

**Data form for critical components and material information**

Applicant name and address..... :	Jiangsu Seraphim Solar System Co., Ltd (CBW No.: 098455) No. 10, Tongshun Rd, Henglin Zhen,Wujin District, 213101 Changzhou, China.
Manufacturer name and address . :	Jiangsu Seraphim Solar System Co., Ltd (CBW No.: 098455) No. 10, Tongshun Rd, Henglin Zhen,Wujin District, 213101 Changzhou, China.
Name and address of factory / factories..... :	1. Jiangsu Seraphim Solar System Co., Ltd (CBW No.: 098455) No. 10, Tongshun Rd, Henglin Zhen,Wujin District, 213101 Changzhou, China. 2. Jingyi & Seraphim Hebei Energy Technology Co., Ltd. (CBW No.: 98633) Science & Technology Park, 075600 Zhuolu, Hebei Province, P. R.China. 3. Jinzhai Seraphim Energy Technology Co., Ltd East of the intersection of Shichuan Road and Jinjiazhai Road, Jinzhai Economic Development Zone (Modern Industrial Park), Lu 'an City, Anhui Province,China 4. Elin Elektrik Insaat MUSAAVIRLIK Proje Taahhut Ticaret ve Sanayi A.S.(CBW No.: 108867) Baskent O.S.B.23. Cadde No: 2 Malikoy 06909 Sincan Ankara, TURKEY. 5. Anhui Seraphim Energy CO., LTD (CBW No.: 113958) Jingqi Road, Tonghang Avenue,Yingshang Economic DevelopmentZone, Fuyang, Anhui, China
Project-No./Report-No. .... :	704062310808-05A4
Test item description..... :	See the corresponding test report
Model/Type reference ..... : <b>Single glass modules</b>	<b>182mm half-cut cell (perc):</b> 1) SRP-xxx-BMA-HV (xxx=535-560, in steps of 5); 2) SRP-xxx-BMB-HV (xxx=445-465, in steps of 5); 3) SRP-xxx-BMC-HV (xxx=490-510, in steps of 5); 4) SRP-xxx-BMD-HV (xxx=400-420, in steps of 5); 5) SRP-xxx-BMZ-HV (xxx=575-605, in steps of 5); <b>182mm half-cut cell (topcon):</b> 6) SRP-xxx-BTA-HV(xxx=550-590, in steps of 5); 7) SRP-xxx-BTB-HV(xxx=460-490, in steps of 5); 8) SRP-xxx-BTC-HV(xxx=505-540, in steps of 5); 9) SRP-xxx-BTD-HV(xxx=415-440, in steps of 5); 10) SRP-xxx-BTZ-HV (xxx=600-635, in steps of 5). <b>210mm half-cut cell (perc):</b>

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Address of legal entity: Street:3-13F, No. 151 Heng Tong Road  
City, Country: Shanghai, P. R. China  
Name of Project Handler: Ning Tang



*Jing Tang*

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	<p>11) SRP-xxx-BMB-HV(xxx=590-610, in steps of 5);                  12) SRP-xxx-BMC-HV(xxx=650-675, in steps of 5);                  13) SRP-xxx-BMD-HV(xxx=535-550, in steps of 5);                  14) SRP-xxx-BME-HV(xxx=475-490, in steps of 5);                  15) SRP-xxx-BMF-HV(xxx=415-430, in steps of 5);                  xxx is standing for rated output power at STC.</p>
<p>Model/Type reference ..... :  <b>Double glass modules</b></p>	<p><b>182mm half-cut cell (perc):</b>                  16) SRP-xxx-BMA-BG (xxx=535-560, in steps of 5);                  17) SRP-xxx-BMB-BG (xxx=445-465, in steps of 5);                  18) SRP-xxx-BMC-BG (xxx=490-510, in steps of 5);                  19) SRP-xxx-BMD-BG (xxx=400-420, in steps of 5);                  20) SRP-xxx-BMZ-BG (xxx=575-605, in steps of 5);  <b>182mm half-cut cell (topcon):</b>                  21) SRP-xxx-BTA-BG (xxx=550-590, in steps of 5);                  22) SRP-xxx-BTB-BG (xxx=460-490, in steps of 5);                  23) SRP-xxx-BTC-BG (xxx=505-540, in steps of 5);                  24) SRP-xxx-BTD-BG (xxx=415-440, in steps of 5);                  25) SRP-xxx-BTZ-BG (xxx=600-635, in steps of 5).  <b>210mm half-cut cell (perc):</b>                  26) SRP-xxx-BMB-BG(xxx=590-610, in steps of 5);                  27) SRP-xxx-BMC-BG(xxx=650-675, in steps of 5);                  28) SRP-xxx-BMD-BG(xxx=535-550, in steps of 5);                  29) SRP-xxx-BME-BG(xxx=475-490, in steps of 5);                  30) SRP-xxx-BMF-BG(xxx=415-430, in steps of 5);  <b>182*199mm half-cut cell (topcon):</b>                  31) SRP-xxx-BTA-BG(xxx=620-640, in steps of 5);                  32) SRP-xxx-BTC-BG(xxx=570-585, in steps of 5);                  33) SRP-xxx-BTD-BG(xxx=465-480, in steps of 5);  <b>182*210mm half-cut cell (topcon):</b>                  34) SRP-xxx-BTB-BG(xxx=550-565, in steps of 5);                  35) SRP-xxx-BTC-BG(xxx=605-625, in steps of 5);                  36) SRP-xxx-BTD-BG(xxx=495-510, in steps of 5);                  37) SRP-xxx-BTE-BG(xxx=440-455, in steps of 5);                  38) SRP-xxx-BTF-BG(xxx=385-395, in steps of 5);</p>

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	<p><b>210mm half-cut cell (topcon):</b>                  39) SRP-xxx-BTB-BG(xxx=630-645, in steps of 5);                  40) SRP-xxx-BTC-BG(xxx=690-710, in steps of 5);                  41) SRP-xxx-BTD-BG(xxx=565-580, in steps of 5);                  42) SRP-xxx-BTE-BG(xxx=500-515, in steps of 5);                  43) SRP-xxx-BTF-BG(xxx=440-450, in steps of 5);</p> <p><b>210mm half-cut cell (HJT):</b>                  44) SRP-xxx-BHB-BG(xxx=635-655, in steps of 5);                  45) SRP-xxx-BHC-BG(xxx=695-720, in steps of 5);                  46) SRP-xxx-BHD-BG(xxx=570-590, in steps of 5);                  47) SRP-xxx-BHE-BG(xxx=505-520, in steps of 5);                  48) SRP-xxx-BHF-BG(xxx=440-460, in steps of 5);                  xxx is standing for rated output power at STC.</p>
Device type .....	Mono-crystalline Silicon Photovoltaic (PV) Module

Ratings .....	See below electrical parameter table
Overvoltage category .....	<input type="checkbox"/> I / <input type="checkbox"/> II / <input checked="" type="checkbox"/> III / <input type="checkbox"/> IV / <input type="checkbox"/> N/A
Pollution degree .....	<input checked="" type="checkbox"/> 1 / <input type="checkbox"/> 2 / <input type="checkbox"/> 3 / <input type="checkbox"/> 4 / <input type="checkbox"/> N/A
Class of protection .....	<input type="checkbox"/> Class I (PE connected) <input checked="" type="checkbox"/> Class II (isolated) <input type="checkbox"/> Class III <input type="checkbox"/> Others: <input checked="" type="checkbox"/> N/A
Product with functional earthing .....	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> N/A
Environmental conditions / Maximum ambient temperature (°C) .....	:-40 °C~+40 °C
Equipment mobility / Classification of installation and use .....	<input type="checkbox"/> transportable / <input type="checkbox"/> portable / <input type="checkbox"/> stationary / <input type="checkbox"/> mobile / <input type="checkbox"/> fixed / <input checked="" type="checkbox"/> permanently installed / <input type="checkbox"/> hand-held / <input type="checkbox"/> body-worn / <input type="checkbox"/> building-in / <input checked="" type="checkbox"/> Others: ≤2000 m above sea level

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<p>Overall size of equipment (mm) .... :</p> <p><b>Single glass modules</b></p>	<p><b>182mm half-cut cell (perc):</b></p> <p>1) 2278*1134*35(30)(28)</p> <p>2) 1909*1134*35(30)(28)</p> <p>3) 2093*1134*35(30)(28)</p> <p>4) 1722*1134*35(30)(28)</p> <p>5) 2465*1134*35(30)(28)</p> <p><b>182mm half-cut cell (topcon):</b></p> <p>6) 2278*1134*35(30)(28)</p> <p>7) 1909*1134*35(30)(28)</p> <p>8) 2093*1134*35(30)(28)</p> <p>9) 1722*1134*35(30)(28)</p> <p>10) 2465*1134*35(30)(28)</p> <p><b>210mm half-cut cell (perc):</b></p> <p>11) 2172*1303*35(33)</p> <p>12) 2384*1303*35(33)</p> <p>13) 1962*1303*35(33)</p> <p>14) 1751*1303*35(33)</p> <p>15) 1540*1303*35(33)</p>
<p>Overall size of equipment (mm) .... :</p> <p><b>Double glass modules</b></p>	<p><b>182mm half-cut cell (perc 2.0 glass):</b></p> <p>16) 2278*1134*30</p> <p>17) 1909*1134*30</p> <p>18) 2093*1134*30</p> <p>19) 1722*1134*30</p> <p>20) 2465*1134*30(35)</p> <p><b>182mm half-cut cell (topcon 2.0glass):</b></p> <p>21) 2278*1134*30</p> <p>22) 1909*1134*30</p> <p>23) 2093*1134*30</p> <p>24) 1722*1134*30</p> <p>25) 2465*1134*30(35)</p> <p><b>210mm half-cut cell (perc 2.0glass):</b></p> <p>26) 2172*1303*35(33)</p> <p>27) 2384*1303*35(33)</p> <p>28) 1962*1303*35(33)</p>

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	<p>29) 1751*1303*35(33)                  30) 1540*1303*35(33)  <b>182*199mm half-cut cell (topcon 2.0glass):</b>                  31) 2465*1134*30                  32) 2278*1134*30                  33) 1864*1134*30  <b>182*210mm half-cut cell (topcon 2.0glass):</b>                  34) 2172*1134*30                  35) 2382*1134*30                  36) 1962*1134*30                  37) 1762*1134*30                  38) 1540*1134*30  <b>210mm half-cut cell (topcon 2.0glass):</b>                  39) 2172*1303*35(33)                  40) 2384*1303*35(33)                  41) 1962*1303*35(33)                  42) 1751*1303*35(33)                  43) 1540*1303*35(33)  <b>210mm half-cut cell (HJT 2.0glass):</b>                  44) 2172*1303*35(33)                  45) 2384*1303*35(33)                  46) 1962*1303*35(33)                  47) 1751*1303*35(33)                  48) 1540*1303*35(33)</p>
<p>Mass of equipment (kg) ..... :  <b>Single glass modules</b></p>	<p><b>182mm half-cut cell (perc):</b>                  1) 27.0&amp;27.0&amp;26.0                  2) 22.3&amp;22.3&amp;21.5                  3) 24.5&amp;24.5&amp;24                  4) 21.3&amp;21.5&amp;21.0                  5) 29&amp;29&amp;28.5  <b>182mm half-cut cell (topcon):</b>                  6) 27.0&amp;27.0&amp;26.0                  7) 22.3&amp;22.3&amp;21.5                  8) 24.5&amp;24.5&amp;24</p>

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	9) 21.3&21.5&21.0 10) 29&29&28.5 <b>210mm half-cut cell (perc):</b> 11) 31.0&29.5kg 12) 34.0&32.2kg 13) 27.8&26.4kg 14) 24.7&23.7kg 15) 21.6&20.9kg
Mass of equipment (kg) ..... : <b>Double glass modules</b>	<b>182mm half-cut cell (perc 2.0 glass):</b> 16) 32 17) 27.3 18) 29.4 19) 24 20) 34.6(35) <b>182mm half-cut cell (topcon 2.0 glass):</b> 21) 32 22) 27.3 23) 29.4 24) 24 25) 34.6(35) <b>210mm half-cut cell (perc 2.0glass):</b> 26) 35.0&35.0kg 27) 38.5&38.5kg 28) 31.5&31.5kg 29) 28.0&28.0kg 30) 24.5&24.5kg <b>182*199mm half-cut cell (topcon 2.0glass):</b> 31) 34.6kg 32) 32kg 33) 27kg <b>182*210mm half-cut cell (topcon 2.0glass):</b> 34) 30.7kg 35) 33.7kg 36) 27.8kg

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	37) 24.9kg 38) 21.8kg <b>210mm half-cut cell (topcon 2.0glass):</b> 39) 35.0&35.0kg 40) 38.5&38.5kg 41) 31.5&31.5kg 42) 28.0&28.0kg 43) 24.5&24.5kg <b>210mm half-cut cell (HJT 2.0glass):</b> 44) 35.0&35.0kg 45) 38.5&38.5kg 46) 31.5&31.5kg 47) 28.0&28.0kg 48) 24.5&24.5kg
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Data communication ports:	
<input checked="" type="checkbox"/> N/A	
Wired ports .....	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> USB <input type="checkbox"/> LAN <input type="checkbox"/> DALI <input type="checkbox"/> other:
Wireless ports .....	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Wifi <input type="checkbox"/> Bluetooth <input type="checkbox"/> NFC <input type="checkbox"/> 4G/LTE <input type="checkbox"/> 5G <input type="checkbox"/> Other:
Data Storage/ Processing .....	<input type="checkbox"/> N/A <input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Cloud

Additional	
IEC 60601-1 / EN 60601-1 / ANSI/AAMI ES60601-1 / CAN/CSA-C22.2 No. 60601-1:	
<input checked="" type="checkbox"/> N/A	
Applied part type .....	<input type="checkbox"/> B <input type="checkbox"/> BF <input type="checkbox"/> CF <input type="checkbox"/> Defibrillation-Proof <input checked="" type="checkbox"/> No AP
Software Version.....	N/A

General product information and other remarks:
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**Form**



**Data form for critical components and material information**

Main label /Warning Markings:	
Description of model differences:	See the corresponding test report
General information / Intended use:	See the corresponding test report
Protective earth connection:	Grounding hole 
Drawing(s) / Picture(s):	See the corresponding test report

**Additional information:**

- Types of terminations:
- Type A: wire of flying lead
  - Type B: tags, threaded stubs, screws, etc.
  - Type C: connector
  - Junction box
- Protection devices:
- By-pass Diode
  - Fuse
  - Other
- Fire safety class according to UL790:
- Class A Double glass modules
  - Class B
  - Class C Single or double glass modules
- Frame:
- Framed
  - Frameless
- Designed mechanical load and safety factor:
- Positive: 3600Pa,1.5  
Negative: 1600Pa,1.5
- Serial No. bar code:

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# Data form for critical components and material information

Annex I Rules of Serial number of Seraphim																
the first		the second to sixth							the seventh	the ninth to tenth	the eleventh to thirteenth	the fourteenth to eighteenth				
type of module		model of module							year	month	batch number	Product serial number				
code	type of module	code	type of cell	code	the place of manufacture	code	the size of cell	pcs of cells		code	code	code	code			
S	Standard module	P	poly	1	Shuyang Saibu(China)	5	125 or 125.4	the following apply to the S-, G-, A-, B-, C-, D modules		1	0	0	1			
E	Eclipse module	M	mono	2	INFINE (Japan)	6	156 or 156.75 or 157 or 158.75	36	4*9	1	7	0	2			
G	Glass module	H	HJT	3	Jingyi (China)	7	166	42	6*7 (*2)	1	6	0	3			
B	Blade module	T	TOPCon	4	Vinergy (Vietnam)	8	182	48	6*6 (*2)	1	0	0	4			
A	bifacial module			5	Seraphim-linshan (China)	9	210	54	6*6 (*2)	2	0	0	5			
C	Blade glass module			6	Seraphim-hengyao road (China)	10	182*210	60	6*10 (*2)	2	1	0	6			
D	Blade bifacial module			7	Seraphim-longshun Rd (China)			60	6*11 (*2)	2	2	0	7			
F	Single glass three fragment module			8	LIAN Seraphim			72	6*12 (*2)	2	3	0	8			
H	Double glass three fragment module			9	South Africa Seraphim			78	6*13 (*2)	2	4	0	9			
				0	Elin (Turkey)			96	8*12	2	5	1	0			
				A	Seraphim-jinzhai (China)			the following apply to the E modules		2	0	1	1			
				B	Seraphim-yingsheng (China)			code	Number of strings	code	the number of cells per string		2	7	1	2
				C	Dexler (Turkey)			1	12	1	34					
				D	MECEN (Vietnam)			2	10	2	33					
				E	Taratic(changzhou)			3	8	3	32					
				F	Taotie(Ou Zhou)			4	6	4	31					
				G	Yunnan					5	30					
								the following apply to the F-, H modules								
								code	cells arrangement							
								41	6*12*2							
								52	6*13*2							
								56	6*14*2							
								60	6*15*2							
								64	6*16*2							
								68	6*17*2							
								72	6*18*2							

001-000  
 (changzhou use 001-499  
 jingyi use 001-500  
 is an use 601-700)

00001  
 00000

Label:

**Jiangsu Seraphim Solar System Co., Ltd.**

Add: No. 10 Tongshun Rd, Henglin Zhen, Wujin District, 213101 Changzhou, PEOPLE'S REPUBLIC OF CHINA  
 www.seraphim-energy.com  
 Tested according to IEC 61215-1:2021, IEC 61215-2:2021, IEC 61730-1:2023, IEC 61730-2:2023  
 Made in China

PV Module Classification: Class II  
**SHIFTING THE FUTURE**

Module Type: SRP-700-BHC-BG	Pmax(BNPI): 785W±3%	Dimension: 2384×1303×33mm
Pmax (STC) : 700W	Isc(BNPI): 19.56A±4%	Cell Technology: Mono-Si
Power Sorting: (0,+4.99)	Voc(BNPI): 50.24V±3%	Min Design Load: +3600/-1600Pa
Imp (STC) : 16.64 A	Isc(BSI)*: 22.15A±4%	Sys.Volt: 1500V
Vmp (STC) : 42.14V	Fire Rating: Class A	Module(T <sub>cell</sub> ) <sub>max</sub> : 70 °C
Isc (STC) : 17.44A±4%	Weight: 38.5kg	Max. series fuse: 35A
Voc (STC) : 50.16V±3%		Power Tolerance: ±3%

Bifaciality coefficient a:  $\phi Voc=0.99(\pm 5\%) / \phi Isc=0.9(\pm 10\%) / \phi Pmax=0.9(\pm 10\%)$

Connector (see manual for designated connectors) : QC Solar QC4.10-ods

All technical data measured at STC: 1000W/m<sup>2</sup>, AM1.5, 25°C

BNPI: front 1 000 W/m<sup>2</sup>, rear 135 W/m<sup>2</sup>  
 BSI: front 1 000 W/m<sup>2</sup>, rear 300 W/m<sup>2</sup>  
 \* Only required for IEC 61215 series.  
 † Depending on bifaciality, BSI (a 300 W/m<sup>2</sup>) or aBSI (> 300 W/m<sup>2</sup>) is required.

### Limited materials combinations for single glass module:

<b>J-box Adhesive</b>	<b>J-Box</b>	<b>Backsheet</b>
KDW 1536	SRP02-abcd	FFC-JW3010(plus)

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1527	SRP02-abcd	Cynagard 255
1527	SRP02-abcd	FFC-JW3010(plus)

Encapsulation	Backsheet
B601HP/ B601P	FFC-JW3010(plus)
B602/B601W	FFC-JW3010(plus)
B601HP/ B601P	Cynagard 255
GW801A/GW801V	FFC-JW3010(plus)

**Limited materials combinations for Double glass module:**

J-box Adhesive	J-Box	Backsheet
KDW 1536	SRP02-abcd	ShanXi RiShengDa
1527	SRP02-abcd	Anhui Seraphim
KDW 1536	SRP02-abcd	Flat glass
KDW 1536	SRP02-abcd	Anhui yanlongji
KDW 1536	SRP02-abcd	Ninghai Kibing
KDW 1536	SRP02-abcd	Almaden
1527	SRP02-abcd	Anhui yanlongji

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# Single glass modules

## Critical components and material information:

Kind of component / Bauteil	Manufacturer / Hersteller	Mechanical, electrical and chemical specification / Mechanische, elektrische und chemische Spezifikation	Test report and/or mark from / Prüfbericht und /oder -zeichen von
Cell	Aiko Solar Energy Technology Co.,Ltd	Mono-Si, Cell type: 7M9E1018A-L1, Perc 10 busbars. Bifacial cell Cell dimensions: L*W: 182mmx91mm±0.5mm Thickness: 165±17.5µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	Aiko Solar Energy Technology Co.,Ltd	Mono-Si, Cell type: 8S7E1218A-R1, Perc 12 busbars. Bifacial cell. Cell dimensions: L*W: 210mmx105mm±0.5mm, Thickness: 185±18.5µm, Cell area: 220.5 (cm <sup>2</sup> )	Tested with appliance
	JIETAI TECHNOLOGY	Mono-Si, Cell type: CZJT-182M-16D1, TOPCon, 16 busbars. Bifacial cell Cell dimensions: Lx W: 182mmx91mm±0.5mm Thickness: 140µm±14µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	JIETAI TECHNOLOGY	Mono-Si, Cell type: N182CG16D1, TOPCon, 16 busbars. Bifacial cell Cell dimensions: Lx W: 182.2mmx91.875mm±0.5mm Thickness: 130µm±13µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
Superstrate	FLAT GLASS GROUP CO., LTD.	Type: AR coating tempered glass Thickness: 3.2 (mm)	Tested with appliance
	Anhui Seraphim Energy Co., LTD	Type: AR coating tempered glass Thickness: 3.2 (mm)	Tested with appliance
	Anhui yanlongji New Energy Technology Co.,Ltd	Type: AR coating tempered glass Thickness: 3.2 (mm)	Tested with appliance
Substrate (backsheet)	Jolywood (Suzhou) Sunwatt Co.,Ltd.	Type: FFC-JW3010(plus) white. 1500V Material: FFC/PET/FFC, Thickness: 13/285/12 um. TI: 110.8°C.	TÜV SÜD
	Cybird Technologies Inc	Type: Cynagard 255, 1500V	TÜV SÜD

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## Data form for critical components and material information

		Material: Coating (12µm/White)/PET(288µm/White)/coating (4µm/White or Black).	
Encapsulant	Changzhou Betterial Film Technologies Co.,Ltd.	B601HP(with front surface), thickness:0.45- 0.55mm. B601P(with rear surface), thickness:0.45- 0.55mm	Tested with appliance
	Changzhou Betterial Film Technologies Co.,Ltd.	B602(with front surface), thickness:0.6-0.7mm. B601W(with rear surface), thickness:0.6- 0.65mm	Tested with appliance
	Golden Wrapping (Shanghai) Technology.,Ltd.	GW801A(with front surface), thickness:0.495-0.605mm. GW801V(with rear surface), thickness:0.513- 0.627mm	Tested with appliance
Junction box 1	Changzhou Seraphim Trading Co., LTD	SRP02-abcd 1000V or 1500V 20A,25A or 30A IP65/IP68(1m,1h), -40 °C to 85 °C.	TÜV SÜD
Potting Material	H.B. Fuller(Suzhou) Advanced Material Co., Ltd.	1521 (white)	Tested with appliance
		1533 (white and black)	Tested with appliance
	Shanghai Huitian New Material Co., Ltd.	5299W-S (white and black)	Tested with appliance
		5299W(white)	Tested with appliance
	LIYANG KANGDAWEI INDUSTRIAL CO.,LTD	KDW-3582	Tested with appliance
Jolywood (Suzhou) Sunwatt Co.,Ltd	JW-3707	Tested with appliance	
Adhesive for junction box	Liyang Kangdawei Industry Co.,Ltd	Silicone adhesive, type KDW-1536	Tested with appliance
	H.B. Fuller(Suzhou) Advanced Material Co., Ltd.	Silicone adhesive, type 1527	Tested with appliance
Cable for photovoltaic equipment	Wuxi Xinhongye Wire & Cable Co.,Ltd.	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜV Rheinland
	Wuxi Suntech Power Co.,Ltd.	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜV Rheinland
	Zerun Co., LTD	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜV Rheinland
		H1Z2Z2-K 1X4,0 mm2, 1500V,	TÜV Rheinland

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Data form for critical components and material information

		-40°C~+90°C	
	Suzhou BAOHING Electric Wire&Cable Co.,LTD.	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜV Rheinland
	Changshu JHOSIN Communication Technology Co., LTD	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜV Rheinland
	Huzhou Shangfu Wire &Cable High Technology Co.,Ltd	62930 IEC 131 1X4,0 mm2, 1500V, -40°C~+90°C	TÜVSÜD
Connector for Photovoltaic system	Zerun Co., LTD.	Z4S-abcde,1500VDC,40A for 4,0mm <sup>2</sup>	TÜV Rheinland
	Stäubli Electrical Connectors AG	PV-KST4-EVO 2/xy_UR, PV-KBT4-EVO2/xy_UR, 1500VDC,45A(4mm <sup>2</sup> ),53A(6mm <sup>2</sup> )	TÜV Rheinland
		PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy, 1500VDC,45A(4mm <sup>2</sup> ),53A(6mm <sup>2</sup> )	TÜV Rheinland
		PV-KST4/xy-UR; PVKBT4/xy-UR, 1000VDC,39A	TÜV Rheinland
	Amphenol Industrial Operations	H4Labcdef, 1100VDC, rated current:35A for 4,0mm <sup>2</sup>	TÜV Rheinland
	Amphenol Technology (Shenzhen) Co., LTD	UTXCFabce, UTXCMabcd, 1500VDC, rated current: 42A for 4,0mm <sup>2</sup>	TÜV Rheinland
	Tyco Electronics Austria GmbH	PV4-S1yx,1500VDC, 40A for 4mm <sup>2</sup>	TÜV Rheinland
	Jiangxi Jinko PV Material Co.,Ltd.	PV-JK03M2/xy(Plug+Socket), 1500VDC,30A(2,5mm <sup>2</sup> ), 45A(4,0mm <sup>2</sup> ),50A(6,0mm <sup>2</sup> ),60A(10,0mm <sup>2</sup> ),IP68	TÜV SÜD
	Jiangsu Tonglin Electric Co., Ltd.	TL-CABLE01S, TLCABLE01SF; 1500VDC,41A(4,0mm <sup>2</sup> ),46A(6,0mm <sup>2</sup> ),IP68	TÜV Rheinland
	Wuxi Suntech Power Co.,Ltd.	STP-XC4-4; STP-XC4-6; 1500VDC,41A(4,0mm <sup>2</sup> ) for STP-XC4-4, 46A(6,0mm <sup>2</sup> ) for STP-XC4-6,IP68	TÜV Rheinland
Hanwha Q	HQC4,1500VDC, 41A(4,0mm <sup>2</sup> )	TÜV Rheinland	

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	CELLS(Qidong) Co.,Ltd		
	Zerun Co., LTD.	Z4S-abcd (a=C or P; b=T or H; c=A or B or C; d=A or B), 1500VDC for (d=B);41A for (c=B)	TÜV SÜD
	QC Solar (Suzhou) Corporation	QC4.10-cds,1500VDC, 36A or 41A or 46A or 42A or 55A or 60A	TÜV SÜD
Bypass diode	Zerun Co., LTD(OEM: Hangzhou Daoming Microelectronic Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM=45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		38SQ045,IF(AV) =38A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD(OEM: NANTONG GAOXIN ELECTRONICS CO.,LTD)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD(OEM: NANTONG HORNBY ELECTRONIC CO.,LTD)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD(OEM: (Yangzhou Yangjie Electronic Technology Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD (OEM: Anhui Juxin Semiconductor Technology Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A	Test with unit

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## Data form for critical components and material information

Cell interconnector	Wuxi Changliang Photoelectric Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Anhui Tongcheng New Energy Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Sveck Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Suzhou YourBest New-type Materials Co.,Ltd.	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Jiangsu Lanxin New Energy Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Suzhou Xiangbang New Material Technology Co., Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
String connector	Shanghai SanySolar materials Technology Co., Ltd	Cross section: 0.35x 4mm,0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40,	Tested with appliance
	Wuxi Changliang Photoelectric Technology Co.,Ltd	Cross section: 0.35x 4mm, 0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40, thickness 0.02~0.025 mm at each side	Tested with appliance
	Sveck Technology Co.,Ltd	Cross section: 0.35x4mm,0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40,	Tested with appliance
	Anhui Tongcheng New Energy Technology Co.,Ltd	Cross section: 0.35x4mm, 0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40,	Tested with appliance
	ChangZhou Greateen New Energy Technology Co.,Ltd	Cross section: 0.35x4mm, 0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40,	Tested with appliance
	Xi'an Telison New Materials Co.,Ltd	Cross section: 0.35x4mm, 0.4*6mm	Tested with appliance

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**Form**



**Data form for critical components and material information**

		Material: Base Cu (≥99.95%). Coating Sn60Pb40,	
	Jiangsu Lanxin New Energy Technology Co.,Ltd	Cross section: 0.35×4mm,0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Suzhou Boneed Photovoltaic Technology Co., Ltd	Cross section: 0.35×4mm,0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40 black	Tested with appliance
	Suzhou Xiangbang New Material Technology Co., Ltd	Cross section: 0.35×4mm,0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40	Tested with appliance
Fluxing material	Zhengzhou Wise PV Technology Co.,Ltd	WS-868-S2	Tested with appliance
	Zhengzhou Wise PV Technology Co.,Ltd	WS-867	Tested with appliance
	Shenzhen Vital New Material Company Limited	WTO-PV112F	Tested with appliance
	Singapore Asahi Chemical and Solder Industries Pte Ltd	SF56	Tested with appliance
	Shenzhen Tong fang Electronic New Material Co., Ltd	TFHF9100	Tested with appliance
Frame	Changzhou Lidu Lighting Co., Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Wuxi Xuye Metal Products Manufacturing Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Jiangyin Zhaoxu Metal Products manufactory Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	AnHui XinXu New Energy Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Wuxi Xisha Photoelectric Aluminium Products Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	CITIC BOHAI ALUMINUM INDUSTRIES HOLDING CO.,LTD	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance

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**Form**



**Data form for critical components and material information**

	Anhui Xinbo Technology Co., LTD.	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Chi zhou Anan Aluminum CO.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Anhui Haifu New Meterial Technology Co.Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Shandong Phoenix New Material Technology Co., Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
Adhesive for frame	Liyang Kangdawei Industry Co.,Ltd	Silicone adhesive, type KDW-1536	Tested with appliance
	H.B. Fuller (Suzhou) Advanced Material Co., Ltd.	Silicone adhesive, type 1527	Tested with appliance
Insulation material between string connectors	N/A	N/A	N/A
Fixing tape	3M	UV-1	Tested with appliance
Label	Wuxi Zhengfeng Special printing Co., Ltd.	Material: PET	Tested with appliance

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Electrical Parameter Table:

Product Electrical Ratings at STC:							
Module	SRP-535-BMA-HV	SRP-540-BMA-HV	SRP-545-BMA-HV	SRP-550-BMA-HV	SRP-555-BMA-HV	SRP-560-BMA-HV	SRP-445-BMB-HV
open-circuit voltage (with tolerance±3% ) [V]:	49.4	49.5	49.6	49.7	49.8	49.9	41.22
voltage at max. power [V]:	41.29	41.55	41.8	42.05	42.31	42.56	34.18
current at max. power [A]:	12.96	13	13.04	13.08	13.12	13.16	13.03
short-circuit current (with tolerance±4% ) [A]:	13.7	13.81	13.9	14	14.1	14.21	13.66
max. power (with tolerance±3%) [W]:	535	540	545	550	555	560	445
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	12	12	12	12	12	12	12
Product Electrical Ratings at STC:							
Module	SRP-450-BMB-HV	SRP-455-BMB-HV	SRP-460-BMB-HV	SRP-465-BMB-HV	SRP-490-BMC-HV	SRP-495-BMC-HV	SRP-500-BMC-HV
open-circuit voltage (with tolerance±3% ) [V]:	41.32	41.42	41.52	41.62	45.32	45.43	45.53
voltage at max. power [V]:	34.28	34.38	34.49	34.6	37.59	37.7	37.78
current at max. power [A]:	13.13	13.24	13.34	13.44	13.05	13.15	13.24
short-circuit current (with tolerance±4% ) [A]:	13.76	13.86	13.96	14.06	13.68	13.79	13.89
max. power (with tolerance±3%) [W]:	450	455	460	465	490	495	500
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	12	12	12	12	12	12	12

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Data form for critical components and material information

Product Electrical Ratings at STC:							
Module	SRP-505-BMC-HV	SRP-510-BMC-HV	SRP-400-BMD-HV	SRP-405-BMD-HV	SRP-410-BMD-HV	SRP-415-BMD-HV	SRP-420-BMD-HV
open-circuit voltage (with tolerance±3% ) [V]:	45.63	45.75	37.12	37.22	37.32	37.42	37.52
voltage at max. power [V]:	37.87	37.95	30.81	30.93	31.05	31.16	31.28
current at max. power [A]:	13.34	13.44	12.99	13.1	13.21	13.32	13.43
short-circuit current (with tolerance±4% ) [A]:	13.99	14.1	13.6	13.7	13.8	13.9	14
max. power (with tolerance±3%) [W]:	505	510	400	405	410	415	420
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	12	12	12	12	12	12	12
Product Electrical Ratings at STC:							
Module	SRP-575-BMZ-HV	SRP-580-BMZ-HV	SRP-585-BMZ-HV	SRP-590-BMZ-HV	SRP-595-BMZ-HV	SRP-600-BMZ-HV	SRP-605-BMZ-HV
open-circuit voltage (with tolerance±3% ) [V]:	53.23	53.43	53.63	53.83	54.03	54.23	54.43
voltage at max. power [V]:	44.61	44.81	45.01	45.21	45.41	45.61	45.81
current at max. power [A]:	12.89	12.95	13.01	13.06	13.11	13.16	13.21
short-circuit current (with tolerance±4% ) [A]:	13.75	13.81	13.87	13.93	13.99	14.05	14.11
max. power (with tolerance±3%) [W]:	575	580	585	590	595	600	605
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500

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Data form for critical components and material information

Min. creepage distance [mm]	12	12	12	12	12	12	12
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Product Electrical Ratings at STC:							
Module	SRP-590-BMB-HV	SRP-595-BMB-HV	SRP-600-BMB-HV	SRP-605-BMB-HV	SRP-610-BMB-HV	SRP-650-BMC-HV	SRP-655-BMC-HV
open-circuit voltage (with tolerance±3%) [V]:	41.29	41.49	41.69	41.89	42.09	45.48	45.68
voltage at max. power [V]:	34.18	34.38	34.58	34.78	34.98	37.76	37.96
current at max. power [A]:	17.26	17.31	17.36	17.41	17.46	17.21	17.25
short-circuit current (with tolerance±4%) [A]:	18.28	18.34	18.40	18.46	18.52	18.34	18.39
max. power (with tolerance±3%) [W]:	590	595	600	605	610	650	655
Series Fuse Rating [A]	30	30	30	30	30	30	30
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	13.5	13.5

Product Electrical Ratings at STC:							
Module	SRP-660-BMC-HV	SRP-665-BMC-HV	SRP-670-BMC-HV	SRP-675-BMC-HV	SRP-535-BMD-HV	SRP-540-BMD-HV	SRP-545-BMD-HV
open-circuit voltage (with tolerance±3%) [V]:	45.88	46.08	46.28	46.48	38.9	39.1	39.3
voltage at max. power [V]:	38.16	38.36	38.56	38.76	31.55	31.77	31.99
current at max. power [A]:	17.29	17.33	17.37	17.41	16.96	17	17.04
short-circuit current (with tolerance±4%) [A]:	18.44	18.49	18.54	18.59	17.89	17.94	17.99
max. power (with tolerance±3%) [W]:	660	665	670	675	535	540	545
Series Fuse Rating [A]	30	30	30	30	30	30	30

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Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	13.5	13.5

Product Electrical Ratings at STC:							
Module	SRP-550-BMD-HV	SRP-475-BME-HV	SRP-480-BME-HV	SRP-485-BME-HV	SRP-490-BME-HV	SRP-415-BMF-HV	SRP-420-BMF-HV
open-circuit voltage (with tolerance±3%) [V]:	39.5	36.5	36.7	36.9	37.1	34.10	34.30
voltage at max. power [V]:	32.21	28.83	29.06	29.29	29.52	25.94	26.19
current at max. power [A]:	17.08	16.48	16.52	16.56	16.6	16.00	16.04
short-circuit current (with tolerance±4%) [A]:	18.04	17.29	17.34	17.39	17.44	16.69	16.74
max. power (with tolerance±3%) [W]:	550	475	480	485	490	415	420
Series Fuse Rating [A]	30	30	30	30	30	30	30
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	13.5	13.5

Product Electrical Ratings at STC:							
Module	SRP-425-BMF-HV	SRP-430-BMF-HV	SRP-550-BTA-HV	SRP-555-BTA-HV	SRP-560-BTA-HV	SRP-565-BTA-HV	SRP-570-BTA-HV
open-circuit voltage (with tolerance±3%) [V]:	34.50	34.70	50.9	51.1	51.3	51.5	51.7
voltage at max. power [V]:	26.44	26.68	42.2	42.4	42.6	42.8	43
current at max. power [A]:	16.08	16.12	13.04	13.1	13.16	13.21	13.26
short-circuit current (with tolerance±4%) [A]:	16.79	16.84	13.71	13.77	13.83	13.89	13.95
max. power (with tolerance±3%) [W]:	425	430	550	555	560	565	570
Series Fuse Rating [A]	30	30	25	25	25	25	25

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Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	13.5	13.5	11.2	11.2	11.2	11.2	11.2

Product Electrical Ratings at STC:							
Module	SRP-575-BTA-HV	SRP-580-BTA-HV	SRP-585-BTA-HV	SRP-590-BTA-HV	SRP-455-BTB-HV	SRP-460-BTB-HV	SRP-465-BTB-HV
open-circuit voltage (with tolerance±3%) [V]:	51.9	52.1	52.3	52.5	42.20	42.40	42.60
voltage at max. power [V]:	43.2	43.4	43.6	43.8	35.00	35.20	35.40
current at max. power [A]:	13.32	13.37	13.42	13.48	13.00	13.07	13.14
short-circuit current (with tolerance±4%) [A]:	14.01	14.07	14.13	14.19	13.70	13.76	13.82
max. power (with tolerance±3%) [W]:	575	580	585	590	455	460	465
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	11.2	11.2	11.2	11.2	12	12	12

Product Electrical Ratings at STC:							
Module	SRP-470-BTB-HV	SRP-475-BTB-HV	SRP-480-BTB-HV	SRP-485-BTB-HV	SRP-490-BTB-HV	SRP-500-BTC-HV	SRP-505-BTC-HV
open-circuit voltage (with tolerance±3%) [V]:	42.80	43.00	43.20	43.40	43.60	46.60	46.80
voltage at max. power [V]:	35.60	35.80	36.00	36.20	36.40	38.60	38.80
current at max. power [A]:	13.21	13.27	13.34	13.41	13.48	12.96	13.02
short-circuit current (with tolerance±4%) [A]:	13.88	13.94	14.00	14.06	14.12	13.67	13.73
max. power (with tolerance±3%) [W]:	470	475	480	485	490	500	505
Series Fuse Rating [A]	25	25	25	25	25	25	25

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Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	12	12	12	12	12	12	12

Product Electrical Ratings at STC:							
Module	SRP-510-BTC-HV	SRP-515-BTC-HV	SRP-520-BTC-HV	SRP-525-BTC-HV	SRP-530-BTC-HV	SRP-410-BTD-HV	SRP-415-BTD-HV
open-circuit voltage (with tolerance±3%) [V]:	47.00	47.20	47.40	47.60	47.80	38.10	38.30
voltage at max. power [V]:	39.00	39.20	39.40	39.60	39.80	31.50	31.70
current at max. power [A]:	13.08	13.14	13.20	13.26	13.32	13.02	13.09
short-circuit current (with tolerance±4%) [A]:	13.79	13.85	13.91	13.97	14.03	13.67	13.75
max. power (with tolerance±3%) [W]:	510	515	520	525	530	410	415
Series Fuse Rating [A]	25	25	25	25	25	25	25
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	12	12	12	12	12	10.8	10.8

Product Electrical Ratings at STC:							
Module	SRP-420-BTD-HV	SRP-425-BTD-HV	SRP-430-BTD-HV	SRP-435-BTD-HV	SRP-440-BTD-HV	SRP-600-BTZ-HV	SRP-605-BTZ-HV
open-circuit voltage (with tolerance±3%) [V]:	38.50	38.70	38.90	39.10	39.30	55.24	55.44
voltage at max. power [V]:	31.90	32.10	32.30	32.50	32.70	46.02	46.19
current at max. power [A]:	13.17	13.24	13.32	13.39	13.47	13.04	13.10
short-circuit current (with tolerance±4%) [A]:	13.83	13.91	13.99	14.07	14.15	13.71	13.77
max. power (with tolerance±3%) [W]:	420	425	430	435	440	600	605
Series Fuse Rating [A]	25	25	25	25	25	25	25

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Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	10.8	10.8	10.8	10.8	10.8	11.4	11.4

Product Electrical Ratings at STC:							
Module	SRP-610-BTZ-HV	SRP-615-BTZ-HV	SRP-620-BTZ-HV	SRP-625-BTZ-HV	SRP-630-BTZ-HV	SRP-635-BTZ-HV	
open-circuit voltage (with tolerance±3% ) [V]:	55.64	55.84	56.04	56.24	56.44	56.64	
voltage at max. power [V]:	46.36	46.56	46.76	46.93	47.13	47.31	
current at max. power [A]:	13.16	13.21	13.26	13.32	13.37	13.43	
short-circuit current (with tolerance±4% ) [A]:	13.83	13.89	13.95	14.01	14.07	14.13	
max. power (with tolerance±3% ) [W]:	610	615	620	625	630	635	
Series Fuse Rating [A]	25	25	25	25	25	25	
Maximum System Voltage	1500	1500	1500	1500	1500	1500	
Min. creepage distance [mm]	11.4	11.4	11.4	11.4	11.4	11.4	

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# Double glass modules

## Critical components and material information:

Kind of component / Bauteil	Manufacturer / Hersteller	Mechanical, electrical and chemical specification / Mechanische, elektrische und chemische Spezifikation	Test report and/or mark from / Prüfbericht und /oder -zeichen von
Cell	Aiko Solar Energy Technology Co.,Ltd	Mono-Si, Cell type: 7M9E1018A-L1, Perc 10 busbars. Bifacial cell Cell dimensions:L*W: 182mmx91mm±0.5mm Thickness:165±17.5µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	Jiangsu Longheng new energy Co., Ltd	Mono-Si, Cell type: S18210BB023, Perc 10 busbars. Bifacial cell Cell dimensions:L*W: 182mmx91mm±0.5mm Thickness:150±15.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	Anhui Yingfa Desheng Technology Co.,Ltd	Mono-Si, Cell type:M10-A, Perc 10 busbars. Bifacial cell Cell dimensions:L*W: 182mmx91mm±0.5mm Thickness:155±15.5µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	SolarSpace Technology Development (Chuzhou) Co., Ltd	Mono-Si, Cell type:M18216BTP10, Topcon 16 busbars. Bifacial cell Cell dimensions:L*W: 182mmx91mm±0.5mm Thickness:130±13.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
	SolarSpace Technology Co., Ltd	Mono-Si, Cell type:M21012BBF50, Perc 12busbars. Bifacial cell Cell dimensions:L*W: 210*105±0.25mm Thickness:160±16 µ m Cell area: 220.5(cm <sup>2</sup> )	Tested with appliance
	SolarSpace Technology Co., Ltd	Mono-Si, Cell type: M21018BTP50, Topcon 18busbars. Bifacial cell Cell dimensions:L*W: 210*105±1.50mm Thickness:135±13.5 µ m Cell area: 220.5(cm <sup>2</sup> )	Tested with appliance
	ANHUI MEIDALUN TECHNOLOGY CO., LTD	Mono-Si, Cell type:M18216BTS02, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mmx91mm±0.5mm Thickness:130±13.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance

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ANHUI MEIDALUN TECHNOLOGY CO., LTD	Mono-Si, Cell type: M18316BTR02, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182.2mm*91.875mm±0.5mm Thickness: 130±13.0µm Cell area: 167.39 (cm <sup>2</sup> )	Tested with appliance
AnHui Serawing Solar Energy Technology Co., LTD	Mono-Si, Cell type: SW-199MR-16A01, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mmx99.5mm±0.5mm Thickness: 130±13.0µm Cell area: 180.74 (cm <sup>2</sup> )	Tested with appliance
Anhui Yingfa Ruineng Technology Co., Ltd	Mono-Si, Cell type: G10R-A-16BB, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mm*105mm±0.5mm Thickness: 135±13.5µm Cell area: 190.93 (cm <sup>2</sup> )	Tested with appliance
Anhui Yingfa Ruineng Technology Co., Ltd	Mono-Si, Cell type: M10-A-16BB, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mmx91mm±0.5mm Thickness: 130±13.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
Anhui Yingfa Ruineng Technology Co., Ltd	Mono-Si, Cell type: G10L-A-16BB, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182.2mm*91.875mm±0.5mm Thickness: 135±13.5µm Cell area: 167.39 (cm <sup>2</sup> )	Tested with appliance
Zhejiang Lunisolar Co. Ltd	Mono-Si, Cell type: LSL-182M-16D3, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mmx91mm±0.5mm Thickness: 130±13.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
Zhejiang Lunisolar Co. Ltd	Mono-Si, Cell type: N183AM16D, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182.2mm*91.875mm±0.5mm Thickness: 130±13.0µm Cell area: 167.39 (cm <sup>2</sup> )	Tested with appliance
Zhejiang Aiko Solar Energy Technology Co., Ltd	Mono-Si, Cell type: AXTM10S16, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182.2mmx91.1mm±0.5mm Thickness: 130±13.0µm Cell area: 165.07 (cm <sup>2</sup> )	Tested with appliance
Zhejiang Aiko Solar Energy Technology Co., Ltd	Mono-Si, Cell type: AXTM10R16, Topcon 16 busbars. Bifacial cell	Tested with appliance

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		Cell dimensions: L*W: 182.2mm*91.875mm±0.5mm Thickness:130±13.0µm Cell area: 167.39 (cm²)	
	JIETAI TECHNOLOGY	Mono-Si, Cell type:CZJT-182M-16D1, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182mmx91mm±0.5mm Thickness:140±14.0µm Cell area: 165.07 (cm²)	Tested with appliance
	JIETAI TECHNOLOGY	Mono-Si, Cell type: N182CG16D1, Topcon 16 busbars. Bifacial cell Cell dimensions: L*W: 182.2mmx91.875mm±0.5mm Thickness:130±13.0µm Cell area: 167.39 (cm²)	Tested with appliance
	ZHE JIANG WINHITECH NEW ENERGY CO.,LTD.	Mono-Si, Cell type: RHA-H02-02-18, HJT 18busbars. Bifacial cell Cell dimensions: L*W: 210*105±0.25mm Thickness:120±12 µ m Cell area: 220.5(cm²)	Tested with appliance
Superstrate	ShanXi RiShengDa New Material Technology Co.,Ltd	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Anhui Seraphim Energy Co., LTD	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
	FLAT GLASS GROUP CO., LTD	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Anhui yanlongji New Energy Technology Co.,Ltd	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Zhejiang Ninghai Kibing New Energy Management Co., Ltd	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Changzhou Almaden Co., Ltd	Type: AR coating tempered glass Thickness: 2.0 (mm)	Tested with appliance
Substrate (backsheets)	ShanXi RiShengDa New Material Technology Co.,Ltd	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Anhui Seraphim Energy Co., LTD	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance

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	FLAT GLASS GROUP CO., LTD	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Anhui yanlongji New Energy Technology Co.,Ltd	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Zhejiang Ninghai Kibing New Energy Management Co., Ltd	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance
	Changzhou Almaden Co., Ltd	Type: tempered glass Thickness: 2.0 (mm)	Tested with appliance
Encapsulant	Changzhou Betterial Film Technologies Co.,Ltd.	Type: B601HP (with front surface), thickness: 0.45-0.55mm; Type:B602M with back surface), thickness: 0.45-0.6mm	Tested with appliance
	Changzhou Betterial Film Technologies Co.,Ltd.	Type: B602M (with front surface), thickness: 0.55-0.65mm; Type: B601HP(with back surface), thickness: 0.55-0.66mm	Tested with appliance
	ANHUI KRX NEW MATERIALS CO.,LTD	Type: EP602/(with front surface), thickness: 0.5-0.6mm; Type: K202(with back surface), thickness: 0.5-0.6mm	Tested with appliance
	Zhejiang Sinopont Technology Co., Ltd	Type:PO8110e/(with front surface), thickness: 0.6-0.7mm; Type: EVA 9110T(with back surface), thickness: 0.5-0.6mm.	Tested with appliance
Junction box 1	Changzhou Seraphim Trading Co., LTD	SRP02-abcd 1000V or 1500V 20A,25A or 30A IP65/IP68(1m,1h), -40 °C to 85 °C.	TÜV SÜD
Potting Material	H.B. Fuller(Suzhou) Advanced Material Co., Ltd.	1521 (white)	Tested with appliance
		1533 (white and black)	Tested with appliance
	Shanghai Huitian New Material Co., Ltd.	5299W-S (white and black)	Tested with appliance
		5299W(white)	Tested with appliance
LIYANG KANGDAWEI INDUSTRIAL CO.,LTD	KDW-3582	Tested with appliance	



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	Jolywood (Suzhou) Sunwatt Co.,Ltd	JW-3707	Tested with appliance
Adhesive for junction box	Liyang Kangdawei Industry Co.,Ltd	Silicone adhesive, type KDW-1536	Tested with appliance
	H.B. Fuller (Suzhou) Advanced Material Co., Ltd.	Silicone adhesive, type 1527	Tested with appliance
Cable for photovoltaic equipment	Wuxi Xinhongye Wire & Cable Co.,Ltd.	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
	Wuxi Suntech Power Co.,Ltd.	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
	Zerun Co., LTD	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
		H1Z2Z2-K 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
	Suzhou BAOHING Electric Wire&Cable Co.,LTD.	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
	Changshu JHOSIN Communication Technology Co., LTD	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜV Rheinland
	Huzhou Shangfu Wire &Cable High Technology Co.,Ltd	62930 IEC 131 1X4,0 mm <sup>2</sup> , 1500V, -40°C~+90°C	TÜVSÜD
Connector for Photovoltaic system	Zerun Co., LTD.	Z4S-abcde,1500VDC,40A for 4,0mm <sup>2</sup>	TÜV Rheinland
	Stäubli Electrical Connectors AG	PV-KST4-EVO 2/xy_UR, PV-KBT4-EVO2/xy_UR, 1500VDC,45A(4mm <sup>2</sup> ),53A(6mm <sup>2</sup> )	TÜV Rheinland
		PV-KST4-EVO2A/xy, PV-KBT4-EVO2A/xy, 1500VDC,45A(4mm <sup>2</sup> ),53A(6mm <sup>2</sup> )	TÜV Rheinland
		PV-KST4/xy-UR; PVKBT4/xy-UR, 1000VDC,39A	TÜV Rheinland
	Amphenol Industrial Operations	H4Labcdef, 1100VDC, rated current:35A for 4,0mm <sup>2</sup>	TÜV Rheinland
	Amphenol Technology (Shenzhen) Co., LTD	UTXCFabce, UTXCMabcd, 1500VDC, rated current: 42A for 4,0mm <sup>2</sup>	TÜV Rheinland

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	Tyco Electronics Austria GmbH	PV4-S1yx,1500VDC, 40A for 4mm <sup>2</sup>	TÜV Rheinland
	Jiangxi Jinko PV Material Co.,Ltd.	PV-JK03M2/xy(Plug+Socket), 1500VDC,30A(2,5mm <sup>2</sup> ), 45A(4,0mm <sup>2</sup> ),50A(6,0mm <sup>2</sup> ),60A(10,0mm <sup>2</sup> ),IP68	TÜV SÜD
	Jiangsu Tonglin Electric Co., Ltd.	TL-CABLE01S, TLCABLE01SF; 1500VDC,41A(4,0mm <sup>2</sup> ),46A(6,0mm <sup>2</sup> ),IP68	TÜV Rheinland
	Wuxi Suntech Power Co.,Ltd.	STP-XC4-4; STP-XC4-6; 1500VDC,41A(4,0mm <sup>2</sup> ) for STP-XC4-4, 46A(6,0mm <sup>2</sup> ) for STP-XC4-6,IP68	TÜV Rheinland
	Hanwha Q CELLS(Qidong) Co.,Ltd	HQC4,1500VDC, 41A(4,0mm <sup>2</sup> )	TÜV Rheinland
	Zerun Co., LTD.	Z4S-abcd (a=C or P; b=T or H; c=A or B or C; d=A or B), 1500VDC for (d=B);41A for (c=B)	TÜV SÜD
	QC Solar (Suzhou) Corporation	QC4.10-cds,1500VDC, 36A or 41A or 46A or 42A or 55A or 60A	TÜV SÜD
Bypass diode	Zerun Co., LTD(OEM: Hangzhou Daoming Microelectronic Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM=45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		38SQ045,IF(AV) =38A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD(OEM: NANTONG GAOXIN ELECTRONICS CO.,LTD)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD(OEM: NANTONG HORNBY ELECTRONIC CO.,LTD)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit

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 Revision / Version: 05A5  
 Date: 2024-08-27

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 Name of Project Handler: Ning Tang






Data form for critical components and material information

	Zerun Co., LTD(OEM: (Yangzhou Yangjie Electronic Technology Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A,	Test with unit
	Zerun Co., LTD (OEM: Anhui Juxin Semiconductor Technology Co., Ltd.)	30SQ045,IF(AV) =30A,VRRM =45V,Tj=200°C,20A,	Test with unit
		35SQ045,IF(AV) =35A,VRRM =45V,Tj=200°C,25A,	Test with unit
		40SQ045,IF(AV) =40A,VRRM =45V,Tj=200°C,30A	Test with unit
Cell interconnector	Wuxi Changliang Photoelectric Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Anhui Tongcheng New Energy Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Sveck Technology Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Suzhou YourBest New- type Materials Co.,Ltd.	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Jiangsu Lanxin New Energy Technolog y Co.,Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Diameter: 0.24 <sup>+0.015</sup> <sub>-0.005</sub> mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
	Suzhou Xiangbang New Material Technology Co., Ltd	Diameter: 0.26±10%mm. Diameter: 0.28±10%mm. Type: Tinned copper ribbon, Base Cu (≥99.97%), Sn60Pb40	Tested with appliance
String connector	Shanghai Sanysolar materials Technology Co., Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance

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## Data form for critical components and material information

	Wuxi Changliang Photoelectric Technology Co.,Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Changzhou Beida Machinery Manufacturing Co., Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Sveck Technology Co.,Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Anhui Tongcheng New Energy Technology Co.,Ltd	Cross section: 0.35x4mm, 0.4*6mm Material: Base Cu (≥99.95%). Coating Sn60Pb40,	Tested with appliance
	ChangZhou Greateen New Energy Technology Co.,Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Xi'an Telison New Materials Co.,Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Jiangsu Lanxin New Energy Technology Co.,Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
	Suzhou Boneed Photovoltaic Technology Co., Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40 black	Tested with appliance
	Suzhou Xiangbang New Material Technology Co., Ltd	Cross section: 0.35x4mm. 0.4*6mm Material: Base Cu (≥99.95%).Coating Sn60Pb40	Tested with appliance
Fluxing material	Zhengzhou Wise PV Technology Co.,Ltd	WS-868-S2	Tested with appliance
	Zhengzhou Wise PV Technology Co.,Ltd	WS-867	Tested with appliance
	Shenzhen Vital New Material Company Limited	WTO-PV112F	Tested with appliance
	Singapore Asahi Chemical and Solder Industries Pte Ltd	SF56	Tested with appliance
	Shenzhen Tong fang Electronic New Material Co., Ltd	TFHF9100	Tested with appliance
	Kester Components Pte Ltd	952-S	Tested with appliance

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# Form



## Data form for critical components and material information

	National Solder Company Pty Ltd	Flux NCF 101	Tested with appliance
Frame	Changzhou Lidu Lighting Co., Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Wuxi Xuye Metal Products Manufacturing Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Jiangyin Zhaoxu Metal Products manufactory Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	AnHui XinXu New Energy Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Wuxi Xisha Photoelectric Aluminium Products Co.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	CITIC BOHAI ALUMINUM INDUSTRIES HOLDING CO.,LTD	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Anhui Xinbo Technology Co., LTD.	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Chi zhou Anan Aluminum CO.,Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Anhui Haifu New Meterial Technology Co.Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Shandong Phoenix New Material Technology Co., Ltd	Anodized aluminum alloy, type 6063-T6/6005-T6	Tested with appliance
	Adhesive for frame	Liyang Kangdawei Industry Co.,Ltd	Silicone adhesive, type KDW-1536
H.B. Fuller (Suzhou) Advanced Material Co., Ltd.		Silicone adhesive, type 1527	Tested with appliance
Insulation material between string connectors	N/A	N/A	N/A
Fixing tape	3M	UV-1	Tested with appliance
Label	Wuxi Zhengfeng Special printing Co., Ltd.	Material: PET	Tested with appliance

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Data form for critical components and material information

Electrical Parameter Table:

Product Electrical Ratings at STC:								
	Module	SRP-535-BMA-BG	SRP-540-BMA-BG	SRP-545-BMA-BG	SRP-550-BMA-BG	SRP-555-BMA-BG	SRP-560-BMA-BG	SRP-445-BMB-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	49.4	49.5	49.6	49.7	49.8	49.9	41.22
	voltage at max. power [V]:	41.29	41.55	41.8	42.05	42.31	42.56	34.18
	current at max. power [A]:	12.96	13	13.04	13.08	13.12	13.16	13.03
	short-circuit current (with tolerance±4% ) [A]:	13.7	13.81	13.9	14	14.1	14.21	13.66
	max. power (with tolerance±3%) [W]:	535	540	545	550	555	560	445
BNPI condition	max. power (with tolerance±3%) [W]:	586	591	597	602	607	613	487
	open-circuit voltage (tolerance±3%) [V]:	49.60	49.70	49.80	49.90	50.00	50.10	41.42
	short-circuit current (tolerance±4%) [A]:	14.99	15.12	15.21	15.32	15.43	15.55	14.95
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi_{Pmax}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	16.58	16.71	16.82	16.94	17.06	17.18	16.53
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11.2	11.2	11.2	11.2	11.2	11.2	12
Product Electrical Ratings at STC:								
	Module	SRP-450-BMB-BG	SRP-455-BMB-BG	SRP-460-BMB-BG	SRP-465-BMB-BG	SRP-490-BMC-BG	SRP-495-BMC-BG	SRP-500-BMC-BG

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Data form for critical components and material information

STC condition	open-circuit voltage (with tolerance±3% ) [V]:	41.32	41.42	41.52	41.62	45.32	45.43	45.53
	voltage at max. power [V]:	34.28	34.38	34.48	34.6	37.59	37.7	37.78
	current at max. power [A]:	13.13	13.24	13.34	13.44	13.05	13.15	13.24
	short-circuit current (with tolerance±4% ) [A]:	13.76	13.86	13.96	14.06	13.68	13.79	13.89
	max. power (with tolerance±3%) [W]:	450	455	460	465	490	495	500
BNPI condition	max. power (with tolerance±3%) [W]:	493	498	503	509	536	542	547
	open-circuit voltage (with tolerance±3%) [V]:	41.52	41.62	41.72	41.82	45.52	45.63	45.73
	short-circuit current (with tolerance±4%) [A]:	15.06	15.17	15.28	15.39	14.97	15.09	15.20
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi_{Pmax}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	16.65	16.77	16.89	17.01	16.55	16.69	16.81
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12	12	12	12	12	12	12

Product Electrical Ratings at STC:								
	Module	SRP-505-BMC-BG	SRP-510-BMC-BG	SRP-400-BMD-BG	SRP-405-BMD-BG	SRP-410-BMD-BG	SRP-415-BMD-BG	SRP-420-BMD-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	45.63	45.75	37.12	37.22	37.32	37.42	37.52
	voltage at max. power [V]:	37.87	37.95	30.81	30.93	31.05	31.16	31.28

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	current at max. power [A]:	13.34	13.44	12.99	13.1	13.21	13.32	13.43
	short-circuit current (with tolerance±4% ) [A]:	13.99	14.1	13.6	13.7	13.8	13.9	14
	max. power (with tolerance±3%) [W]:	505	510	400	405	410	415	420
BNPI condition	max. power (with tolerance±3%) [W]:	553	558	438	443	449	454	460
	open-circuit voltage( tolerance±3%) [V]:	45.83	45.95	37.32	37.42	37.52	37.62	37.72
	short-circuit current (tolerance±4%) [A]:	15.31	15.43	14.89	14.99	15.10	15.21	15.32
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi P_{max}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	16.93	17.06	16.46	16.58	16.70	16.82	16.94
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12	12	10.8	10.8	10.8	10.8	10.8
Product Electrical Ratings at STC:								
	Module	SRP-575-BMZ-BG	SRP-580-BMZ-BG	SRP-585-BMZ-BG	SRP-590-BMZ-BG	SRP-595-BMZ-BG	SRP-600-BMZ-BG	SRP-605-BMZ-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	53.23	53.43	53.63	53.83	54.03	54.23	54.43



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Data form for critical components and material information

	voltage at max. power [V]:	44.61	44.81	45.01	45.21	45.41	45.61	45.81
	current at max. power [A]:	12.89	12.95	13.01	13.06	13.11	13.16	13.22
	short-circuit current (with tolerance±4% ) [A]:	13.75	13.81	13.87	13.93	13.99	14.05	14.11
	max. power (with tolerance±3%) [W]:	575	580	585	590	595	600	605
BNPI condition	max. power (with tolerance±3%) [W]:	629	635	640	646	651	657	662
	open-circuit voltage( tolerance±3%) [V]:	53.43	53.63	53.83	54.03	54.23	54.43	54.63
	short-circuit current (tolerance±4%) [A]:	15.05	15.12	15.18	15.25	15.31	15.38	15.44
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi_{Pmax}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	16.64	16.71	16.78	16.86	16.93	17.00	17.07
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11.4	11.4	11.4	11.4	11.4	11.4	11.4

Product Electrical Ratings at STC:								
Module	SRP-550-BTA-BG	SRP-555-BTA-BG	SRP-560-BTA-BG	SRP-565-BTA-BG	SRP-570-BTA-BG	SRP-575-BTA-BG	SRP-580-BTA-BG	

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STC condition	open-circuit voltage (with tolerance±3% ) [V]:	50.9	51.1	51.3	51.5	51.7	51.9	52.1
	voltage at max. power [V]:	42.2	42.4	42.6	42.8	43	43.2	43.4
	current at max. power [A]:	13.04	13.1	13.16	13.21	13.26	13.32	13.37
	short-circuit current (with tolerance±4% ) [A]:	13.71	13.77	13.83	13.89	13.95	14.01	14.07
	max. power (with tolerance±3%) [W]:	550	555	560	565	570	575	580
BNPI condition	max. power (with tolerance±3%) [W]:	603	608	614	619	625	630	636
	open-circuit voltage( tolerance±3%) [V]:	50.98	51.18	51.38	51.58	51.78	51.98	52.18
	short-circuit current (tolerance±4%) [A]:	15.03	15.09	15.16	15.22	15.29	15.35	15.42
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	17.00	17.07	17.15	17.22	17.30	17.37	17.45
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11.2	11.2	11.2	11.2	11.2	11.2	11.2
Product Electrical Ratings at STC:								

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	Module	SRP-585-BTA-BG	SRP-590-BTA-BG	SRP-460-BTB-BG	SRP-465-BTB-BG	SRP-470-BTB-BG	SRP-475-BTB-BG	SRP-480-BTB-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	52.3	52.5	42.4	42.6	42.8	43	43.2
	voltage at max. power [V]:	43.6	43.8	35.2	35.4	35.6	35.8	36
	current at max. power [A]:	13.43	13.48	13.07	13.14	13.21	13.27	13.34
	short-circuit current (with tolerance±4% ) [A]:	14.13	14.19	13.76	13.82	13.88	13.94	14
	max. power (with tolerance±3%) [W]:	585	590	460	465	470	475	480
BNPI condition	max. power (with tolerance±3%) [W]:	641	647	504	510	515	521	526
	open-circuit voltage( tolerance±3%) [V]:	52.38	52.58	42.48	42.68	42.88	43.08	43.28
	short-circuit current (tolerance±4%) [A]:	15.49	15.55	15.08	15.15	15.21	15.28	15.34
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	17.52	17.60	17.06	17.14	17.21	17.29	17.36
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500

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Min. creepage distance [mm]	11.2	11.2	12	12	12	12	12
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		Product Electrical Ratings at STC:						
	Module	SRP-485-BTB-BG	SRP-490-BTB-BG	SRP-505-BTC-BG	SRP-510-BTC-BG	SRP-515-BTC-BG	SRP-520-BTC-BG	SRP-525-BTC-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	43.4	43.6	46.8	47	47.2	47.4	47.6
	voltage at max. power [V]:	36.2	36.4	38.8	39	39.2	39.4	39.6
	current at max. power [A]:	13.41	13.48	13.02	13.08	13.14	13.2	13.26
	short-circuit current (with tolerance±4% ) [A]:	14.06	14.12	13.73	13.79	13.85	13.91	13.97
	max. power (with tolerance±3%) [W]:	485	490	505	510	515	520	525
BNPI condition	max. power (with tolerance±3%) [W]:	532	537	553	559	564	570	575
	open-circuit voltage( tolerance±3%) [V]:	43.48	43.68	46.88	47.08	47.28	47.48	47.68
	short-circuit current (tolerance±4%) [A]:	15.41	15.48	15.05	15.11	15.18	15.25	15.31
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi P_{max}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with	17.43	17.51	17.03	17.10	17.17	17.25	17.32

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	tolerance $\pm$ 4% ) [A]:							
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12	12	12	12	12	12	12
Product Electrical Ratings at STC:								
	Module	SRP-530-BTC-BG	SRP-535-BTC-BG	SRP-540-BTC-BG	SRP-415-BTD-BG	SRP-420-BTD-BG	SRP-425-BTD-BG	SRP-430-BTD-BG
STC condition	open-circuit voltage (with tolerance $\pm$ 3% ) [V]:	47.8	48	48.2	38.3	38.5	38.7	38.9
	voltage at max. power [V]:	39.8	40	40.2	31.7	31.9	32.1	32.3
	current at max. power [A]:	13.32	13.38	13.44	13.09	13.17	13.24	13.32
	short-circuit current (with tolerance $\pm$ 4% ) [A]:	14.03	14.09	14.15	13.75	13.83	13.91	13.99
	max. power (with tolerance $\pm$ 3%) [W]:	530	535	540	415	420	425	430
BNPI condition	max. power (with tolerance $\pm$ 3%) [W]:	581	586	592	455	460	466	471
	open-circuit voltage (with tolerance $\pm$ 3%) [V]:	47.88	48.08	48.28	38.38	38.58	38.78	38.98
	short-circuit current (with tolerance $\pm$ 4%) [A]:	15.38	15.44	15.51	15.07	15.16	15.25	15.33
bifaciality coefficient	$\phi$ Voc /Tolerance $\pm$ 5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi$ Isc /Tolerance $\pm$ 10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8

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	$\phi P_{max}$ / Tolerance $\pm 10\%$	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	17.40	17.47	17.55	17.05	17.15	17.25	17.35
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12	12	12	10.8	10.8	10.8	10.8

Product Electrical Ratings at STC:								
	Module	SRP-435-BTD-BG	SRP-440-BTD-BG	SRP-600-BTZ-BG	SRP-605-BTZ-BG	SRP-610-BTZ-BG	SRP-615-BTZ-BG	SRP-620-BTZ-BG
STC condition	open-circuit voltage (with tolerance $\pm 3\%$ ) [V]:	39.1	39.3	55.24	55.44	55.64	55.84	56.04
	voltage at max. power [V]:	32.5	32.7	46.02	46.19	46.36	46.56	46.76
	current at max. power [A]:	13.39	13.47	13.04	13.1	13.16	13.21	13.26
	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	14.07	14.15	13.71	13.77	13.83	13.89	13.95
	max. power (with tolerance $\pm 3\%$ ) [W]:	435	440	600	605	610	615	620
BNPI condition	max. power (with tolerance $\pm 3\%$ ) [W]:	477	482	658	663	669	674	680
	open-circuit voltage (tolerance $\pm 3\%$ ) [V]:	39.18	39.38	55.32	55.52	55.72	55.92	56.12
	short-circuit current (tolerance $\pm 4\%$ ) [A]:	15.42	15.51	15.03	15.09	15.16	15.22	15.29

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bifaciality coefficient	$\phi V_{oc}$ /Tolerance $\pm 5\%$	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance $\pm 10\%$	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi P_{max}$ /Tolerance $\pm 10\%$	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	17.45	17.55	17.00	17.07	17.15	17.22	17.30
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	10.8	10.8	11.4	11.4	11.4	11.4	11.4
Product Electrical Ratings at STC:								
	Module	SRP-625-BTZ-BG	SRP-630-BTZ-BG	SRP-635-BTZ-BG	SRP-590-BMB-BG	SRP-595-BMB-BG	SRP-600-BMB-BG	SRP-605-BMB-BG
STC condition	open-circuit voltage (with tolerance $\pm 3\%$ ) [V]:	56.24	56.44	56.64	41.29	41.49	41.69	41.89
	voltage at max. power [V]:	46.93	47.13	47.31	34.18	34.38	34.58	34.78
	current at max. power [A]:	13.32	13.37	13.43	17.26	17.31	17.36	17.41
	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	14.01	14.07	14.13	18.28	18.34	18.4	18.46
	max. power (with tolerance $\pm 3\%$ ) [W]:	625	630	635	590	595	600	605
BNPI condition	max. power (with tolerance $\pm 3\%$ ) [W]:	685	690	696	643	649	654	659
	open-circuit voltage (tolerance $\pm 3\%$ ) [V]:	56.32	56.52	56.72	41.37	41.57	41.77	41.97
	short-circuit current	15.35	15.42	15.49	19.93	19.99	20.06	20.12

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	(tolerance±4%) [A]:							
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.8	0.8	0.8	0.7	0.7	0.7	0.7
	$\phi P_{max}$ /Tolerance±10%	0.8	0.8	0.8	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4%) [A]:	17.37	17.45	17.52	22.12	22.19	22.26	22.34
	Series Fuse Rating [A]	25	25	25	30	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11.4	11.4	11.4	13.5	13.5	13.5	13.5

Product Electrical Ratings at STC:								
	Module	SRP-610-BMB-BG	SRP-650-BMC-BG	SRP-655-BMC-BG	SRP-660-BMC-BG	SRP-665-BMC-BG	SRP-670-BMC-BG	SRP-675-BMC-BG
STC condition	open-circuit voltage (with tolerance±3%) [V]:	42.09	45.48	45.68	45.88	46.08	46.28	46.48
	voltage at max. power [V]:	34.98	37.76	37.96	38.16	38.36	38.56	38.76
	current at max. power [A]:	17.46	17.21	17.25	17.29	17.33	17.37	17.41
	short-circuit current (with tolerance±4%) [A]:	18.52	18.34	18.39	18.44	18.49	18.54	18.59
	max. power (with tolerance±3%) [W]:	610	650	655	660	665	670	675
BNPI condition	max. power (with tolerance±3%) [W]:	665	709	714	719	725	730	736
	open-circuit voltage (tolerance±3%) [V]:	42.17	45.56	45.76	45.96	46.16	46.36	46.56

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	short-circuit current (tolerance±4%) [A]:	20.19	19.99	20.05	20.10	20.15	20.21	20.26
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi P_{max}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	22.41	22.19	22.25	22.31	22.37	22.43	22.49
	Series Fuse Rating [A]	30	30	30	30	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Product Electrical Ratings at STC:								
	Module	SRP-535-BMD-BG	SRP-540-BMD-BG	SRP-545-BMD-BG	SRP-550-BMD-BG	SRP-475-BME-BG	SRP-480-BME-BG	SRP-485-BME-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	38.9	39.1	39.3	39.5	36.5	36.7	36.9
	voltage at max. power [V]:	31.55	31.77	31.99	32.21	28.83	29.06	29.29
	current at max. power [A]:	16.96	17	17.04	17.08	16.48	16.52	16.56
	short-circuit current (with tolerance±4% ) [A]:	17.89	17.94	17.99	18.04	17.29	17.34	17.39
	max. power (with tolerance±3% ) [W]:	535	540	545	550	475	480	485
BNPI condition	max. power (with tolerance±3% ) [W]:	583	589	594	600	518	523	529

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	open-circuit voltage (tolerance±3%) [V]:	38.98	39.18	39.38	39.58	36.58	36.78	36.98
	short-circuit current (tolerance±4%) [A]:	19.50	19.55	19.61	19.66	18.85	18.90	18.96
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
	$\phi P_{max}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.7	0.7
BSI condition	short-circuit current (with tolerance±4% ) [A]:	21.65	21.71	21.77	21.83	20.92	20.98	21.04
	Series Fuse Rating [A]	30	30	30	30	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	13.5	13.5

Product Electrical Ratings at STC:								
	Module	SRP-490-BME-BG	SRP-415-BMF-BG	SRP-420-BMF-BG	SRP-425-BMF-BG	SRP-430-BMF-BG	SRP-620-BTA-BG	SRP-625-BTA-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	37.1	34.1	34.3	34.5	34.7	52.08	52.28
	voltage at max. power [V]:	29.52	25.94	26.19	26.44	26.68	43.52	43.72
	current at max. power [A]:	16.6	16	16.04	16.08	16.12	14.25	14.3
	short-circuit current (with tolerance±4% ) [A]:	17.44	16.69	16.74	16.79	16.84	15.07	15.12
	max. power (with tolerance±3%) [W]:	490	415	420	425	430	620	625

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BNPI condition	max. power (with tolerance±3%) [W]:	534	452	458	463	469	687	693
	open-circuit voltage (tolerance±3%) [V]:	37.18	34.18	34.38	34.58	34.78	52.16	52.36
	short-circuit current (tolerance±4%) [A]:	19.01	18.19	18.25	18.30	18.36	16.70	16.75
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.8	0.8
	$\phi P_{max}$ /Tolerance±10%	0.7	0.7	0.7	0.7	0.7	0.8	0.8
BSI condition	short-circuit current (with tolerance±4%) [A]:	21.10	20.19	20.26	20.32	20.38	18.69	18.75
	Series Fuse Rating [A]	30	30	30	30	30	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.5	13.5	13.5	13.5	13.5	12.7	12.7
Product Electrical Ratings at STC:								
	Module	SRP-630-BTA-BG	SRP-635-BTA-BG	SRP-640-BTA-BG	SRP-570-BTC-BG	SRP-575-BTC-BG	SRP-580-BTC-BG	SRP-585-BTC-BG
STC condition	open-circuit voltage (with tolerance±3%) [V]:	52.48	52.68	52.88	47.8	48	48.2	48.4
	voltage at max. power [V]:	43.92	44.12	44.32	40.06	40.26	40.46	40.65
	current at max. power [A]:	14.35	14.4	14.45	14.23	14.28	14.34	14.39
	short-circuit current (with tolerance±4%) [A]:	15.17	15.22	15.27	15.1	15.15	15.2	15.25

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	max. power (with tolerance±3%) [W]:	630	635	640	570	575	580	585
BNPI condition	max. power (with tolerance±3%) [W]:	698	704	709	632	637	643	648
	open-circuit voltage (tolerance±3%) [V]:	52.56	52.76	52.96	47.88	48.08	48.28	48.48
	short-circuit current (tolerance±4%) [A]:	16.81	16.86	16.92	16.73	16.79	16.84	16.90
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi P_{max}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4%) [A]:	18.81	18.87	18.93	18.72	18.79	18.85	18.91
	Series Fuse Rating [A]	25	25	25	25	25	25	25
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12.7	12.7	12.7	12.5	12.5	12.5	12.5

Product Electrical Ratings at STC:								
	Module	SRP-465-BTD-BG	SRP-470-BTD-BG	SRP-475-BTD-BG	SRP-480-BTD-BG	SRP-550-BTB-BG	SRP-555-BTB-BG	SRP-560-BTB-BG
STC condition	open-circuit voltage (with tolerance±3%) [V]:	39.15	39.35	39.55	39.75	44.27	44.47	44.67
	voltage at max. power [V]:	32.7	32.9	33.1	33.3	36.81	37.01	37.21
	current at max. power [A]:	14.22	14.29	14.35	14.42	14.95	15	15.05
	short-circuit current (with	15.06	15.11	15.16	15.21	15.83	15.88	15.91

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	tolerance $\pm$ 4% ) [A]:							
	max. power (with tolerance $\pm$ 3%) [W]:	465	470	475	480	550	555	560
BNPI condition	max. power (with tolerance $\pm$ 3%) [W]:	515	521	526	532	609	615	620
	open-circuit voltage (tolerance $\pm$ 3%) [V]:	39.23	39.43	39.63	39.83	44.35	44.55	44.75
	short-circuit current (tolerance $\pm$ 4%) [A]:	16.69	16.74	16.80	16.85	17.54	17.60	17.63
bifaciality coefficient	$\phi$ Voc /Tolerance $\pm$ 5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi$ Isc /Tolerance $\pm$ 10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi$ Pmax /Tolerance $\pm$ 10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance $\pm$ 4% ) [A]:	18.67	18.74	18.80	18.86	19.63	19.69	19.73
	Series Fuse Rating [A]	25	25	25	25	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11.5	11.5	11.5	11.5	12.7	12.7	12.7
Product Electrical Ratings at STC:								
	Module	SRP-565-BTB-BG	SRP-605-BTC-BG	SRP-610-BTC-BG	SRP-615-BTC-BG	SRP-620-BTC-BG	SRP-625-BTC-BG	SRP-495-BTD-BG
STC condition	open-circuit voltage (with tolerance $\pm$ 3% ) [V]:	44.87	48.72	48.92	49.12	49.32	49.52	39.83
	voltage at max. power [V]:	37.41	40.51	40.71	40.91	41.11	41.31	33.11
	current at max. power [A]:	15.11	14.94	14.99	15.04	15.09	15.14	14.96

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	short-circuit current (with tolerance±4% ) [A]:	15.96	15.82	15.87	15.92	15.97	16.02	15.83
	max. power (with tolerance±3%) [W]:	565	605	610	615	620	625	495
BNPI condition	max. power (with tolerance±3%) [W]:	626	670	676	681	687	693	548
	open-circuit voltage (tolerance±3%) [V]:	44.95	48.80	49.00	49.20	49.40	49.60	39.91
	short-circuit current (tolerance±4%) [A]:	17.68	17.53	17.58	17.64	17.69	17.75	17.54
bifaciality coefficient	$\phi V_{oc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi I_{sc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi P_{max}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	19.79	19.62	19.68	19.74	19.80	19.86	19.63
	Series Fuse Rating [A]	30	30	30	30	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12.7	12	12	12	12	12	13.4

Product Electrical Ratings at STC:								
	Module	SRP-500-BTD-BG	SRP-505-BTD-BG	SRP-510-BTD-BG	SRP-440-BTE-BG	SRP-445-BTE-BG	SRP-450-BTE-BG	SRP-455-BTE-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	40.03	40.23	40.43	35.38	35.58	35.78	35.98
	voltage at max. power [V]:	33.31	33.51	33.71	29.41	29.61	29.81	30.01

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	current at max. power [A]:	15.02	15.07	15.13	14.97	15.03	15.1	15.17
	short-circuit current (with tolerance±4% ) [A]:	15.88	15.93	15.98	15.8	15.85	15.9	15.95
	max. power (with tolerance±3%) [W]:	500	505	510	440	445	450	455
BNPI condition	max. power (with tolerance±3%) [W]:	554	560	565	488	493	499	504
	open-circuit voltage( tolerance±3%) [V]:	40.11	40.31	40.51	35.46	35.66	35.86	36.06
	short-circuit current (tolerance±4%) [A]:	17.60	17.65	17.71	17.51	17.56	17.62	17.67
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	19.69	19.75	19.82	19.59	19.65	19.72	19.78
	Series Fuse Rating [A]	30	30	30	30	30	30	30
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.4	13.4	13.4	13.5	13.5	13.5	13.5
Product Electrical Ratings at STC:								
	Module	SRP-385-BTF-BG	SRP-390-BTF-BG	SRP-395-BTF-BG	SRP-630-BTB-BG	SRP-635-BTB-BG	SRP-640-BTB-BG	SRP-645-BTB-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	30.93	31.13	31.33	43.89	44.09	44.29	44.49

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	voltage at max. power [V]:	25.71	25.91	26.11	36.65	36.85	37.05	37.25
	current at max. power [A]:	14.98	15.06	15.13	17.2	17.24	17.28	17.32
	short-circuit current (with tolerance±4% ) [A]:	15.83	15.88	15.93	18.26	18.3	18.34	18.38
	max. power (with tolerance±3%) [W]:	385	390	395	630	635	640	645
BNPI condition	max. power (with tolerance±3%) [W]:	427	432	438	690	696	701	707
	open-circuit voltage( tolerance±3%) [V]:	31.01	31.21	31.41	43.97	44.17	44.37	44.57
	short-circuit current (tolerance±4%) [A]:	17.54	17.60	17.65	20.01	20.06	20.10	20.14
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	19.63	19.69	19.75	22.64	22.69	22.74	22.79
	Series Fuse Rating [A]	30	30	30	35	35	35	35
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.8	13.8	13.8	11.3	11.3	11.3	11.3

Product Electrical Ratings at STC:								
Module	SRP-690-BTC-BG	SRP-695-BTC-BG	SRP-700-BTC-BG	SRP-705-BTC-BG	SRP-710-BTC-BG	SRP-565-BTD-BG	SRP-570-BTD-BG	
open-circuit voltage (with	48.1	48.3	48.5	48.7	48.9	39.42	39.62	

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STC condition	tolerance $\pm$ 3% ) [V]:							
	voltage at max. power [V]:	40.13	40.33	40.53	40.73	40.93	32.96	33.16
	current at max. power [A]:	17.2	17.24	17.28	17.31	17.35	17.15	17.19
	short-circuit current (with tolerance $\pm$ 4% ) [A]:	18.24	18.28	18.32	18.36	18.4	18.26	18.3
	max. power (with tolerance $\pm$ 3%) [W]:	690	695	700	705	710	565	570
BNPI condition	max. power (with tolerance $\pm$ 3%) [W]:	756	762	767	773	778	619	625
	open-circuit voltage (tolerance $\pm$ 3%) [V]:	48.18	48.38	48.58	48.78	48.98	39.50	39.70
	short-circuit current (tolerance $\pm$ 4%) [A]:	19.99	20.03	20.08	20.12	20.17	20.01	20.06
bifaciality coefficient	$\phi$ Voc /Tolerance $\pm$ 5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi$ Isc /Tolerance $\pm$ 10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi$ Pmax /Tolerance $\pm$ 10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance $\pm$ 4% ) [A]:	22.62	22.67	22.72	22.77	22.82	22.64	22.69
	Series Fuse Rating [A]	35	35	35	35	35	35	35
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	12.5	12.5	12.5	12.5	12.5	13.1	13.1
Product Electrical Ratings at STC:								
	Module	SRP-575-BTD-BG	SRP-580-BTD-BG	SRP-500-BTE-BG	SRP-505-BTE-BG	SRP-510-BTE-BG	SRP-515-	SRP-440-BTF-BG

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							BTE-BG	
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	39.82	40.02	34.87	35.07	35.27	35.47	30.66
	voltage at max. power [V]:	33.36	33.56	29.08	29.28	29.48	29.68	25.59
	current at max. power [A]:	17.24	17.29	17.2	17.25	17.31	17.36	17.2
	short-circuit current (with tolerance±4% ) [A]:	18.34	18.38	18.24	18.28	18.32	18.36	18.26
	max. power (with tolerance±3%) [W]:	575	580	500	505	510	515	440
BNPI condition	max. power (with tolerance±3%) [W]:	630	636	548	553	559	564	482
	open-circuit voltage (tolerance±3%) [V]:	39.90	40.10	34.95	35.15	35.35	35.55	30.74
	short-circuit current (tolerance±4%) [A]:	20.10	20.14	19.99	20.03	20.08	20.12	20.01
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.8	0.8	0.8	0.8	0.8
BSI condition	short-circuit current (with tolerance±4% ) [A]:	22.74	22.79	22.62	22.67	22.72	22.77	22.64
	Series Fuse Rating [A]	35	35	35	35	35	35	35
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500

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	Min. creepage distance [mm]	13.1	13.1	13.4	13.4	13.4	13.4	13.7
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Product Electrical Ratings at STC:								
	Module	SRP-445-BTF-BG	SRP-450-BTF-BG	SRP-635-BHB-BG	SRP-640-BHB-BG	SRP-645-BHB-BG	SRP-650-BHB-BG	SRP-655-BHB-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	30.86	31.06	45.6	45.76	45.92	46.08	46.24
	voltage at max. power [V]:	25.79	25.99	38.31	38.47	38.63	38.79	38.95
	current at max. power [A]:	17.26	17.32	16.58	16.64	16.7	16.76	16.82
	short-circuit current (with tolerance±4% ) [A]:	18.3	18.34	17.42	17.48	17.54	17.6	17.66
	max. power (with tolerance±3%) [W]:	445	450	635	640	645	650	655
BNPI condition	max. power (with tolerance±3%) [W]:	488	493	712	718	723	729	735
	open-circuit voltage (tolerance±3%) [V]:	30.94	31.14	45.68	45.84	46.00	46.16	46.32
	short-circuit current (tolerance±4%) [A]:	20.06	20.10	19.54	19.60	19.67	19.74	19.81
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.8	0.8	0.9	0.9	0.9	0.9	0.9
	$\phi_{Pmax}$ /Tolerance±10%	0.8	0.8	0.9	0.9	0.9	0.9	0.9
BSI condition	short-circuit current (with tolerance±4% ) [A]:	22.69	22.74	22.12	22.20	22.28	22.35	22.43

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Series Fuse Rating [A]	35	35	35	35	35	35	35	35
Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500	1500
Min. creepage distance [mm]	13.7	13.7	11.3	11.3	11.3	11.3	11.3	11.3

Product Electrical Ratings at STC:								
	Module	SRP-695-BHC-BG	SRP-700-BHC-BG	SRP-705-BHC-BG	SRP-710-BHC-BG	SRP-715-BHC-BG	SRP-720-BHC-BG	SRP-570-BHD-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	50.00	50.16	50.32	50.48	50.64	50.80	41.04
	voltage at max. power [V]:	41.98	42.14	42.30	42.46	42.62	42.78	34.48
	current at max. power [A]:	16.58	16.64	16.70	16.76	16.82	16.88	16.54
	short-circuit current (with tolerance±4% ) [A]:	17.38	17.44	17.50	17.56	17.62	17.68	17.46
	max. power (with tolerance±3%) [W]:	695	700	705	710	715	720	570
BNPI condition	max. power (with tolerance±3%) [W]:	779	785	791	796	802	807	639
	open-circuit voltage (tolerance±3%) [V]:	50.08	50.24	50.40	50.56	50.72	50.88	41.12
	short-circuit current (tolerance±4%) [A]:	19.49	19.56	19.63	19.69	19.76	19.83	19.58
bifaciality coefficient	$\phi_{Voc}$ /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99
	$\phi_{Isc}$ /Tolerance±10%	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	$\phi_{Pmax}$ /Tolerance±10%	0.9	0.9	0.9	0.9	0.9	0.9	0.9

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BSI condition	short-circuit current (with tolerance±4% ) [A]:	22.07	22.15	22.23	22.30	22.38	22.45	22.17
	Series Fuse Rating [A]	35	35	35	35	35	35	35
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	11	11	11	11	11	11	13.1

Product Electrical Ratings at STC:								
	Module	SRP-575-BHD-BG	SRP-580-BHD-BG	SRP-585-BHD-BG	SRP-590-BHD-BG	SRP-505-BHE-BG	SRP-510-BHE-BG	SRP-515-BHE-BG
STC condition	open-circuit voltage (with tolerance±3% ) [V]:	41.20	41.36	41.52	41.68	36.32	36.48	36.64
	voltage at max. power [V]:	34.64	34.80	34.96	35.12	30.49	30.65	30.81
	current at max. power [A]:	16.60	16.67	16.74	16.80	16.57	16.64	16.72
	short-circuit current (with tolerance±4% ) [A]:	17.52	17.58	17.64	17.70	17.37	17.43	17.49
	max. power (with tolerance±3% ) [W]:	575	580	585	590	505	510	515
BNPI condition	max. power (with tolerance±3% ) [W]:	645	650	656	662	566	572	578
	open-circuit voltage (tolerance±3% ) [V]:	41.28	41.44	41.60	41.76	36.40	36.56	36.72
	short-circuit current (tolerance±4% ) [A]:	19.65	19.72	19.78	19.85	19.48	19.55	19.62
	$\phi$ Voc /Tolerance±5%	0.99	0.99	0.99	0.99	0.99	0.99	0.99

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bifaciality coefficient	$\phi_{sc}$ /Tolerance $\pm 10\%$	0.9	0.9	0.9	0.9	0.9	0.9	0.9
	$\phi_{Pmax}$ /Tolerance $\pm 10\%$	0.9	0.9	0.9	0.9	0.9	0.9	0.9
BSI condition	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	22.25	22.33	22.40	22.48	22.06	22.14	22.21
	Series Fuse Rating [A]	35	35	35	35	35	35	35
	Maximum System Voltage	1500	1500	1500	1500	1500	1500	1500
	Min. creepage distance [mm]	13.1	13.1	13.1	13.1	13.4	13.4	13.4

Product Electrical Ratings at STC:								
	Module	SRP-520-BHE-BG	SRP-445-BHF-BG	SRP-450-BHF-BG	SRP-455-BHF-BG	SRP-460-BHF-BG		
STC condition	open-circuit voltage (with tolerance $\pm 3\%$ ) [V]:	36.8	31.92	32.08	32.24	32.4		
	voltage at max. power [V]:	30.97	26.82	26.98	27.14	27.3		
	current at max. power [A]:	16.8	16.6	16.68	16.77	16.85		
	short-circuit current (with tolerance $\pm 4\%$ ) [A]:	17.55	17.44	17.5	17.56	17.62		
	max. power (with tolerance $\pm 3\%$ ) [W]:	520	445	450	455	460		
BNPI condition	max. power (with tolerance $\pm 3\%$ ) [W]:	583	499	505	510	516		
	open-circuit voltage	36.88	32.00	32.16	32.32	32.48		

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	tolerance±3%) [V]:							
	short-circuit current (tolerance±4%) [A]:	19.68	19.56	19.63	19.69	19.76		
bifaciality coefficient	$\phi$ Voc /Tolerance±5%	0.99	0.99	0.99	0.99	0.99		
	$\phi$ Isc /Tolerance±10%	0.9	0.9	0.9	0.9	0.9		
	$\phi$ Pmax /Tolerance±10%	0.9	0.9	0.9	0.9	0.9		
BSI condition	short-circuit current (with tolerance±4% ) [A]:	22.29	22.15	22.23	22.30	22.38		
	Series Fuse Rating [A]	35	35	35	35	35		
	Maximum System Voltage	1500	1500	1500	1500	1500		
	Min. creepage distance [mm]	13.4	13.7	13.7	13.7	13.7		

Signature of the Certification Holder:

Name, seal and signature of Certificate Holder:	
Date:	



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