



**BUREAU
VERITAS**

Certificate of compliance

Applicant: NingBo Deye Inverter Technology Co., Ltd.
No. 26 South YongJiang Road, Daqi, Beilun, NingBo
China

Product: Photovoltaic inverter

Model: SUN-M60G4-EU-Q0
SUN-M80G4-EU-Q0
SUN-M100G4-EU-Q0
SUN-M60G4-EU-Q0-P
SUN-M80G4-EU-Q0-P
SUN-M100G4-EU-Q0-P
SUN-E60G4-EU-Q0
SUN-E80G4-EU-Q0
SUN-E100G4-EU-Q0

The device is designed to work as a generation unit of the type: **A**

Inverter for single-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:

EN 50549-1:2019

Requirements for parallel connection of installations with distribution networks - Part 1: Connection to an LV distribution network - Production of installations up to and including Type B

- 4.4 Normal operating range
- 4.5 Immunity to disturbances
- 4.6 Active response to frequency deviation
- 4.7 Power response to voltage variations and voltage changes
- 4.8 EMC and power quality
- 4.9 Interface protection
- 4.10 Connection and starting to generate electrical power
- 4.11 Ceasing and reduction of active power on set point
- 4.13 Requirements regarding single fault tolerance of interface protection system and interface switch

EN 50549-10:2022

Requirements for generating plants to be connected in parallel with distribution networks - Part 10: Tests for conformity assessment of generating units

Commission Regulation (EU) 2016/631 of 14 April 2016

Establishing a network code on requirements for grid connection of generators (NC RFG).
Type approval for generation units to use in Type A plants.

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: ASUE-ESH-P24010378-R2 **Certification Program:** NSOP-0032-DEU-ZE-V10

Certificate number: U25-0611 **Date of issue:** 2025-07-07

Certification body **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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Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016				
Manufacturer	NingBo Deye Inverter Technology Co., Ltd. No. 26 South YongJiang Road, Daqi, Beilun, NingBo China			
Product type	Photovoltaic inverter			
Static converter model	SUN-M60G4-EU-Q0	SUN-M80G4-EU-Q0	SUN-M100G4-EU-Q0	SUN-M60G4-EU-Q0-P
Input (PV DC)				
MPP voltage range [V]	25-55	25-55	25-55	25-55
Max. input voltage [V]	60	60	60	60
Max. input current [A]	13*2	13*2	13*2	18*2
Output (AC)				
Rated AC voltage [V]	230, L/N/PE, 50Hz	230, L/N/PE, 50Hz	230, L/N/PE, 50Hz	230, L/N/PE, 50Hz
Max. output current [A]	2,7	3,5	4,4	2,7
Nom. converter output (P _{NINV}) [W]	600	800	1000	600
Max. apparent power [VA]	600	800	1000	600
Static converter model	SUN-M80G4-EU-Q0-P	SUN-M100G4-EU-Q0-P	SUN-E60G4-EU-Q0	SUN-E80G4-EU-Q0
Input (PV DC)				
MPP voltage range [V]	25-55	25-55	25-55	25-55
Max. input voltage [V]	60	60	60	60
Max. input current [A]	18*2	18*2	15/15	15/15
Output (AC)				
Rated AC voltage [V]	230, L/N/PE, 50Hz	230, L/N/PE, 50Hz	L/N/PE, 230V, 50Hz	L/N/PE, 230V, 50Hz
Max. output current [A]	3,5	4,4	2,7	3,5
Nom. converter output (P _{NINV}) [W]	800	1000	600	800
Max. apparent power [VA]	800	1000	600	800
Static converter model	SUN-E100G4-EU-Q0	--	--	--
Input (PV DC)				
MPP voltage range [V]	25-55	--	--	--
Max. input voltage [V]	60	--	--	--
Max. input current [A]	15/15	--	--	--
Output (AC)				
Rated AC voltage [V]	L/N/PE, 230V, 50Hz	--	--	--
Max. output current [A]	4,4	--	--	--
Nom. converter output (P _{NINV}) [W]	1000	--	--	--
Max. apparent power [VA]	1000	--	--	--

Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	integrated NS-protection
Assigned to generation unit type	SUN-M60G4-EU-Q0 SUN-M80G4-EU-Q0 SUN-M100G4-EU-Q0 SUN-M60G4-EU-Q0-P SUN-M80G4-EU-Q0-P SUN-M100G4-EU-Q0-P SUN-E60G4-EU-Q0 SUN-E80G4-EU-Q0 SUN-E100G4-EU-Q0
Integrated interface switch	For models: SUN-M60G4-EU-Q0 SUN-M80G4-EU-Q0 SUN-M100G4-EU-Q0 SUN-M60G4-EU-Q0-P SUN-M80G4-EU-Q0-P SUN-M100G4-EU-Q0-P Type of switching equipment 1: galvanic separation HF-Transformer) Type of switching equipment 2: Relay (Model HF140FF)
	For models: SUN-E60G4-EU-Q0 SUN-E80G4-EU-Q0 SUN-E100G4-EU-Q0 Type of switching equipment 1: galvanic separation HF-Transformer) Type of switching equipment 2: Relay (Model HF115F)
	Note: The output is switched off by the inverter bridge and one relay in series in each line and neutral.
Firmware version	0308-1426
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. The above stated generators are tested according to the requirements in the EN 50549-1:2019 Commission Regulation (EU) 2016/631 of 14 April 2016. Any modification that affects the stated tests must be named by the manufacturer/supplier of the product to ensure that the product meets all requirements.	