

Applicant:	NingBo Deye Inverter Technology Co., Ltd. No. 26 South YongJing Road, Daqi, Beilun, NingBo, China										
Device Category:	Inverter										
Device Type:	Hybrid (PV with DC coupled Electricity Storage)										
Model(s):	SUN-3K-SG03LP1-EU SUN-5K-SG03LP1-EU	SUN-3.6K-SG03LP1-EU SUN-6K-SG03LP1-EU									
Trademark:											
Technical data:	Product family: SUN-3~6K-SG03LP1-EU (For further details see A.2 Technical data of the Generating Unit(s) on p.2)										
Software version:	Ver0108										
Grid connection code:	CEI 0-21: 2022 Technical reference rule for the connection of active and passive users to the LV electricity distribution networks of companies. Topology of the device, which this certificate is based on: <table border="1"><thead><tr><th>INTERFACE DEVICE</th><th>PROTECTION INTERFACE</th><th>STATIC ELECTRONIC INVERTER</th><th>ROTATING GENERATION MACHINE</th></tr></thead><tbody><tr><td>X</td><td>X</td><td>X</td><td></td></tr></tbody></table> Indicate with one x the field or fields to which the declaration refers. PHASE NUMBER: single-phase Note: The device is able to limit the Idc to 0.5% of the nominal current. The device is for plants of each power. 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-phi wanted.			INTERFACE DEVICE	PROTECTION INTERFACE	STATIC ELECTRONIC INVERTER	ROTATING GENERATION MACHINE	X	X	X	
INTERFACE DEVICE	PROTECTION INTERFACE	STATIC ELECTRONIC INVERTER	ROTATING GENERATION MACHINE								
X	X	X									
Test report no.:	221103BWA128-EG-IT-003 (2023-04-06)										

This verification confirms that the above-mentioned generating unit(s) with corresponding software meet the requirements of the referenced grid connection code at the time the tests were conducted.




Jack Shi

Sr. Project Manager

Annex to the Verification No.: 221103BWA128-EG-IT-C003

A.1 Revision history of the verification

Revision	Date	Changes	Status
0 (221103BWA128-EG-IT-C003)	2023-04-06	Initial issue	Active

A.2 Technical data of the Generating Unit(s)

Model	SUN-3K-SG03LP1-EU	SUN-3.6K-SG03LP1-EU
DC input (PV)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 ~ 450	
Input DC current [A]	max. 13	max. 13 / 13
Battery connection		
Battery voltage range [V]	48 (40-60)	
Battery charging and discharging current [A]	max. 70	max. 90
Battery charging and discharging power [kW]	3,3	3,96
AC connection		
Nominal output AC voltage [V]	230/400 (L + N + PE, 50 Hz)	
Output AC current [A]	max. 14,3	max. 17,2
Nominal active output power P _n [kW]	3,0	3,6
Max. apparent power [kVA]	3,3	3,96
Model	SUN-5K-SG03LP1-EU	SUN-6K-SG03LP1-EU
DC input (PV)		
Max. DC input voltage [V]	500	
Operating MPPT voltage range [V]	150 ~ 450	
Input DC current [A]	max. 13 / 13	
Battery connection		
Battery voltage range [V]	48 (40-60)	
Battery charging and discharging current [A]	max. 120	max. 135
Battery charging and discharging power [kW]	23,9	28,7
AC connection		
Nominal output AC voltage [V]	230/400 (L + N + PE, 50 Hz)	
Output AC current [A]	max. 21,7	max. 26,1
Nominal active output power P _n [kW]	5,0	6,0
Max. apparent power [kVA]	5,5	6,6
Software version	Ver0108	
Factory's name	NingBo Deye Inverter Technology Co., Ltd.	
Factory address	No. 26 South YongJing Road, Daqi, Beilun, NingBo, China	
Testing laboratory	Guangdong HuaChuang Technology Service Co., Ltd. Room 815, No.122, Houjie Road (West), Houjie Town, Dongguan City, Guangdong, 523960, P.R. China (Accredited acc. ISO/IEC 17025: A2LA Accreditation no. 5200.02)	
Testing location	Same as above	
Date(s) of performance of tests	2022-11-07 to 2023-03-30	

A.3 Batteries that can be used with the static converters listed above

Brand	V-TAC EXPORTS LIMITED
Technology	Secondary (Rechargeable) Lithium Battery
Model	VT48200B
CUS module [kWh]	7,68
Firmware version BMS	Ver:9.3
No. modules	1 ~ 15
Note	The batteries are not integrated in the converter and must be installed according to local regulations.