

# Certificate

No. **ESY 075386 0310 Rev. 00**

## Unit Certificate

**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

**Product: Converter  
(Energy Storage Inverter)**

**Model(s): KAC100DH, KAC125DH**

**Parameters:** See page 2-3

**Applicable standards:** VDE-AR-N 4110:2023  
FGW TR3:2022  
FGW TR4:2022  
FGW TR8:2019

This Certificate confirms the compliance with the above listed standards on a voluntary basis. It refers only to the sample submitted to TÜV SÜD Product Service GmbH and does not certify the quality or safety of the serial products. It was issued according to TÜV SÜD Product Service certification program Photovoltaics and Grid Integration. For details see: [www.tuvsud.com/ps-cert](http://www.tuvsud.com/ps-cert)

**Test report no.:** 64290243082701

**Date,** 2025-12-19



( Kennen Wang )

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## Parameters:

General and Output values	
Manufacturer	Shenzhen Kstar New Energy Company Limited
Type name	KAC125DH
No. of phases	3 phases
Rated apparent power	125000 VA
Rated active power	125000 W
Rated AC-voltage	230/400 V <sub>AC</sub> , 3W+N+PE
Rated frequency	50 Hz
Contribution to short circuit current (RMS)	216.1 A <sub>AC</sub>
<b>Battery input/output</b>	
Min. Battery voltage	600 V <sub>DC</sub>
Max. Battery voltage	1500 V <sub>DC</sub>
Max. Battery current	233.8 A <sub>DC</sub>
Max. Charge/Discharge power	137500 W
<b>Converter-Power section</b>	
Manufacturer	Shenzhen Kstar New Energy Company Limited
Type name	KAC125DH
Rated apparent power	125000 VA
Generic type	MV/LV transformer is not included in the inverter
Pulse rated of inverter	16 kHz
Generic type of power control	PQ control
Software version	DSP: V000B000D072, ARM: V000B030D010, EMS: V000B130D010

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<b>General and Output values</b>	
Manufacturer	Shenzhen Kstar New Energy Company Limited
Type name	KAC100DH
No. of phases	3 phases
Rated apparent power	100000 VA
Rated active power	100000 W
Rated AC-voltage	230/400 V <sub>AC</sub> , 3W+N+PE
Rated frequency	50 Hz
Contribution to short circuit current (RMS)	188.5 A <sub>AC</sub>
<b>Battery input/output</b>	
Min. Battery voltage	600 V <sub>DC</sub>
Max. Battery voltage	1500 V <sub>DC</sub>
Max. Battery current	187.0 A <sub>DC</sub>
Max. Charge/Discharge power	110000 W
<b>Converter-Power section</b>	
Manufacturer	Shenzhen Kstar New Energy Company Limited
Type name	KAC100DH
Rated apparent power	100000 VA
Generic type	MV/LV transformer is not included in the inverter
Pulse rated of inverter	16 kHz
Generic type of power control	PQ control
Software version	DSP: V000B000D072, ARM: V000B030D010, EMS: V000B130D010

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Unit Certificate			
<b>Manufacturer</b>	Shenzhen Kstar New Energy Company Limited		
<b>Power generation unit type</b>	Energy Storage Inverter, type 2		
<b>Technical data</b>	Rated active power:	KAC125DH	125000 W
		KAC100DH	100000 W
	Rated voltage:	230/400 V <sub>AC</sub> , 3W+N+PE	
	Nominal frequency:	50 Hz	
<b>Network connection rule</b>	VDE-AR-N 4110:2023-09 "TCR Medium-voltage" Technical requirements for the connection and operation of customer installations to the medium voltage network		
<b>Certification program</b>	FGW Technical guideline No 8 (Revision 9)		
<b>Standards/guidelines which are also applicable</b>	FGW Technical guideline No 3 (Revision 26)		
	FGW Technical guideline No 4 (Revision 10)		
The power generating unit designated above meets the requirements of the VDE application guide listed above. The following restrictions and deviations apply: The computer simulation model is validated with the built environment DigSilent Powerfactory 2023 SP4 (x64) and with the identity number: 1) For the model KAC125DH MD5 code: d2d410e6de1d6b1528b29f87e448e70c 2) For the model KAC100DH MD5 code: a2b505b941779491373e1ca8f4929dbe The integrated voltage/frequency protection is provided but without test terminal strips for function tests on-site for power generation system according to Clause 6.3.4.5 of VDE-AR-N 4110:2023. It should be considered during the planning of power generation system. The manufacturer has provided proof of certification of the quality management system of his production facility in accordance with ISO 9001.			
The certificate includes the following: <ul style="list-style-type: none"> <li>– technical data of the power generating unit, the auxiliary equipment used and the software version used (See Page 2 to 3);</li> <li>– schematic set-up of the power generation unit (See Page 5);</li> <li>– summarized information on the properties of the power generating unit (Technical report 64.290.24.30827.01 for the full evaluation according to FGW TR8 guideline).</li> </ul>			
<b>Certificate expiry date</b>	2030-12-18		

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Schematic design of the power generation unit

