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Certificate of compliance

Applicant: SolarEdge Technologies Ltd.
1 HaMada Street
Herzliya 4673335
Israel

Product: Photovoltaic (PV) inverter

Model:

SE50K	SE90K	SE80K*
SE55K	SE100K	SE100K*
SE66.6K	SE66.6K*	SE120K*
SE82.8K		

* 480 V mains voltage models

Inverter for three-phase parallel connection to a MV distribution network.

Applied rules and standards:

EN 50549-2:2019

Requirements for generating plants to be connected in parallel with distribution networks - Part 2: Connection to a MV distribution network - Generating plants 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

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 B, Type C plants.

Note:

This certificate proves the conformity of a generating unit based on NC RFG. However, some requirements, such as frequency sensitive mode (FSM), reactive power capacity etc. can be applicable on the generating plant level, which assessment can be out of the scope of this certificate. Consequently, it is possible that the conformity assessment of a generating unit does not cover all aspects of the above-mentioned standardization documents, typically when a requirement is rather evaluated on a plant level.

At the time of issue of this certificate, the representative product listed above corresponds to the stated rules and standards.

Report number: 20TH0532-EN50549-2_2

Certification Program: NSOP-0032-DEU-ZE-V01

Certificate number: U23-0852

Date of issue: 2023-09-28

Certification body



Certification body Bureau Veritas Consumer Products Services Germany GmbH accreditation to DIN EN ISO/IEC 17065

Testing laboratory accredited according to DIN EN ISO/IEC 17025

A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH



Annex to the EN 50549-2 certificate of compliance No. U23-0852

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Appendix

Extract from test report according to EN 50549-2

No. 20TH0532-EN50549-2_2

Type Approval and declaration of compliance with the requirements of EN 50549-2 and Commission Regulation (EU) 2016/631 of 14 April 2016.

Manufacturer / applicant	SolarEdge Technologies Ltd. 1 HaMada Street Herzliya 4673335 Israel
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Generator Type	Photovoltaic inverter			
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	SE50K	SE55K	SE66.6K	SE82.8K
Input DC voltage range [V]	680 - 1000	680 - 1000	680 - 1000	680 - 1000
Input DC current [A]	2 x 36,25	2 x 40	2 x 48,25	3 x 40
Output AC voltage [V]	220 / 380 230 / 400			
Rated AC current [A]	72,5	80	96,5	120
Active Power [W]	50000	55000	66600	82800
Apparent power [VA]	50000	55000	66600	82800

	SE90K	SE90K	SE100K	SE66.6K*
Input DC voltage range [V]	680 - 1000	680 - 1000	680 - 1000	680 - 1000
Input DC current [A]	3 x 43,5	3 x 43,5	3 x 48,25	2 x 40
Output AC voltage [V]	220 / 380 230 / 400	220 / 380 230 / 400	220 / 380 230 / 400	277 / 480
Rated AC current [A]	130,5	130,5	145	80
Active Power [W]	89970	90000	100000	66600
Apparent power [VA]	89970	90000	100000	66600

	SE80K*	SE100K*	SE120K*	--
Input DC voltage range [V]	680 - 1000	680 - 1000	680 - 1000	--
Input DC current [A]	2 x 48,25	3 x 40	3 x 48,5	--
Output AC voltage [V]	277 / 480	277 / 480	277 / 480	--
Rated AC current [A]	96,5	120	145	--
Active Power [W]	80000	100000	120000	--
Apparent power [VA]	80000	100000	120000	--

Firmware version	Main DSP is 1.20 / Aux DSP is 2.20
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Description of the structure of the power generation unit

The power generation unit is equipped with a PV and line-side EMC filter. The power generation unit has no galvanic isolation between DC input and AC output. Output switch-off is performed with single-fault tolerance based on the inverter bridge and two series-connected relays in each line and neutral. This enables a safe disconnection of the power generation unit from the network in case of error.

Note:

In case the above stated 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 50549-2:2019 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.