



ASTRONERGY

TECHNICAL BULLETIN

Jan 6th, 2015

Subject: New UL1703 Fire Classification

Astronergy has completed the spread of flame fire performance testing of our photovoltaic modules to classify them to the updated UL 1703 standard 3rd edition.

When combined with Class A mounting systems our modules meet the photovoltaic fire system rating of Class A.

Module Series

All the current Astronergy poly and mono series product are performed the latest fire resistance test and listed as “Type 1” rating by CSA certification body.

The “type” ratings are defined by the panel construction characteristics such as glass thickness, EVA thickness, back sheet thickness and fire performance.

Testing Method

For Class A testing of the combination of module and racking system, the module is positioned to simulate mounting to a ballasted system or sloped roof at 22-degrees and exposed to calibrated flame and wind from a standard distance. The flame is continuously applied to the bottom of the module for 10 minutes.

Passing Criteria

In order to pass the spread of flame test:

No part of the module can be blown or fall off the deck in the form of flaming or glowing brands;

No portion of the module or roof deck that forms part of the building can fall away in the form of glowing particles;

The flame cannot spread laterally on the top surface or intermediate channel such as the space between the module and a roof

Flame may not spread beyond the specified distance:

Results

Astronergy's photovoltaic modules meet the “Type 1” fire class rating. Our modules achieve the photovoltaic fire system Class A rating (the most stringent) when combined with Class A rated racking system. From Astronergy side, it's just the updated test on the current product material and structure. Therefore, the new fire performance rating also applies to all inventories in the US.



Certificate of Compliance

Certificate: 2451686

Master Contract: 250641

Project: 70016603

Date Issued: January 6, 2015

Issued to: Chint Solar (Zhejiang) Co Ltd

1335 Bin An Rd
Binjiang District
Hangzhou, 310053
China
Attention: Amy Zhao

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



Mary Chen

Issued by: Mary Chen

PRODUCTS

CLASS 5311 90 - POWER SUPPLIES - Photovoltaic Modules and Panels - Certified to US Standards

CLASS 5311 10 - POWER SUPPLIES - Photovoltaic Modules and Panels

Photovoltaic Modules with Class C or Type 1 or Type 2 fire class rating, with maximum system voltage up to 1000 Vdc.

Models:

CHSM6612M-245, CHSM6612M-250, CHSM6612M-255, CHSM6612M-260, CHSM6612M-265, CHSM6612M-270, CHSM6612M-275, CHSM6612M-280, CHSM6612M-285, CHSM6612M-290, CHSM6612M-295, CHSM6612M-300, CHSM6612M-305, CHSM6612M-310, CHSM6612M-315, CHSM6612M-320, CHSM6612M-325, CHSM6611M-225, CHSM6611M-230, CHSM6611M-235, CHSM6611M-240, CHSM6611M-245, CHSM6611M-250, CHSM6611M-255, CHSM6611M-260, CHSM6611M-265, CHSM6611M-270, CHSM6611M-275, CHSM6611M-280, CHSM6611M-285, CHSM6611M-290, CHSM6611M-295, CHSM6611M-300, CHSM6610M-205, CHSM6610M-210, CHSM6610M-215, CHSM6610M-220, CHSM6610M-225, CHSM6610M-230, CHSM6610M-235, CHSM6610M-240, CHSM6610M-245, CHSM6610M-250, CHSM6610M-255, CHSM6610M-260, CHSM6610M-265, CHSM6610M-270, CHSM6610M-275, CHSM6610M-280, CHSM6609M-190,



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CHSM6609M-195, CHSM6609M-200, CHSM6609M-205, CHSM6609M-210, CHSM6609M-215, CHSM6609M-245, CHSM6609M-250, CHSM6608M-160, CHSM6608M-165, CHSM6608M-170, CHSM6608M-175, CHSM6608M-180, CHSM6608M-185, CHSM6608M-190, CHSM6608M-195, CHSM6608M-200, CHSM6608M-205, CHSM6608M-210, CHSM6608M-215, CHSM6608M-220, CHSM6608M-225, CHSM6607M-145, CHSM6607M-150, CHSM6607M-155, CHSM6607M-160, CHSM6607M-165, CHSM6607M-170, CHSM6607M-175, CHSM6607M-180, CHSM6607M-185, CHSM6607M-190, CHSM6607M-195, CHSM6606M-125, CHSM6606M-130, CHSM6606M-135, CHSM6606M-140, CHSM6606M-145, CHSM6606M-150, CHSM6606M-155, CHSM6606M-160, CHSM6606M-165, CHSM6606M-170, CHSM5612M-155, CHSM5612M-160, CHSM5612M-165, CHSM5612M-170, CHSM5612M-175, CHSM5612M-180, CHSM5612M-185, CHSM5612M-190, CHSM5612M-195, CHSM5612M-200, CHSM5612M-205, CHSM5612M-210, CHSM5611M-160, CHSM5611M-165, CHSM5611M-170, CHSM5611M-175, CHSM5611M-180, CHSM5611M-185, CHSM5611M-190, CHSM5409M-75, CHSM5409M-80, CHSM5409M-85, CHSM5409M-90, CHSM5409M-95, CHSM5409M-100, CHSM5409M-105, CHSM5409M-110, CHSM5409M-115

CHSM6612P-240, CHSM6612P-245, CHSM6612P-250, CHSM6612P-255, CHSM6612P-260, CHSM6612P-265, CHSM6612P-270, CHSM6612P-275, CHSM6612P-280, CHSM6612P-285, CHSM6612P-290, CHSM6612P-295, CHSM6612P-300, CHSM6612P-305, CHSM6612P-310, CHSM6611P-245, CHSM6611P-250, CHSM6611P-255, CHSM6611P-260, CHSM6611P-265, CHSM6611P-270, CHSM6611P-275, CHSM6611P-280, CHSM6611P-285, CHSM6611P-290, CHSM6610P-200, CHSM6610P-205, CHSM6610P-210, CHSM6610P-215, CHSM6610P-220, CHSM6610P-225, CHSM6610P-230, CHSM6610P-235, CHSM6610P-240, CHSM6610P-245, CHSM6610P-250, CHSM6610P-255, CHSM6610P-260, CHSM6610P-265, CHSM6610P-270, CHSM6609P-180, CHSM6609P-185, CHSM6609P-190, CHSM6609P-195, CHSM6609P-200, CHSM6609P-205, CHSM6609P-210, CHSM6609P-215, CHSM6609P-220, CHSM6609P-225, CHSM6609P-230, CHSM6609P-235, CHSM6609P-240, CHSM6608P-155, CHSM6608P-160, CHSM6608P-165, CHSM6608P-170, CHSM6608P-175, CHSM6608P-180, CHSM6608P-185, CHSM6608P-190, CHSM6608P-195, CHSM6608P-200, CHSM6608P-205, CHSM6608P-210, CHSM6608P-215, CHSM6607P-135, CHSM6607P-140, CHSM6607P-145, CHSM6607P-150, CHSM6607P-155, CHSM6607P-160, CHSM6607P-165, CHSM6607P-170, CHSM6607P-175, CHSM6607P-180, CHSM6607P-185, CHSM6607P-190, CHSM6606P-120, CHSM6606P-125, CHSM6606P-130, CHSM6606P-135, CHSM6606P-140, CHSM6606P-145, CHSM6606P-150, CHSM6606P-155, CHSM6606P-160.

Notes:

1. All models may be inserted with “(BL)” before “-xxx”, which indicates the black substrate material.
2. For details related to rating, size, configuration, etc. reference should be made to the CSA Certification Record or the descriptive report.

APPLICABLE REQUIREMENTS

ULC/ORD - C1703-01 - Flat-Plate Photovoltaic Modules and Panels

UL 1703-3rd Ed - Flat-Plate Photovoltaic Modules and Panels