



# Certificate of compliance

**Applicant:** KOSTAL Solar Electric GmbH  
Hanferstraße 6  
79108 Freiburg im Breisgau  
Germany

**Product:** Battery Inverter

**Model:** PLENTICORE BI 5.5/26 G2  
PLENTICORE BI 10/26 G2

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**

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
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

**DIN VDE V 0124-100:2020 (5.5.2.1 Functional safety of network and system protection)**

Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low voltage distribution networks

**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 and Type B 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:** 19TH0374-BI-G2-EN50549-1\_0

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

**Certificate number:** U23-0363

**Date of issue:** 2023-05-08

**Certification body**



Alf Assenkamp



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



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## Annex to the EN 50549-1 certificate of compliance No. U23-0363

### Appendix

Extract from test report according to EN 50549-1

No. 19TH0374-BI-G2-EN50549-1\_0

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

<b>Manufacturer / applicant</b>	KOSTAL Industrie Elektrik GmbH Lange Eck 11 58099 Hagen Germany
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<b>Micro-generator Type</b>	Battery inverter			
	<b>PLENTICORE BI 5.5/26 G2</b>	<b>PLENTICORE BI 10/26 G2</b>	--	--
<b>Input DC voltage range [V]</b>	120 – 650	120 – 650	--	--
<b>Input DC current [A]</b>	26	26	--	--
<b>Output AC voltage [V]</b>	3N~, 400V, 50Hz	3N~, 400V, 50Hz	--	--
<b>Rated AC current [A]</b>	7,94	14,43	--	--
<b>Max AC current [A]</b>	8,82	16,04	--	--
<b>Active Power [W]</b>	5500	10000	--	--
<b>Apparent power [VA]</b>	5500	10000	--	--

<b>Firmware version</b>	02.08
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#### 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.