

No. 2621/0125-B-M9-CER

# Certificate of Conformity

By the product certificate number:

Issued to:

License holder:

ELGIN S.A Av. Dante Jordão Stopa, 47 - César De Souzacep 08820-320 - Mogi Das Cruzes – SPCNPJ:52.556.578/0001-22

Trademark:



Contract number: 801656 It is certified that the product: Type of generating unit: Utility Interactive Inverter

Models:		ELGIN- 70K-G03	ELGIN- 75K-G03	ELGIN- 80K-G03	ELGIN- 90K-G03	ELGIN- 100K-G03	ELGIN- 110K-G03
Technical Data:	Nominal power	70 kW	75 kW	80 kW	90 kW	100 kW	110 kW
	Nominal voltage	230 / 400 V	230 / 400 V				
	Nominal frequency	50 / 60 Hz	50 / 60 Hz				
	Firmware version			Ver:	3205		
	Number of phases			Three	phases		
	Isolation Transformer			N	lo		

## Is in compliance with the standard:

### IEC 62116 :2014

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

The above-mentioned generating unit is certified according to the SGS internal procedure PE.T-ECPE-18 based on the requirements of the UNE-EN ISO / IEC 17065.

First issued on 02<sup>nd</sup> November 2022 This certificate is valid until 14<sup>th</sup> June 2024

Madrid, 02<sup>nd</sup> November 2022

Daniel Arranz Muñiz Certification Manager



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms\_and\_conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: <u>https://www.sgs.com/en/certified-clients-and-products/electrical-products</u> This document cannot be reproduced partially

SGS





No. 2621/0125-B-M9-CER



No. 2621/0125-A-M9-CER

# Certificate of Conformity

By the product certificate number:

Issued to:

License holder:

Av. Dante Jordão Stopa, 47 - César De Souzacep 08820-320 - Mogi Das Cruzes - SPCNPJ:52.556.578/0001-22

Trademark:



**ELGIN S.A** 

Contract number: 801656

It is certified that the product:

Type of generating unit: Utility Interactive Inverter

Models:		ELGIN- 70K-G03	ELGIN- 75K-G03	ELGIN- 80K-G03	ELGIN- 90K-G03	ELGIN- 100K-G03	ELGIN- 110K-G03
Technical Data:	Nominal power	70 kW	75 kW	80 kW	90 kW	100 kW	110 kW
	Nominal voltage	230 / 400 V	230 / 400 V				
	Nominal frequency	50 / 60 Hz	50 / 60 Hz				
	Firmware version			Ver	3205		
	Number of phases			Three	phase		
	Isolation Transformer			N	o		

#### Is in compliance with the standard:

IEC 61727:2004.

Photovoltaic (PV) systems - Characteristics of the utility interface.

The above-mentioned generating unit is certified according to the SGS internal procedure PE.T-ECPE-32 based on the requirements of the UNE-EN ISO / IEC 17065.

First issued on 02<sup>nd</sup> November 2022 This certificate is valid until 11<sup>th</sup> June 2024

Madrid, 02<sup>nd</sup> November 2022

Daniel Arranz Muñiz Certification Manager



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms and conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: https://www.sgs.com/en/certified-clients-and-products/electrical-products/

SGS

This document cannot be reproduced partially





No. 2621/0125-A-M9-CER



## Certificate of Conformity

By the product certificate number: Issued to:

No. 2621/0125-D-M9-CER

License Holder:

ELGIN S.A

Av. Dante Jordão Stopa, 47 - César De Souzacep 08820-320 - Mogi Das Cruzes – SPCNPJ:52.556.578/0001-22

Trademark:

*'elgin* 

Contract number: 801656

It is certified that the product:

Type of generating unit: Utility Interactive Inverter

Models:		ELGIN- 70K-G03	ELGIN- 75K-G03	ELGIN- 80K-G03	ELGIN- 90K-G03	ELGIN- 100K-G03	ELGIN- 110K-G03	
Technical Data:	Nominal power	70 kW	75 kW	80 kW	90 kW	100 kW	110 kW	
	Nominal voltage	230 / 400 V	230 / 400 V					
	Nominal frequency	50 / 60 Hz	50 / 60 Hz					
	Firmware version			Ver	3205			
	Number of phases			Three	phase			
	Isolation Transformer			N	lo			
Is in compliance	with the standards:							

IEC 60068-2-1: 2007 Environmental testing. Part 2-1. Test Ae: Cold IEC 60068-2-2: 2007 Environmental testing. Part 2-2. Test Be: Dry heat IEC 60068-2-14: 2009 Environmental testing. Part 2-14. Test Nb: Changes of temperature IEC 60068-2-30: 2005 Environmental testing. Part 2-30. Test Db – Variant 1: Damp heat, cyclic (12 h + 12 h)

This certificate is based upon the test results of the Test Report nº BL-DG2140198-B03. This report confirms that one sample of the above-mentioned products has been tested with positive result against the requirements of these IEC standards for environmental conditions.

The above-mentioned generating unit is certified according to the SGS internal process 4 based on the requirements of the UNE-EN ISO/IEC 17065.

First issued on 02<sup>nd</sup> November 2022 This certificate is valid until 14<sup>th</sup> June 2024

Madrid, 02<sup>nd</sup> November 2022

Daniel Arranz Muñiz Certification Manager



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms\_and\_conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: https://www.sgs.com/ap/certificat-clients.and-products/alectricat-products/

SG

This document cannot be reproduced partially



No. 2621/0125-D-M9-CER Page 1 of 1



No. 2621/0125-C-M9-CER

# **Certificate of Conformity**

Product certificate number:

Issued to:

License holder:

ELGIN S.A

Av. Dante Jordão Stopa, 47 - César De Souzacep 08820-320 - Mogi Das Cruzes - SPCNPJ:52.556.578/0001-22

Trademark:



Contract number: 801656

It is certified that the product:

Type of generating unit: Utility Interactive Inverter

Models:		ELGIN- 70K-G03	ELGIN- 75K-G03	ELGIN- 80K-G03	ELGIN- 90K-G03	ELGIN- 100K-G03	ELGIN- 110K-G03
Technical Data:	Nominal power	70 kW	75 kW	80 kW	90 kW	100 kW	110 kW
	Nominal voltage	230 / 400 V	230 / 400 V				
	Nominal frequency	50 / 60 Hz	50 / 60 Hz				
	Firmware version			Ver	3205		
	Number of phases			Three	phase		
	Isolation Transformer			N	lo		

Is in compliance with the standard:

#### IEC 61683:1999.

Photovoltaic systems. Power conditioners. Procedure for measuring efficiency.

The above-mentioned generating unit is certified according to the SGS internal procedure PE.T-ECPE-33 based on the requirements of the UNE-EN ISO / IEC 17065.

First issued on 02<sup>nd</sup> November 2022 This certificate is valid until 14<sup>th</sup> June 2024

Madrid, 02<sup>nd</sup> November 2022

Daniel Arranz Muñiz Certification Manager



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms\_and\_conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: https://www.sgs.com/en/certified-clients-and-products/electrical-products/

SGS

This document cannot be reproduced partially





No. 2621/0125-C-M9-CER Page 1 of 3



## Summary efficiency results measured for the tested models:

These efficiency results are representatives for the referred models with a testing frequency of 50Hz.

ELGIN-70K-G03							
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn		
Minimum rated input voltage (1)	98.23%	98.32%	98.23%	97.98%	97.50%		
Nominal input voltage (2)	98.11%	98.40%	98.23%	97.74%	97.50%		
90% of the maximum rated input voltage (3)	98.75%	98.49%	98.21%	98.07%	97.74%		
<sup>(1)</sup> 460 V; <sup>(2)</sup> 650 V; <sup>(3)</sup> 765 V		16sessauses	Listnishuser				

ELGIN-75K-G03							
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn		
Minimum rated input voltage (1)	98.23%	98.35%	98.12%	98.12%	97.09%		
Nominal input voltage (2)	98.23%	98.50%	98.35%	98.12%	97.09%		
90% of the maximum rated input voltage (3)	98.26%	98.58%	98.43%	98.38%	97.18%		
<sup>(1)</sup> 460 V; <sup>(2)</sup> 650 V; <sup>(3)</sup> 765 V	A CONTRACTOR OF	ASSASOSO SOLOU	Secon	3000			

ELGIN-80K-G03							
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn			
98.23%	98.30%	98.12%	98.02%	97.27%			
98.23%	98.52%	98.34%	98.23%	97.27%			
98.37%	98.61%	98.55%	98.31%	97.36%			
	<b>100%Sn</b> 98.23% 98.23%	100%Sn75%Sn98.23%98.30%98.23%98.52%	100%Sn75%Sn50%Sn98.23%98.30%98.12%98.23%98.52%98.34%	100%Sn75%Sn50%Sn25%Sn98.23%98.30%98.12%98.02%98.23%98.52%98.34%98.23%			

ELGIN-90K-G03							
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn		
Minimum rated input voltage (1)	98.28%	98.43%	98.33%	98.23%	97.12%		
Nominal input voltage (2)	98.33%	98.49%	98.33%	98.43%	97.09%		
90% of the maximum rated input voltage (3)	98.41%	98.71%	98.51%	98.53%	97.66%		

ELGIN-100K-G03							
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn			
98.23%	98.64%	98.58%	98.23%	97.37%			
98.32%	98.53%	98.50%	98.24%	97.38%			
98.45%	98.74%	98.60%	98.54%	97.90%			
	<b>100%Sn</b> 98.23% 98.32%	100%Sn75%Sn98.23%98.64%98.32%98.53%	100%Sn75%Sn50%Sn98.23%98.64%98.58%98.32%98.53%98.50%	100%Sn75%Sn50%Sn25%Sn98.23%98.64%98.58%98.23%98.32%98.53%98.50%98.24%			

FLG	IN-110K-G	03	5656565		
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn
Minimum rated input voltage (1)	98.35%	98.49%	98.47%	97.61%	95.31%
Nominal input voltage (2)	98.35%	98.50%	98.39%	97.76%	95.31%
90% of the maximum rated input voltage (3)	98.34%	98.52%	98.51%	97.78%	95.36%

<sup>(1)</sup> 460 V; <sup>(2)</sup>650 V; <sup>(3)</sup>765 V



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms\_and\_conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: https://www.sgs.com/en/certified-clients-and-products/electrical-product

SGSSG

This document cannot be reproduced partially



These efficiency results are representatives for the referred models with a testing frequency of 60Hz.

ELGIN-70K-G03							
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn			
98.23%	98.32%	98.23%	97.98%	97.50%			
98.23%	98.32%	98.23%	97.98%	97.50%			
98.17%	98.43%	98.24%	98.05%	97.05%			
	<b>100%Sn</b> 98.23% 98.23%	100%Sn75%Sn98.23%98.32%98.23%98.32%	100%Sn75%Sn50%Sn98.23%98.32%98.23%98.23%98.32%98.23%	100%Sn75%Sn50%Sn25%Sn98.23%98.32%98.23%97.98%98.23%98.32%98.23%97.98%			

<sup>(1)</sup> 460 V; <sup>(2)</sup>650 V; <sup>(3)</sup>765 V

ELGIN-75K-G03							
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn		
Minimum rated input voltage (1)	98.24%	98.35%	98.23%	97.89%	97.09%		
Nominal input voltage (2)	98.18%	98.50%	98.35%	98.12%	97.09%		
90% of the maximum rated input voltage (3)	98.41%	98.52%	98.44%	98.20%	97.18%		
<sup>1)</sup> 460 V; <sup>(2)</sup> 650 V; <sup>(3)</sup> 765 V	Susan Caleston	Lister Howker					

SIN-80K-G	03	5650		
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn
98.23%	98.31%	98.23%	98.23%	97.27%
98.23%	98.52%	98.34%	98.23%	97.27%
98.38%	98.61%	98.38%	98.11%	97.34%
	<b>100%Sn</b> 98.23% 98.23%	100%Sn75%Sn98.23%98.31%98.23%98.52%	100%Sn75%Sn50%Sn98.23%98.31%98.23%98.23%98.52%98.34%	100%Sn75%Sn50%Sn25%Sn98.23%98.31%98.23%98.23%98.23%98.52%98.34%98.23%

IN-90K-G	03		1045	
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn
98.33%	98.43%	98.33%	98.23%	97.60%
98.33%	98.56%	98.33%	98.43%	97.09%
98.36%	98.71%	98.60%	98.31%	97.77%
	<b>100%Sn</b> 98.33% 98.33%	100%Sn75%Sn98.33%98.43%98.33%98.56%	100%Sn75%Sn50%Sn98.33%98.43%98.33%98.33%98.56%98.33%	100%Sn75%Sn50%Sn25%Sn98.33%98.43%98.33%98.23%98.33%98.56%98.33%98.43%

N-100K-G	03	5656565656565656	CARSES DE DES DE	CSGS
100%Sn	75%Sn	50%Sn	25%Sn	10%Sn
98.19%	98.64%	98.49%	98.23%	97.37%
98.32%	98.52%	98.41%	98.24%	96.94%
98.42%	98.68%	98.68%	98.31%	97.89%
	<b>100%Sn</b> 98.19% 98.32%	100%Sn75%Sn98.19%98.64%98.32%98.52%	100%Sn75%Sn50%Sn98.19%98.64%98.49%98.32%98.52%98.41%	100%Sn75%Sn50%Sn25%Sn98.19%98.64%98.49%98.23%98.32%98.52%98.41%98.24%

ELG	IN-110K-0	603	No. 1056		
Test condition	100%Sn	75%Sn	50%Sn	25%Sn	10%Sn
Minimum rated input voltage (1)	98.31%	98.45%	98.39%	97.78%	94.96%
Nominal input voltage (2)	98.31%	98.40%	98.40%	97.91%	97.21%
90% of the maximum rated input voltage <sup>(3)</sup>	98.43%	98.58%	98.52%	97.76%	95.01%
<sup>(1)</sup> 460 V; <sup>(2)</sup> 650 V; <sup>(3)</sup> 765 V	SUSCESSION SUSCESSION	CERCES CS	SCOOLSCOREST OF		1945 M



SGS Tecnos, S.A.U. C/ Trespaderne, 29 - 28042 Madrid This certificate is issued by SGS under its General Conditions for Product Certification at <u>www.sgs.com/terms</u> and <u>conditions</u>. The status and validity of the certificate can be checked scanning the QR code above included or through the following web link database: https://www.sgs.com/en/certified-clients-and-products/electrical-produc

SGSSG

This document cannot be reproduced partially

to -		
	Bàr	
	VERIFICATION OF CO	NFORMITY
1	Dongguan BALUN Testing Technolog Room 104, 204, 205, Building 1, No. 6, Industrial South Road, Songshan Lake D	
Certificate No.:	BL-DG22B0021D01	
Applicant:	ELGIN S.A	
Address:	AV. DANTE JORDÃO STOPA, 47 - CÉSAR MOGI DAS CRUZES - SPCNPJ:52.556.578	
Manufacture:	ELGIN S.A	
Address:	AV. DANTE JORDÃO STOPA, 47 - CÉSAR MOGI DAS CRUZES - SPCNPJ:52.556.578	
Product:	Inversor String Simplex	
Brand name:	<b>'elgin</b>	
Brand name: Model name:	ELGIN-70K-G03, ELGIN-75K-G03, ELGIN- ELGIN-90K-G03, ELGIN-100K-G03, ELGIN	
Model name: The submitted sar	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN nple of the above product has been tested accord mpliance with the essential requirements in the E	I-110K-G03 ding with below Standard(s) us
Model name: The submitted sar showing co Applied Stand	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN nple of the above product has been tested accord mpliance with the essential requirements in the E	I-110K-G03 ding with below Standard(s) us IMC directive (2014/30/EU) : Report No.:
Model name: The submitted sar showing co Applied Stan EN IEC 61000	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN nple of the above product has been tested accord mpliance with the essential requirements in the <b>E</b> dards:	I-110K-G03 ding with below Standard(s) us EMC directive (2014/30/EU) :
Model name: The submitted sar showing co Applied Stan EN IEC 61000	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN nple of the above product has been tested accord mpliance with the essential requirements in the E dards: D-6-2:2019, EN IEC 61000-6-4:2019, D-3-11:2019, EN 61000-3-12:2011	I-110K-G03 ding with below Standard(s) us IMC directive (2014/30/EU) : Report No.:

VI	ERIFICATION OF CONF	FORMITY
Roor	Dongguan BALUN Testing Technolog n 104, 204, 205, Building 1, No. 6, Industrial South Road, Songshan Lake D	
Certificate No.:	BL-DG22B0021D02	
Applicant:	ELGIN S.A	
Address:	AV. DANTE JORDÃO STOPA, 47 - CÉSAR MOGI DAS CRUZES - SPCNPJ:52.556.578	
Manufacture:	ELGIN S.A	
Address:	AV. DANTE JORDÃO STOPA, 47 - CÉSAR MOGI DAS CRUZES - SPCNPJ:52.556.578	
Product:	Inversor String Simplex	
Brand name:	<b>'elgin</b>	
Brand name: Model name:	elgin-70K-G03, Elgin-75K-G03, Elgin-8 Elgin-90K-G03, Elgin-100K-G03, Elgin	
Model name:	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN	-110K-G03
Model name: The submitted sa Applied Standa	ELGIN-90K-G03, ELGIN-100K-G03, ELGIN	-110K-G03 cording with below Standard(s

.