

Kehua Hengsheng Co., Ltd.
Li Jianfu

Date : 24.05.2019
Our ref. : zhangco 02
Your ref.: Mr. Li Jianfu

No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Ref : R TÜV-Mark Approval

Type of Equipment : Grid-connected PV Inverter
Model Designation : See Certificate
Certificate No. : R 50436872 0001
Report No. : 50235694 001

Dear Li Jianfu,

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

Enclosed you will find the certificate of approval.

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

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

Please contact our office for approval of your new products.

With kind regards,

Certification Body


Sommy 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

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50436872

Blatt *Sheet*
0001

| Ihr Zeichen <i>Client Reference</i> | Unser Zeichen <i>Our Reference</i> | Ausstellungsdatum <i>Date of Issue</i> |
|-------------------------------------|------------------------------------|--|
| Mr. Li Jianfu | 02-zhangco-50235694 001 | 24.05.2019 (day/mo/yr) |

Genehmigungsinhaber *License Holder*
Kehua Hengsheng Co., Ltd.
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Fertigungsstätte *Manufacturing Plant*
ZHANGZHOU KEHUA TECHNOLOGY CO., LTD.
KEHUA FACTORY, BEIDOU INDUSTRIAL ZONE
JINFENG INDUSTRIAL DISTRICT
ZHANGZHOU CITY, FUJIAN 363000
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

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

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

PV-Wechselrichter (Grid-connected PV Inverter)

| | | | |
|-----------------------------|-------------------------|---------|---|
| Type Designation | : SPI5K-B | SPI6K-B | 9 |
| Vmax PV[Vd.c.] | : 1000 | | |
| Max. Input Current[Ad.c.] | : 11/11 | | |
| Isc PV[Ad.c.] | : 13.8/13.8 | | |
| MPPT Voltage Range[Vd.c.] | : 200-950 | | |
| Overvoltage Category(OVC) | : II for PV | | |
| Rated Output Voltage[Va.c.] | : 380/400/415V, 3W+N+PE | | |
| Max. Output Current[Aa.c.] | : 8.0 | 9.6 | |
| Rated Output Frequency[Hz] | : 50/60 | | |
| Rated Output Power[kW] | : 5 | 6 | |
| Power Factor | : [-0.80, 0.80] | | |
| Overvoltage Category(OVC) | : III for AC Mains | | |

Continued on page 0002

9

ANLAGE (Appendix): 1.0

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety



Sommy Chen

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50436872

Blatt *Sheet*
0002

Ihr Zeichen *Client Reference*
Mr. Li Jianfu

Unser Zeichen *Our Reference*
02-zhangco-50235694

Ausstellungsdatum *Date of Issue*
001 24.05.2019
(day/mo/yr)

Genehmigungsinhaber *License Holder*

Kehua Hengsheng Co., Ltd.
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Fertigungsstätte *Manufacturing Plant*

ZHANGZHOU KEHUA TECHNOLOGY CO., LTD.
KEHUA FACTORY, BEIDOU INDUSTRIAL ZONE
JINFENG INDUSTRIAL DISTRICT
ZHANGZHOU CITY, FUJIAN 363000
P. R. China

Prüfzeichen *Test Mark*



Bauart geprüft
Sicherheit
Regelmäßige
Produktions-
überwachung

www.tuv.com
ID 1419069210

Geprüft nach *Tested acc. to*

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

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Grid-connected PV Inverter)

as page 0001 continuation

| | | | |
|----------------------------|-------------|---------|---|
| Type Designation | : SPI8K-B | SPI0K-B | 2 |
| Vmax PV[Vd.c.] | : 1000 | | |
| Isc PV[Ad.c.] | : 27.5/13.8 | | |
| Max. Input Current[Ad.c.] | : 22/11 | | |
| MPPT Voltage Range[Vd.c.] | : 200-950 | | |
| Overvoltage Category (OVC) | : II for PV | | |

| | |
|-----------------------------|-------------------------|
| Rated Output Voltage[Va.c.] | : 380/400/415V, 3W+N+PE |
| Rated Output Power[kW] | : 8 10 |
| Max. Output Current[Aa.c.] | : 12.8 15.9 |
| Rated Output Frequency[Hz] | : 50/60 |
| Power Factor | : [-0.80, 0.80] |
| Overvoltage Category (OVC) | : III for AC Mains |

Continued on page 0003

2

ANLAGE (Appendix): 1.0

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com

Fax: +49 221 806-3935 http://www.tuv.com/safety



Sommy Chen

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50436872

Blatt *Sheet*
0003

Ihr Zeichen *Client Reference*

Mr. Li Jianfu

Unser Zeichen *Our Reference*

02-zhangco-50235694 001 24.05.2019

Ausstellungsdatum

Date of Issue

(day/mo/yr)

Genehmigungsinhaber *License Holder*

Kehua Hengsheng Co., Ltd.
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Fertigungsstätte *Manufacturing Plant*

ZHANGZHOU KEHUA TECHNOLOGY CO., LTD.
KEHUA FACTORY, BEIDOU INDUSTRIAL ZONE
JINFENG INDUSTRIAL DISTRICT
ZHANGZHOU CITY, FUJIAN 363000
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

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

Zertifiziertes Produkt (Geräteidentifikation)

Certified Product (Product Identification)

Lizenzentgelte - Einheit

License Fee - Unit

PV-Wechselrichter (Grid-connected PV Inverter)

as page 0002 continuation

| | | | |
|----------------------------|-------------|-----------|---|
| Type Designation | : SPI12K-B | SPI12K-BL | 2 |
| Vmax PV[Vd.c.] | : 1000 | | |
| Isc PV[Ad.c.] | : 13.8/13.8 | 27.5/27.5 | |
| Max. Input Current [Ad.c.] | : 11/11 | 22/22 | |
| MPPT Voltage Range[Vd.c.] | : 200-950 | | |
| Overvoltage Category (OVC) | : II for PV | | |

| | |
|------------------------------|-------------------------|
| Rated Output Voltage [Va.c.] | : 380/400/415V, 3W+N+PE |
| Rated Output Frequency [Hz] | : 50/60 |
| Max. Output Current [Aa.c.] | : 19.1 19.1 |
| Rated Output Power [kW] | : 12 12 |
| Power Factor | : [-0.80, 0.80] |
| Overvoltage Category (OVC) | : III for AC Mains |

Continued on page 0004

2

ANLAGE (Appendix): 1.0

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com

Fax: +49 221 806-3935 http://www.tuv.com/safety



Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50436872

Blatt Sheet
0004

Ihr Zeichen Client Reference
Mr. Li Jianfu

Unser Zeichen Our Reference
02-zhangco-50235694 001

Ausstellungsdatum Date of Issue
24.05.2019 (day/mo/yr)

Genehmigungsinhaber License Holder

Kehua Hengsheng Co., Ltd.
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Fertigungsstätte Manufacturing Plant

ZHANGZHOU KEHUA TECHNOLOGY CO., LTD.
KEHUA FACTORY, BEIDOU INDUSTRIAL ZONE
JINFENG INDUSTRIAL DISTRICT
ZHANGZHOU CITY, FUJIAN 363000
P. R. China

Prüfzeichen Test Mark



Bauart geprüft
Sicherheit
Regelmäßige
Produktions-
überwachung

www.tuv.com
ID 1419069210

Geprüft nach Tested acc. to

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

**Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)**

**Lizenzentgelte - Einheit
License Fee - Unit**

PV-Wechselrichter (Grid-connected PV Inverter)

as page 0003 continuation

Type Designation : SPI15K-B SPI17K-B SPI20K-B
Vmax PV[Vd.c.] : 1000
Isc PV[Ad.c.] : 27.5/27.5
Max. Input Current[Ad.c.] : 22/22
MPPT Voltage Range[Vd.c.] : 200-950
Overvoltage Category(OVC) : II for PV

3

Rated Output Voltage[Va.c.] : 380/400/415V, 3W+N+PE
Rated Output Frequency[Hz] : 50/60
Max. Output Current[Aa.c.] : 23.9 27.1 31.9
Rated Output Power[kW] : 15 17 20
Power Factor : [-0.80, 0.80]
Overvoltage Category(OVC) : III for AC Mains

Continued on page 0005

3

ANLAGE (Appendix) : 1.0

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com

Fax: +49 221 806-3935 http://www.tuv.com/safety



Sommy Chen

Zertifikat

Certificate



Zertifikat Nr. Certificate No.
R 50436872

Blatt Sheet
0005

Ihr Zeichen Client Reference

Mr. Li Jianfu

Unser Zeichen Our Reference

02-zhangco-50235694 001 24.05.2019

Ausstellungsdatum

Date of Issue

(day/mo/yr)

Genehmigungsinhaber License Holder

Kehua Hengsheng Co., Ltd.
No. 457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Fertigungsstätte Manufacturing Plant

ZHANGZHOU KEHUA TECHNOLOGY CO., LTD.
KEHUA FACTORY, BEIDOU INDUSTRIAL ZONE
JINFENG INDUSTRIAL DISTRICT
ZHANGZHOU CITY, FUJIAN 363000
P. R. China

Prüfzeichen Test Mark



Bauart geprüft
Sicherheit
Regelmäßige
Produktions-
überwachung

www.tuv.com
ID 1419069210

Geprüft nach Tested acc. to

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

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

PV-Wechselrichter (Grid-connected PV Inverter)

as page 0004 continuation

Protective Class : Class I
Enclosure Protection (IP) : IP 65
Pollution degree (PD) : PD 2
Altitude [m] : ≤2000
Operating Temperature [°C] : -25 to 60 (> 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.

ANLAGE (Appendix) : 1.0

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.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety



Kehua Hengsheng Co., Ltd.
Li Jianfu
-
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Date : 24.05.2019
Our ref. : zhangco 02
Your ref.: Mr. Li Jianfu

Ref : AN Certificate of Conf. Low Voltage D.

Type of Equipment : Grid-connected PV Inverter
Model Designation : See Certificate
Certificate No. : AN 50436903 0001
Report No. : 50235694 001

Dear Li Jianfu,

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

Enclosed you will find the certificate of approval.

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

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

Please contact our office for approval of your new products.

With kind regards,

Certification Body


Sommy 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 50436903 0001

Report No.: 50235694 001

Holder: Kehua Hengsheng Co., Ltd.
No.457, Malong Road,
Torch High-tech Industrial Zone
Xiamen, Fujian 361000
P. R. China

Product: PV-Inverter
(Grid-connected PV Inverter)

Identification:

| | |
|------------------|--|
| Type Designation | : SPI5K-B SPI6K-B SPI8K-B SPI10K-B SPI12K-B SPI12K-BL SPI15K-B SPI17K-B SPI20K-B |
| Serial No. | : 551501050390K3100003 |
| Remark(s) | : Issued in conjunction with TÜV Rheinland license R 50436872 pages 0001-0005. |

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 24.05.2019


Sommy Chen

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

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

CE