



Certificate of Compliance

Certificate: 70218631

Master Contract: 259077

Project: 80070295

Date Issued: 2021-02-22

Issued to: Altenergy Power System Inc.
No.1 Yatai Road
Jiaxing, Zhejiang, 314050
CHINA

Attention: Kevin Lu

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



Issued by: Rohana Yang
Rohana Yang

PRODUCTS

CLASS 5311 09 - POWER SUPPLIES - Distributed Generation Power Systems Equipment

CLASS 5311 89 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

APsmart Rapid shutdown System:

Model	Attenuators	Initiation Device	System Ratings
Type-A	RSD-S-PLC-A	Transmitter-PLC	System voltage 1000Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power
Type-B	RSD-S-PLC-B	Transmitter-PLC	System voltage 1500Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power



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Type-C	RSD-S-PLC-A	Transmitter-PLC-PCBA	System voltage 1000Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power
Type-D	RSD-S-PLC-B	Transmitter-PLC-PCBA	System voltage 1500Vdc, Attenuators Input: 8~80Vdc, 15Amax per module, 15A max input short circuit. Attenuators Output: 8~80Vdc, 15Amax, 800W max per module. Rapid shutdown time limit 15s. Initiated by the loss of AC power

Model	Attenuators	Initiation Device	Inverter	System Ratings
APsmart's RSD system, PVRSS: Sunspec	Altenergy Power System Inc. RSD-S-PLC-A RSD-S-PLC-B RSD-D-15-1000 RSD-D-20-1000 RSD-D-25-1000 RSD-D-15-1500 RSD-D-20-1500 RSD-D-25-1500	Altenergy Power System Inc. Transmitter-PLC Transmitter-PLC-PCBA	SHANGHAI CHINT POWER SYSTEMS CO., LTD. CPS SCA60KTL-DO/US-480 CPS SCA50KTL-DO/US-480 CPS SCA25KTL-DO-R/US-480 CPS SCA20KTL-DO-R/US-480 CPS SCA25KTL-DO/US-208	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power
	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY020-A PV-SY020	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY020-PLC PV-SY020-PCBA	Delta Electronics (Shanghai) Co., Ltd. M10-4-TL-US M10-TL-US M8-TL-US M6-TL-US M5-TL-US M4-TL-US E8-TL-US E6-TL-US E4-TL-US	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power
	Baoding Yitong PV Science&Technology Co., Ltd. YT-RSD-P-1000 YT-RSD-P-1500	Baoding Yitong PV Science&Technology Co., Ltd. Transmitter-PLC Transmitter-PLC-PCBA	Solectria Renewables, LLC PVI 50TL-480 PVI 60TL-480 PVI 20TL-480-R PVI 25TL-480-R PVI 25TL-208	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter.



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				Initiated by the loss of AC power
			JIANGSU GOODWE POWER SUPPLY TECHNOLOGY CO., LTD. GW9600A-ES, GW8600A-ES, GW7600A-ES, GW7000A-ES, GW6000A-ES, GW5000A-ES, GW9600A-MS, GW8600A-MS, GW7600A-MS, GW7000A-MS, GW6000A-MS, GW5000A-MS, GW9600A-IS, GW8600A-IS, GW7600A-IS, GW7000A-IS, GW6000A-IS, GW5000A-IS GW9600H-ES, GW8600H-ES, GW7600H-ES, GW7000H-ES, GW6000H-ES, GW5000H-ES,	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the DC Switch on the inverter.

Model	Attenuators	Initiation Device	Inverter	System Ratings
APsmart's RSD system, PVRSS: Sunspec	Altenergy Power System Inc. RSD-S-PLC-A RSD-S-PLC-B RSD-D-15-1000 RSD-D-20-1000 RSD-D-25-1000 RSD-D-15-1500 RSD-D-20-1500 RSD-D-25-1500	Integrated in Fronius inverter as listed in the just right column of this table	Fronius International GmbH Fronius Symo Advanced 10.0-3 208-240 Fronius Symo Advanced 12.0-3 208-240	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power
			Fronius International GmbH Fronius Symo Advanced 15.0-3 480	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter

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	Zhejiang Twinsel Electronic Technology Co., Ltd. PV-SY020-A PV-SY020 Baoding Yitong PV Science&Technology Co., Ltd. YT-RSD-P-1000 YT-RSD-P-1500		Fronius Symo Advanced 20.0-3 480 Fronius Symo Advanced 22.7-3 480 Fronius Symo Advanced 24.0-3 480	Initiated by the loss of AC power
			Fronius International GmbH Primo GEN24 3.8 208-240 Primo GEN24 5.0 208-240 Primo GEN24 6.0 208-240	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by external buttons with signal wire connected to the WSD interface of the Inverter.
		Integrated in Ginlong inverters as listed in the just right column of this table	Ningbo Ginlong Technologies Co., Ltd. Solis-50K-US-SW; Solis-50K-US-LSW; Solis-66K-US-F-SW; Solis-66K-US-F-LSW; Solis-60K-US-F-SW; Solis-60K-US-F-LSW; Solis-50K-US-F-SW; Solis-50K-US-F-LSW; Solis-40K-US-F-SW; Solis-40K-US-LSW; Solis-40K-US-SW; Solis-36K-US-SW; Solis-36K-US-F-SW; Solis-36K-US-LSW; Solis-30K-US-F-SW; Solis-30K-US-LSW; Solis-30K-US-SW; Solis-25K-US-SW; Solis-25K-US-F-SW; Solis-25K-US-LSW;	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power

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		Integrated in Ginlong inverters as listed in the just right column of this table	Ningbo Ginlong Technologies Co., Ltd. Solis-1P10K-4G-US; Solis-1P9K-4G-US; Solis-1P8.6K-4G-US; Solis-1P8K-4G-US; Solis-1P7.6K-4G-US; Solis-1P7K-4G-US; Solis-1P6K-4G-US; Solis-1P6K2-4G-US; Solis-1P5K-4G-US; Solis-1P4.6K-4G-US; Solis-1P4K-4G-US; Solis-1P3.6K-4G-US; Solis-1P3K-4G-US; Solis-1P2.5K-4G-US; Solis-1P2K-4G-US; Solis-1P1.5K-4G-US; Solis-1P1K-4G-US;	600 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power
		Integrated in Ginlong inverters as listed in the just right column of this table	Ningbo Ginlong Technologies Co., Ltd. RHI-1P5K-HVES-5G; RHI-1P6K-HVES-5G; RHI-1P7K-HVES-5G; RHI-1P7.6K-HVES-5G; RHI-1P8K-HVES-5G; RHI-1P9K-HVES-5G; RHI-1P10K-HVES-5G;	500 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power
		Integrated in Candian Solar inverters as listed in the just right column of this table	Canadian Solar Inc. : CSI-66K-T480GL01-UB, CSI-60K-T480GL01-UB, CSI-50K-T480GL01-UB, CSI-40K-T480GL01-UB, CSI-36K-T480GL01-UB, CSI-30K-T480GL01-UB, CSI-25K-T480GL01-UB. CSI-25KTL-GS-FLB, CSI-30KTL-GS-FLB, CSI-36KTL-GS-FLB, CSI-40KTL-GS-FLB, CSI-40KTL-GS-B, CSI-50KTL-GS-FLB, CSI-50KTL-GS-B, CSI-60KTL-GS-B, CSI-66KTL-GS-B	1000 Vdc maximum system voltage. Rapid shutdown time limit 30s with inverter. Initiated by the loss of AC power



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Note:

1. For details related to rating, size, configuration, etc., reference should be made to the CSA Certification Record, Certificate of Compliance Annex A, or the Descriptive Report.

APPLICABLE REQUIREMENTS

UL Std. No. 1741-Second Edition - Inverters, Converters, Controllers and Interconnection System Equipment for
Use With Distributed Energy Resources (February 15, 2018)

CSA C22.2 No. 330-17 - Photovoltaic rapid shutdown systems

Note: Photovoltaic Rapid Shutdown Function has also been evaluated according to CEC Code, Part I, Rule 64-218;
NEC-2017 Section 690.12; and NEC-2020 Section 690.12 applicable requirement.