



# Certificate of Compliance

**Certificate:** 2284121

**Master Contract:** 249143

**Project:** 70205130

**Date Issued:** 2018-11-09

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

CLASS - C531110 - POWER SUPPLIES-Photovoltaic Modules and Panels

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc and Type 1 and Type 2 module fire performance, Model Series CS6X-XXXXP, CS6X-XXXXPX where 'XXX' is the power output from 250 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (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 and Type 1 and Type 2 module fire performance, Model Series CS6X-XXXM where 'XXX' is the power output from 260 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (STC):



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

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 and Type 1 and Type 2 module fire performance, Model Series CS6P-XXXXP, CS6P-XXXXPX where 'XXX' is the power output from 200 W to 300 W with the following electrical ratings typical at 300 W for CS6P-XXXXP/ CS6P-XXXXP-S, and CS6P-XXXXPX series respectively @ Standard Test Condition (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 600 V dc or 1000 V dc and Type 1 and Type 2 module fire performance, Model Series CS6P-XXXM and CS6P-XXXMX where 'XXX' is the power output from 200 W to 300 W with the following electrical ratings typical at 300 W for CS6P-XXXM and CS6P-XXXMX series respectively @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 39.1 V  
Short Circuit Current (Isc): 9.78 A  
Operating Voltage (Vpmax): 32.4 V  
Current at Operating Voltage (Ipmax): 9.25 A

Photovoltaic Modules with maximum system voltage of 600 V dc and Type 1 and Type 2 module fire performance, Model Series CS6A-XXXXP, where 'XXX' is the power output from 160 W to 210 W with the following electrical ratings typical at 210 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 30.0 V  
Short Circuit Current (Isc): 9.19 A  
Operating Voltage (Vpmax): 24.4 V  
Current at Operating Voltage (Ipmax): 8.63 A

Photovoltaic Modules with maximum system voltage of 600 V dc and Type 1 and Type 2 module fire performance, Model Series CS6C-XXXM, CS6C-XXXMS, where 'XXX' is the power output from 120 W to 180 W with the following electrical ratings typical at 145 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 22.4V  
Short Circuit Current (Isc): 8.52 A  
Operating Voltage (Vpmax): 18.1V  
Current at Operating Voltage (Ipmax): 8.01 A

Photovoltaic Modules with maximum system voltage of 600 V dc and Type 1 and Type 2 module fire performance, Model Series CS6C-XXXXP, where 'XXX' is the power output from 120 W to 180 W with the following electrical ratings typical at 150 W @ Standard Test Condition (STC):



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

Open Circuit Voltage (Voc): 22.3V  
Short Circuit Current (Isc): 8.87 A  
Operating Voltage (Vpmax): 18.1V  
Current at Operating Voltage (Ipmax): 8.30 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc or 1500V dc and Type 1 and Type 2 module fire performance, Model Series CS6K-XXXXP, where 'XXX' is the power output from 220 W to 300 W with the following electrical ratings typical at 300 W for CS6K-XXXXP series @ Standard Test Condition (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 600 V dc and Type 1 and Type 2 module fire performance, Model Series CS6A-XXXXM, CS6A-XXXXMS, where 'XXX' is the power output from 160 W to 245 W with the following electrical ratings typical at 245 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 32.1V  
Short Circuit Current (Isc): 9.84 A  
Operating Voltage (Vpmax): 26.2V  
Current at Operating Voltage (Ipmax): 9.36 A

Photovoltaic Modules with maximum system voltage of 600 V dc or 1000 V dc or 1500V dc (only for CS6K-XXXXM series) and Type 1 and Type 2 module fire performance, Model Series CS6K-XXXXM, CS6K-XXXXMS, where 'XXX' is the power output from 240 W to 305 W with the following electrical ratings typical at 305 W @ Standard Test Condition (STC):

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

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 module fire performance, Model Series CS6U-XXXXM, where 'XXX' is the power output from 260 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (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



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS6U-XXXXP, CS6U-XXXXPN, where 'XXX' is the power output from 250 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (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 600V dc or 1000 V dc and Type 1 and Type 2 module fire performance, Model Series CS6P-XXXXP-SD, and CS6K-XXXXP-SD where 'XXX' is the power output from 240 W to 300 W with the following electrical ratings typical at 250 W @ Standard Test Condition (STC):

Output Voltage Range (Vout): 5 – 60V  
Maximum Output Current (Imax): 15A

Photovoltaic Modules with maximum system voltage of 600V dc or 1000 V dc and Type 1 and Type 2 module fire performance, Model Series CS6P-XXXXM-SD, CS6K-XXXXMS-SD, and CS6K-XXXXM-SD where 'XXX' is the power output from 240 W to 305 W with the following electrical ratings typical at 250 W @ Standard Test Condition (STC):

Output Voltage Range (Vout): 5 – 60 V  
Maximum Output Current (Imax): 15A

Photovoltaic Modules with maximum system voltage of 600V or 1000 V dc and Type 1 and Type 2 module fire performance, Model Series CS6P-XXXXP-TD, where 'XXX' is the power output from 240 W to 300 W with the following electrical ratings typical at 250 W @ Standard Test Condition (STC):

Output Voltage Range (Vout): 16 – 32 V (Voc\*)  
Maximum Output Current (Imax): 9.5 A

\*For modules with Smart Curve function the Voc is adjustable and is programmed only at the factory based on the PV module voltage.

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 module fire performance, Model Series CS3U-XXXXMS-H, where 'XXX' is the power output from 350 W to 400 W with the following electrical ratings typical at 400 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 48.6 V  
Short Circuit Current (Isc): 10.33 A  
Operating Voltage (Vpmax): 40.8 V  
Current at Operating Voltage (Ipmax): 9.81 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS3U-XXXXP-H, where 'XXX' is the power output from 295 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (STC):



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

---

Open Circuit Voltage (Voc): 46.7 V  
Short Circuit Current (Isc): 9.68 A  
Operating Voltage (Vpmax): 39.2 V  
Current at Operating Voltage (Ipmax): 9.19 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 module fire performance, Model Series CS3U-XXXMS, where 'XXX' is the power output from 350 W to 400 W with the following electrical ratings typical at 400 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 48.6 V  
Short Circuit Current (Isc): 10.33 A  
Operating Voltage (Vpmax): 40.8 V  
Current at Operating Voltage (Ipmax): 9.81 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 module fire performance, Model Series CS3K-XXXMS, where 'XXX' is the power output from 280 W to 330 W with the following electrical ratings typical at 330 W @ Standard Test Condition (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 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS3U-XXXXP, where 'XXX' is the power output from 295 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 46.7 V  
Short Circuit Current (Isc): 9.68 A  
Operating Voltage (Vpmax): 39.2 V  
Current at Operating Voltage (Ipmax): 9.19 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V and Type 1 fire performance, Model Series CS3K-XXXXP, where 'XXX' is the power output from 250 W to 310 W with the following electrical ratings typical at 310 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 39.1 V  
Short Circuit Current (Isc): 9.96 A  
Operating Voltage (Vpmax): 32.4 V  
Current at Operating Voltage (Ipmax): 9.57 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS3W-XXXXP, where 'XXX' is the power output from 380 W to 420 W with the following electrical ratings typical at 420 W @ Standard Test Condition (STC):



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

---

Open Circuit Voltage (Voc): 48.0 V  
Short Circuit Current (Isc): 11.22 A  
Operating Voltage (Vpmax): 39.5 V  
Current at Operating Voltage (Ipmax): 10.64 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS3L-XXXXP, where 'XXX' is the power output from 315 W to 345 W with the following electrical ratings typical at 345 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 39.8 V  
Short Circuit Current (Isc): 11.06 A  
Operating Voltage (Vpmax): 32.8 V  
Current at Operating Voltage (Ipmax): 10.52 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS1K-XXXMS, where 'XXX' is the power output from 285 W to 345 W with the following electrical ratings typical at 315 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 36.6 V  
Short Circuit Current (Isc): 11.14 A  
Operating Voltage (Vpmax): 30.4 V  
Current at Operating Voltage (Ipmax): 10.39 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS1V-XXXMS, where 'XXX' is the power output from 240 W to 275 W with the following electrical ratings typical at 265 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 35.7 V  
Short Circuit Current (Isc): 9.51 A  
Operating Voltage (Vpmax): 29.4 V  
Current at Operating Voltage (Ipmax): 9.00 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS1VL-XXXMS, where 'XXX' is the power output from 200 W to 220W with the following electrical ratings typical at 220 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 28.8 V  
Short Circuit Current (Isc): 9.82 A  
Operating Voltage (Vpmax): 23.7 V  
Current at Operating Voltage (Ipmax): 9.28 A

Photovoltaic Modules with maximum system voltage of 1500V dc and Type 1 fire performance, Model Series CS1U-XXXMS, where 'XXX' is the power output from 385 W to 430W with the following electrical ratings typical at 430 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 54.0 V





**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

Short Circuit Current (Isc): 9.90 A  
Operating Voltage (Vpmax): 45.3 V  
Current at Operating Voltage (Ipmax): 9.51 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS1K-XXXMS, where 'XXX' is the power output from 310 W to 350W with the following electrical ratings typical at 350 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 43.9 V  
Short Circuit Current (Isc): 9.95 A  
Operating Voltage (Vpmax): 36.8 V  
Current at Operating Voltage (Ipmax): 9.51 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS1H-XXXMS, where 'XXX' is the power output from 310 W to 350W with the following electrical ratings typical at 350 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 43.9 V  
Short Circuit Current (Isc): 9.95 A  
Operating Voltage (Vpmax): 36.8 V  
Current at Operating Voltage (Ipmax): 9.51 A

Photovoltaic Modules with maximum system voltage of 1000V dc or 1500 V dc and Type 1 module fire performance, Model Series CS3U-XXXMS-V, where 'XXX' is the power output from 350 W to 400 W with the following electrical ratings typical at 400 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 48.6 V  
Short Circuit Current (Isc): 10.33 A  
Operating Voltage (Vpmax): 40.8 V  
Current at Operating Voltage (Ipmax): 9.81 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 module fire performance, Model Series CS3K-XXXMS-V, where 'XXX' is the power output from 280 W to 330 W with the following electrical ratings typical at 330 W @ Standard Test Condition (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 1000V dc or 1500 V dc and Type 1 fire performance, Model Series CS3U-XXXP-V, where 'XXX' is the power output from 295 W to 360 W with the following electrical ratings typical at 360 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 46.7 V  
Short Circuit Current (Isc): 9.68 A



**Certificate:** 2284121  
**Project:** 70189209

**Master Contract:** 249143  
**Date Issued:** 2018-11-09

Operating Voltage (Vpmax): 39.2 V  
Current at Operating Voltage (Ipmax): 9.19 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS3K-XXXXP-V, where 'XXX' is the power output from 250 W to 310 W with the following electrical ratings typical at 310 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 39.1 V  
Short Circuit Current (Isc): 9.96 A  
Operating Voltage (Vpmax): 32.4 V  
Current at Operating Voltage (Ipmax): 9.57 A

Photovoltaic Modules with maximum system voltage of 1000V dc and Type 1 fire performance, Model Series CS3K-XXXXP-H, where 'XXX' is the power output from 250 W to 310 W with the following electrical ratings typical at 310 W @ Standard Test Condition (STC):

Open Circuit Voltage (Voc): 39.1 V  
Short Circuit Current (Isc): 9.96 A  
Operating Voltage (Vpmax): 32.4 V  
Current at Operating Voltage (Ipmax): 9.57 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. A maximum series fuse rating of 20A is only for module Model Series CS6P-XXXXP-SD, CS6K-XXXXP-SD, CS3W-XXXXP, CS3L-XXXXP, CS6P-XXXXM-SD, CS6K-XXXXMS-SD and CS6K-XXXXM-SD, CS6K-P, CS6U-P, CS1K-XXXXMS, CS1V-XXXXMS, CS6K-XXXXMS, CS1U-XXXXMS, CS1H-XXXXMS, CS1K-XXXXMS.
3. A maximum series fuse rating of 30A is only for module Model Series CS3U-XXXXMS-H, CS3U-XXXXP-H, CS3U-XXXXMS, CS3U-XXXXP, CS3K-XXXXMS, CS3K-XXXXP and CS3K-XXXXP-H.

**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