



**BUREAU
VERITAS**

Certificate of compliance

Applicant: **Marstek energy Co., Ltd.**
1-4F, BLDG#9, 1/F, BLDG#5, West Industrial Park,
South of the Intersection of Ma'anshan Tunnel and Zhangshe Avenue, Xiangxi High-tech Zone,
Hunan Province
China

Product: **AC Coupled ESS**

Model: **MST-BIE2.5-2500, MST-BIE5-2500, MST-BIE2.5-0800, MST-BIE5-0800**

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

Inverter for single-phase parallel connection to the public grid.

Applied rules and standards:

EN 50549-1:2019/A1:2023, NBN 50549-1:2019/A1:2023

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

C10/11:2024-10

Specific technical prescription regarding power-generating plant operating in parallel to the distribution network

EN 50549-10:2022, NBN 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

Compliance with the parameters in Annex C of the standard

(see manufacturer's declaration)

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: **CSLL-ESH-P24121000**

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

Certificate number: **U25-0032**

Date of issue: **2025-01-22**

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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Annex certificate of conformity No. U25-0032

Extract from test report CSLL-ESH-P24121000 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”.

Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016 and C10/11 for Belgium				
Manufacturer	Hamedata Technology Co., Limited 1-3F 8; 6-8F, BLDG#A, Changfang industrial Park, No.2 Guihua 5th Road, pingshan District, shenzhen, Guangdong China			
Product type	AC Coupled ESS			
Static converter model	MST-BIE2.5-2500	MST-BIE2.5-0800	MST-BIE5-2500	MST-BIE5-0800
Input DC (battery)				
DC voltage range [V]	44,8-58,4	44,8-58,4	44,8-58,4	44,8-58,4
Max. charge current [A]	45	45	60	60
Max. discharge current [A]	60	60	60	60
Output AC				
Rated AC voltage [V]	L/N/PE, 230, 50Hz	L/N/PE, 230, 50Hz	L/N/PE, 230, 50Hz	L/N/PE, 230, 50Hz
Rated output current [A]	10,9	3,48	10,9	3,48
Rated apparent power [VA]	2500	800	2500	800



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Interface protection system and interface switch (Network and system protection "NS-protection")	
Type of protection	Integrated NS-protection
Assigned to generation unit type	MST-BIE2.5-2500, MST-BIE5-2500, MST-BIE2.5-0800, MST-BIE5-0800
Integrated interface switch	Type of switching equipment 1: galvanic separation HF-Transformer Type of switching equipment 2: Relay (Model HF140FF-G) Note: The output is switched off by the inverter bridge and one relay in series in each line and neutral.
Firmware version	V137
Note The settings of the generators are password protected adjustable. In case the 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 and the 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.	