

Certificate of Compliance

Certificate: 80139634 Master Contract: 203213

Project: 80139634 **Date Issued:** 2022-10-09

Issued To: Fronius International GmbH

Guenter Fronius Strasse 1

Wels-Thalheim, Upper Austria, 4600

Austria

Attention: Stefan Radinger

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: Peter Lim Peter Lim



PRODUCTS

CLASS - C531109 - POWER SUPPLIES Distributed Generation Power Systems Equipment CLASS - C531189 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

Rapid Shutdown Box

PART A:

Rapid Shutdown Box Single, rack mounted, permanently connected, system rating as follows:



Model	Rapid Shutdown Box Single
RATINGS:	
Maximum System voltage (V dc)	600 Vdc
Range of input/output operating voltage (V dc)	80 to 600 Vdc
Maximum input/output rated current (A dc)	17A
Maximum Overcurrent rating	17A
Maximum Number of Circuits	1
Normal operating ambient temperature range	-40°C to +60°C
Enclosure Rating Type	Type 4X

Conditions of Acceptability:

- 1. The above model is intended for operation with PV arrays only (floating or grounded).
- 2. This product is evaluated as PV Rapid Shutdown System Equipment (PVRSE), a component of a PV Rapid Shutdown System (PVRSS), where the suitability of the combination is to be determined in the end system.
- 3. The above model was evaluated for use at 600 V dc with the following certified utility interactive inverters only: Fronius PRIMO series, Fronius SYMO series and Fronius Galvo series.
- 4. Model Rapid Shutdown Box Single is not provided with disconnects or overcurrent protection and if required by the National Electrical Code, ANSI/NFPA 70 and Canadian Electric Code Part I C22.1 -12 and Canadian Electric Code Part I shall be provided by others in the end installation.
- 5. The Fronius Rapid Shutdown Box Single have been evaluated in conjunction with Fronius Galvo, Primo and Symo series inverters (testing performed with Fronius Galvo inverter). The system has been tested per UL CRD for Rapid Shutdown Systems and CSA LTR No. AE-004-2015 for PV Rapid Shutdown to ensure that, when rapid shutdown is initiated, both DC input and AC output of the inverter reaches <30V and <240VA within 10s.

PART B:

Rapid Shutdown Box Multi, rack mounted, permanently connected, system rating as follows:

Model	Rapid Shutdown Box Multi
RATINGS:	
Maximum System voltage (V dc)	600 Vdc
Range of input/output operating voltage (V dc)	80 to 600 Vdc
Maximum input rated current (A dc)	4 x 12.5A dc
Maximum output rated current (A dc)	2 x 25A dc
Maximum Overcurrent rating	25A
Maximum Number of Circuits	2



Model	Rapid Shutdown Box Multi
Normal operating ambient temperature range	-40° C to $+60^{\circ}$ C
Enclosure Rating Type	Type 4X

Conditions of Acceptability:

- 1. The above model is intended for operation with PV arrays only (floating or grounded).
- 2. This product is evaluated as PV Rapid Shutdown System Equipment (PVRSE), a component of a PV Rapid Shutdown System (PVRSS), where the suitability of the combination is to be determined in the end system.
- 3. The above model was evaluated for use at 600 V dc with the following certified utility interactive inverters only: Fronius PRIMO series, Fronius SYMO series and Fronius Galvo series.
- 4. Model Rapid Shutdown Box Single is not provided with disconnects or overcurrent protection and if required by the National Electrical Code, ANSI/NFPA 70 and Canadian Electric Code Part I C22.1 -12 and Canadian Electric Code Part I shall be provided by others in the end installation.
- 5. The Fronius Rapid Shutdown Box Multi have been evaluated in conjunction with Fronius Galvo, Primo and Symo series inverters (testing performed with Fronius Galvo inverter). The system has been tested per UL CRD for Rapid Shutdown Systems and CSA LTR No. AE-004-2015 for PV Rapid Shutdown to ensure that, when rapid shutdown is initiated, both DC input and AC output of the inverter reaches <30V and <240VA within 10s.

PART C:

Rapid Shutdown Box Duo, rack mounted, permanently connected, system rating as follows:

Model	Rapid Shutdown Box Duo
RATINGS:	
Maximum System voltage (V dc)	600 Vdc
Range of input/output operating voltage (V dc)	80 to 600 Vdc
Maximum input/output rated current (A dc)	25A
Maximum Overcurrent rating	25A
Maximum Number of Circuits	1
Normal operating ambient temperature range	-40°C to +65°C
Enclosure Rating Type	Type 4X



Conditions of Acceptability:

- 1. The above model is intended for operation with PV arrays only (floating or grounded).
- 2. This product is evaluated as PV Rapid Shutdown System Equipment (PVRSE), a component of a PV Rapid Shutdown System (PVRSS), where the suitability of the combination is to be determined in the end system.
- 3. The above model was evaluated for use at 600 V dc with the following certified utility interactive inverters only: Fronius PRIMO series, Fronius SYMO series and Fronius Galvo series.
- 4. Model Rapid Shutdown Box Dual is not provided with disconnects or overcurrent protection and if required by the National Electrical Code, ANSI/NFPA 70 and Canadian Electric Code Part I C22.1 -12 and Canadian Electric Code Part I shall be provided by others in the end installation.
- 5. The Fronius Rapid Shutdown Box Duo have been evaluated in conjunction with Fronius Galvo, Primo and Symo series inverters (testing performed with Fronius Galvo inverter). The system has been tested per UL CRD for Rapid Shutdown Systems and CSA LTR No. AE-004-2015 for PV Rapid Shutdown to ensure that, when rapid shutdown is initiated, both DC input and AC output of the inverter reaches <30V and <240VA within 10s.

PART D:

Rapid Shutdown Box Quattro, rack mounted, permanently connected, system rating as follows:

Model	Rapid Shutdown Box Quattro
RATINGS:	
Maximum System voltage (V dc)	600 Vdc
Range of input/output operating voltage (V dc)	80 to 600 Vdc
Maximum input rated current (A dc)	2 x 25A dc
Maximum output rated current (A dc)	2 x 25A dc
Maximum Overcurrent rating	25A
Maximum Number of Circuits	2
Normal operating ambient temperature range	-40°C to +65°C
Enclosure Rating Type	Type 4X

Conditions of Acceptability:

- 1. The above model is intended for operation with PV arrays only (floating or grounded).
- 2. This product is evaluated as PV Rapid Shutdown System Equipment (PVRSE), a component of a PV Rapid Shutdown System (PVRSS), where the suitability of the combination is to be determined in the end system.



3. The above model was evaluated for use at 600 V dc with the following certified utility interactive inverters only: Fronius PRIMO series, Fronius SYMO series and Fronius Galvo series.

- 4. Model Rapid Shutdown Box Quattro is not provided with disconnects or overcurrent protection and if required by the National Electrical Code, ANSI/NFPA 70 and Canadian Electric Code Part I C22.1 -12 and Canadian Electric Code Part I shall be provided by others in the end installation.
- 5. The Fronius Rapid Shutdown Box Quattro have been evaluated in conjunction with Fronius Galvo, Primo and Symo series inverters (testing performed with Fronius Galvo inverter). The system has been tested per UL CRD for Rapid Shutdown Systems and CSA LTR No. AE-004-2015 for PV Rapid Shutdown to ensure that, when rapid shutdown is initiated, both DC input and AC output of the inverter reaches <30V and <240VA within 10s.

APPLICABLE REQUIREMENTS

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

UL Std No. 1741 - Second Edition - Inverters, Converters, Controllers and Interconnection System

Equipment for Use With Distributed Energy Resources (Rev.

Mar 23, 2016)

REFERENCED STANDARD For UL1741 EDITION 2:

UL CRD for PV Rapid Shutdown Systems and CSA LTR No. AE-004-2015 (revised March 23, 2016) for PV Rapid Shutdown Systems

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Products certified under Class C531109 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 80139634 Master Contract: 203213

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description
80139634	2022-10-09	Re-list report 70043748 (last update 70143515) and also to include standard CSA No.330 as outlined in CSA notice Power Supplies no. 34