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Product Service

Compliance Document

No. D 075386 0211 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 models: E8KT, E10KT, E12KT**
Battery modes: BluE-PACK-5.1-16S-100A-F, BluE-PACK-5.1-16S-100A-N

Parameters: See page 2

Tested according to: CEI 0-21:2022

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.: 64290223106201

Date, 2023-04-06

(Billy Qiu)

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Product Service

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Parameters:

Model:	E8KT	E10KT	E12KT
PV input parameter			
Maximum input voltage	1100 Vd.c.		
MPPT voltage range	140~1000 Vd.c.		
MPPT voltage range (full load)	380~850 Vd.c.	420~850 Vd.c.	480~850 Vd.c.
Maximum input current	2*15 Ad.c.		
PV I_{SC}	2*20 Ad.c.		
Battery input/output parameter			
Battery type	Lithium		
Input voltage range	44~58 Vd.c.		
Maximum input/output voltage	58 Vd.c.		
Maximum charging current	160 Ad.c.		
Maximum charging power	8000 W		
Maximum discharging current	160 Ad.c.	200 Ad.c.	
Maximum discharging power	8000 W	10000 W	
Grid parameter			
Rated input/output voltage	3/N/PE, 230/400 Va.c.		
Rated input/output frequency	50 Hz		
Maximum input current	25 Aa.c.		
Maximum input active power	16000 W	17800 W	
Maximum input apparent power	16000 VA	17800 VA	
Maximum input active power from grid to battery	8600 W		
Rated output current	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
Maximum continuous output current	12.8 Aa.c.	16.0 Aa.c.	19.2 Aa.c.
Rated output active power	8000 W	10000 W	12000 W
Maximum output active power	8000 W	10000 W	12000 W
Maximum output apparent power	8800 VA	11000 VA	13200 VA
Maximum output active power from battery to grid (without PV input)	7500 W	9300 W	
Power factor	0.9 inductive(under-excited) to 0.9 capacitive(over-excited)		
Ambient temperature parameter			
Operation temperature range	-25°C to +40°C		
Storage temperature range	-40°C to +70°C		

Battery model parameters see below page 4. For more detail parameters, please see report pages 5 to 10.

Product Service

Compliance Document

No. D 075386 0211 Rev. 00

	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 Indus-trial 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: 50Hz Voltage: 230V/400V		
	Primary energy used	☒ Solar ☒ Storage ☐ Wind ☐ Hydroelectric ☐ CHP ☐ Other:		
	Generator model	E8KT	E10KT	E12KT
	Rated active power output to Grid	8000 W	10000 W	12000 W
	Maximum apparent power output to Grid	8800 VA	11000 VA	13200 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 B	Characteristics of the interface protection system			
	Manufacturer	Shenzhen Kstar New Energy Company Limited The 9th Floor, R&D Building, Kstar Industrial Park, Guangming Hi-tech Indus-trial Zone, 518107 Shenzhen, Guangdong Province, PEOPLE'S REPUBLIC OF CHINA		
	Model	E8KT, E10KT, E12KT		
	Type	☒ Integrated ☐ Not integrated Remark: The application of Model E12KT in system may exceed 11.08kW on grid connection point, external interface protection system is required according to final installation requirement.		
Section C	Characteristics of inverter(s)			
	Model of inverter	E8KT	E10KT	E12KT
	Manufacturer of inverter	Shenzhen Kstar New Energy Company Limited		
	Firmware version	V1.0.0		
	Rated power of inverter (P_{NINV})	8000 W	10000 W	12000 W

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Product Service

Compliance Document

No. D 075386 0211 Rev. 00

Section E	Characteristics of the Storage System (SdA)				
	Inverter forming storage system				
	Inverter manufacturer	Shenzhen Kstar New Energy Company Limited			
	Inverter model	E8KT	E10KT	E12KT	
	Battery 1 forming storage system				
	Battery manufacturer	Shenzhen Kstar New Energy Company Limited			
	Battery model	BluE-PACK-5.1-16S-100A-F			
	Capacity of battery[kWh]	10.2 (With 2x battery units in parallel)	20.4 (With 4x battery units in parallel)	30.6 (With 6x battery units in parallel)	40.8 (With 8x battery units in parallel)
	Battery 2 forming storage system				
	Battery manufacturer	Shenzhen Kstar New Energy Company Limited			
	Battery model	BluE-PACK-5.1-16S-100A-N			
	Capacity of battery[kWh]	10.2 (With 2x battery units in parallel)	20.4 (With 4x battery units in parallel)	30.6 (With 6x battery units in parallel)	40.8 (With 8x battery units in parallel)
	Remark: The Storage System parameters are referred to the report no: 64.290.22.31062.01				
	Type	☒ Bidirectional ☐ Monodirectional			
	Batteries that can be used with the above static converters				
	Brand	Kstar			
	Technology	Lithium-ion			
	Models	BluE-PACK-5.1-16S-100A-F	BluE-PACK-5.1-16S-100A-N		
	CUS module (kWh)	10.2 (with 2*battery module)	10.2 (with 2*battery module)		
	BMS firmware version	P1755V100-1757V1.13			
	Number of modules	2/4/6/8 pieces	2/4/6/8 pieces		
	Note	Batteries are not contained in the inverter and should be installed according to local regulations and in accordance with manufacturer's instruction.			

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Compliance Document

No. D 075386 0211 Rev. 00

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 A and Bbis: 64.290.22.31062.01
	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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