



Product Service

CERTIFICATE

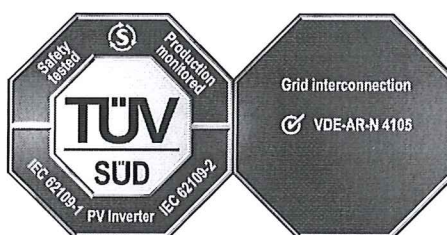
No. Z2 16 10 75386 054

Holder of Certificate: **Shenzhen Kstar New Energy Company Limited**

The 9th Floor, R&D Building
 Kstar Industrial Park, Guangming Hi-tech Industrial Zone
 518107 Shenzhen, Guangdong Province
 PEOPLE'S REPUBLIC OF CHINA

Production Facility(ies): 76189

Certification Mark:



Product: **Converter (PV grid-interactive inverter)**

Model(s): **KSG-30K, KSG-36K-HV, KSG-50K, KSG-50K-HV, KSG-60K, KSG-60K-HV**

Parameters:
 Vmax PV: 1000 Vd.c.
 Nominal Frequency: 50 Hz
 Protective class: I
 See page 2-3 for more details

Tested according to: IEC 62109-1(ed.1)
 EN 62109-1:2010
 IEC 62109-2(ed.1)
 EN 62109-2:2011
 VDE-AR-N 4105:2011
 DIN VDE V 0124-100:2012

The product was tested on a voluntary basis and complies with the essential requirements. The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition the certification holder must not transfer the certificate to third parties. See also notes overleaf.

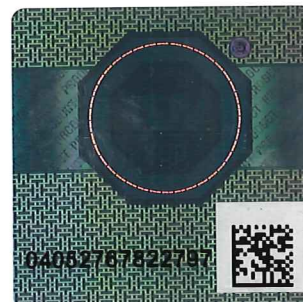
Test report no.: 64290160451301

Valid until: 2021-10-20

(Billy Qiu)

Date, 2016-10-24

Page 1 of 3





Product Service

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No. Z2 16 10 75386 054

Model	KSG-30K	KSG-36K-HV	KSG-50K
Vmax PV	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
Isc PV	28 Ad.c. x 3	28 Ad.c. x 3	38 Ad.c. x 3
Nominal AC voltage	3/N/PE, 230/400 Va.c.	3~PE, 480 Va.c.	3/N/PE, 230/400 Va.c.
Nominal Frequency	50 Hz	50 Hz	50 Hz
Max. Continuous output current	44 Aa.c.	44 Aa.c.	72 Aa.c.
Nominal active power P_n	30 kW	36 kW	50 kW
Maximum active power $P_{E_{max}}$	33 kW	40 kW	55 kW
Maximum apparent power $S_{E_{max}}$	33 kVA	40 kVA	55 kVA
Power factor (Cos phi), adjustable	0,80 _{under-excited} to 0,80 _{over-excited}	0,80 _{under-excited} to 0,80 _{over-excited}	0,80 _{under-excited} to 0,80 _{over-excited}
Protective class	I	I	I
Ingress protection	IP65	IP65	IP65

Model	KSG-50K-HV	KSG-60K	KSG-60K-HV
Vmax PV	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
Isc PV	38 Ad.c. x 3	42 Ad.c. x 3	42 Ad.c. x 3
Nominal AC voltage	3~PE, 480 Va.c.	3/N/PE, 230/400 Va.c.	3~PE, 480 Va.c.
Nominal Frequency	50 Hz	50 Hz	50 Hz
Max. Continuous output current	61 Aa.c.	87 Aa.c.	72 Aa.c.
Nominal active power P_n	50 kW	60 kW	60 kW
Maximum active power $P_{E_{max}}$	55 kW	66 kW	66 kW
Maximum apparent power $S_{E_{max}}$	55 kVA	66 kVA	66 kVA
Power factor (Cos phi), adjustable	0,80 _{under-excited} to 0,80 _{over-excited}	0,80 _{under-excited} to 0,80 _{over-excited}	0,80 _{under-excited} to 0,80 _{over-excited}
Protective class	I	I	I
Ingress protection	IP65	IP65	IP65

Page 2 of 3



Product Service

C E R T I F I C A T E

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Remark:

- (1) Additional test summary of VDE-AR-N 4105 F.3 is attached at the end of the technical report.
- (2) According to VDE-AR-N 4105:2011 Clause 6.1, additional central NS protection and central interface switch device shall be provided for final field installation.

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Date, 2016-10-24

Page 3 of 3