WindGuard Certification GmbH

Accredited according to DIN EN 45011:1998

Oldenburger Straße 65, 26316 Varel, Germany



Nr.: ZN11102.03.01

Addendum to Type Certificate for **Generation Unit**

Manufacturer Power-One Italy S.P.A.

Via S. Giorgio, 642; 52028 — Terranuova Bracciolini (AR), Italy

Quality management system:

ISO 9001:2008, valid until 18.04.2013

Description

Type:

TRIO-20.0-TL-OUTD-400 & TRIO-27.6-TL-OUTD-400 families

Rated active / apparent power:

20.0 kW/22.3 kVA & 27.6 kW/30.7 kVA

Rated AC voltage / -frequency:

400 V/50 Hz

Software version: DSP-DC/DC: \geq A030; DSP-Inv.: \geq B045; μ P: \geq C057

The certification body confirms with its signature the following amendment to the type certificate for generation unit ZN11102.01.01 (12.04.2012) for the solar inverter families Power-One TRIO-20.0-TL-OUTD-400 & TRIO-27.6-TL-OUTD-400:

The Appendix 1 to the certificate ZN11102.01.01 is supplemented with the verification, as to whether or not the power ramp limitation after voltage loss of the inverter is activated:

• For the implementation of this functionality the internal parameter of the inverter, "Slow ramp", must be asset to "ENABLED".

This functionality controls the active power injection into the grid after an occurring grid disconnection of the inverter. With activation of this functionality, the inverter performs a power ramp of $<10\%P_n$ per minute. With activation of the 'power ramp functionality', the ramp function is also applied after an occurring generic fault inside the inverter or after a voltage loss/power-off on the DC-side. The current version of the BDEW-guideline, paragraph 5.7.1, with its 4th supplement from January 2013, requires the activation of this functionality for solar farms irrespective of their connection power.

These corrections do not have any further relevance with regard to the assessment of the electrical characteristics and behaviour of the electrical unit within the framework of the preparation of plant certificates.

Thus, the certification body, in accordance with the owner of the certificate, refrains from the issuance of a new

certificate.

Akkreditierungsstelle D-ZE-17195-01-00

Varel, 30.04.2013

Dipl.-Ing. K. Küch

(Expert in charge)

CNGSSDIDI Ing. (FH) R. Klosse

(Executive expert of certification body)