



**BUREAU
VERITAS**

Certificate of compliance

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

Product: Grid-tied photovoltaic (PV) inverter

Model: KACO blueplanet 5.0 TL3 M2 WM OD IIG0
KACO blueplanet 6.5 TL3 M2 WM OD IIG0
KACO blueplanet 7.5 TL3 M2 WM OD IIG0
KACO blueplanet 9.0 TL3 M2 WM OD IIG0

Use in accordance with regulations:

The inverters are tested according to the IEC 61683:1999, EN 61683:2000, DIN EN 61683:2000 procedure for measuring efficiency.

Applied rules and standards:

IEC 61683:1999, EN 61683:2000, DIN EN 61683:2000

Photovoltaic systems – Power conditioners – Procedure for measuring efficiency

IEC 61727:2004

Photovoltaic (PV) systems – Characteristics of the utility interface

IEC 62116:2008

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

IEC 62109-1:2010

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

IEC 62109-2:2011

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

IEC 62109-1:2010-04 Ed.1.0; EN 62109-1:2011; DIN EN 62109-1:2011

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

IEC 62109-2:2011-06 Ed.1.0; 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: 14TH0348-IEC61683
Certificate number: U16-0282
Date of issue: 2016-06-01

Certification body



Dieter Zitzmann



Deutsche
Akkreditierungsstelle
D-ZE-12024-01-01

Certification body of Bureau Veritas Consumer Products Services Germany GmbH
Accredited according to EN 45011 - ISO / IEC Guide 65

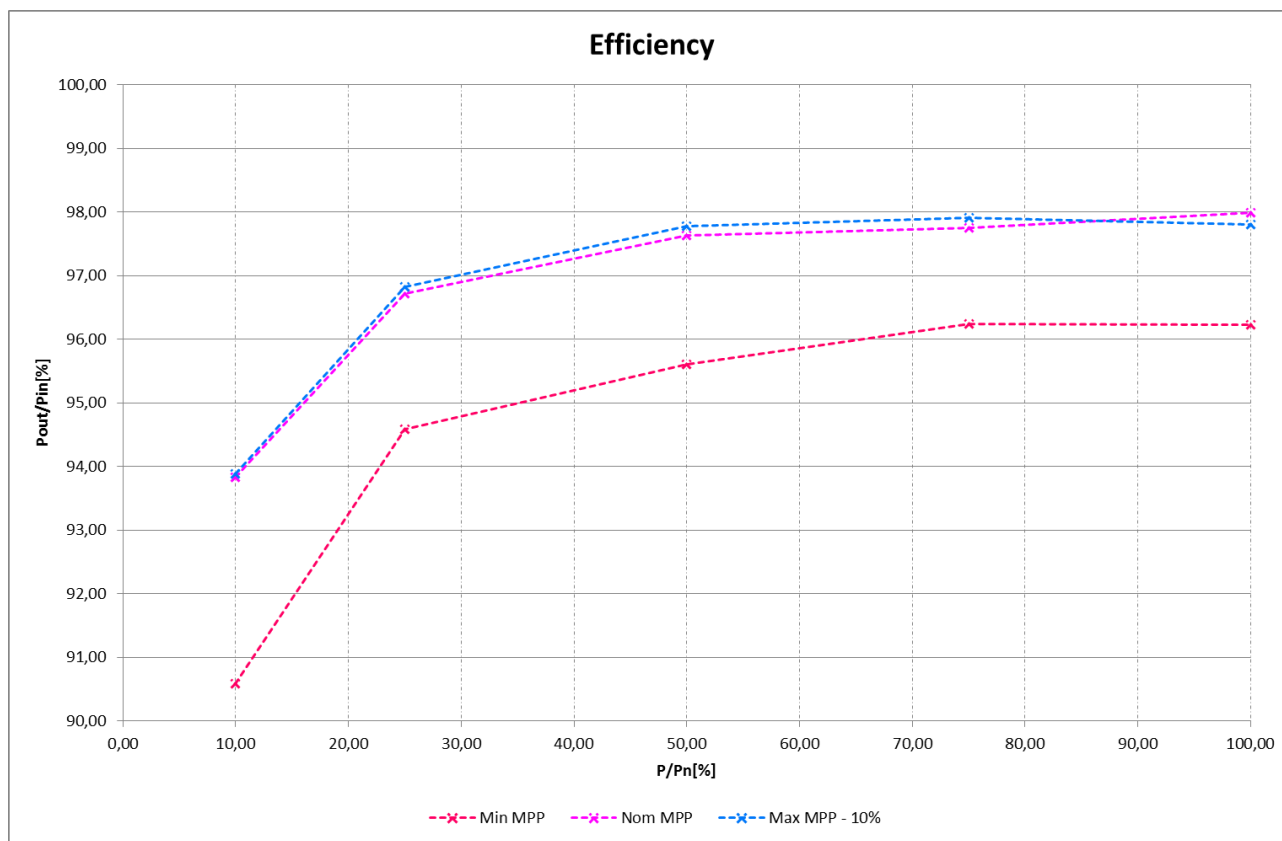
Measuring of efficiency

Extract from test report according the IEC 61683

Nr. 14TH0348

Efficiency measurement conditions test results

blueplanet 5.0TL3						
Input voltage [Vdc]		Power in [W] (nom. 5kW)				
		10%	25%	50%	75%	100%
		0,5kW	1,25kW	2,5kW	3,75kW	5kW
		η in [%]				
V_{min}	240	90,58	94,58	95,60	96,24	96,23
$V_{nominal}$	644	93,83	96,72	97,63	97,75	98,00
V_{max} (90% MPPT)	720	93,88	96,82	97,78	97,90	97,80



Measuring of efficiency

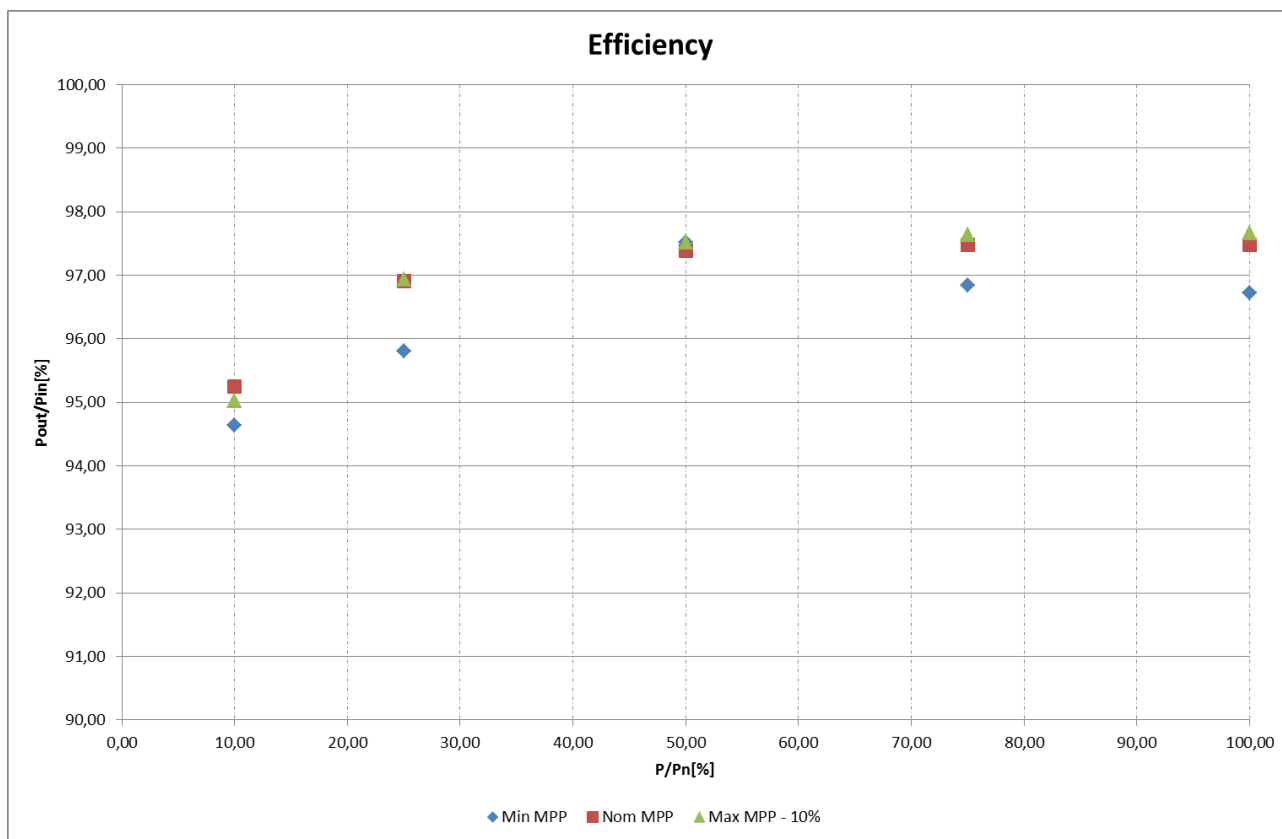
Extract from test report according the IEC 61683

Nr. 14TH0348

Efficiency measurement conditions test results

blueplanet 6.5TL3

Input voltage [Vdc]		Power in [W] (nom. 6,5kW)				
		10%	25%	50%	75%	100%
		0,65kW	1,625kW	3,25kW	4,875kW	6,5kW
		η in [%]				
V _{min}	310,00	94,63%	95,80%	97,51%	96,84%	96,72%
V _{nominal}	644,00	95,25%	96,91%	97,38%	97,48%	97,48%
V _{max} (90% MPPT)	720,00	95,02%	96,94%	97,51%	97,64%	97,66%



Measuring of efficiency

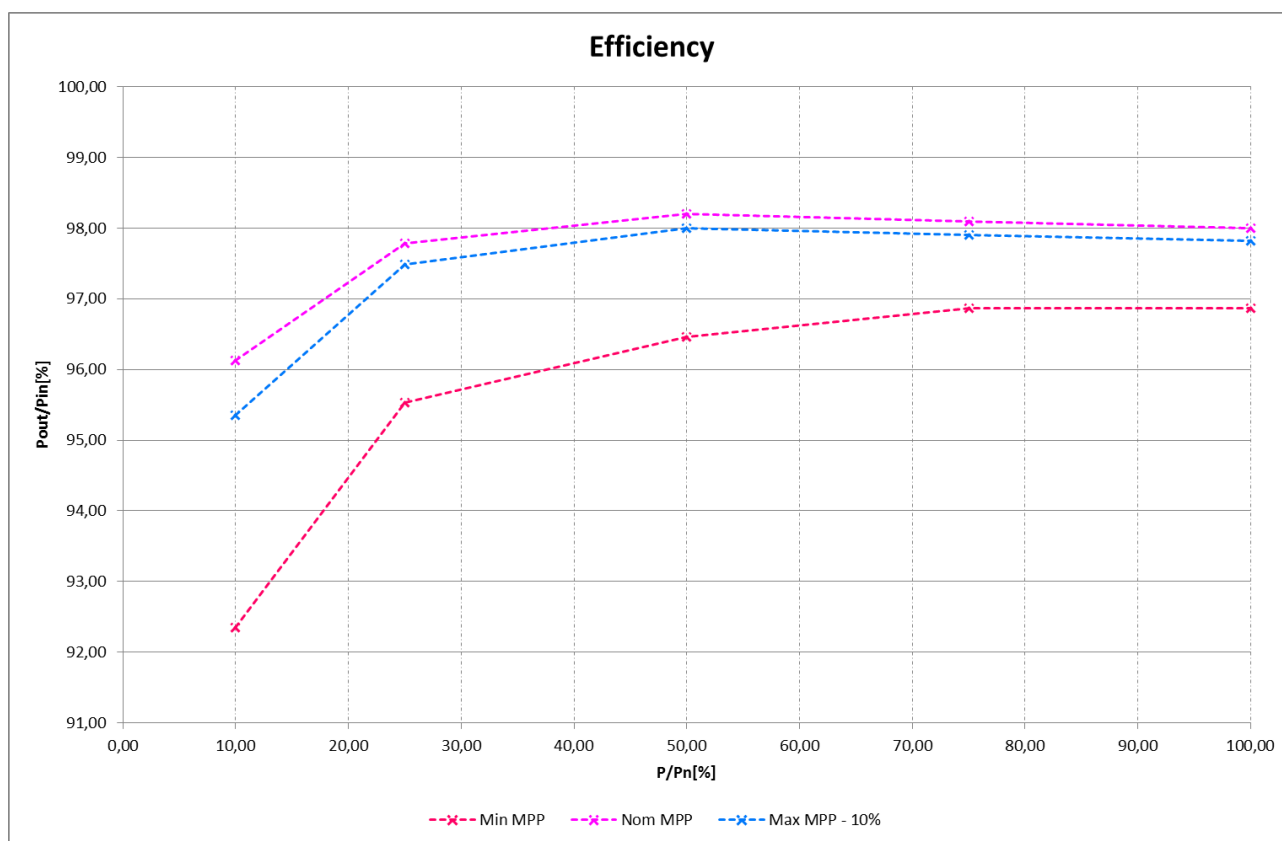
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Nr. 14TH0348

Efficiency measurement conditions test results

blueplanet 7.5TL3

Input voltage [Vdc]		Power in [W] (nom. 7,5kW)				
		10%	25%	50%	75%	100%
		0,75kW	1,875kW	3,75kW	5,625kW	7,5kW
		η in [%]				
V _{min}	350,00	92,35	95,53	96,47	96,87	96,86
V _{nominal}	644,00	96,13	97,79	98,20	98,10	98,00
V _{max} (90% MPPT)	720,00	95,35	97,49	98,00	97,90	97,82



Measuring of efficiency

Extract from test report according the IEC 61683

Nr. 14TH0348

Efficiency measurement conditions test results

blueplanet 9.0TL3

Input voltage [Vdc]		Power in [W] (nom. 9,0kW)				
		10%	25%	50%	75%	100%
		0,9kW	2,25kW	4,5kW	6,75kW	9kW
		η in [%]				
V_{min}	420,00	94,45	96,60	97,21	97,20	97,29
$V_{nominal}$	644,00	95,00	97,05	97,62	97,65	97,87
V_{max} (90% MPPT)	720,00	94,99	97,16	97,77	97,83	97,73

