



**BUREAU
VERITAS**

Certificate of compliance

Applicant: KACO new energy GmbH
Carl-Zeiss-Str. 1
74172 Neckarsulm
Germany

Product: Grid-tied photovoltaic inverter

Model: Powador 12.0TL3-INT,
Powador 14.0TL3-INT,
Powador 18.0TL3-INT,
Powador 20.0TL3 INT,
Blueplanet 20.0 TL3 M2 WM OD IIG0

Use in accordance with regulations:

Automatic disconnection device with three -phase mains surveillance in accordance with IEC 61727:2004 and IEC62116:2008 for photovoltaic systems with a three-phase parallel coupling via an inverter in the public mains supply. The automatic disconnection device is an integral part of the aforementioned inverters.

Applied rules and standards:

IEC 61727:2004

Photovoltaic (PV) systems – Characteristics of the utility interface

IEC 62116:2008/2014

Test procedure of islanding prevention measures for utility-interconnected photovoltaic inverters

IEEE 1547:2003, IEEE 1547.1:2005 (harmonics, d.c.-injection, voltage and frequency disconnection, reconnection)

IEEE Standard Conformance Test Procedures for Equipment Interconnecting Distributed Resources with Electric Power Systems

The following deviations for Thailand were applied:

Electricity Grid System Connection Requirements B.E. 2551 of Provincial Electricity Authority (PEA 2013) with attachment for Proclamation No. 6.2 for plants till and above 500kW:

<i>under voltage limit (level 1):</i>	<i>198,0V</i>	<i>lower frequency limit:</i>	<i>48,0Hz</i>
<i>under voltage limit (level 2):</i>	<i>110,0V</i>	<i>upper frequency limit:</i>	<i>51,0Hz</i>
<i>over voltage limit (level 1):</i>	<i>242,0V</i>	<i>loss of main detection limit:</i>	<i>2s</i>
<i>overvoltage limit (level 2):</i>	<i>264,0V</i>		

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: 10TH0306-IEC61727
Certificate number: U16-0497
Date of issue: 2016-09-06

Certification body



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