

Certificate of compliance

Applicant: SMA Solar Technology AG
Sonnenallee 1
34266 Niestetal
Germany

Product: Photovoltaic inverter

Model: STP8.0-3AV-40
STP10.0-3AV-40

The device is designed to work as a generation unit of the type: **A**

Inverter for three-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

EN 50549-1:2019/A1:2023

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

- 4.4 Normal operating range
- 4.5 Immunity to disturbances
- 4.6 Active response to frequency deviation
- 4.7 Power response to voltage variations and voltage changes
- 4.8 EMC and power quality
- 4.9 Interface protection
- 4.10 Connection and starting to generate electrical power
- 4.11 Ceasing and reduction of active power on set point
- 4.12 Remote information exchange
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-10:2022

Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A plants.

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: 18TH0325_HP_EN50549-10_0
18TH0325_HP_5.3_EN50549-10_0

Certification Program: NSOP-0032-DEU-ZE-V10

Certificate number: U25-0415

Date of issue: 2025-04-24

Certification body

Accreditation



Domenik Koll
Head of Energy Systems Germany



Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkkS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkkS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

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Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016

Manufacturer	SMA Solar Technology AG Sonnenallee 1 34266 Niestetal Germany			
Product type	Photovoltaic inverter			
Static converter model	STP8.0-3AV-40	STP10.0-3AV-40	--	--
Input DC (photovoltaic)				
MPP voltage range [V]	260 - 800	320 - 800	--	--
Max. input voltage [V]	125 - 1000	125 - 1000	--	--
Max. input current per MPPT [A]	max. 20 / 12	max. 20 / 12	--	--
Output AC				
Rated AC voltage [V]	380 / 400 / 415 (3P, N, PE)	380 / 400 / 415 (3P, N, PE)	--	--
Rated output current [A]	3x 11,6	3x 14,5	--	--
Max. output current [A]	3x 12,1	3x 14,5	--	--
Nom. converter output (P_{NINV}) [W]	8000	10000	--	--
Rated apparent power [VA]	8000	10000	--	--

Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	Integrated NS-protection
Assigned to generation unit type	STP8.0-3AV-40 STP10.0-3AV-40
Integrated interface switch	Type of switching equipment 1: Relay (Model FTR-K3-PS) Type of switching equipment 2: Relay (Model FTR-K3-PS) Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.
Firmware version	04.xx.xx.R Note: The tests were performed with firmware version 04.03.04.R. Changes in the firmware version on position "x" have no effect on the required electrical properties. "x" could be any number or sign higher than the tested version.
Note: The settings of the product are password protected adjustable. In case the generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration. The above stated generators are tested according to the requirements in the EN 50549-1 and the Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.	