

## STANDARD INFORMATION

**Standard:** CSA C22.2 No. 330

**Standard ID:** Photovoltaic Rapid Shutdown Systems [CSA C22.2#330:2023 Ed.2]

**Previous Standard ID:** Photovoltaic Rapid Shutdown Systems (R2022) [CSA C22.2#330:2017 Ed.1]

## EFFECTIVE DATE OF NEW/REVISED REQUIREMENTS

**Effective Date:** **June 10, 2025**

## IMPACT, OVERVIEW, AND ACTION REQUIRED

**Impact Statement:** Per our accreditation, Intertek is required to review reports against the standard revisions to confirm compliance. Once compliance is confirmed, the standard reference in the report is updated to show continued compliance to the technical requirements of the standard. Reports not updated to this version by the effective date above will be withdrawn.

**Overview of Changes:** Revised requirements for equipment incorporating electronic technology, semiconductors, or software (RS2 equipment). Specific details of new/revised requirements are found in table below.

***Current Listings Not Active? – Please immediately identify any current Listing Reports or products that are no longer active and should be removed from our records. We will do this at no charge as long as Intertek is notified in writing prior to the review of your reports.***



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CLAUSE	VERDICT	COMMENT
		<i>Additions to existing requirements are <u>underlined</u> and deletions are shown <del>lined-out</del> below.</i>
5	Info	<b>Testing and evaluation</b>
5.3	Info	<b>Equipment incorporating electronic technology, semiconductors, or software (RS2 equipment)</b>
5.3.1		<p>RS2 equipment containing solid-state and microprocessor-based controls, <u>firmware, or communications shall be subjected to a risk assessment process to define appropriate risk reduction strategies, including the identification of any safety control functions.</u> Any safety control functions shall be evaluated under Class B, <u>dependent upon the identified risk,</u> for functional safety in accordance with CSA C22.2 No. 0.8.</p> <p><u>As an alternative approach, the safety control functions may be evaluated using the methods in IEC 61508, including IEC 61508-1, or in ISO 13849-1 and ISO 13849-2. Safety control functions shall comply with a predicted failure rates equal to minimum of SIL2 or PLd. The risk assessment might identify a higher SIL or PL.</u></p>
5.3.2		<p>If the initiator is or can be a remote device connected by a signal wire to the PVRSS or PVRSE, <u>then the risk assessment shall identify if the initiator is part of a safety control function and detail the required level of safety integrity for the safety control function.</u></p>
5.3.3		<p>If the initiator is or can be a remote device connected using a wireless means to communicate with the PVRSS or PVRSE, <u>then the risk assessment shall identify if the initiator is part of a safety control function and detail the required level of safety integrity for the safety control function.</u></p>
5.3.4		<p><u>The self-test function shall be checked with simulated fault conditions on critical sensors or devices, or by other means of positive verification that the system is operating as designed.</u></p> <p>Note: The self-test function provides a means by which correct operation of the PVRSS or PVRSE can be verified.</p>