



**BUREAU  
VERITAS**

# Certificate of compliance

**Applicant:** SolarEdge Technologies Ltd.  
1 HaMada Street  
Herzliya 4673335  
Israel

**Product:** Photovoltaic (PV) inverter

**Model:** SE50K; SE55K; SE66.6K; SE82.8K; SE90K; SE100K  
SE66.6K\*; SE80K\*; SE100K\*; SE120K\*  
SE55K-IN\*\*; SE82.8K-IN\*\*

**Note:** \* 480 V mains voltage models  
\*\* Models for India

## Use in accordance with regulations:

The inverters are tested according 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

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:** 20TH0532-IEC61683\_0  
**Certificate number:** U21-0594

**Certification program:** NSOP-0032-DEU-ZE-V01  
**Date of issue:** 2021-06-28

**Certification body**



Thomas Lammel



Deutsche  
Akkreditierungsstelle  
D-ZE-12024-01-00

*Certification body of Bureau Veritas Consumer Products Services Germany GmbH accredited according to DIN EN ISO/IEC 17065  
A partial representation of the certificate requires the written approval of Bureau Veritas Consumer Products Services Germany GmbH*

## Measuring of efficiency

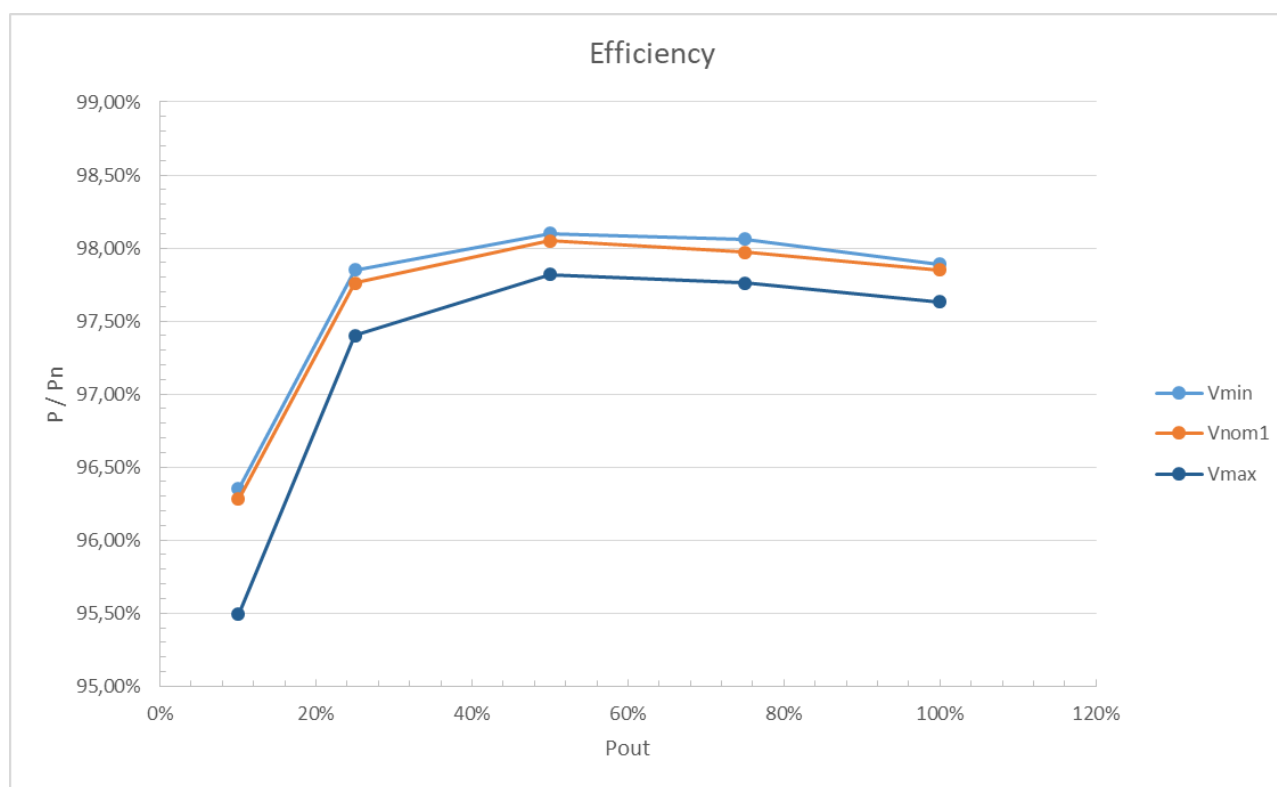
Extract from test report according the IEC 61683

Nr. 20TH0532-IEC61683\_0

### Efficiency measurement conditions test results

#### SE25K

Input voltage [Vdc]		Power in [W] (nom. 25000W)				
		10%	25%	50%	75%	100%
		2500	6250	12500	18750	25000
		$\eta$ in [%]				
$V_{min}$	700	96,35	97,85	98,10	98,06	97,89
$V_{nominal}$	750	96,28	97,76	98,05	97,97	97,85
$V_{max}$ (90%)	900	95,49	97,40	97,82	97,76	97,63



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

## Measuring of efficiency

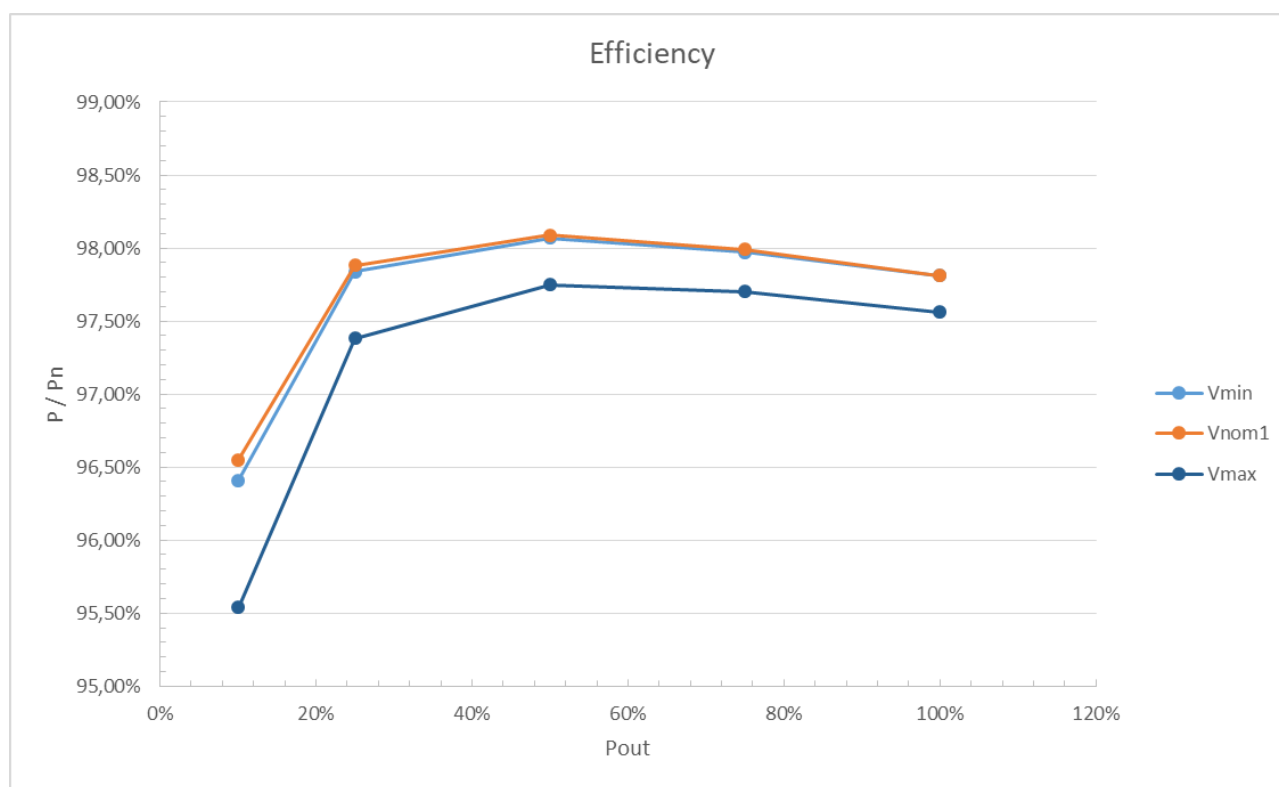
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### Efficiency measurement conditions test results

#### SE27.6K

Input voltage [Vdc]		Power in [W] (nom. 27600W)				
		10%	25%	50%	75%	100%
		2500	6250	12500	20700	25000
		$\eta$ in [%]				
$V_{min}$	700	96,41	97,84	98,07	97,97	97,81
$V_{nominal}$	750	96,55	97,88	98,09	97,99	97,81
$V_{max}$ (90%)	900	95,54	97,38	97,75	97,70	97,56



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

## Measuring of efficiency

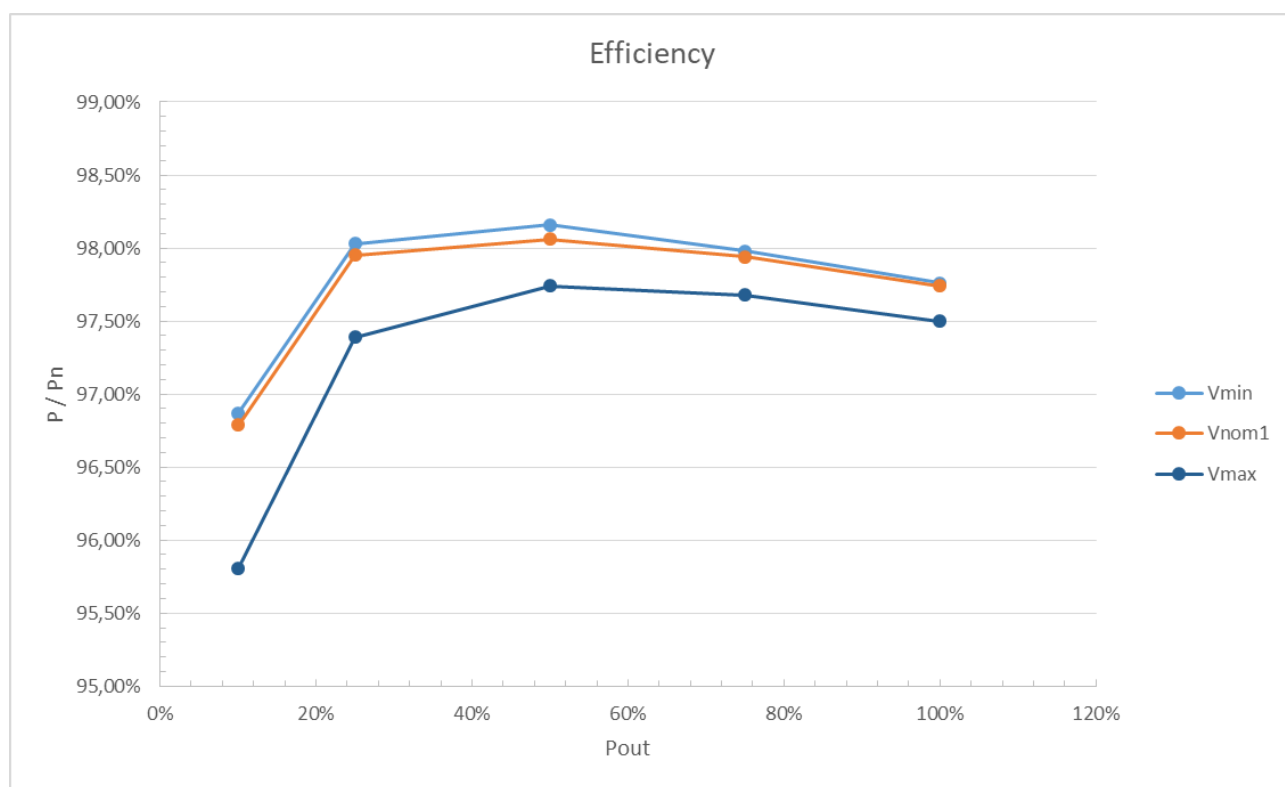
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### Efficiency measurement conditions test results

#### SE30K

Input voltage [Vdc]		Power in [W] (nom. 30000W)				
		10%	25%	50%	75%	100%
		3000	7500	15000	22500	30000
		$\eta$ in [%]				
$V_{min}$	700	96,87	98,03	98,16	97,98	97,76
$V_{nominal}$	750	96,79	97,95	98,06	97,94	97,74
$V_{max}$ (90%)	900	95,81	97,39	97,74	97,68	97,50



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

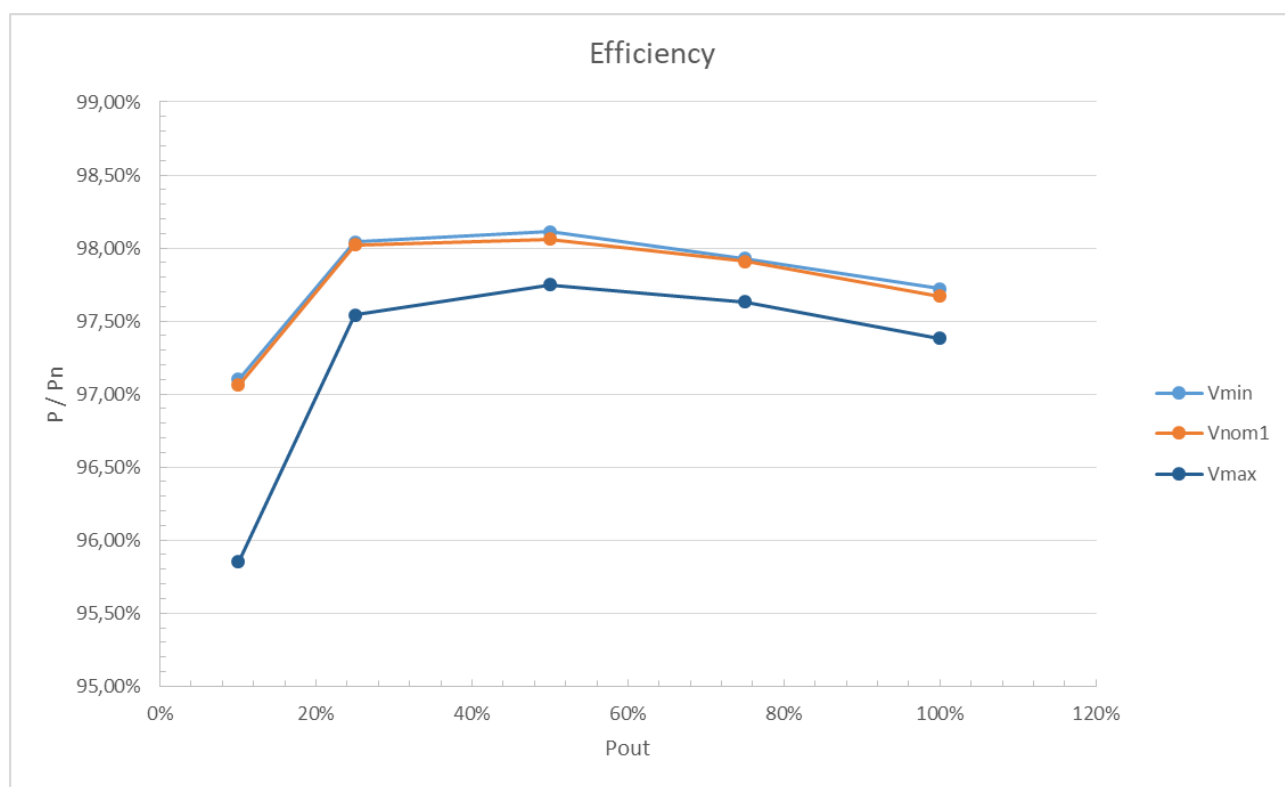
**Measuring of efficiency**

Extract from test report according the IEC 61683

Nr. 20TH0532-IEC61683\_0

**Efficiency measurement conditions test results**
**SE33.3K**

Input voltage [Vdc]		Power in [W] (nom. 33300W)				
		10%	25%	50%	75%	100%
		3330	8325	16650	24975	33300
		$\eta$ in [%]				
$V_{min}$	700	97,10	98,04	98,11	97,93	97,72
$V_{nominal}$	750	97,06	98,02	98,06	97,91	97,67
$V_{max}$ (90%)	900	95,85	97,54	97,75	97,63	97,38



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

## Measuring of efficiency

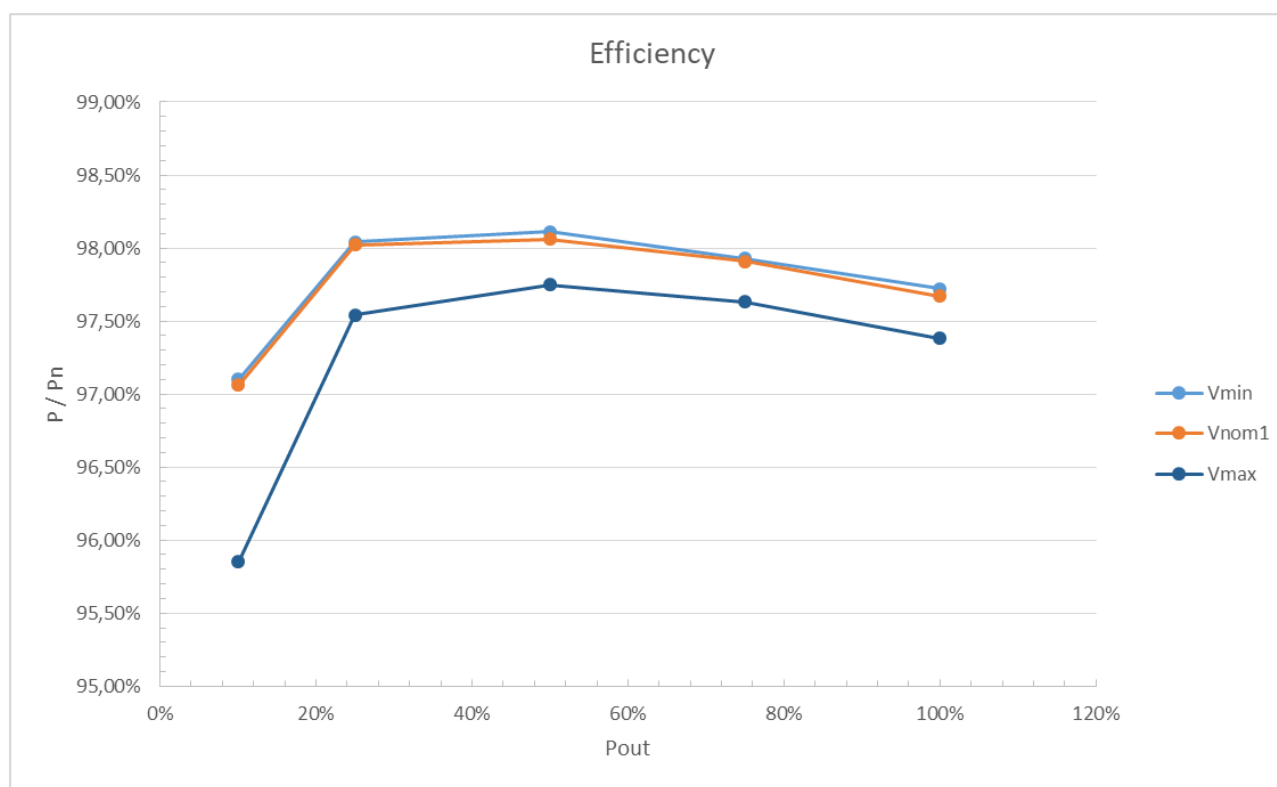
Extract from test report according the IEC 61683

Nr. 20TH0532-IEC61683\_0

### Efficiency measurement conditions test results

#### SE30K 277V

Input voltage [Vdc]		Power in [W] (nom. 30000W)				
		10%	25%	50%	75%	100%
		3000	7500	15000	22500	30000
		$\eta$ in [%]				
$V_{min}$	790	96,57	98,36	98,51	98,39	98,25
$V_{nominal}$	850	96,52	97,97	98,26	98,23	98,11
$V_{max}$ (90%)	950	95,53	97,59	98,08	98,09	97,99



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

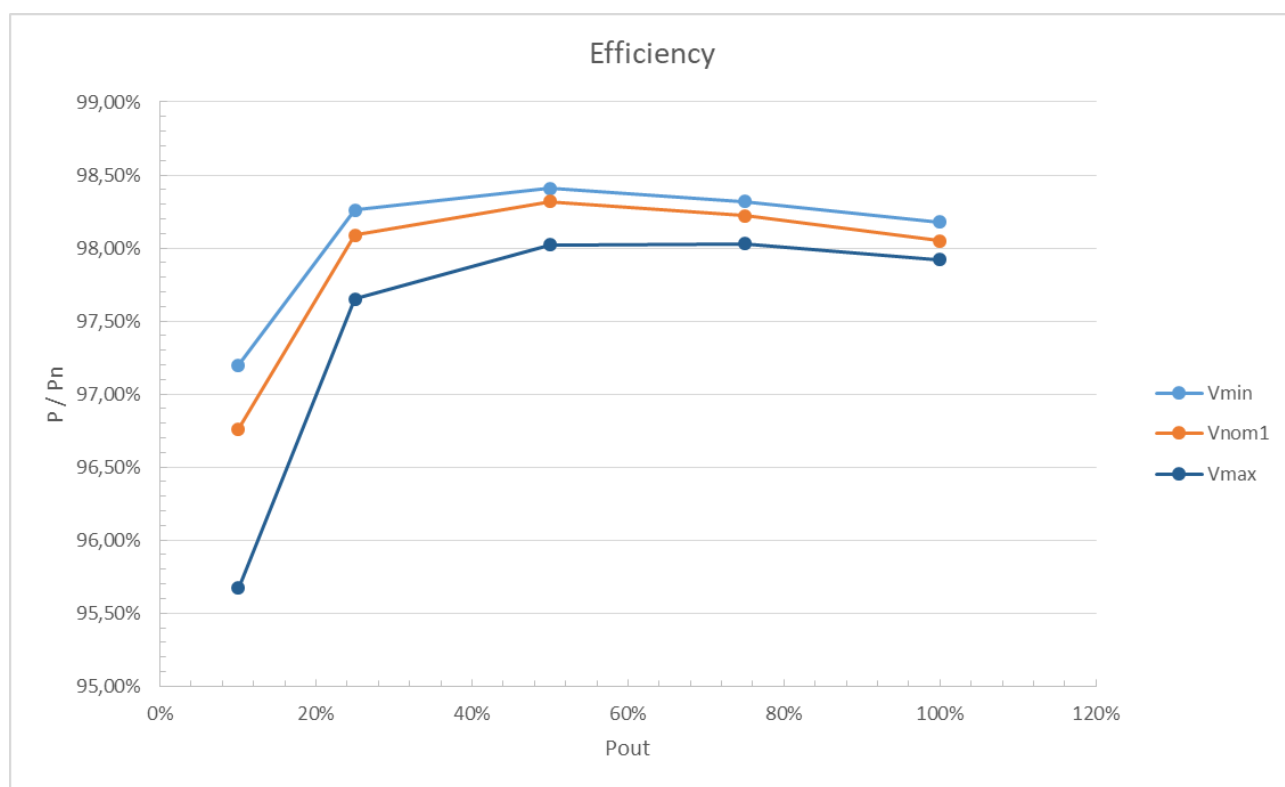
**Measuring of efficiency**

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Nr. 20TH0532-IEC61683\_0

**Efficiency measurement conditions test results**
**SE33.3K 277V**

Input voltage [Vdc]		Power in [W] (nom. 33300W)				
		10%	25%	50%	75%	100%
		3330	8325	16650	24975	33300
		$\eta$ in [%]				
$V_{min}$	790	97,20	98,26	98,41	98,32	98,18
$V_{nominal}$	850	96,76	98,09	98,32	98,22	98,05
$V_{max}$ (90%)	950	95,67	97,65	98,02	98,03	97,92



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.

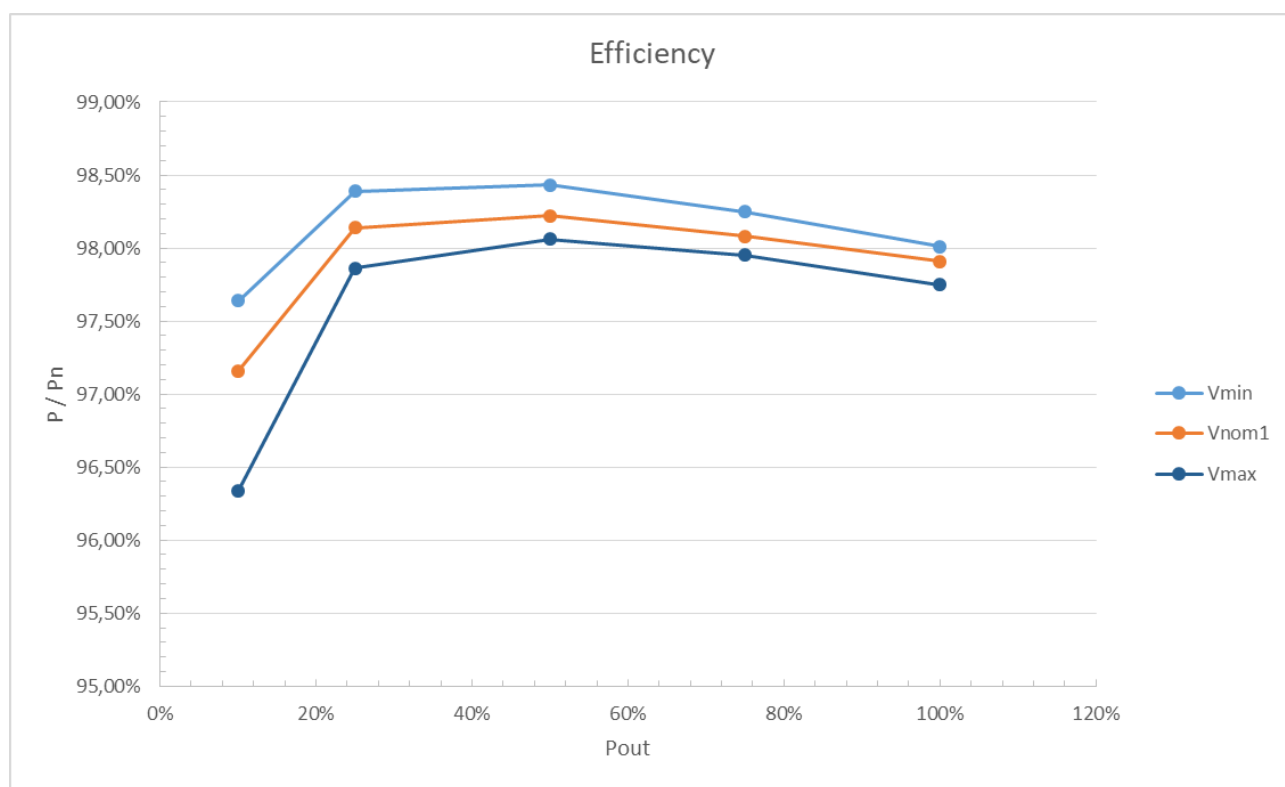
**Measuring of efficiency**

Extract from test report according the IEC 61683

Nr. 20TH0532-IEC61683\_0

**Efficiency measurement conditions test results**
**SE40K 277V**

Input voltage [Vdc]		Power in [W] (nom. 40000W)				
		10%	25%	50%	75%	100%
		4000	10000	20000	30000	40000
		$\eta$ in [%]				
$V_{min}$	790	97,64	98,39	98,43	98,25	98,01
$V_{nominal}$	850	97,16	98,14	98,22	98,08	97,91
$V_{max}$ (90%)	950	96,34	97,86	98,06	97,95	97,75



**Note:** The efficiency tests inside the referenced report were not tested on the full unit with a combiner box. The efficiency tests are only related to the inverter model and the losses of the combiner box and the connections between are not taken under consideration.