

Unit Certificate / Einheitenzertifikat

SGS

Certificate holder / Inhaber des Zertifikats

Jackery Technology GmbH
Adlerstraße 72, 40211 Düsseldorf, Germany

Date of Original Issue / Datum der ursprünglichen Ausgabe : 2024-04-19

Date of Last Revision / Datum der letzten Überarbeitung : --

Date of Expiry / Verfallsdatum : 2027-04-18

Certificate number / Zertifikatsnummer : PCS-24-1039

Brand / Trademark / Warenzeichen

: **Jackery**



It is certified that the product / Es ist zertifiziert, dass das Produkt

Models / Modelle

: JAKS-IN1K2-BA2K-GEA1, JAKS-IN1K2-BA2K-GEA2

Type of generator / Generatortyp

: Hybrid Inverter

Technical Data / Technische Daten

: See page 3

Test Laboratory / Testlabor

: SGS-CSTC Standards Technical Services Co., Ltd. Suzhou Branch

Test Report (s) / Testbericht(e)

: SUEE240300002951

Test Standard(s) / Prüfnorm(en)

: VDE-AR-N 4105:2018-11 + Correction 1:2020

In compliance with the Network connection rule / In Übereinstimmung mit der Anwendungsregel:

VDE-AR-N-4105:2018-11 + Correction 1:2020-10 "Generators connected to the low-voltage distribution network / Erzeugungsanlagen am Niederspannungsnetz" Technical minimum requirements for connection and parallel operation of power generation systems connected to the low-voltage network / Technische Mindestanforderungen für Anschluss und Parallelbetrieb von Erzeugungsanlagen am Niederspannungsnetz

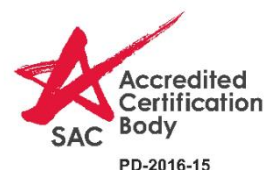
Based on tests requirements defined in / Basierend auf Tests Anforderungen definiert in:

VDE V 0124-100: 2020-06 "Network integration of power generation systems – Low voltage / Netzintegration von Erzeugungsanlagen" Test requirements for power generation units intended for connection to and parallel operation on the low-voltage network / Niederspannung – Prüfanforderungen an Erzeugungseinheiten, vorgesehen zum Anschluss und Parallelbetrieb am Niederspannungsnetz

This is to certify that the product has been tested and was found to comply with the requirements of the standard(s). / Hiermit wird bescheinigt, dass das Produkt getestet wurde und den Anforderungen der Norm(en) entspricht.

The above-mentioned product is certified according to the requirements of ISO/IEC 17065:2012. / Das oben genannte Produkt ist gemäß den Anforderungen der ISO/IEC 17065:2012 zertifiziert.

Christopher Hee
Certification Officer



SGS Testing & Control Services Singapore Pte Ltd
30 Boon Lay Way #03-01 Singapore 609957



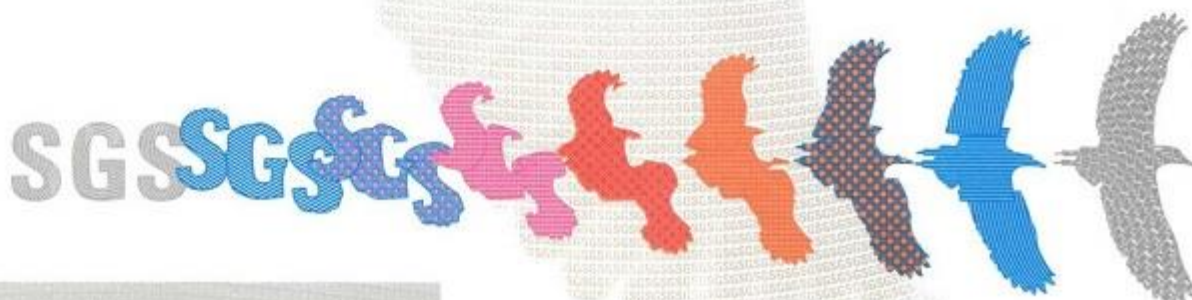
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APPENDIX(ANHANG)

Certificate number / Zertifikatsnummer: PCS-24-1039

E.5 Requirements for the test report for power generation units <i>E.5 Prüfbericht „Netrückwirkungen“ für Erzeugungseinheiten mit einem Eingangsstrom > 75 A (*)</i>												
Extract from test report for unit certificate "Determination of electrical properties" Auszug aus dem Prüfbericht für Erzeugungseinheiten Bestimmung der elektrischen Eigenschaften"										No. SUEE240300002951		
System Manufacturer Anlagenhersteller:				Shenzhen Hello Tech Energy Co., Ltd.								
Manufacturer indications: Herstellerangaben:				Type of system: Anlagenart:		Hybrid inverter						
				Max. active power PEmax max. Wirkleistung PEmax		JAKS-IN1K2-BA2K-GEA1						
						1200 W						
				Rated voltage: Bemessungsspannung		L/N/PE, 230 Vac						
Measuring period: 2024-01-29 to 2024-04-11												
Flicker		Network impedance angle ψ_k Netzimpedanzwinkel ψ_k					32°					
		Initial flicker factor C_f Anlagenflickerbeiwert C _f					33%P _n		66%P _n		100%P _n	
							7.875		7.875		8.500	
Model: ESS-1KW-A												
Harmonics Single-Phase Oberschwingungen												
Active power P/P _n [%] Wirkleistung P/P _n [%]	0	10	20	30	40	50	60	70	80	90	100	
Ordinal number Ordnungszahl	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	I(%)	
2	0.002	0.005	0.004	0.004	0.005	0.004	0.004	0.003	0.003	0.002	0.003	
3	0.002	0.009	0.022	0.031	0.039	0.045	0.049	0.054	0.057	0.060	0.035	
4	0.004	0.003	0.004	0.004	0.005	0.004	0.005	0.004	0.004	0.005	0.003	
...												
40	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	

(*) the inverter outputs a current <75 A, thus Inter-harmonics and High Frequencies are not evaluated in accordance with the standard



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Full list of product references and nominal characteristics / Vollständige Liste der Produktreferenzen und nominalen Merkmale:

Model	JAKS-IN1K2-BA2K-GEA1, JAKS-IN1K2-BA2K-GEA2
PV Input	
Number of MPPT Trackers	2
Max. Input Voltage	60 Vdc
DC Input Voltage (PV)	17.5 Vdc ~60 Vdc
MPPT Voltage Range	17.5 Vdc ~ 60 Vdc
Max. Input Current	28A
Max. Short Current	42A
DC Input	
DC Input Voltage (Car)	11.5 Vdc ~ 17.5 Vdc
Max. Input Current	8A
AC Output (On-Grid)	
Nominal Grid Voltage	230 Vac
Nominal Grid Frequency	50 Hz
Max. Output Current	5.22 A
Max. Output Power	1200 W
Output Power Factor	>0.99(0.8ind-0.8cap)
AC Output (Load)	
Nominal Grid Voltage	230 Vac
Nominal Grid Frequency	50 Hz
Max. Output Current	5.22 A
Max. Output Power	1200 W
AC Input	
Nominal Grid Voltage	230 Vac
Nominal Grid Frequency	50 Hz
Max. Output Current	7.83 A
Max. Output Power	1800 W
Battery	
Battery type	LiFePO4
Battery voltage range	46.4 Vdc ~ 58.4 Vdc
Normal Battery voltage	51.2Vdc
Total/Rated Capacity	40Ah / 38Ah
Max. charge & discharge current	40A
General Data	
Operating temperature range	-20 °C ~ +55 °C
Protection degree	IP65
Protective class	Class I
Weight	29.1kg
Dimensions	441 mm × 350 mm × 378 mm
Topology	Transformer



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