

# CERTIFICATE

**TÜV NORD CERT GmbH**

herewith declares that

**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 mentioned below with the mark as illustrated:

**Description of product (details see Annex 2):**

**Crystalline Silicon Terrestrial Photovoltaic (PV) Modules**



Valid from: 2024-12-13

Valid until: 2026-09-29

|                                 |                                 |
|---------------------------------|---------------------------------|
| Certification program:          | P12-VA-01 Rev. 17 09.20         |
| Certification fundamental(s):   | IEC 62716:2013 / EN 62716:2013. |
| Registered No.:                 | 44 780 23 406749 - 192R11A6M12  |
| Manufacturer and factory(-ies): | See Annex 1                     |
| Test Report No.:                | 492012552.013                   |
| File No.:                       | PVP09104/24P-02                 |



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Essen, 2024-12-13

Please also pay attention to the information stated overleaf.

**Manufacturer and factory(-ies):**

|                                |   |
|--------------------------------|---|
| Manufacturer:                  | <b>Shanghai JA Solar Technology Co., Ltd.</b><br>No. 118, Lane 3111, West Huancheng Road, Fengxian District<br>Shanghai 201401, P.R. China            |
| Factory 1:                     | <b>Shanghai JA Solar Technology Co., Ltd.</b><br>No. 118, Lane 3111, West Huancheng Road, Fengxian District<br>Shanghai 201401, P.R. China            |
| Factory inspection report no.: | 862010153.012   |
| Factory 2:                     | <b>Hefei JA Solar Technology Co., Ltd.</b><br>No. 999, Chang Ning Road, Hi-tech Zone, Hefei<br>230088, P.R. China                                     |
| Factory inspection report no.: | 862010241.011   |
| Factory 3:                     | <b>JA Solar (Xingtai) Co., Ltd.</b><br>No. 1688, Chang An Road, Xingtai Economic Development Area<br>Xingtai City, Hebei Province, 054001, P.R. China |
| Factory inspection report no.: | 862010290.009   |
| Factory 4:                     | <b>JA Solar New Energy Yangzhou Co., Ltd.</b><br>No.1, Jinhui Road, Economic Development Zone<br>Yangzhou, Jiangsu Province, 225131, P.R. China.      |
| Factory inspection report no.: | 862010496.005   |
| Factory 5:                     | <b>Yiwu JA Solar Technology Co., Ltd.</b><br>No. 165, Tongze Road, Yiting Town, Yiwu City,<br>Zhejiang Province, 322000, P.R. China.                  |
| Factory inspection report no.: | 862010513.005   |
| Factory 6:                     | <b>JA Solar Viet Nam Company Limited</b><br>Lot G, Quang Chau Industiral Park, Quang Chau Ward, Viet Yen Town,<br>236110 Bac Giang Province, VIETNAM. |
| Factory inspection report no.: | 862010560.004   |



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| Factory 7:                     | <b>JA Solar New Energy Yangzhou Co., Ltd. (Jingshan Park)</b><br>No.123, Jinshan Road, Economic Development Zone,<br>Yangzhou, Jiangsu Province, 225131, P.R. China.  |
| Factory inspection report no.: | 862010584.004   |
| Factory 8:                     | <b>HSA ENERJI A.S.</b><br>OSB III. Kisim Keciliköy OSB Mah., Mustafa Kemal Bulvari No:15/1.,<br>45030 Yunusemre – Manisa, TURKEY  |
| Factory inspection report no.: | 862010735.002   |
| Factory 9:                     | <b>Dongtai JA Solar Technology Co., Ltd.</b><br>No.8 Zaofeng North Road, Dongtai High-tech Zone, Dongtai City, 224248<br>Yancheng City, Jiangsu Province, PEOPLE'S REPUBLIC OF CHINA  |
| Factory inspection report no.: | 862010802.002   |
| Factory 10:                    | <b>QuJing JA Solar Technology Co., Ltd.</b><br>North of Nanhai Avenue and East of Shaoxi Road, Qujing Economic and<br>Technological Development Zone, 655000 Qujing City, Yunnan Province,<br>PEOPLE'S REPUBLIC OF CHINA              |
| Factory inspection report no.: | 862010866.002   |
| Factory 11:                    | <b>Inner Mongolia JA Solar PV Technology Co., Ltd.</b><br>No.21, Zhuangbei Avenue, Xin Guihua Area, Equipment park, Qingshan<br>District, 014000 Baotou, Inner Mogolia Autonomous Region, PEOPLE'S<br>REPUBLIC OF CHINA               |
| Factory inspection report no.: | 862010874.002   |
| Factory 12:                    | <b>Ordos JA Solar Technology Co., Ltd.</b><br>Room 2007, Office Building, High-tech Industrial Development Zone,<br>Dongsheng District Equipment Manufacturing Base, 017000 Ordos City,<br>Inner Mongolia, PEOPLE'S REPUBLIC OF CHINA |
| Factory inspection report no.: | 862011003.001   |



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Factory 13: **Inner Mongolia JA Naoer New Energy Co., Ltd.**  
Room 620, Office Building of the Management Committee, No.1 Fuyuan  
Road, North Economic and Technological Development Zone, Bayannur  
City 015000, Inner Mongolia Autonomous Region, PEOPLE'S REPUBLIC  
OF CHINA

Factory inspection report no.: 862011027.001

Factory 14: **MEM PANEL SOLAR ENERJI SANAYI VETICARET A.S**  
Organized Industrial Site 3, Street No: 4 Onikisubat, 46050  
Kahramanmaras, TURKIYE

Factory inspection report no.: 862011040.001

Remark:

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



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**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)  
60 cells: JAM60S02-xxx/SC/1000V (xxx=265-305, in steps of 5)



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60 cells: JAM60S02-xxx/MR/1000V (xxx=305-320, in steps of 5)  
60 cells: JAM60S12-xxx/PR/1000V (xxx=305-330, in steps of 5)  
48 cells: JAM6(FA)-48-xxx/SI (xxx=205-220, in steps of 5)  
48 cells: JAM6(R)(FA)-48-xxx (xxx=210-225, in steps of 5)  
48 cells: JAM6(R)-48-xxx/PR (xxx=220-235, in steps of 5)  
48 cells: JAM6-48-xxx/PR (xxx=215-235, in steps of 5)  
48 cells: JAM6(L)-48-xxx/PR (xxx=215-235, in steps of 5)  
48 cells: JAM6(K)-48xxx/4BB (xxx=210-225, in steps of 5)  
48 cells: JAM6(K)-48-xxx/PR (xxx=220-235, in steps of 5)

Maximum system voltage: 1000V  
Maximum overcurrent protection rating: 20A  
Electrical protection class: Class II

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

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)



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|--|--|
|  | 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) |
|  | 66 cells: JAM66S10-xxx/MR/1000V (xxx=345-390, in steps of 5) |
| Maximum system voltage:                | 1000V  |
| Maximum overcurrent protection rating: | 20A  |
| Electrical protection class:           | Class II   |

## 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   |

## 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) |



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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)  
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

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



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| Module types:                          | <b>PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:</b> |
|  | 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   |

|               |  |
|---------------|--|
| Module types: | <b>PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):</b> |
|               | 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   |



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Electrical protection class: Class II

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

Maximum overcurrent protection rating: 20A

Electrical protection class: Class II

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)



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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)  
 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)

Maximum system voltage: 1500V  
 Maximum overcurrent protection rating: 20A  
 Electrical protection class: Class II



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Module types:

**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)  
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)



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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

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

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)



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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)  
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)  
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=585-600, in steps of 5)  
72 cells: JAM72D40-xxx/MB-US/1500V (xxx=585-600, 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=405-440, in steps of 5)  
54 cells: JAM54D41-xxx/MB/1500V (xxx=405-440, 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)



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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

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=420-465, in steps of 5)  
 54 cells: JAM54D40-xxx/LB/1500V (xxx=420-465, in steps of 5)  
 54 cells: JAM54D40-xxx/LR (xxx=420-465, in steps of 5)  
 54 cells: JAM54D40-xxx/LR/1500V (xxx=420-465, in steps of 5)  
 60 cells: JAM60D41-xxx/LB (xxx=485-500, in steps of 5)  
 60 cells: JAM60D41-xxx/LB/1500V (xxx=485-500, 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)  
 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)



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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=580-630, in steps of 5)  
66 cells: JAM66D45-xxx/LB /1500V (xxx=580-630, in steps of 5)  
66 cells: JAM66D45-xxx/LR (xxx=580-630, in steps of 5)  
66 cells: JAM66D45-xxx/LR /1500V (xxx=580-630, 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

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  
Maximum overcurrent protection rating: 25A  
Electrical protection class: Class II

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=685-730, in steps of 5)  
66 cells: JAM66D46-xxx/LB /1500V (xxx=685-730, in steps of 5)

Maximum system voltage: 1500V



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Maximum overcurrent protection rating: 25A

Electrical protection class: Class II

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

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

72 cells: JAM72S40-xxx/LR (xxx=560-615, in steps of 5)

60 cells: JAM60S40-xxx/LR (xxx=475-510, in steps of 5)

54 cells: JAM54S40-xxx/LR (xxx=420-460, in steps of 5)

72 cells: JAM72S41-xxx/LR (xxx=560-595, in steps of 5)

60 cells: JAM60S41-xxx/LR (xxx=475-495, in steps of 5)

54 cells: JAM54S41-xxx/LR (xxx=420-445, 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)

72 cells: JAM72S40-xxx/MR (xxx=580-605, in steps of 5)

54 cells: JAM54S40-xxx/MR (xxx=435-450, in steps of 5)

Maximum system voltage: 1500V

Maximum overcurrent protection rating: 25A



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Electrical protection class: Class II

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

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

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)



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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  
 Electrical protection class: Class II

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



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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

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)



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|--|--|
|  | 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   |

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   |

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) |



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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

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



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| Module types:                          | <b>PV Modules with 182mm Mono-crystalline Silicon 1/5-cut Solar Cells:</b><br>68 cells: JAM68S11-xxx/PR (xxx=355-365, in steps of 5)<br>68 cells: JAM68S11-xxx/PR(B) (xxx=345-365, in steps of 5)<br>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   |
| Module types:                          | <b>PV Modules with Poly-crystalline Silicon Solar Cells (156mm to 158.75mm):</b><br>72 cells: JAP72S01-xxx/SC (xxx=310-345, in steps of 5)<br>72 cells: JAP72S02-xxx/SC (xxx=310-345, in steps of 5)<br>72 cells: JAP72S01-xxx/PR (xxx=330-345, in steps of 5)<br>72 cells: JAP72S02-xxx/PR (xxx=330-345, in steps of 5)<br>72 cells: JAP72S09-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S01-xxx/MS (xxx=325-340, in steps of 5)<br>60 cells: JAP60S01-xxx/SC (xxx=255-290, in steps of 5)<br>60 cells: JAP60S02-xxx/SC (xxx=255-290, in steps of 5)<br>60 cells: JAP60S01-xxx/PR (xxx=275-285, in steps of 5)<br>60 cells: JAP60S02-xxx/PR (xxx=275-285, in steps of 5)<br>60 cells: JAP60S09-xxx/SC (xxx=265-290, in steps of 5)<br>60 cells: JAP60S01-xxx/MS (xxx=270-280, in steps of 5)<br>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   |
| Module types:                          | <b>PV Modules with Poly-crystalline Silicon half-cut Solar Cells (156mm to 158.75mm):</b><br>72 cells: JAP72S03-xxx/PR (xxx=335-355, in steps of 5)<br>72 cells: JAP72S03-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S10-xxx/SC (xxx=335-350, in steps of 5)<br>72 cells: JAP72S03-xxx/MS (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/SC (xxx=320-345, in steps of 5)<br>72 cells: JAP72S08-xxx/PR (xxx=335-355, in steps of 5)<br>60 cells: JAP60S03-xxx/PR (xxx=280-295, in steps of 5)<br>60 cells: JAP60S03-xxx/SC (xxx=270-290, in steps of 5)  |



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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: 1000V or 1500V

Maximum overcurrent protection rating: 20A

Electrical protection class: Class II

Remark:

For detailed product information, please refer to CDF (Constructional Data Form).



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