

# **Certificate of Compliance**

Certificate: 2760387 Master Contract: 203213

**Project:** 80158408 **Date Issued:** 2023-02-16

**Issued To:** Fronius International GmbH

**Guenter Fronius Strasse 1** 

Wels-Thalheim, Upper Austria, 4600

Austria

**Attention: Josef Feichtinger** 

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 – 5311 09 - POWER SUPPLIES Distributed Generation Power Systems Equipment CLASS – 5311 89 - POWER SUPPLIES - Distributed Generation Power Systems Equipment - Certified to U.S. Standards

Transformerless Special Purpose Grid Support Interactive Inverter.

Transformerless Special Purpose Grid Support Interactive Inverter, Models Fronius Symo 10.0-3 208-240, Fronius Symo 10.0-3 208-240 Lite, Fronius Symo 12.0-3 208-240, Fronius Symo 12.0-3 208-240 Lite, Fronius Symo 10.0-3 480, Fronius Symo 10.0-3 480 Lite, Fronius Symo 12.5-3 480, Fronius Symo 12.5-3 480 Lite, Fronius Symo 15.0-3 480, Fronius Symo 15.0-3 480, Fronius Symo 17.5-3 480, Fronius Symo 20.0-3 480, Fronius Symo 20.0-3 480, Fronius Symo 22.7-3 480, Fronius Symo 22.7-3 480 Lite, Fronius Symo 24.0-3 480, and Fronius Symo 24.0-3 480 Lite, permanently connected.

For details related to rating and notes, reference should be made to the CSA Certification Record, the Descriptive Report or Annex A Ratings.



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### APPLICABLE REQUIREMENTS

CSA-C22.2 No.107.1-16 - General Use Power Supplies

\*UL Std No. 1741-Third Edition - Inverters, Converters, Controllers and Interconnection System

Equipment For Use With Distributed Energy Sources

(Rev. September 28, 2021)

UL Std No. 1741 CRD - Non-Isolated EPS Interactive PV Inverters Rated Less Than

30kVA(Dated April 26, 2010)

UL 1699B - Outline of Investigation for Photovoltaic (PV) DC Arc-Fault Circuit

Protection (Issue Number 2, January 14, 2013)

CSA C22.2 No.290:19 Photovoltaic combiners and recombiners (2<sup>nd</sup> Edition)

CSA C22.2 No.292-18 DC Arc Fault Protection for Photovoltaic

**Applications** 

#### \*Notes:

- (1) Conformity to UL 1741 Third Edition (Rev. September 28, 2021 includes compliance with applicable requirements of UL1741 Supplement SA(SA8 to SA15) GRID SUPPORT UTILITY INTERACTIVE INVERTERS AND CONVERTERS, California Rule 21(SRDs), Hawaiian Electric Co. Rule 14, Hawaiian Electric Co. SRD-UL-1741-SA-V1.0, IEEE 1547:2003, IEEE1547a and IEEE 1547.1:2005.
- (2) To fulfill the rapid shutdown requirements of the NEC Article 690.12 and CEC Sec 64-218 Photovoltaic system rapid shutdown with the Fronius Primo, the inverter can be used together with a suitable rapid shutdown device, or the inverter must be mounted within the boundary values given in the NEC and CEC Article. The ac output of the inverter complies with the requirements of following standards to ensure the ac conductors are within the controlled limits of 30Vdc, 15Vac and 8A within the 30s:
  - a. IEC62109-1:2010 §7.3.9
  - b. UL62109-1:2014 §7.3.9
  - c. CAN/CSA C22.2 No. 62109-1:16 §7.3.9
  - d. UL1741 3rd Edition (with SA 8 to SA15) §13
  - e. CAN/CSA C22.2 No. 107.1-16

#### Notes:

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

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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
80158408	2023-02-16	Scope to update report 2760387 to include alternate Fuseholder , DC and AC Surge Suppressor, DC+ to Ground Capacitor, and opto isolator
80106344	2022-04-13	Update report 2760387 to include software bugfixes and some alternative components.
70178842	2018-03-28	Update to report 2760387 to include alternate AC wire for Transformless Special Purpose Grid Support Interactive Inverter: all Mode Is Fronius Symo from Project 70163421. Update to report 2760387 to include alternate AC wire for Transformless Special Purpose Grid Support Interactive Inverter: all Mode Is Fronius Symo from Project 70163421.
70163421	2017-12-29	Update Report 2760387 to Evaluate Firmware Changes That Address Software Bugs Associated with Power Stage Changes Issues
70156295	2017-10-16	Update Report 2760387 to include UL1741 SA requirement for remaining models Fronius Symo 208V-240V series.
70130879	2017-07-27	Update Symo Series Report 2760387 to include new UL1741 SA Visit 1; 3 weeks on site, June 5 -23)
70091556	2016-09-19	Update report 2760387 to include firmware revision and acceptance of test data under the CSA SMTC program.
70065229	2016-06-10	Update report 2760387 (SYMO 10KW to 24KW Series) to include hardware alterations, roach firmware revision, and acceptance of CSA SMTC test data.
70057183	2016-01-21	Update report 2760387 to include firmware revision, alternate construction and acceptance of test data under the CSA SMTC program.
70039562	2015-11-11	Update report 2760387 to include firmware revision with acceptance of data under the CSA SMTC program.



70030415	2015-05-28	Update report 2760387 to include firmware revision (H1, H2, H3 setup) and acceptance of CSA SMTC test data.
2783673	2015-02-19	Update to report 2760387 to include firmware revision and alternate components.
2760387	2014-10-15	Transformerless Utility Interactive Inverter, Fronius Symo series. (C/US)