

Certificate of compliance

Applicant: NingBo Deye Inverter Technology Co., Ltd.

No. 26 South YongJiang Road, Dagi, Beilun, NingBo

China

Product: Photovoltaic inverter

Model: SUN-18K-G05, SUN-20K-G05, SUN-22K-G05,

SUN-23K-G05, SUN-25K-G05, SUN-18K-G05P3-EU-CM2, SUN-20K-G05P3-EU-CM2, SUN-22K-G05P3-EU-CM2, SUN-25K-G05P3-EU-CM2

Inverter for three-phase parallel connection to the public grid. The network monitoring and disconnection device is an integral part of the above-mentioned model.

Applied rules and standards:

Dubai Electricity & Water Authority

Standards for distributed renewable resources generators connected to the distribution network Version 3.0 December 2023

Appendix D.3 Inverters for Low voltage connected RRGUs

At the time of issue of this certificate, the safety concept of an aforementioned representative product corresponds to the valid safety specifications for the specified use in accordance with regulations.

Report number: SH-P25071652

Certificate number: U25-0702

Certification body

Date of issue:

Certification Program: NSOP-0032-DEU-ZE-V10

2025-07-30

Accreditation

Domenik Koll Head of Energy Systems Germany



Accredited certification body by Deutsche Akkreditierungsstelle GmbH (DAkkS) according to ISO/IEC 17065. The accreditation is valid only for the scope listed in the annex of the accreditation certificate D-ZE-12024-01-00. The Deutsche Akkreditierungsstelle GmbH (DAkkS) is signatory of the multilateral arrangements of EA, ILAC and IAF for mutual recognition.

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Extract from test report ASUE-ESH-P25071652 issued by a testing laboratory accredited by "Deutsche Akkreditierungsstelle GmbH (DAkkS)" according to ISO/IEC 17025. The accreditation is only valid for the scope listed in the annex of the accreditation certificate "D-PL-12024-03-04".

Manufacturer	NingBo Deye Inverter Technology Co., Ltd. No. 26 South YongJiang Road, Daqi, Beilun, NingBo China				
	1				
Product type	Photovoltaic inverter				
		1			
Static converter model	SUN-18K-G05	SUN-20K-G05	SUN-22K-G05	SUN-23K-G05	
Input DC (photovoltaic)		1			
MPP voltage range [V]	200-1000	200-1000	200-1000	200-1000	
Max. input voltage [V]	1100	1100	1100	1100	
Max. input current per MPPT [A]	26+26	26+26	26+26	26+26	
Output AC					
Rated AC voltage [V]	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	
Rated output current [A]	26,1	29,0	31,9	33,4	
Max. output current [A]	28,7	31,9	35,1	36,7	
Nom. converter output (P _{NINV}) [kW]	18,0	20,0	22,0	23,0	
Max. apparent power [kVA]	19,8	22,0	24,2	25,3	
			1	<u> </u>	
Static converter model	SUN-25K-G05	SUN-18K-G05P3-EU- CM2	SUN-20K-G05P3-EU- CM2	SUN-22K-G05P3-EU CM2	
Input DC (photovoltaic)					
MPP voltage range [V]	200-1000	200-1000	200-1000	200-1000	
Max. input voltage [V]	1100	1100	1100	1100	
Max. input current per MPPT [A]	26+26	26+26	26+26	26+26	
Output AC					
Rated AC voltage [V]	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz	
Rated output current [A]	36,2	26,1	29,0	31,9	
Max. output current [A]	39,8	28,7	31,9	35,1	
Nom. converter output (P _{NINV}) [kW]	25,0	18,0	20,0	22,0	
Max. apparent power [kVA]	27,5	19,8	22,0	24,2	
Static converter model	SUN-23K-G05P3-EU- CM2	SUN-25K-G05P3-EU- CM2			
Input DC (photovoltaic)		,			
MPP voltage range [V]	200-1000	200-1000			
Max. input voltage [V]	1100	1100			
Max. input current per MPPT [A]	26+26	26+26			
Output AC					
Rated AC voltage [V]	3L/N/PE, 230/400, 50Hz	3L/N/PE, 230/400, 50Hz			
Rated output current [A]	33,4	36,3			



Annex certificate of conformity No. U25-0702

Extract from test report ASUE-ESH-P25071652 issued by a testing laboratory accredited by "Deutsche Akkreditierungsstelle GmbH (DAkkS)" according to ISO/IEC 17025. The accreditation is only valid for the scope listed in the annex of the accreditation certificate "D-PL-12024-03-04".

Max. output current [A]	36,7	39,9	
Nom. converter output (P _{NINV}) [kW]	23,0	25,0	
Max. apparent power [kVA]	25,3	27,5	

Note:

- a) The device is able to limit the ldc to 0.5% of the nominal current.
- 1) The device is for systems up 400kW.

The inverters of NingBo Deye Inverter Technology Co., Ltd.have a maximum apparent power limit. In the case where a system should be able to reach in every working condition a determined power factor, it is necessary to set the maximum active power in such a way, that you can reach at any time the $\cos \varphi$ wanted.

The inverter is intended for outdoor application and provide an IP65 enclosure.

The inverter is able to keep the power derating smaller or equal to 25% of the rated power at an ambient temperature of 50°C.

Interface protection system and interface switch (Network and system protection "NS-protection")				
Type of protection	integrated NS-protection			
Assigned to generation unit type	SUN-18K-G05, SUN-20K-G05, SUN-22K-G05, SUN-23K-G05, SUN-25K-G05, SUN-18K-G05P3-EU-CM2, SUN-20K-G05P3-EU-CM2, SUN-22K-G05P3-EU-CM2, SUN-23K-G05P3-EU-CM2, SUN-25K-G05P3-EU-CM2			
Integrated interface switch	Type of switching equipment 1: Relay (Model AZSR143) Type of switching equipment 2: Relay (Model AZSR143)			
	Note: The output is switched off by the inverter bridge and two relay in series in each line and neutral.			
Firmware version	5512-0326			

Note

The settings of the interface protection are password protected adjustable.

In case the above stated generators are used with an external protection device, the protection settings of the inverters are to be adjusted according to the manufacturer's declaration.