

Certificate of compliance

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

Product: Photovoltaic inverter

Models:	SE50K	SE100K*
	SE55K	SE120K*
	SE66.6K	
	SE75K	SE50K**
	SE82.8K	SE55K**
	SE90K	SE66.6K**
	SE100K	SE82.8K**
		SE90K**
	SE66.6K*	SE100K**
	SE80K*	SESUK***

Note: * 480 V mains voltage models

** delta grid units

*** The SESUK is a separate model that is used for single inverter modules that are replaced in a live installation. It can be any inverter module of the models listed above and is meant to be classified as a replacement. Referring to the test report for more information.

The certificate refers to the stated model(s) which passed the tests according to the applicable standard(s):

Applied rules and standards:

IEC 62109-1:2010, EN 62109-1:2010, DIN EN 62109-1:2011

Safety of power converters for use in photovoltaic power systems – Part 1: General requirements

IEC 62109-2:2011, EN 62109-2:2011, DIN EN 62109-2:2012

Safety of power converters for use in photovoltaic power systems - Part 2: Particular requirements for inverters

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: 20TH0532-IEC62109-1_9
20TH0532-IEC62109-2_6

Certification Program:

NSOP-0038-DEU-ZE-V02

Certificate number: U25-0055

Date of issue:

2025-01-17

Certification body

Accreditation



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 IEC 62109-1:2010, EN 62109-1:2010, DIN EN 62109-1:2011 and IEC 62109-2:2011, EN 62109-2:2011, DIN EN 62109-2:2012

Manufacturer / applicant	SolarEdge Technologies Ltd. 1 HaMada Street Herzliya 4673335 Israel			
Product type	Photovoltaic inverter			
Ratings :	SE50K	SE55K	SE66.6K	SE75K
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	220 / 380 230 / 400	220 / 380 230 / 400	220 / 380
Output AC current [A]	72,5	80	96,5	120
Initial short-current AC current I _{k'} [A]	77	85	102	128
Output power [VA]	50000	55000	66600	74700
Ratings	SE82.8K	SE90K	SE90K	SE90K
Input DC voltage range [V]	680 - 1000	680 - 1000	680 - 1000	680 - 1000
Input DC current [A].....	3 x 40	3 x 43,5	3 x 43,5	3 x 48,25
Output AC voltage [V].....	220 / 380 230 / 400	220 / 380 230 / 400	220 / 380 230 / 400	220 / 380 230 / 400
Output AC current [A]	120	130,5	130,5	145
Initial short-current AC current I _{k'} [A]	128	141	141	153
Output power [VA]	82800	89970	90000	100000
Ratings	SE100K	SE66.6K*	SE80K*	SE100K*
Input DC voltage range [V]	680 - 1000	680 - 1000	680 - 1000	680 - 1000
Input DC current [A].....	3 x 48,25	2 x 40	2 x 48,25	3 x 40
Output AC voltage [V].....	220 / 380 230 / 400	277 / 480	277 / 480	277 / 480
Output AC current [A]	145	80	96,5	120
Initial short-current AC current I _{k'} [A]	153	85	102	128
Output power [VA]	100000	66600	80000	100000
Ratings	SE120K*	SE50K**	SE55K**	SE66.6K**
Input DC voltage range [V]	680 - 1000	370 - 600	370 - 600	370 - 600
Input DC current [A].....	3 x 48,5	2 x 36,25	2 x 40	2 x 48,25
Output AC voltage [V].....	277 / 480	230 / 400	230 / 400	230 / 400
Output AC current [A]	145	72,5	80	96,5
Initial short-current AC current I _{k'} [A]	153	44	49	59
Output power [VA]	120000	29000	32000	38500

Ratings	SE82.8K**	SE90K**	SE100K**	--
Input DC voltage range [V]	370 - 600	370 - 600	370 - 600	--
Input DC current [A].....	3 x 40	3 x 43,5	3 x 48,25	--
Output AC voltage [V].....	230 / 400	230 / 400	230 / 400	--
Output AC current [A]	120	130,5	145	--
Initial short-current AC current I _k "[A]	74	81	88	--
Output power [VA]	48000	51900	57600	--
Firmware version	Main DSP 1.20 / Aux DSP 2.20			
Description of the structure of the power generation unit:				
The power generation unit is equipped with a DC 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.				