



**BUREAU  
VERITAS**

# Certificate of compliance

**Applicant:** SMA Solar Technology AG  
Sonnenallee 1  
34266 Niestetal  
Germany

**Product:** Grid-tied photovoltaic (PV) inverter

**Model:** STP 60-10  
SHP 75-10

## 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. For the STP 60-10 a maximum efficiency value of  $\eta = 98,8\%$  is measured and for the SHP 75-10 a maximum efficiency value of  $\eta = 98,8\%$  is measured.

## Applied rules and standards:

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

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:** 14TH0075-IEC61683\_1

**Certificate number:** U17-0439

**Date of issue:** 2017-08-21

**Certification body**



Holger Schaffer

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



**DAkKS**  
Deutsche  
Akkreditierungsstelle  
D-ZE-12024-01-00

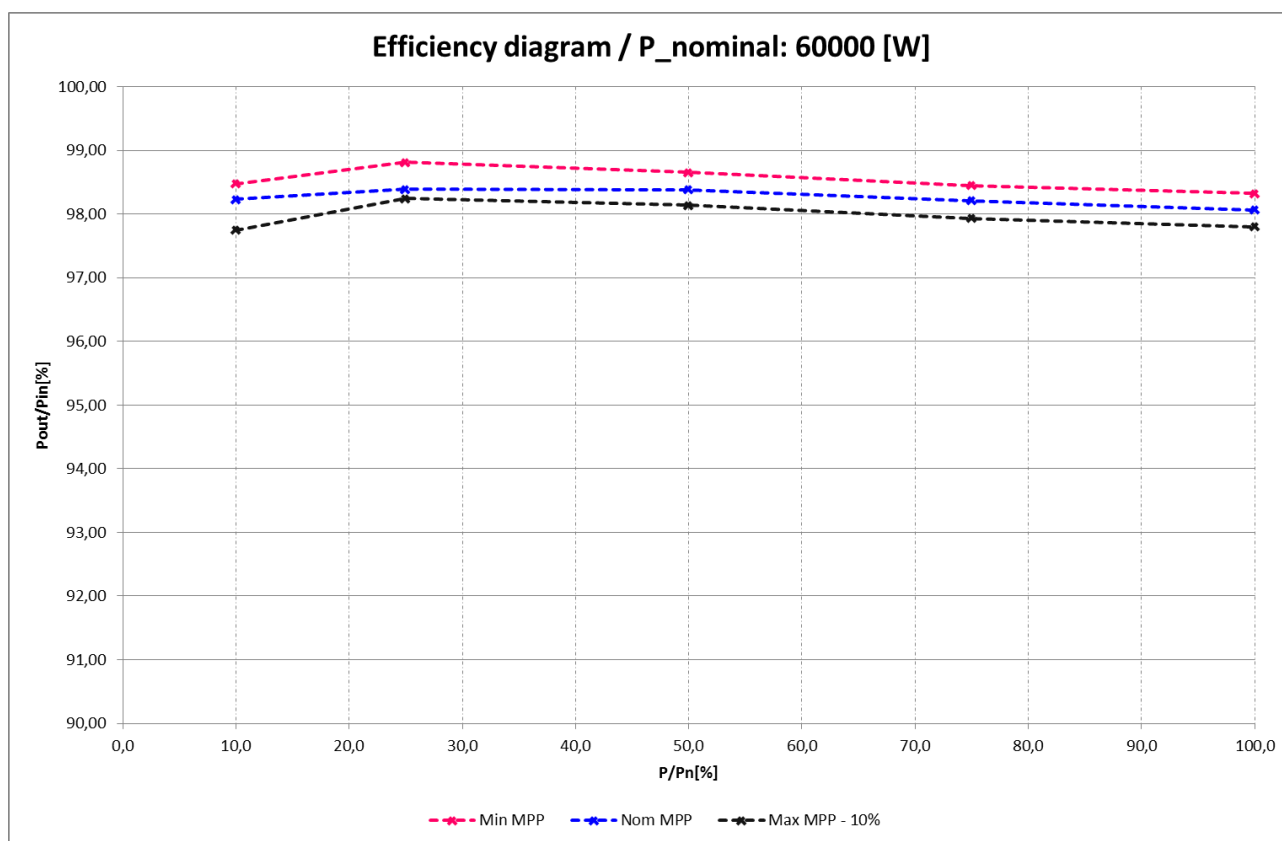
**Measuring of efficiency**

Extract from test report according the IEC 61683

Nr. 14TH0075-IEC61683\_1

**Efficiency measurement conditions test results**

STP 60-10						
Input voltage [Vdc]		Power in [W] (nom. 60000W)				
		10%	25%	50%	75%	100%
		6,0 kW	15,0 kW	30,0 kW	45,0 kW	60,0 kW
		η in [%]				
V <sub>min</sub>	570,00	98,5	98,8	98,7	98,5	98,3
V <sub>nominal</sub>	630,00	98,2	98,4	98,4	98,2	98,1
V <sub>max (90% MPPT)</sub>	720,00	97,8	98,3	98,1	97,9	97,8



**Measuring of efficiency**

Extract from test report according the IEC 61683

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**Efficiency measurement conditions test results**

SHP 75-10						
Input voltage [Vdc]		Power in [W] (nom. 75000W)				
		10%	25%	50%	75%	100%
		7,5 kW	18,75 kW	37,5 kW	56,25 kW	75,0 kW
		η in [%]				
V <sub>min</sub>	570,00	98,5	98,8	98,6	98,3	98,1
V <sub>nominal</sub>	630,00	98,2	98,4	98,3	98,0	97,9
V <sub>max (90% MPPT)</sub>	720,00	97,9	98,1	98,0	97,7	97,6

