

Compliance Document

No. D 115067 0048 Rev. 01

Holder of Certificate:	Xiamen Kehua Digital Energy Tech Co., Ltd. Room 208-38, Hengye Building No. 100 Xiangxing Road Torch High-tech Zone (Xiang'an) Industrial Zone 361115 Xiamen PEOPLE'S REPUBLIC OF CHINA
Product:	Converter (Hybrid Inverter with storage battery system)
Model(s):	Inverter models: iStoragE3 5K, iStoragE3 6K, iStoragE3 8K, iStoragE3 10K, iStoragE3 12K; Storage battery system: iStoragE B5-S2 (1-8pieces)
Parameters:	See page 2-3
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.:	64290223111402

Date, 2023-06-09



(Billy Qiu)

Compliance Document

No. D 115067 0048 Rev. 01

Parameters:

Inverter model	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
PV terminal parameters					
Vmax. PV	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.	1000 Vd.c.
MPPT Voltage Range	150 Vd.c.~ 900 Vd.c.	150 Vd.c.~ 900 Vd.c.	150 Vd.c.~ 900 Vd.c.	150 Vd.c.~ 900 Vd.c.	150 Vd.c.~ 900 Vd.c.
MPPT Voltage Range (full load)	450 Vd.c.~ 750 Vd.c.	450 Vd.c.~ 750 Vd.c.	450 Vd.c.~ 750 Vd.c.	450 Vd.c.~ 750 Vd.c.	450 Vd.c.~ 750 Vd.c.
Max. continuous PV input current	16 Ad.c./ 16 Ad.c.	16 Ad.c./ 16 Ad.c.	27 Ad.c./ 16 Ad.c.	27 Ad.c./ 16 Ad.c.	27 Ad.c./ 16 Ad.c.
Isc PV	20 Ad.c./ 20 Ad.c.	20 Ad.c./ 20 Ad.c.	34 Ad.c./ 20 Ad.c.	34 Ad.c./ 20 Ad.c.	34 Ad.c./ 20 Ad.c.
Max. continuous PV input power	23000 W	23000 W	29000 W	29000 W	29000 W
Battery terminal parameter					
Battery type	LFP	LFP	LFP	LFP	LFP
Voltage range	650 Vd.c.~ 900 Vd.c.	650 Vd.c.~ 900 Vd.c.	650 Vd.c.~ 900 Vd.c.	650 Vd.c.~ 900 Vd.c.	650 Vd.c.~ 900 Vd.c.
Rated voltage	720 Vd.c.	720 Vd.c.	720 Vd.c.	720 Vd.c.	720 Vd.c.
Maximum charge/discharge current	24.6 Ad.c.*/ 8.5 Ad.c.	24.6 Ad.c.*/ 10.2 Ad.c.	24.6 Ad.c.*/ 13.5 Ad.c.	24.6 Ad.c.*/ 16.9 Ad.c.	24.6 Ad.c.*/ 18.5 Ad.c.
Maximum charge current from grid to battery	8.5 Ad.c.	10.2 Ad.c.	13.5 Ad.c.	16.9 Ad.c.	18.5 Ad.c.
Maximum charge/discharge power	16000 W*/ 5500 W	16000 W*/ 6600 W	16000 W*/ 8800 W	16000 W*/ 11000 W	16000 W*/ 12000W
Maximum charge power from grid to battery	5500 W	6600 W	8800 W	11000 W	12000 W
Grid terminal parameter					
Rated voltage	230/400 Va.c., 3W+N+PE				
Rated frequency	50 Hz				
Rated current output to Grid	7.2 Aa.c.	8.7 Aa.c.	11.6 Aa.c.	14.5 Aa.c.	17.4 Aa.c.
Maximum continuous current output to Grid	7.9 Aa.c.	9.6 Aa.c.	12.8 Aa.c.	16.0 Aa.c.	17.4 Aa.c.
Rated active power output to Grid	5000 W	6000 W	8000 W	10000 W	12000 W
Maximum apparent power output to Grid	5500 VA	6600 VA	8800 VA	11000 VA	12000 VA
Maximum continuous current from Grid	14.4 Aa.c.	17.4 Aa.c.	23.2 Aa.c.	26.0 Aa.c.	26.0 Aa.c.

Compliance Document

No. D 115067 0048 Rev. 01

Maximum apparent power from Grid	10000 VA	12000 VA	16000 VA	18000 VA	18000 VA
Power factor (Cos phi), adjustable	0.8 inductive(under-excited) to 0.8 capacitive(over-excited)				
General					
Operation temperature range	-20 °C to 50 °C				
Storage temperature range	-40 °C to 70 °C				
Remark: *: The maximum charge current (24.6 Ad.c.) and power (16000 W) only in PV+Grid supply to battery.					

Battery model parameters see below page 5

Compliance Document

No. D 115067 0048 Rev. 01

The following generators meet the requirements of CEI 0-21:2022						
Section A	Manufacturer	Xiamen Kehua Digital Energy Tech Co., Ltd. Room 208-38, Hengye Building, No. 100 Xiangxing Road, Torch High-tech Zone, (Xiang'an) Industrial Zone 361115 Xiamen, PEOPLE'S REPUBLIC OF CHINA				
	Equipment type	Converter (Hybrid Inverter with storage battery system)				
	Brand	Kehua				
	Number of phase	☐ Single phase ☒ Three phase Frequency: 50Hz Voltage: a.c. 230V/400V				
	Primary energy used	☒ Solar ☒ Storage ☐ Wind ☐ Hydroelectric ☐ CHP ☐ Other:				
	Generator model	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
	Rated active power output to Grid	5000 W	6000 W	8000 W	10000 W	12000 W
	Maximum apparent power output to Grid	5500 VA	6600 VA	8800 VA	11000 VA	12000 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	Xiamen Kehua Digital Energy Tech Co., Ltd. Room 208-38, Hengye Building, No. 100 Xiangxing Road, Torch High-tech Zone, (Xiang'an) Industrial Zone 361115 Xiamen, PEOPLE'S REPUBLIC OF CHINA				
	Model	iStoragE3 5K, iStoragE3 6K, iStoragE3 8K, iStoragE3 10K, iStoragE3 12K;				
	Type	☒ Integrated ☐ Not integrated				
Section C	Characteristics of inverter(s)					
	Model of inverter	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
	Manufacturer of inverter	Xiamen Kehua Digital Energy Tech Co., Ltd.				
	Firmware version	V1				
	Rated power of inverter (PNINV)	5000 W	6000 W	8000 W	10000 W	12000 W

Compliance Document

No. D 115067 0048 Rev. 01

Section E	Characteristics of the Storage System (SdA)					
	Inverter forming storage system					
	Inverter manufacturer	Xiamen Kehua Digital Energy Tech Co., Ltd.				
	Inverter model	iStoragE3 5K	iStoragE3 6K	iStoragE3 8K	iStoragE3 10K	iStoragE3 12K
	Battery forming storage system					
	Battery manufacturer	Xiamen Kehua Digital Energy Tech Co., Ltd.				
	Battery model	iStoragE B5-S2				
	Capacity of battery[kWh]	5 (with 1*battery unit)	10 (with 2*battery unit)	15 (with 3*battery unit)	20 (with 4*battery unit)	
		25(with 5*battery unit)	30(with 6*battery unit)	35(with 7*battery unit)	40(with 8*battery unit)	
	Remark: The Storage System parameters are referred to the report no: 64.290.22.31114.02					
	Type	☒ Bidirectional ☐ Monodirectional				
	Batteries that can be used with the above static converters					
	Brand	Kehua				
	Technology	Li-Ion				
	Models	iStoragE B5-S2				
	CUS module (kWh)	5 (with 1*battery module)				
	BMS firmware version	V1				
	Number of modules	1-8 pieces				
	Note	Batteries are not contained in the inverter and should be installed according to local regulations and in accordance with manufacturer's instruction.				
	Section I	References of the laboratories that performed the tests and their test reports (RdP)				
Selected method		☒ Tests performed under the supervision of a certification body				
Test Reports (RdP)		1) Test report according to Annex A & Bbis: 64.290.22.31114.02				
Issued by		Testing lab: TÜV SÜD Certification and Testing (China) Co., Ltd. Guangzhou Branch				
Accreditation No.		D-PL-19065-01-00				
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				