1500V (xxx=560-590, in steps of 5)
78 cells: JAM78D30-xxx/MB (xxx=580-605, in steps of 5)
78 cells: JAM78D30-xxx/MB/1500V (xxx=580-605, in steps of 5)
72 cells: JAM72D30-xxx/MB (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/1500V (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/F (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/MB/F/1500V (xxx=505-560, in steps of 5)
66 cells: JAM66D30-xxx/MB (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/1500V (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/F (xxx=465-505, in steps of 5)
66 cells: JAM66D30-xxx/MB/F/1500V (xxx=465-505, in steps of 5)
60 cells: JAM60D30-xxx/MB (xxx=435-460, in steps of 5)
60 cells: JAM60D30-xxx/MB/1500V (xxx=435-460, in steps of 5)
54 cells: JAM54D30-xxx/MB (xxx=390-415, in steps of 5)
54 cells: JAM54D30-xxx/MB/1500V (xxx=390-415, in steps of 5)
54 cells: JAM54D31-xxx/MB (xxx=395-400, in steps of 5)
54 cells: JAM54D31-xxx/MB/1500V (xxx=395-400, in steps of 5)
78 cells: JAM78D30-xxx/GB (xxx=585-610, in steps of 5)
78 cells: JAM78D30-xxx/GB/1500V (xxx=585-610, in steps of 5)
72 cells: JAM72D30-xxx/GB (xxx=505-560, in steps of 5)
72 cells: JAM72D30-xxx/GB/1500V (xxx=505-560, in steps of 5)
66 cells: JAM66D30-xxx/GB (xxx=495-510, in steps of 5)
66 cells: JAM66D30-xxx/GB/1500V (xxx=495-510, in steps of 5)
60 cells: JAM60D30-xxx/GB (xxx=450-470, in steps of 5)
60 cells: JAM60D30-xxx/GB/1500V (xxx=450-470, in steps of 5)
54 cells: JAM54D30-xxx/GB (xxx=405-420, in steps of 5)
54 cells: JAM54D30-xxx/GB/1500V (xxx=405-420, in steps of 5)
54 cells: JAM54D31-xxx/GB (xxx=410-420, in steps of 5)
54 cells: JAM54D31-xxx/GB/1500V (xxx=410-420, in steps of 5)
72 cells: JAM72D30-xxx/HB (xxx=530-560, in steps of 5)
72 cells: JAM72D30-xxx/HB/1500V (xxx=530-560, in steps of 5)
78 cells: JAM78D30-xxx/TB (xxx=580-630, in steps of 5)
78 cells: JAM78D30-xxx/TB/1500V (xxx=580-630, in steps of 5)
72 cells: JAM72D30-xxx/TB (xxx=540-580, in steps of 5)
72 cells: JAM72D30-xxx/TB/1500V (xxx=540-580, in steps of 5)

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

78 cells: JAM78D40-xxx/MB (xxx=580-655, in steps of 5)
78 cells: JAM78D40-xxx/MB/1500V (xxx=580-655, in steps of 5)
72 cells: JAM72D40-xxx/MB (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/MB/1500V (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/MB-US (xxx=585-615, in steps of 5)
72 cells: JAM72D40-xxx/MB-US/1500V (xxx=585-615, in steps of 5)
66 cells: JAM66D40-xxx/MB (xxx=500-545, in steps of 5)
66 cells: JAM66D40-xxx/MB/1500V (xxx=500-545, in steps of 5)
60 cells: JAM60D40-xxx/MB (xxx=455-495, in steps of 5)
60 cells: JAM60D40-xxx/MB/1500V (xxx=455-495, in steps of 5)
54 cells: JAM54D40-xxx/MB (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/MB/1500V (xxx=405-455, in steps of 5)
72 cells: JAM72D41-xxx/MB (xxx=575-590, in steps of 5)
72 cells: JAM72D41-xxx/MB/1500V (xxx=575-590, in steps of 5)
54 cells: JAM54D41-xxx/MB (xxx=405-445, in steps of 5)
54 cells: JAM54D41-xxx/MB/1500V (xxx=405-445, in steps of 5)
54 cells: JAM54D40-xxx/MR (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/MR/1500V (xxx=405-455, in steps of 5)
78 cells: JAM78D40-xxx/GB (xxx=580-655, in steps of 5)
78 cells: JAM78D40-xxx/GB/1500V (xxx=580-655, in steps of 5)
72 cells: JAM72D40-xxx/GB (xxx=540-610, in steps of 5)
72 cells: JAM72D40-xxx/GB/1500V (xxx=540-610, in steps of 5)
66 cells: JAM66D40-xxx/GB (xxx=500-560, in steps of 5)
66 cells: JAM66D40-xxx/GB/1500V (xxx=500-560, in steps of 5)
60 cells: JAM60D40-xxx/GB (xxx=455-505, in steps of 5)
60 cells: JAM60D40-xxx/GB/1500V (xxx=455-505, in steps of 5)
54 cells: JAM54D40-xxx/GB (xxx=405-455, in steps of 5)
54 cells: JAM54D40-xxx/GB/1500V (xxx=405-455, in steps of 5)
72 cells: JAM72D41-xxx/GB (xxx=575-590, in steps of 5)
72 cells: JAM72D41-xxx/GB/1500V (xxx=575-590, in steps of 5)
54 cells: JAM54D41-xxx/GB (xxx=415-435, in steps of 5)
54 cells: JAM54D41-xxx/GB/1500V (xxx=415-435, in steps of 5)
72 cells: JAM72D30-xxx/LB (xxx=555-575, in steps of 5)
72 cells: JAM72D30-xxx/LB/1500V (xxx=555-575, in steps of 5)
54 cells: JAM54D30-xxx/LB (xxx=420-430, in steps of 5)
54 cells: JAM54D30-xxx/LB/1500V (xxx=420-430, in steps of 5)
66 cells: JAM66D42-xxx/MB (xxx=540-600, in steps of 5)
66 cells: JAM66D42-xxx/MB/1500V (xxx=540-600, in steps of 5)
66 cells: JAM66D42-xxx/MR (xxx=540-600, in steps of 5)
66 cells: JAM66D42-xxx/MR/1500V (xxx=540-600, in steps of 5)
66 cells: JAM66D43-xxx/MB (xxx=565-580, in steps of 5)
66 cells: JAM66D43-xxx/MB/1500V (xxx=565-580, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

25A or 30A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Module types:

PV Modules with 182mm Mono-crystalline Silicon half-cut or Asymmetric cut Solar Cells:

72 cells: JAM72D40-xxx/LB (xxx=560-620, in steps of 5)
72 cells: JAM72D40-xxx/LB/1500V (xxx=560-620, in steps of 5)
60 cells: JAM60D40-xxx/LB (xxx=485-515, in steps of 5)
60 cells: JAM60D40-xxx/LB/1500V (xxx=485-515, in steps of 5)
54 cells: JAM54D40-xxx/LB (xxx=420-475, in steps of 5)
54 cells: JAM54D40-xxx/LB/1500V (xxx=420-475, in steps of 5)
54 cells: JAM54D40-xxx/LR (xxx=420-475, in steps of 5)
54 cells: JAM54D40-xxx/LR/1500V (xxx=420-475, in steps of 5)
60 cells: JAM60D41-xxx/LB (xxx=485-505, in steps of 5)
60 cells: JAM60D41-xxx/LB/1500V (xxx=485-505, in steps of 5)
54 cells: JAM54D41-xxx/LB (xxx=420-455, in steps of 5)
54 cells: JAM54D41-xxx/LB/1500V (xxx=420-455, in steps of 5)
54 cells: JAM54D41-xxx/LR (xxx=440-455, in steps of 5)
72 cells: JAM72D42-xxx/LB (xxx=590-655, in steps of 5)
72 cells: JAM72D42-xxx/LB/1500V (xxx=590-655, in steps of 5)
60 cells: JAM60D42-xxx/LB (xxx=500-545, in steps of 5)
60 cells: JAM60D42-xxx/LB/1500V (xxx=500-545, in steps of 5)
54 cells: JAM54D42-xxx/LB (xxx=455-485, in steps of 5)
54 cells: JAM54D42-xxx/LB/1500V (xxx=455-485, in steps of 5)
78 cells: JAM78D49-xxx/LB (xxx=585-610, in steps of 5)
78 cells: JAM78D49-xxx/LB /1500V (xxx=585-610, in steps of 5)
66 cells: JAM66D45-xxx/LB (xxx=580-650, in steps of 5)
66 cells: JAM66D45-xxx/LB /1500V (xxx=580-650, in steps of 5)
66 cells: JAM66D45-xxx/LR (xxx=580-650, in steps of 5)
66 cells: JAM66D45-xxx/LR /1500V (xxx=580-650, in steps of 5)
72 cells: JAM72D40-xxx/HB (xxx=585-605, in steps of 5)
72 cells: JAM72D40-xxx/HB /1500V (xxx=585-605, in steps of 5)
54 cells: JAM54D40-xxx/HB (xxx=440-450, in steps of 5)
54 cells: JAM54D40-xxx/HB /1500V (xxx=440-450, in steps of 5)
54 cells: JAM54D41-xxx/HB (xxx=430-445, in steps of 5)
54 cells: JAM54D41-xxx/HB /1500V (xxx=430-445, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

25A or 30A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells:

50 cells: JAM50S40-xxx/MR/1500V (xxx=490-500, in steps of 5)
50 cells: JAM50D40-xxx/MB (xxx=485-500, in steps of 5)
50 cells: JAM50D40-xxx/MB/1500V (xxx=485-500, in steps of 5)

Maximum system voltage:

1500V

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Maximum overcurrent protection rating:

25A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with 210mm Mono-crystalline Silicon 1/2-cut Solar Cells:

66 cells: JAM66S35-xxx/MR/1500V (xxx=650-670, in steps of 5)
60 cells: JAM60S35-xxx/MR/1500V (xxx=590-610, in steps of 5)
66 cells: JAM66D35-xxx/MB (xxx=650-665, in steps of 5)
66 cells: JAM66D35-xxx/MB/1500V (xxx=650-665, in steps of 5)
60 cells: JAM60D35-xxx/MB (xxx=590-605, in steps of 5)
60 cells: JAM60D35-xxx/MB/1500V (xxx=590-605, in steps of 5)
66 cells: JAM66D46-xxx/LB (xxx=685-740, in steps of 5)
66 cells: JAM66D46-xxx/LB /1500V (xxx=685-740, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

25A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with 182mm PERC Mono-crystalline Silicon 1/2-cut Solar Cells:

72 cells: JAM72S30-xxx/MR (xxx=525-560, in steps of 5)
66 cells: JAM66S30-xxx/MR (xxx=480-510, in steps of 5)
54 cells: JAM54S30-xxx/MR (xxx=395-420, in steps of 5)
72 cells: JAM72S30-xxx/LR (xxx=560-580, in steps of 5)
54 cells: JAM54S30-xxx/LR (xxx=415-435, in steps of 5)
72 cells: JAM72S30-xxx/GR (xxx=530-570, in steps of 5)
54 cells: JAM54S30-xxx/GR (xxx=400-425, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

25A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with 182mm TOPCon Mono-crystalline Silicon 1/2-cut Solar Cells:

72 cells: JAM72S40-xxx/MR (xxx=580-615, in steps of 5)
54 cells: JAM54S40-xxx/MR (xxx=435-450, in steps of 5)
72 cells: JAM72S40-xxx/LR (xxx=560-615, in steps of 5)
60 cells: JAM60S40-xxx/LR (xxx=475-515, in steps of 5)
54 cells: JAM54S40-xxx/LR (xxx=420-475, in steps of 5)
54 cells: JAM54S40-xxx/LR-X (xxx=420-475, in steps of 5)
72 cells: JAM72S41-xxx/LR (xxx=560-630, in steps of 5)

Essen, 2025-09-08



Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

60 cells: JAM60S41-xxx/LR (xxx=475-525, in steps of 5) 54 cells: JAM54S41-xxx/LR (xxx=420-470, in steps of 5) 72 cells: JAM72S41-xxx/MR (xxx=585-605, in steps of 5) 54 cells: JAM54S41-xxx/MR (xxx=440-450, in steps of 5) 72 cells: JAM72S42-xxx/LR (xxx=600-655, in steps of 5) 66 cells: JAM66S42-xxx/MR (xxx=550-600, in steps of 5) 60 cells: JAM60S42-xxx/LR (xxx=500-545, in steps of 5) 54 cells: JAM54S42-xxx/LR (xxx=450-490, in steps of 5) 72 cells: JAM72S43-xxx/LR (xxx=595-635, in steps of 5) 66 cells: JAM66S43-xxx/MR (xxx=545-585, in steps of 5) 60 cells: JAM60S43-xxx/LR (xxx=495-530, in steps of 5) 54 cells: JAM54S43-xxx/LR (xxx=445-475, in steps of 5)	
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with 210mm TOPCon Mono-crystalline Silicon 1/2-cut Solar Cells: 66 cells: JAM66S45-xxx/LR (xxx=600-635, in steps of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	30A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with 182mm ABC Mono-crystalline Silicon 1/2-cut Solar Cells: 60 cells: JAT60S40-xxx/LR (xxx=510-540, in steps of 5) 54 cells: JAT54S40-xxx/LR (xxx=460-485, in steps of 5) 60 cells: JAT60S41-xxx/LR (xxx=505-530, in steps of 5) 54 cells: JAT54S41-xxx/LR (xxx=455-475, in steps of 5)
Maximum system voltage:	1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

Page 13 of 19

Module types:

PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:
76 cells: JAM76S11-xxx/PR(B)/1500V (xxx=395-415, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

25A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAP6(K)-72-xxx/4BB/1500V (xxx=310-330, in steps of 5)

72 cells: JAP72S01-xxx/SC/1500V (xxx=310-345, in steps of 5)

72 cells: JAP72S01-xxx/PR/1500V (xxx=330-345, in steps of 5)

72 cells: JAP72S09-xxx/SC/1500V (xxx=320-345, in steps of 5)

72 cells: JAP72S01-xxx/MS/1500V (xxx=325-340, in steps of 5)

72 cells: JAP72S02-xxx/SC/1500V (xxx=310-345, in steps of 5)

72 cells: JAP72S02-xxx/PR/1500V (xxx=330-345, in steps of 5)

60 cells: JAP6(K)-60-xxx/4BB/1500V (xxx=255-275, in steps of 5)

60 cells: JAP60S01-xxx/SC/1500V (xxx=255-290, in steps of 5)

60 cells: JAP60S01-xxx/PR/1500V (xxx=275-285, in steps of 5)

60 cells: JAP60S09-xxx/SC/1500V (xxx=265-290, in steps of 5)

60 cells: JAP60S01-xxx/MS/1500V (xxx=270-280, in steps of 5)

60 cells: JAP60S02-xxx/SC/1500V (xxx=255-290, in steps of 5)

60 cells: JAP60S02-xxx/PR/1500V (xxx=275-285, in steps of 5)

72 cells: JAP6(DG)-72-xxx/4BB/1500V (xxx=305-325, in steps of 5)

72 cells: JAP6(DG)-72-xxx/3BB/1500V (xxx=305-315, in steps of 5)

72 cells: JAP6(DG)-72-xxx/4BB/RE/1500V (xxx=310-335, in steps of 5)

72 cells: JAP6(K)(DG)-72-xxx/4BB/1500V (xxx=310-335, in steps of 5)

72 cells: JAP72D00-xxx/SC (xxx=305-345, in steps of 5)

72 cells: JAP72D00-xxx/SC/1500V (xxx=310-340, in steps of 5)

72 cells: JAP72D00-xxx/PR (xxx=330-350, in steps of 5)

72 cells: JAP72D00-xxx/PR/1500V (xxx=330-345, in steps of 5)

72 cells: JAP72D09-xxx/SC (xxx=325-345, in steps of 5)

72 cells: JAP72D09-xxx/SC/1500V (xxx=330-345, in steps of 5)

60 cells: JAP6(DG)-60-xxx/4BB/1500V (xxx=250-275, in steps of 5)

60 cells: JAP6(DG)-60-xxx/3BB/1500V (xxx=245-265, in steps of 5)

60 cells: JAP6(DG)-60-xxx/4BB/RE/1500V (xxx=255-280, in steps of 5)

60 cells: JAP6(K)(DG)-60-xxx/4BB/1500V (xxx=255-280, in steps of 5)

60 cells: JAP60D00-xxx/SC (xxx=255-290, in steps of 5)

60 cells: JAP60D00-xxx/SC/1500V (xxx=260-285, in steps of 5)

60 cells: JAP60D00-xxx/PR (xxx=275-290, in steps of 5)

60 cells: JAP60D00-xxx/PR/1500V (xxx=275-290, in steps of 5)

60 cells: JAP60D09-xxx/SC (xxx=270-290, in steps of 5)

60 cells: JAP60D09-xxx/SC/1500V (xxx=275-290, in steps of 5)

Maximum system voltage:

1500V

Maximum overcurrent protection rating:

20A

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Electrical protection class:
98th percentile module operating
temperature (T₉₈):

Class II
70°C

Module types:

PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):

72 cells: JAP72S03-xxx/SC/1500V (xxx=320-345, in steps of 5)
72 cells: JAP72S03-xxx/PR/1500V (xxx=335-355, in steps of 5)
72 cells: JAP72S10-xxx/SC/1500V (xxx=335-350, in steps of 5)
72 cells: JAP72S03-xxx/MS/1500V (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/SC/1500V (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/PR/1500V (xxx=335-355, in steps of 5)
60 cells: JAP60S03-xxx/SC/1500V (xxx=270-290, in steps of 5)
60 cells: JAP60S03-xxx/PR/1500V (xxx=280-295, in steps of 5)
60 cells: JAP60S10-xxx/SC/1500V (xxx=275-290, in steps of 5)
60 cells: JAP60S03-xxx/MS/1500V (xxx=270-285, in steps of 5)
60 cells: JAP60S08-xxx/SC/1500V (xxx=270-290, in steps of 5)
60 cells: JAP60S08-xxx/PR/1500V (xxx=280-295, in steps of 5)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 20A

Electrical protection class: Class II

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

Module types:

PV Modules with Mono-crystalline Silicon Solar Cells (156mm to 158.75mm):

72 cells: JAM72S01-xxx/SC (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/SC (xxx=320-365, in steps of 5)
72 cells: JAM72S02-xxx/PR (xxx=345-390, in steps of 5)
72 cells: JAM72S01-xxx/MR (xxx=365-385, in steps of 5)
72 cells: JAM72S02-xxx/MR (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/PR (xxx=370-405, in steps of 5)
72 cells: JAM72S12-xxx/PR (xxx=365-385, in steps of 5)
72 cells: JAM72S09-xxx/BP (xxx=375-385, in steps of 5)
60 cells: JAM60S01-xxx/SC (xxx=265-305, in steps of 5)
60 cells: JAM60S02-xxx/SC (xxx=265-305, in steps of 5)
60 cells: JAM60S01-xxx/PR (xxx=285-325, in steps of 5)
60 cells: JAM60S02-xxx/PR (xxx=285-325, in steps of 5)
60 cells: JAM60S01-xxx/MR (xxx=305-320, in steps of 5)
60 cells: JAM60S02-xxx/MR (xxx=305-320, in steps of 5)
60 cells: JAM60S09-xxx/PR (xxx=310-335, in steps of 5)
60 cells: JAM60S12-xxx/PR (xxx=305-330, in steps of 5)
60 cells: JAM60S09-xxx/BP (xxx=315-320, in steps of 5)

Maximum system voltage: 1000V or 1500V

Maximum overcurrent protection rating: 20A

Electrical protection class: Class II

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de

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

Module types:

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):

72 cells: JAM72S03-xxx/PR (xxx=360-395, in steps of 5)
72 cells: JAM72S10-xxx/PR (xxx=380-410, in steps of 5)
72 cells: JAM72S17-xxx/PR (xxx=380-390, in steps of 5)
72 cells: JAM72S10-xxx/MR (xxx=390-430, in steps of 5)
72 cells: JAM72S17-xxx/MR (xxx=390-430, in steps of 5)
72 cells: JAM72S17-xxx/GR (xxx=385-400, in steps of 5)
72 cells: JAM72S10-xxx/BP (xxx=385-400, in steps of 5)
72 cells: JAM72S10-xxx/MB (xxx=395-415, in steps of 5)
72 cells: JAM72S08-xxx/PR (xxx=360-395, in steps of 5)
60 cells: JAM60S03-xxx/PR (xxx=300-330, in steps of 5)
60 cells: JAM60S08-xxx/PR (xxx=300-330, in steps of 5)
60 cells: JAM60S10-xxx/PR (xxx=315-345, in steps of 5)
60 cells: JAM60S10-xxx/MR (xxx=325-355, in steps of 5)
60 cells: JAM60S10-xxx/BP (xxx=320-330, in steps of 5)
60 cells: JAM60S10-xxx/MB (xxx=330-345, in steps of 5)
60 cells: JAM60S17-xxx/PR (xxx=315-325, in steps of 5)
60 cells: JAM60S17-xxx/MR (xxx=315-355, in steps of 5)
78 cells: JAM78S10-xxx/MR (xxx=435-465, in steps of 5)
78 cells: JAM78S10-xxx/MR-J (xxx=435-465, in steps of 5)
66 cells: JAM66S10-xxx/MR (xxx=345-390, in steps of 5)

Maximum system voltage:

1000V or 1500V

Maximum overcurrent protection rating:

20A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Module types:

PV Modules with Mono-crystalline Silicon half-cut Solar Cells (166mm to 168mm):

72 cells: JAM72S20-xxx/MR (xxx=430-470, in steps of 5)
72 cells: JAM72S20-xxx/MB (xxx=450-465, in steps of 5)
60 cells: JAM60S20-xxx/MR (xxx=355-390, in steps of 5)
60 cells: JAM60S21-xxx/MR (xxx=355-390, in steps of 5)
60 cells: JAM60S20-xxx/MB (xxx=375-390, in steps of 5)

Maximum system voltage:

1000V or 1500V

Maximum overcurrent protection rating:

20A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Page 16 of 19

Module types:

PV Modules with 182mm Mono-crystalline Silicon half-cut Solar Cells:

78 cells: JAM78S30-xxx/MR (xxx=580-605, in steps of 5)
72 cells: JAM72S30-xxx/MR (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/MR (xxx=470-510, in steps of 5)
60 cells: JAM60S30-xxx/MR (xxx=435-460, in steps of 5)
54 cells: JAM54S30-xxx/MR (xxx=390-425, in steps of 5)
78 cells: JAM78S30-xxx/GR (xxx=575-610, in steps of 5)
72 cells: JAM72S30-xxx/GR (xxx=510-560, in steps of 5)
66 cells: JAM66S30-xxx/GR (xxx=500-510, in steps of 5)
60 cells: JAM60S30-xxx/GR (xxx=445-470, in steps of 5)
54 cells: JAM54S30-xxx/GR (xxx=400-420, in steps of 5)
72 cells: JAM72S31-xxx/MR (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/MR (xxx=470-500, in steps of 5)
60 cells: JAM60S31-xxx/MR (xxx=425-450, in steps of 5)
54 cells: JAM54S31-xxx/MR (xxx=385-415, in steps of 5)
78 cells: JAM78S31-xxx/GR (xxx=570-590, in steps of 5)
72 cells: JAM72S31-xxx/GR (xxx=510-545, in steps of 5)
66 cells: JAM66S31-xxx/GR (xxx=480-500, in steps of 5)
60 cells: JAM60S31-xxx/GR (xxx=435-450, in steps of 5)
54 cells: JAM54S31-xxx/GR (xxx=395-415, in steps of 5)
72 cells: JAM72S40-xxx/GR (xxx=540-575, in steps of 5)
66 cells: JAM66S40-xxx/GR (xxx=495-525, in steps of 5)
60 cells: JAM60S40-xxx/GR (xxx=450-480, in steps of 5)
54 cells: JAM54S40-xxx/GR (xxx=405-430, in steps of 5)
72 cells: JAM72S41-xxx/GR (xxx=540-570, in steps of 5)
66 cells: JAM66S41-xxx/GR (xxx=495-525, in steps of 5)
60 cells: JAM60S41-xxx/GR (xxx=450-475, in steps of 5)
54 cells: JAM54S41-xxx/GR (xxx=405-430, in steps of 5)
72 cells: JAM72S30-xxx/LR (xxx=555-580, in steps of 5)
54 cells: JAM54S30-xxx/LR (xxx=415-435, in steps of 5)
54 cells: JAM54S31-xxx/LR (xxx=415-425, in steps of 5)
72 cells: JAM72S30-xxx/MB (xxx=535-550, in steps of 5)
72 cells: JAM72S31-xxx/MB (xxx=525-540, in steps of 5)
54 cells: JAM54S30-xxx/MB (xxx=385-410, in steps of 5)
54 cells: JAM54S31-xxx/MB (xxx=385-405, in steps of 5)
54 cells: JAM54S30-xxx/LB (xxx=410-425, in steps of 5)
54 cells: JAM54S31-xxx/LB (xxx=410-415, in steps of 5)
72 cells: JAM72S40-xxx/MR (xxx=560-590, in steps of 5)

Maximum system voltage:

1000V or 1500V

Maximum overcurrent protection rating:

25A

Electrical protection class:

Class II

98th percentile module operating temperature (T₉₈):

70°C

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Module types:	PV Modules with 210mm Mono-crystalline Silicon 1/3-cut Solar Cells: 50 cells: JAM50S40-xxx/MR (xxx=490-500, in steps of 5) 66 cells: JAM66S35-xxx/MR (xxx=650-670, in steps of 5) 60 cells: JAM60S35-xxx/MR (xxx=590-610, in steps of 5)
Maximum system voltage:	1000V or 1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells: 68 cells: JAM68S11-xxx/PR (xxx=355-365, in steps of 5) 68 cells: JAM68S11-xxx/PR(B) (xxx=345-365, in steps of 5) 76 cells: JAM76S11-xxx/PR(B) (xxx=395-415, in steps of 5)
Maximum system voltage:	1000V or 1500V
Maximum overcurrent protection rating:	25A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C
Module types:	PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm): 72 cells: JAP72S01-xxx/SC (xxx=310-345, in steps of 5) 72 cells: JAP72S02-xxx/SC (xxx=310-345, in steps of 5) 72 cells: JAP72S01-xxx/PR (xxx=330-345, in steps of 5) 72 cells: JAP72S02-xxx/PR (xxx=330-345, in steps of 5) 72 cells: JAP72S09-xxx/SC (xxx=320-345, in steps of 5) 72 cells: JAP72S01-xxx/MS (xxx=325-340, in steps of 5) 60 cells: JAP60S01-xxx/SC (xxx=255-290, in steps of 5) 60 cells: JAP60S02-xxx/SC (xxx=255-290, in steps of 5) 60 cells: JAP60S01-xxx/PR (xxx=275-285, in steps of 5) 60 cells: JAP60S02-xxx/PR (xxx=275-285, in steps of 5) 60 cells: JAP60S09-xxx/SC (xxx=265-290, in steps of 5) 60 cells: JAP60S01-xxx/MS (xxx=270-280, in steps of 5) 54 cells: JAP54S01-xxx/SC (xxx=245-255, in steps of 5)
Maximum system voltage:	1000V or 1500V
Maximum overcurrent protection rating:	20A
Electrical protection class:	Class II
98 th percentile module operating temperature (T ₉₈):	70°C

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany

tuev-nord-cert.de | prodcert@tuev-nord.de

Module types:

PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):

72 cells: JAP72S03-xxx/PR (xxx=335-355, in steps of 5)
72 cells: JAP72S03-xxx/SC (xxx=320-345, in steps of 5)
72 cells: JAP72S10-xxx/SC (xxx=335-350, in steps of 5)
72 cells: JAP72S03-xxx/MS (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/SC (xxx=320-345, in steps of 5)
72 cells: JAP72S08-xxx/PR (xxx=335-355, in steps of 5)
60 cells: JAP60S03-xxx/PR (xxx=280-295, in steps of 5)
60 cells: JAP60S03-xxx/SC (xxx=270-290, in steps of 5)
60 cells: JAP60S10-xxx/SC (xxx=275-290, in steps of 5)
60 cells: JAP60S03-xxx/MS (xxx=270-285, in steps of 5)
60 cells: JAP60S08-xxx/SC (xxx=270-290, in steps of 5)
60 cells: JAP60S08-xxx/PR (xxx=280-295, in steps of 5)

Maximum system voltage:

Maximum overcurrent protection rating:

Electrical protection class:

98th percentile module operating temperature (T₉₈):

1000V or 1500V

20A

Class II

70°C

Remark:

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

Essen, 2025-09-08

Certification Body - Consumer Products

TÜV NORD CERT GmbH

Am TÜV 1, 45307 Essen, Germany
tuev-nord-cert.de | prodcert@tuev-nord.de