



# Certificate of Compliance

**Certificate:** 2655017

**Master Contract:** 249143

**Project:** 70187048

**Date Issued:** 2018-07-09

**Issued to:** Canadian Solar Inc  
545 Speedvale Ave West  
Guelph, Ontario N1K 1E6  
CANADA  
**Attention:** Jason You

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only*



**Issued by:** *Simon Shen*  
Simon Shen

## PRODUCTS

CLASS - C531110 - POWER SUPPLIES-Photovoltaic Modules and Panels

CLASS - C531190 - POWER SUPPLIES-Photovoltaic Modules and Panels - Certified to US Standards

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6X-XXXXP-FG where 'XXX' is the power output from 290 W to 360 W with the following electrical rating typical at 360 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	46.5 V
Short Circuit Current (Isc):	9.92 A
Operating Voltage (Vpmax):	38.3 V
Current at Operating Voltage (Ipmax):	9.40 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6K-XXXXP-FG, CS6K-XXXXP-PG where 'XXX' is the power output from 245 W to 300 W with the following electrical rating typical at 300 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	38.8 V
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Short Circuit Current (Isc): 9.92 A  
Operating Voltage (Vpmax): 32.0 V  
Current at Operating Voltage (Ipmax): 9.38 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6X-XXXM-FG where 'XXX' is the power output from 290 W to 360 W with the following electrical rating typical at 360 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 46.9 V  
Short Circuit Current (Isc): 9.78 A  
Operating Voltage (Vpmax): 38.7 V  
Current at Operating Voltage (Ipmax): 9.31 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6K-XXXM-FG, CS6K-XXXMS-FG where 'XXX' is the power output from 245 W to 305 W with the following electrical rating typical at 305 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 39.9 V  
Short Circuit Current (Isc): 9.75 A  
Operating Voltage (Vpmax): 32.9 V  
Current at Operating Voltage (Ipmax): 9.27 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS6U-XXXXP-AG where 'XXX' is the power output from 290 W to 360 W with the following electrical rating typical at 360 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 46.5 V  
Short Circuit Current (Isc): 9.92 A  
Operating Voltage (Vpmax): 38.3 V  
Current at Operating Voltage (Ipmax): 9.40 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS6K-XXXXP-AG where 'XXX' is the power output from 245 W to 300 W with the following electrical rating typical at 300 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 38.8 V  
Short Circuit Current (Isc): 9.92 A  
Operating Voltage (Vpmax): 32.0 V  
Current at Operating Voltage (Ipmax): 9.38 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS6U-XXXM-AG where 'XXX' is the power output from 290 W to 360 W with the following electrical rating typical at 360 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 46.9 V  
Short Circuit Current (Isc): 9.78 A



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Operating Voltage (Vpmax): 38.7 V  
Current at Operating Voltage (Ipmax): 9.31 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS6K-XXXM-AG, CS6K-XXXMS-AG where 'XXX' is the power output from 200 W to 305 W with the following electrical rating typical at 305 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 39.9 V  
Short Circuit Current (Isc): 9.75 A  
Operating Voltage (Vpmax): 32.9 V  
Current at Operating Voltage (Ipmax): 9.27 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3U-XXXMS-FG where 'XXX' is the power output from 350 W to 410 W with the following electrical rating typical at 410 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 49.0 V  
Short Circuit Current (Isc): 10.49 A  
Operating Voltage (Vpmax): 41.2 V  
Current at Operating Voltage (Ipmax): 9.96 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3U-XXXP-FG where 'XXX' is the power output from 310 W to 370 W with the following electrical rating typical at 370 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 47.4 V  
Short Circuit Current (Isc): 9.83 A  
Operating Voltage (Vpmax): 40.0 V  
Current at Operating Voltage (Ipmax): 9.26 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3K-XXXMS-FG where 'XXX' is the power output from 250 W to 330 W with the following electrical rating typical at 330 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 40.5 V  
Short Circuit Current (Isc): 10.30 A  
Operating Voltage (Vpmax): 33.7 V  
Current at Operating Voltage (Ipmax): 9.80 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3K-XXXP-FG where 'XXX' is the power output from 270 W to 325 W with the following electrical rating typical at 325 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 40.3 V  
Short Circuit Current (Isc): 10.05 A



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Operating Voltage (Vpmax): 33.7 V  
Current at Operating Voltage (Ipmax): 9.65 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3U-XXXMS-AG where 'XXX' is the power output from 350 W to 410 W with the following electrical rating typical at 410 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 49.0 V  
Short Circuit Current (Isc): 10.49 A  
Operating Voltage (Vpmax): 41.2 V  
Current at Operating Voltage (Ipmax): 9.96 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3U-XXXP-AG where 'XXX' is the power output from 310 W to 370 W with the following electrical rating typical at 370 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 47.4 V  
Short Circuit Current (Isc): 9.83 A  
Operating Voltage (Vpmax): 40.0 V  
Current at Operating Voltage (Ipmax): 9.26 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3K-XXXMS-AG where 'XXX' is the power output from 250 W to 330 W with the following electrical rating typical at 330 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 40.5 V  
Short Circuit Current (Isc): 10.30 A  
Operating Voltage (Vpmax): 33.7 V  
Current at Operating Voltage (Ipmax): 9.80 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3K-XXXP-AG where 'XXX' is the power output from 270 W to 325 W with the following electrical rating typical at 325 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 40.3 V  
Short Circuit Current (Isc): 10.05 A  
Operating Voltage (Vpmax): 33.7 V  
Current at Operating Voltage (Ipmax): 9.65 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3U-XXXMB-FG where 'XXX' is the power output from 350 W to 410 W with the following electrical rating typical at 410 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc): 49.0 V  
Short Circuit Current (Isc): 10.49 A  
Operating Voltage (Vpmax): 41.2 V  
Current at Operating Voltage (Ipmax): 9.96 A



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Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3U-XXXPB-FG where 'XXX' is the power output from 310 W to 370 W with the following electrical rating typical at 370 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	47.4 V
Short Circuit Current (Isc):	9.83 A
Operating Voltage (Vpmax):	40.0 V
Current at Operating Voltage (Ipmax):	9.26 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3K-XXXMB-FG where 'XXX' is the power output from 250 W to 330 W with the following electrical rating typical at 330 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	40.5 V
Short Circuit Current (Isc):	10.30 A
Operating Voltage (Vpmax):	33.7 V
Current at Operating Voltage (Ipmax):	9.80 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS3K-XXXPB-FG where 'XXX' is the power output from 270 W to 325 W with the following electrical rating typical at 325 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	40.3 V
Short Circuit Current (Isc):	10.05 A
Operating Voltage (Vpmax):	33.7 V
Current at Operating Voltage (Ipmax):	9.65 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3U-XXXMB-AG where 'XXX' is the power output from 350 W to 410 W with the following electrical rating typical at 410 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	49.0 V
Short Circuit Current (Isc):	10.49 A
Operating Voltage (Vpmax):	41.2 V
Current at Operating Voltage (Ipmax):	9.96 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3U-XXXPB-AG where 'XXX' is the power output from 310 W to 370 W with the following electrical rating typical at 370 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	47.4 V
Short Circuit Current (Isc):	9.83 A
Operating Voltage (Vpmax):	40.0 V
Current at Operating Voltage (Ipmax):	9.26 A



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Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3K-XXXMB-AG where 'XXX' is the power output from 250 W to 330 W with the following electrical rating typical at 330 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	40.5 V
Short Circuit Current (Isc):	10.30 A
Operating Voltage (Vpmax):	33.7 V
Current at Operating Voltage (Ipmax):	9.80 A

Photovoltaic Modules with maximum system voltage of 1000 V dc or 1500 V dc, Class A, New Type module fire performance, similar to Type 13 or Type 3, Model Series CS3K-XXXPB-AG where 'XXX' is the power output from 270 W to 325 W with the following electrical rating typical at 325 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	40.3 V
Short Circuit Current (Isc):	10.05 A
Operating Voltage (Vpmax):	33.7 V
Current at Operating Voltage (Ipmax):	9.65 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6U-XXXMB-FG where 'XXX' is the power output from 290 W to 385W with the following electrical rating typical at 385 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	48.4 V
Short Circuit Current (Isc):	10.23 A
Operating Voltage (Vpmax):	39.5 V
Current at Operating Voltage (Ipmax):	9.75 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6U-XXXPB-FG where 'XXX' is the power output from 290 W to 360 W with the following electrical rating typical at 360 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	46.5 V
Short Circuit Current (Isc):	9.92 A
Operating Voltage (Vpmax):	38.3 V
Current at Operating Voltage (Ipmax):	9.40 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6K-XXXMB-FG where 'XXX' is the power output from 245 W to 320W with the following electrical rating typical at 320 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	40.5 V
Short Circuit Current (Isc):	10.15 A
Operating Voltage (Vpmax):	33.3 V
Current at Operating Voltage (Ipmax):	9.61 A





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Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc, Class A, Type 13, or Type 3 module fire performance, Model Series CS6K-XXXPB-FG where 'XXX' is the power output from 245 W to 300 W with the following electrical rating typical at 300 W at Standard Test Conditions (STC):

Open Circuit Voltage (Voc):	38.8 V
Short Circuit Current (Isc):	9.92 A
Operating Voltage (Vpmax):	32.0 V
Current at Operating Voltage (Ipmax):	9.38 A

Notes:

1. Rated electrical characteristics are within +/-10% of measured values at Standard Test Conditions of 100 mW/cm<sup>2</sup> irradiance, AM 1.5 spectrum, and cell temperature of 25°C.
2. New Type module fire performance for CS6U-XXXP-AG, CS6K-XXXP-AG, CS6U-XXXM-AG, CS6K-XXXM-AG, CS6K-XXXMS-AG, CS3U-XXXP-AG, CS3K-XXXP-AG, CS3U-XXXMS-AG, CS3K-XXXMS-AG, CS3U-XXXPB-AG, CS3K-XXXPB-AG, CS3U-XXXMB-AG, CS3K-XXXMB-AG. The constructions and fire performance are similar to Type 13 or Type 3, except that assembly with metallic (aluminum) frames.
3. The electrical power performance of the bifacial modules, type CS3U-XXXPB-FG, CS3K-XXXPB-FG, CS3U-XXXMB-FG, CS3K-XXXMB-FG, CS3U-XXXPB-AG, CS3K-XXXPB-AG, CS3U-XXXMB-AG, CS3K-XXXMB-AG, CS6U-XXXMB-FG, CS6U-XXXPB-FG, CS6K-XXXMB-FG, CS6K-XXXPB-FG is only generated by front side of the module, more power may be generated if considering back side of the module.

**APPLICABLE REQUIREMENTS**

ULC/ORD- C1703-01 - Flat-Plate Photovoltaic Modules and Panels  
UL 1703-3<sup>rd</sup> Edition - Flat-Plate Photovoltaic Modules and Panels



## *Supplement to Certificate of Compliance*

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*The products listed, including the latest revision described below,  
are eligible to be marked in accordance with the referenced Certificate.*

### **Product Certification History**

<b>Project</b>	<b>Date</b>	<b>Description</b>
70187048	2018-07-09	Update report to add two new bifacial cells CC6P5-BPS, CC6M5-BPS and related new bifacial module types, CS6U-XXXMB-FG, CS6K-XXXMB-FG, CS6U-XXXPB-FG, CS6K-XXXPB-FG, slightly change the overall dimension of CS3U-PB-AG and CS3U-MB-AG series.
70172360	2018-04-24	Update report to add two new bifacial cells, two new junction box, two alternative connectors, four alternative bypass diodes, one alternative substrate manufacturer, two combinations of J-box and J-box adhesive and related new bifacial module types, CS3U-XXXPB-FG, CS3K-XXXPB-FG, CS3U-XXXMB-FG, CS3K-XXXMB-FG, CS3U-XXXPB-AG, CS3K-XXXPB-AG, CS3U-XXXMB-AG, CS3K-XXXMB-AG. The power range of CS3K-XXXP-FG, CS3K-XXXP-AG was also expanded.
70171875	2018-02-11	Update Report 2655017 to add new models CS3U-XXXMS-AG, CS3U-XXXP-AG, CS3K-XXXMS-AG and CS3K-XXXP-AG and related F14 frame.
70165399	2017-12-13	Update Report 2655017 to add new models CS3U-XXXMS-FG, CS3U-XXXP-FG, CS3K-XXXMS-FG and CS3K-XXXP-FG with half-cells.
70165398	2017-12-07	Update Report 2655017 to add new mounting methods for F14 & F15 frame.
70144480	2017-10-30	Update report 2655017 to add a new encapsulation material POE "T22" manufactured by Cybrid.
70136613	2017-08-22	Update Report 2655017 to add junction box CF1505-01mx with connectors T4-PPE-1 & T4-PC-1, adhesive 1527/HT8258/CV709, and to cover alternative cells from Report 2284121.
70122823	2017-05-19	Update report 2655017 to add double glass module with frame, model series CS6U-XXXP-AG, CS6U-XXXM-AG, CS6K-XXXP-AG, CS6K-XXXM-AG, CS 6K-XXXMS-AG.
70133941	2017-05-18	Update report 2655017 to add junction box B12S by Changshu Tlian.
70133943	2017-05-17	Update report 2655017 to add new encapsulant TF4 by Hangzhou First.
70083941	2016-10-24	1. Add two new model series: CS6X-M, CS6K-M 2. Expand the power rating for model series: CS6X-P, CS6K-P 3. Alternate new mechanical installation method 4. Increase the model size for CS6K-P series
70046455	2015-09-11	Update Report 2655017 for the CS6X-XXXP-FG Series with alternate EVA manufactured by First PV, F406P & F806W, for extension approval of





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frameless type CS6X-XXXP-FG with bigger size based on previous approved type CS6K-XXXP-FG with EVA pair 9110T/9130W of supplier 3M, and extension approval of fire test class A based on approved class C, CSA Report #70024060 is referenced.

70036467	2015-06-18	Update Descriptive Report 2655017
70023134	2015-04-28	Update Report 2655017 to add alternative frame adhesive.
70020421	2015-01-14	Update Report 2655017 to include model series CS6K-XXXP-PG and Fire Performance Type.
2655017	2013-10-01	Photovoltaic Modules, Model Series CS6K-XXXP-LG. (C/US)