

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50599166

Blatt Sheet
0001

Ihr Zeichen Client Reference
168392896

Unser Zeichen Our Reference
02-Zhua-CN23D2OT 001

Ausstellungsdatum
30.08.2023

Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder

Guangzhou Sanjing Electric Co., Ltd
No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Fertigungsstätte Manufacturing Plant

Refer to latest revision
of the annex list of factories

Prüfzeichen Test Mark



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 1111273751

Geprüft nach Tested acc. to

EN 62109-1:2010
IEC 62109-1:2010
EN 62109-2:2011
IEC 62109-2:2011

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Energy Storage System (All-In-One Energy Storage System)

Type Designation: 1) HS2-3K-S2-X, 2) HS2-3.6K-S2-X, 3) HS2-4K-S2-X, 4) HS2-4.6K-S2-X, 5) HS2-5K-S2-X, 6) HS2-5K-S2-B-X, 7) HS2-6K-S2-X X=1, 2, 3, 4 (Number of battery modules)) 16

Vmax PV Voltage [Vd.c.] : 550
MPP Voltage Range [Vd.c.] : 90-500
Max.Input Current [Ad.c.] : 16/16
Isc PV [Ad.c.] : 19.2/19.2

Battery Voltage Range [Vd.c.] : 85-450
Max. Charge Current [Ad.c.] : 30
Max. Discharge Current [Ad.c.] : 30

Rated Input Volt. [Va.c.] : 230
Rated Input Freq. [Hz] : 50/60
Max. Input Current [Aa.c.] : 1) 26.1, 2) 32.0, 3) 34.8, 4) 40.0, 5) 43.5, 6) 43.5, 7) 52.2

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ANLAGE (Appendix) : 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.



Zertifizierungsstelle

A. Chen

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
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Blatt Sheet
0002

Ihr Zeichen Client Reference
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Lizenzentgelte - Einheit
License Fee - Unit

Energy Storage System (All-In-One Energy Storage System)

as page 0001 continuation

Rated Output Volt. [Va.c.] : 230
Rated Output Freq. [Hz] : 50/60
Rated Output Current [Aa.c.] : 1) 13.0, 2) 16.0, 3) 17.4,
4) 20.0, 5) 21.7, 6) 21.7, 7) 26.1
Max. Output Current [Aa.c.] : 1) 15.0, 2) 16.0, 3) 20.0,
4) 20.0, 5) 25.0, 6) 22.7, 7) 27.3
Rated Output Power [W] : 1) 3000, 2) 3680, 3) 4000,
4) 4600, 5) 5000, 6) 5000, 7) 6000
Max. Output Apparent Power [VA] : 1) 3300, 2) 3680, 3) 4400,
4) 4600, 5) 5500, 6) 5000, 7) 6000
Power Factor Range : 0.8Leading - 0.8Lagging
Rated Backup Output Volt. [Va.c.] : 230
Rated Backup Output Freq. [Hz] : 50/60
Max. Backup Output Current [Aa.c.] : 1) 13.6, 2) 16.7,
3) 18.2, 4) 20.9, 5) 22.7, 6) 22.7, 7) 27.3
Max. Backup Output Apparent Power [VA] : 1) 3000, 2) 3680,
3) 4000, 4) 4600, 5) 5000, 6) 5000, 7) 6000
Overvoltage Category (OVC) : II for PV Side
II for battery Side
III for AC Mains

Continued on page 0003

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.



Zertifizierungsstelle

A. Chen

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50599166

Blatt Sheet
0003

Ihr Zeichen Client Reference
168392896

Unser Zeichen Our Reference
02-Zhua-CN23D2OT 001

Ausstellungsdatum
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Date of Issue
(day/mo/yr)

Genehmigungsinhaber License Holder

Guangzhou Sanjing Electric Co., Ltd
No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
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P.R. China

Fertigungsstätte Manufacturing Plant

Refer to latest revision
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EN 62109-1:2010
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EN 62109-2:2011
IEC 62109-2:2011

Zertifiziertes Produkt (Geräteidentifikation)
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Lizenzentgelte - Einheit
License Fee - Unit

Energy Storage System (All-In-One Energy Storage System)

as page 0002 continuation

Protective Class : Class I
Hardware Version : V1.2
Firmware Version : V1.010
Ingress Protection (IP) : IP65
Pollution Degree (PD) : PD3
Altitude [m] : ≤ 3000
Operating Temperature [°C] : -10 to +50 (>45 derating)
Type of Inverter : Non-isolated

Remark(s): The installation has to be carried out according to the attached installation instruction.
Any additional requirements in countries where the product is going to be marketed have to be considered additionally.

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.



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TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

http://www.tuv.com/safety E-mail: markcheck@tuv.com
Fax: +49 221 806-3935

Guangzhou Sanjing Electric Co.,
Ltd.

Date : 30.08.2023
Our ref. : Zhua 02
Your ref.: 168392896

No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Ref : R TÜV-Mark Approval

Type of Equipment : All-In-One Energy Storage System
Model Designation : See Certificate
Certificate No. : R 50599166 0003
Report No. : CN23D20T 001

Dear Ladies and Gentlemen,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area. In case you have a change regarding your involved local representative for the certificate, please inform us in due time.

With kind regards,

Certification Body


A. Chen

Enclosure

证书的详细资料请登陆www.certipedia.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

CERTIFICATE



of Conformity Low Voltage Directive 2014/35/EU

Registration No.: AN 50599180 0001

Report No.: CN23D2OT 001

Holder: **Guangzhou Sanjing Electric Co., Ltd.**
No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Product: **Energy Storage System**
(All-In-One Energy Storage System)

Identification: Type Designation: HS2-3K-S2-X, HS2-3.6K-S2-X,
HS2-4K-S2-X, HS2-4.6K-S2-X,
HS2-5K-S2-X, HS2-5K-S2-B-X,
HS2-6K-S2-X X=1, 2, 3, 4 (Number of battery modules))
Serial No. : Engineering Samples
Remark(s) : Issued in conjunction with TÜV Rheinland
license R 50599166 pages 0001-0003.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

Date 30.08.2023




A. Chen

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

 The CE marking may be used if all relevant and effective EC Directives are complied with.



Guangzhou Sanjing Electric Co.,
Ltd.

Date : 30.08.2023
Our ref. : Zhua 02
Your ref.: 168392896

No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Ref : AN Certificate of Conf. Low Voltage D.

Type of Equipment : All-In-One Energy Storage System
Model Designation : See Certificate
Certificate No. : AN 50599180 0001
Report No. : CN23D20T 001

Dear Ladies and Gentlemen,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body



A. Chen

Enclosure

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C E R T I F I C A T E
of Conformity
EC Council Directive 2014/30/EU
Electromagnetic Compatibility

Registration No.: AE 50566764 0001

Report No.: CN22K1PC 001

Holder: **Guangzhou Sanjing Electric Co., Ltd.**
No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Product: **Energy Storage System**
(All-In-One Energy Storage System)

Identification: Type Designation: HS2-3K-S2-X HS2-3.6K-S2-X HS2-4K-S2-X
HS2-4.6K-S2-X HS2-5K-S2-X
HS2-5K-S2-B-X HS2-6K-S2-X
(X=1, 2, 3, 4)

Serial No. : n.a.

Remark: Refer to above-listed test report for details.

Tested acc. to: EN IEC 61000-6-1:2019
EN IEC 61000-6-2:2019
EN IEC 61000-6-3:2021
EN IEC 61000-6-4:2019

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with all provisions of Annex I of Council Directive 2014/30/EU. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to the a.m. Directive.

Date 09.12.2022



Certification Body


Tongle Lee

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may only be used if all relevant and effective EC Directives are complied with. CE

Guangzhou Sanjing Electric Co.,
Ltd.

Date : 09.12.2022
Our ref. : AOFEL 02
Your ref.:

No.9, Lizhishan Road, Science City,
Guangzhou High-tech Zone,
Guangdong
P.R. China

Ref : AE Certificate of Conformity EMC

Type of Equipment : All-In-One Energy Storage System
Model Designation : See Certificate
Certificate No. : AE 50566764 0001
Report No. : CN22K1PC 001

Dear Ladies and Gentlemen,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body



Tongle Lee

Enclosure

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广州三晶电气股份有限公司

Guangzhou Sanjing Electric Co., Ltd.

Tel : 400-159-0088 Fax : 020-66608589

Web : www.saj-electric.cn / www.saj-electric.com

地址 : 广州高新技术产业开发区科学城荔枝山路9号三晶创新园

Add: SAJ Innovation Park, No.9, Lizhishan Road, Science City, Guangzhou High-tech Zone, Guangdong, P.R.China.

EU Declaration of Conformity

We Guangzhou Sanjing Electric Co., Ltd.
No.9, Lizhishan Road, Science City, Guangzhou High-tech Zone, Guangdong, P.R.China

Declare under our own responsibility that the product

Name/Trademark:



Product Name ALL-IN-ONE Energy Storage System

Model:

Single phase inverter: HS2-3K-S2, HS2-3.6K-S2, HS2-4K-S2, HS2-5K-S2, HS2-6K-S2
HS2-4.6K-S2, HS2-5K-S2-B, AS2-3K-S, AS2-3.6K-S, AS2-4K-S,
AS2-5K-S, AS2-6K-S, AS2-4.6K-S, AS2-5K-S-B

Three-phase inverter: HS2-5K-T2, HS2-6K-T2, HS2-8K-T2, HS2-10K-T2, HS2-10K-T2-B
AS2-5K-T, AS2-6K-T, AS2-8K-T, AS2-10K-T, AS2-10K-T-B

Comply with the following directives and regulations:

- 2014/35/EU (Low Voltage Directive)
- 2014/30/EU (EMC Directive)
- 2011/65/EU (RoHS Directive)
- DIRECTIVE (EU) 2015/863
- Commission Regulation (EU) 2016/631 (RFG)

For the evaluation of the compliance with these Directives and Regulations, the following standards/requirements were applied:

Safety: EN 62109-1:2010
EN 62109-2:2011

EMC: EN IEC 61000-6-1:2019
EN IEC 61000-6-2:2019
EN IEC 61000-6-3:2021
EN IEC 61000-6-4:2019
EN 61000-3-2:2014(Maximum AC current ≤ 16A)
EN 61000-3-3:2013(Maximum AC current ≤ 16A)
EN 61000-3-11:2000(Maximum AC current > 16A)
EN 61000-3-12:2011(Maximum AC current > 16A)

RoHS: EN 50581: 2012

RFG: EN 50549-1: 2019



Notified body: TÜV Rheinland
INTERTEK

Guangzhou

October 8th, 2022

Director of New Energy

Place

Date

Signature