



**BUREAU
VERITAS**

Certificate of compliance

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

Product: Photovoltaic inverter

Model: Powador 60.0 TL3, Powador 72.0 TL3,
Powador 39.0 TL3, Powador 48.0 TL3
See annex for detailed model description

Use in accordance with regulations:

The inverters are tested according to electrical safety, grid protection, specified environmental influences and efficiency. For detailed information, please watch the corresponding test reports.

Applied rules and standards:

IEC 61727:2004	Characteristics of the utility interface
IEC 62116:2008/2014	Islanding prevention measures for utility-interconnected photovoltaic inverters.
IEC 62109-1:2010	Safety of power converters for use in photovoltaic power systems
IEC 62109-2:2011	Safety of power converters for use in photovoltaic power systems
IEC 60068-2-1:2007	Environmental testing – Part 2-1: Tests – Test A: Cold
IEC 60068-2-2:2007	Environmental testing – Part 2-2: Tests – Test B: Dry heat
IEC 60068-2-6:2007	Environmental testing – Part 2-6: Tests – Test Fc: Vibration (sinusoidal)
IEC 60068-2-14:2009	Environmental testing – Part 2-14: Tests – Test N: Change of temperature
IEC 60068-2-21:2006	Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices
IEC 60068-2-27:2008	Environmental testing – Part 2-27: Tests – Test Ea and guidance: Shock
IEC 60068-2-30:2005	Environmental testing – Part 2-30: Tests – Test Db: Damp heat, cyclic (12h + 12 h cycle)
IEC 60068-2-75:1997	Environmental testing – Part 2-75: Tests – Test Eh: Hammer tests (IEC 62262:2002 – IK code)
IEC 60068-2-78:2012	Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state
IEC 61683:1999	Photovoltaic systems – Power conditioners – Procedure for measuring efficiency

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: 12TH0351-India

Certificate number: U17-0578

Date of issue: 2017-10-13

Certification body



Holger Schaffer



Deutsche
Akkreditierungsstelle
D-ZE-12024-01-00

Certification body of Bureau Veritas Consumer Products Services Germany GmbH



Additional models

Extract from test report: N/A

Report Nr.: 12TH0351

Model / Type

Powador 39.0 TL3 - M 1
Powador 39.0 TL3 - M- INT
Powador 39.0 TL3 - XL - F - SPD 1+2
Powador 39.0 TL3 - XL INT

Powador 48.0 TL3 - M - INT - Park
Powador 48.0 TL3 - XL - F - SPD 1+2 - Park

Powador 60.0 TL3 - M - INT
Powador 60.0 TL3 - XL - INT
Powador 60.0 TL3 - XL - F - SPD 1+2

Powador 72.0 TL3 - M - INT - Park
Powador 72.0 TL3 - XL - INT - Park
Powador 72.0 TL3 - XL - F - SPD 1+2 - Park