

# **Certificate of Compliance**

Certificate: 2760387 Master Contract: 203213

**Project:** 70163421 **Date Issued:** 2017-12-29

**Issued to:** Fronius International GmbH

Guenter Fronius Strasse 1 Wels-Thalheim, 4600

**AUSTRIA** 

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 - 531109 - POWER SUPPLIES-Distributed Generation Power Systems Equipment CLASS - 531189 - POWER SUPPLIES - Distributed Generation-Power Systems Equipment - Certified to U.S. Standards

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 15.0-3 480, Fronius Symo 15.0-3 480, Fronius Symo 15.0-3 480, Fronius Symo 17.5-3 480, Fronius Symo 17.5-3 480, Fronius Symo 20.0-3 480, Fronius Symo 20.0-3 480 Lite, 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, system.

### APPLICABLE REQUIREMENTS

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

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

Use With Distributed Energy Sources

(Rev. September 7, 2016)

UL CRD - Non-Isolated EPS Interactive PV Inverters Rated Less Than 30kVA

DQD 507 Rev. 2016-02-18

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

Protection (Issue Number 2, January 14, 2013)

CSA TIL M-07 - Interim Certification Requirements for Photovoltaic (PV) DC

Arc-Fault Protection (Issue Number 1, March 11, 2013)

CSA C22.2 No.290 - 15 Photovoltaic combiners (December 2015

#### Notes:

(1) Conformity to UL 1741-Second Edition (Rev. September 7, 2016) includes compliance with applicable requirements of UL1741 Supplement SA - 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, IEEE 1547a and IEEE 1547.1.

- (2) To fulfill the rapid shutdown requirements of the NEC Article 690.12 and CEC Sec 64-218 with the Fronius Symo, the inverter can be used together with an approved rapid shut down device evaluated with the respective inverter. 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 (and 10s respectively for CEC):
  - 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 2nd Edition (with SA)§11
  - e. CAN/CSA C22.2 No. 107.1-16



## 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
70163421	2018-12-29	Update Report 2760387 to Evaluate Firmware Changes That Address Software Bugs Associated with Power Stage Change 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.
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 and roach firmware revision, and acceptance.
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)