Certificate

Shenzhen Growatt New Energy Co., Ltd.
4-13/F. Building A, Sino-German(Europe) Industrial Park,
Hangcheng Ave, Bao'an District, Shenzhen,
China

Type of unit	Balcony Solar Storage (Type 2)	
Description of unit	NEXA 2000	
Technical data	Detail see the ANNEX	
Certification scheme	P30VA01 Rev. 09/11.24	TÜV NORD: Certification Process for Grid Integration Certification
Standard	VDE-AR-N 4105 2018-11	Generators connected to the low-voltage distribution network- Technical requirements for the connection to and parallel operation with low- voltage distribution networks
Additional standards	DIN VDE V 0124-100 2020-06	Grid integration of generator plants - Low-voltage - Test requirements for generator units to be connected to and operated in parallel with low-voltage distribution networks

The generating unit complies with the requirements contained in the certification programmes and standards and directives listed above, with restrictions. Further details and technical data can be found in the annex 1, consisting of 4 pages.

Certificate Registration No. 44 798 23053451 Valid from 2025-04-28
Audit Report No. 3539 7001 Type 1a Certificate

Essen, 2025-04-28

Certification Body at TÜV NORD CERT GmbH

TÜV NORD CERT GmbH
Am TÜV 1, 45307 Essen
www.tuev-nord-cert.com

DAkkS Deutsche Akkreditierungsstelle D-ZE-12007-01-00

Annex

to Certificate Registration No. 44 798 23053451

VDE-AR-N 4105: 2018-11
DIN VDE V 0124-100: 2020-06

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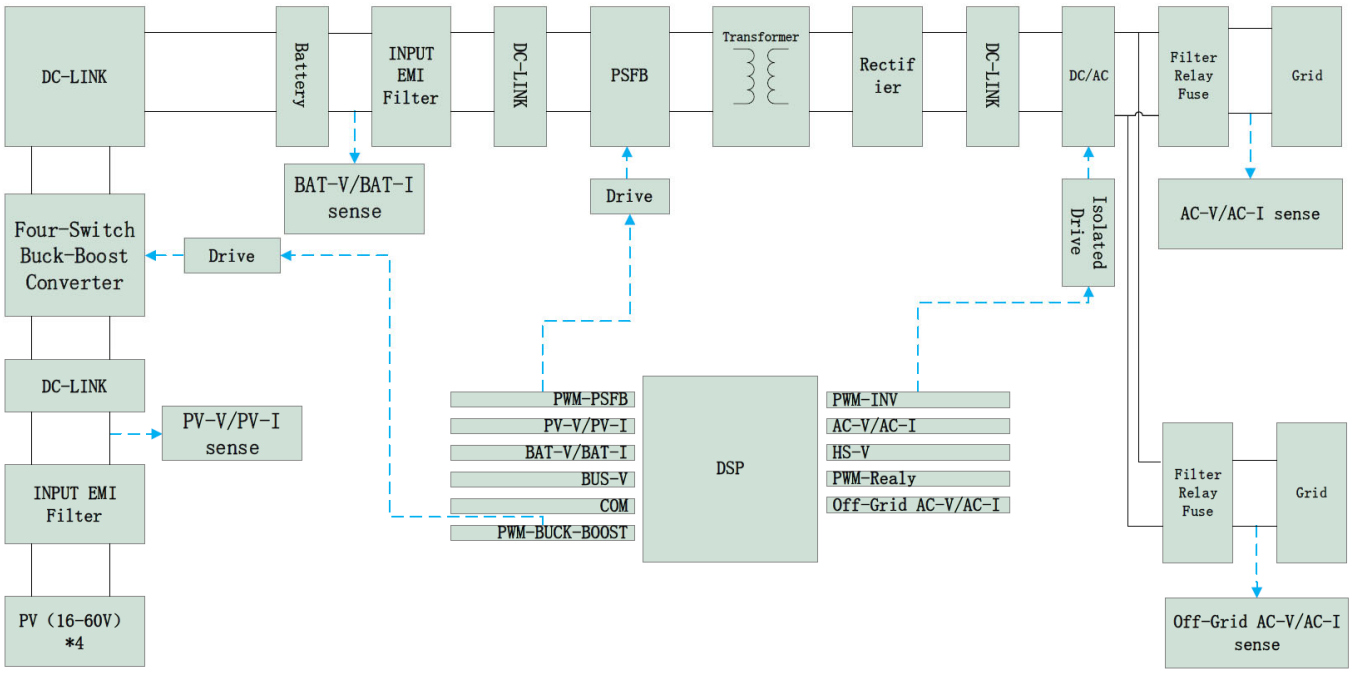
Schematic structure



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VDE-AR-N 4105: 2018-11
DIN VDE V 0124-100: 2020-06

Technical Data

General information

General	
Type of EZE	Type 2 / Balcony Solar Storage
Designation	NEXA 2000
On-grid variables	
Rated apparent power S_{rE}	800 VA 800 VA(max)
Rated effective power P_{rE}	800 W 800 W(max)
Max. effective power P_{Emax}	799.49 W (0.999 P_{Emax})
Max. apparent power S_{Emax}	807.52 VA (1.001 S_{Emax})
Rated voltage U_r	220/230/240V, L+N+PE
Rated current I_r	3.5 A
Initial short-circuit alternating current I''_k	4.0 A
Reactive power adjustment range cos φ	>0.99 (-0.8~+0.8)
Rated frequency f_n	50/60 Hz
Battery Variables	
Battery type	LFP
Battery Rated Voltage	51.2 V
Max. Charge/	40 A

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Discharge Current	
PV – Input Variables	
Min. MPP voltage	16 V
Max. MPP voltage	60 V
Max. DC input voltage	60 V
Number of MPPT	4
Max. input current	4*20A
Isc PV	4*25A
DC – Input variables	
Type /IGBT module	AO3400A
Quantity DC Link Capacitor	4
Clock frequency	8MHz
Type of power control	PWM
Max. Output current (only for IGBT)	5.7A
Software versions	SW-V1.0
Generation unit Control	
Manufacturer	Shenzhen Growatt New Energy Co., Ltd.
Software version	SW-V1.0
Protection device	
Manufacturer	Xiamen Hongfa Electroacoustic Co., Ltd
Type	Integrated guard
Switch-off unit (AC)	HF140FF
Software versions	SW-V1.0

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Notes	The manufacturer has proven for the manufacturing facility of the Unit a certification of its quality management system according to ISO 9001. The manufacturer confirmed in a manufacturer declaration that the certification of the management system will be valid parallel to the period of this unit certification. Additional technical data, according to VDE-AR-N 4105, are given in the assessment report (appendix A1). The use of other firmware and software version numbers is allowed if the differences are proved and confirmed by TÜV NORD CERT GmbH beforehand. Validity of a new software version is attested by written confirmation and becomes part of the certificate. The inverter has an integrated tie breaker and no central tie breaker. The specifications of VDE-AR-N 4105 for central NA protection in combinations with central or integrated tie switches must be observed and implemented at the level of the generating plant.
Restrictions	Please note that the Balcony Solar Storage does not have a display. As a result, the protection settings of the decoupling protection and the connection conditions cannot be read or set via a display on the component. As a result, a readout function must be implemented on the PGU.
Appendix to the certificate	A1 Assessment report no. 35397001 version V1.0 A2 Extract from the test report (according to VDE-AR-N 4105 annex E.7) Dongguan BALUN Testing Technology Co., Ltd., extract No. BL-DG2530130-203 A1 from Mar. 07, 2025 A3 Extract from the test report (according to VDE-AR-N 4105 annex E.5) Dongguan BALUN Testing Technology Co., Ltd., extract No. BL-DG2530130-203 A2 from Mar. 07, 2025 A4 Manufacturer declaration for NEXA 2000 from Mar. 31, 2025

End of the List

Essen, 2025-04-28

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