ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

Compliance Document

No. D 075386 0229 Rev. 00

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** **(Hybrid Inverter with storage battery system)**
Model(s):	**Inverter model: KAC50DP** **Battery model: BC100DE**
Parameters:	See page 2
Tested according to:	CEI 0-21:2022 CEI 0-21:2022/V1:2022

This Compliance document confirms the compliance with the listed standards on a voluntary basis. It refers only to the sample submitted for testing and certification and does not certify the quality or safety of the serial products. For details see: www.tuvsud.com/ps-cert

Test report no.: 64290233039401

Date, 2023-09-28

(Billy Qiu)

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Parameters:

Model:	KAC50DP
PV input parameter	
Maximum input voltage	1000 Vd.c.
MPPT voltage range	350~800 Vd.c.
MPPT voltage range (full load)	667~750 Vd.c.
Maximum input current	3*36 Ad.c.
PV I_{SC}	3*40 Ad.c.
Maximum input power	75000 W
Battery input/output parameter	
Battery type	LiFePO4
Input voltage range	350~750 Vd.c.
Rated voltage	512 Vd.c.
Maximum input/output voltage	750 Vd.c.
Maximum charging current	2*55 Ad.c.
Maximum charging power	55000 W
Maximum discharging current	2*55 Ad.c.
Maximum discharging power	55000 W
Grid parameter	
Rated input/output voltage	230/400 Va.c., 3/N/PE
Rated input/output frequency	50 Hz
Maximum input current	80 Aa.c.
Maximum input active power	50000 W
Maximum input apparent power	55000 VA
Rated output current	72 Aa.c.
Maximum continuous output current	80 Aa.c.
Rated output active power	50000 W
Maximum output active power	50000 W
Maximum output apparent power	55000 VA
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)
Ambient temperature parameter	
Operation temperature range	-25°C to +60°C
Storage temperature range	-40°C to +70°C

Battery model parameters see below pages 4:

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	The following generators meet the requirements of CEI 0-21:2022	
Section A	Manufacturer	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
	Equipment type	Energy Storage Inverter with storage battery system
	Brand	Kstar
	Number of phase	☐ Single phase ☒ Three phase Frequency: 50 Hz Voltage: 230/400 Va.c.
	Primary energy used	☒ Solar ☒ Storage ☐ Wind ☐ Hydroelectric ☐ CHP ☐ Other:
	Generator model	KAC50DP
	Rated active power output to Grid	50000 W
	Maximum apparent power output to Grid	55000 VA
	The generator:	☒ is suitable for installation in systems with an output power of more than 11.08 kW ☒ is capable of limiting Idc to 0.5% of rated current: ☒ uses a DC-sensitive protection function ☐ uses a transformer operating at mains frequency
Section C	Characteristics of inverter(s)	
	Model of inverter	KAC50DP
	Manufacturer of inverter	Shenzhen Kstar New Energy Company Limited
	Firmware version	V000B000D001
	Rated power of inverter (P_{NINV})	50000 W

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Section E	Characteristics of the Storage System (SdA)	
	Inverter forming storage system	
	Inverter manufacturer	Shenzhen Kstar New Energy Company Limited
	Inverter model	KAC50DP
	Battery forming storage system	
	Battery manufacturer	Shenzhen Kstar New Energy Company Limited
	Battery model	BC100DE
	Capacity of battery[kWh]	102.4 (with 2x battery units in parallel)
	Remark: The Storage System parameters are referred to the report no: 64.290.23.30394.01	
	Type	☒ Bidirectional ☐ Monodirectional
	Batteries that can be used with the above static converters	
	Brand	Kstar
	Technology	LiFePO4
	Models	BC100DE
	CUS module (kWh)	204.8 (with 2 × battery system in parallel, each battery system include total 20 battery module BC-PACK-5.1-16S-100A (2P10S) in series)
	BMS firmware version	BAU V3001.31.12.0 BCU V3301.21.12.0 CSU V101.11.0
	Number of modules	2 × battery system in parallel, each battery system include total 20 battery module BC-PACK-5.1-16S-100A (2P10S) in series
	Note	Batteries are not contained in the inverter and should be installed according to local regulations and in accordance with manufacturer's instruction.
Section I	References of the laboratories that performed the tests and their test reports (RdP)	
	Selected method	☒ Tests performed by an accredited laboratory
	Test Reports (RdP)	Test report according to Annex Bbis: 64.290.23.30394.01
	Issued by	Testing lab: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch
	Accreditation No.	D-PL-19065-01-01
	Accreditation body ref.	DAkkS
Section M	Reference of the certification body	
	Certification Body	TÜV SÜD Product Service GmbH
		DAkkS accreditation certificate D-ZE-11321-01-00 according to DIN EN ISO/IEC 17065:2013

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