

CERTIFICATION Notice

An Urgent Bulletin from CSA International

Photovoltaic Equipment No. 1

See Attachment 1 for Effective Dates.

Date: October 23, 2012

See Attachment 1 for Application Due Dates

Announcing: LTR AE-001-2012 Photovoltaic Module Racking Systems

See Attachment 2 for affected Class Numbers.

To purchase the Standard, visit us at www.shopcsa.ca

Who is affected?

Manufacturers of Photovoltaic module racking systems.

What do you do?

1. CSA International Service Delivery staff will contact you to address compliance with each revision as applicable to the product designs covered in your affected Certification Reports. In addition to updates to your Certificate(s) of Compliance & Report(s), testing may be required to comply with these revisions.
2. Please respond within thirty (30) days of receiving CSA International's "Application for CSA Certification Services" and "Quotation" communication. You must respond no later than the application dates listed in Attachment 1 in order to guarantee the update to your certification is completed by the corresponding effective dates shown in the same attachment. If

testing is needed, we will inform you of the samples required.

Background and Rationale:

Neither, the scope of CSA C22.2 No. 61730-1 and -2 nor the scope of CSA C22.2 No. 0.4 explicitly cover photovoltaic module and panel racking equipment. Those units may be designed to be part of the bonding path and mechanical supporting structure for photovoltaic modules and panels.

The purpose of this LTR is to provide guidance for the uniform application of the related standard requirements. It is not intended to establish requirements or supplant requirements that appear in any Part II Standards.

See attachment 3

For questions specific to your file or products contact your regular CSA International engineering staff.

Go to <http://directories.csa-international.org/> and enter your Master Contract # and the class numbers associated with this Notice to determine which of your products are affected.

For technical questions on this Certification Notice

Contact Stephane Poutissou
by phone 604.244.6547, fax 604. 244.6600
or e-mail stephane.poutissou@csagroup.org

In the event your models do not comply with the effective standards, arrangements must be made to bring them into compliance.

In the event we do not receive a response as to your currently certified models, prior to the above applicable effective date(s), the certification of such models will be discontinued.



Visit us at www.csagroup.org Click on "Contact Us" for the online phone listing of our Offices and Partners

ATTACHMENT 1

Effective Dates

Manufacturer of Photovoltaic Module racking systems may now make use of LTR AE-001-2012.

Photovoltaic racking systems previously manufactured and certified will continue to be listed until (whichever occurs first):

- a. January 1, 2014; or
- b. Changes to the equipment are made by the manufacturer; or
- c. Safety related changes are made to LTR AE-001-2012 which would require re-assessment of the product.

The application deadline is June 1, 2013.

ATTACHMENT 2

Affected Class Numbers

Class No:

5311 10, POWER SUPPLIES - Photovoltaic Modules and Panels

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

5313 02, POWER SUPPLIES- PHOTOVOLTAICS - PV Racking

5313 82, POWER SUPPLIES- PHOTOVOLTAICS - PV Racking and clamping systems – Certified to US Standards

ATTACHMENT 3



List of Technical Requirements [LTR]

LTR Number
AE-001-2012

Subject – Keywords
Photovoltaic Module and Panel Racking Systems

Background & Rationale

Neither, the scope of CSA C22.2 No. 61730-1 and -2 nor the scope of CSA C22.2 No. 0.4 explicitly cover photovoltaic module and panel racking equipment. Those units may be designed to be part of the bonding path and mechanical supporting structure for photovoltaic modules and panels.

The purpose of this document is to provide guidance for the uniform application of the related standard requirements. It is not intended to establish requirements or supplant requirements that appear in any Part II Standards.

Technical Issue

This LTR addresses requirements for evaluating the suitability of racking systems to act as part of the bonding path and mechanical support for photovoltaic modules and panels.

Technical Requirements

1.1 REFERENCE STANDARDS:

CAN/CSA-C22.2 No.0.4	Bonding of Electrical equipment
CSA Standard C22.2 No. 61730-1	Photovoltaic (PV) module safety qualification – Part 1: Requirements for construction
CSA Standard C22.2 No. 61730-2	Photovoltaic (PV) module safety qualification – Part 2: Requirements for testing
CSA C22.2 No. 94.2	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA IEC 61646	Thin-film terrestrial photovoltaic (PV) modules – Design qualification and type approval

1.2 REFERENCE CLASS DESCRIPTIONS:

5313 02 UV – Photovoltaic Racking Systems

2 REQUIREMENTS:

2.1 DEFINITIONS:

Bonding Path: A path of components and structural members through which the flow of current will occur in case of a ground fault.

2.2 SCOPE

These requirements apply to Photovoltaic Module and Panel Racking Systems which are intended to be used as part of the bonding path for the module or panel accessible metal.

2.3 Construction

2.3.1 Polymeric material

- a. Polymeric material used as an enclosure shall comply with Clause 5.2 of CAN/CSA C22.2 No. 61730-1
- b. Polymeric Material used as a support shall comply with Clause 5.3 of CAN/CSA C22.2 No. 61730-1
- c. Polymeric Material used with an area greater than 1m² or a single dimension greater than 2 m shall comply with the requirement of Clause 5.4.2 CAN/CSA C22.2 No. 61730-1 or be subject to the flame spread test of annex A of CAN/CSA C22.2 No. 61730-2.
- d. Polymeric Material shall comply with Clause 5.4.3 of CAN/CSA C22.2 No. 61730-1.

2.3.2 Metal parts

- a. Metal parts shall comply with the requirement of Clause 4.2 of CAN/CSA C22.2 No. 61730-1
- b. Corrosion protection shall comply with the requirements of Clause 7.2.3 of CSA C22.2 No. 94.2

2.3.3 Bonding and grounding

- a. Racking shall comply with Clause 8 of CAN/CSA C22.2 No. 61730-1.
- b. The bonding path of racking shall comply with Clause 10.4 of CAN/CSA C22.2 No. 61730-2, this test shall be repeated after condition the bonding path as per the cycle described in Clause 10.11 and 10.12 of CAN/CSA- IEC 61646.
- c. The bonding path shall comply with Clause 4.1 and 4.3 of CAN/CSA- C22.2 No. 0.4
- d. Field wiring terminals for connection to the bonding path shall comply with the test of 10.10A of CAN/CSA C22.2 No. 61730-2. The requirement to complete the robustness of termination test is not required.

2.3.4 Gasket and seals

- a. Gasket and seals shall comply with Clause 10.5 of CAN/CSA C22.2 No. 61730-1

2.3.5 Mechanical Loading

- a. The racking shall be subjected to the mechanical loading test of Clause 10.16 of CAN/CSA- IEC 61646.

2.4 Markings

Photovoltaic module and panel racking shall be plainly marked, in a permanent manner, in a place where the details will be readily visible after installation, with the following:

- a) registered trademark, trade name, manufacturer's name, or other recognized symbol of identification of the manufacturer;

- b) catalogue or type number, or other mark used for distinguishing purposes;
- c) The maximum size and number (if applicable) of modules or panels intended to be mounted;
- d) A racking's fire resistance rating as a roof covering shall be marked on the racking. If racking does not meet specific fire rating requirements, then the racking shall be marked "Not Fire Rated".
- e) Racking shall be marked with the maximum intended load, either 2400 Pa or 5400 Pa for racking qualified to withstand heavy accumulations of snow and ice.

2.5 Requirements for Supplied Documents

Racking shall be provided with installation instruction describing the methods of installation and ratings of the racking.

Installation instruction shall include the information specified in Clause 12.2, 12.4 and 12.6 of CAN/CSA C22.2 No. 61730-1.

Attachments

None

This LTR is applicable to the following programs (✓)			
CSA (✓)	NRTL ()	CB ()	Others: ()

Impact on Existing Certification

There is an impact on previously certified products under Class Nos. 5311-10 and 5311-90.
Duration of this document: until publication or adoption of a standard.

Experts Consulted	Brij Aggarwal
Distribution of this LTR	Terry Nagy, Ernesto Lopez, Brij Aggarwal, Benjamin Lui, Sam Gu.

This LTR was issued by Stephane Poutissou			This LTR replaces previous LTR dated		
on					
yyyy	mm	dd	yyyy	mm	dd
2012	10	23	N/A		

If you require additional technical information, please contact:

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