

CERTIFICATE

No. Z2 16 04 75386 037



Product Service

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



Certification Mark:



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

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.

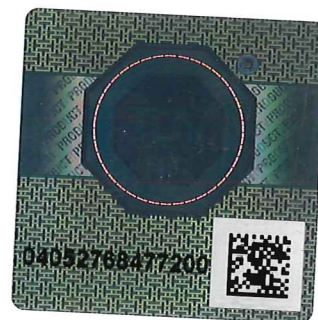
Test report no.: 64290160004501

Valid until: 2021-04-24

Date, 2016-05-03


(Billy Qiu)

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CERTIFICATE**No. Z2 16 04 75386 037****Model(s):****KSG-30K, KSG-36K-HV, KSG-50K, KSG-60K, KSG-60K-HV****Parameters:**

V _{max} PV:	1000 Vd.c.
I _{sc} PV:	28 Ad.c. x 3 (KSG-30K) 28 Ad.c. x 3 (KSG-36K-HV) 38 Ad.c. x 3 (KSG-50K) 42 Ad.c. x 3 (KSG-60K) 42 Ad.c. x 3 (KSG-60K-HV)
Maximum continuous output current:	44 Aa.c. (KSG-30K) 44 Aa.c. (KSG-36K-HV) 72 Aa.c. (KSG-50K) 87 Aa.c. (KSG-60K) 72 Aa.c. (KSG-60K-HV)
Nominal output power:	30 kW (KSG-30K) 36 kW (KSG-36K-HV) 50 kW (KSG-50K) 60 kW (KSG-60K) 60 kW (KSG-60K-HV)
Maximum continuous output power:	33 kVA (KSG-30K) 40 kVA (KSG-36K-HV) 55 kVA (KSG-50K) 66 kVA (KSG-60K) 66 kVA (KSG-60K-HV)
Nominal AC voltage:	3/N/PE 230/400 Va.c. (KSG-30K) 3~PE 480 Va.c. (KSG-36K-HV) 3/N/PE 230/400 Va.c. (KSG-50K) 3/N/PE 230/400 Va.c. (KSG-60K) 3~PE 480 Va.c. (KSG-60K-HV)
Nominal frequency:	50 Hz
Power factor (full load):	>0,99
Protective class:	I
Ingress protection:	IP65

Tested according to:

IEC 62109-1(ed.1)
EN 62109-1:2010
IEC 62109-2(ed.1)
EN 62109-2:2011
DIN VDE 0126-1-1:2013

Production Facility(ies):

76189

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C E R T I F I C A T E

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License condition:

- (1) According to sub-clause 6.1 of German low-voltage grid code VDE AR N4105:2011, central NS protection at the central meter panel is required for the power generation unit(s) with maximum apparent power larger than 30 kVA. If the PV inverter(s) listed in this certificate are intended to be connected to a German low-voltage distribution network, a certified central interface switch (or automatic disconnection device specified in DIN VDE 0126-1-1:2013) according to DIN VDE 0126-1-1:2013 is required to be installed in central meter panel during field installation. The integrated NS protection function of the PV inverters listed in this certificate meets the requirement of DIN VDE 0126-1-1:2013. They may be used without additional central NS protection in EU countries other than Germany if the technical requirement of DIN VDE 0126-1-1:2013 is accepted by individual national low-voltage grid code.
- (2) The integrated voltage protection of the grid disconnection protection monitors the voltage between line to line for models: KSG-36K-HV, KSG-60K-HV, line to neutral for models: KSG-30K, KSG-50K, KSG-60K. If the local grid code requires to monitor the voltage line to neutral, additional central NS protection is needed.

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