

Test Verification of Conformity

Verification Number: 241024038SZN-VOC001

On the basis of the tests undertaken, the sample<s> of the below product has been tested by an accredited 3rd party laboratory in accordance to the referenced specification<s>/standard<s> at the time the tests were carried out. This verification is part of the full test report<s> and should be read in conjunction with it <them>.

This document can be used in support of a claim in meeting relevant EU legislation and mandatory Conformity Marking. And in accordance with EU law, the claim is the sole obligation of the Manufacturer/ Importer.

Applicant Name & Address:	Emaldo ApS Bygmarken 4A, 3650 Ølstykke, Denmark
Product Description:	Emaldo Hybrid-Inverter
Ratings & Principle Characteristics:	See Appendix
Models/Type References:	EM-INV-03-B, EM-INV-03, EM-INV-03-* (*=A-Z)
Brand Name(s):	Emaldo
Specification<s>/Standards:	See Appendix
Verification Issuing Office Name & Address:	Intertek Testing Services Shenzhen Ltd. No.101&201, Building B, No. 308, Wuhe Avenue, Zhangkengjing, Guanhu Street, Longhua District, Shenzhen, Guangdong, China
Date of Tests:	18 August 2021 to 07 November 2021, 27 September 2024 to 28 October 2024, 24 October 2024 to 03 December 2024
Test Report Number(s):	241024038SZN-001, 241024038SZN-002, 241024038SZN-003 241024038SZN-004, 241024038SZN-005, 241024038SZN-006, 241024038SZN-007, 241024038SZN-008, 241024038SZN-009

Additional information in Appendix.



Signature

Name: Damon Wang

Position: Team Leader

Date: 19 December 2024

APPENDIX: Test Verification of Conformity

This is an Appendix to Test Verification of Conformity Number: 241024038SZN-VOC001.

Specification<s>/Standards:

EN IEC 61000-6-1:2019

Electromagnetic compatibility (EMC) Part 6-1: Generic standards - Immunity standard for residential, commercial and light-industrial environments

EN IEC 61000-6-2:2019

Electromagnetic compatibility (EMC) Part 6-2: Generic standards – Immunity standard for industrial environments

EN IEC 61000-6-3:2021

Electromagnetic compatibility (EMC) Part 6-3: Generic standards –Emission standard for equipment in residential environments

EN IEC 61000-6-4:2019

Electromagnetic compatibility (EMC) Part 6-4: Generic standards – Emission standard for industrial environments

EN IEC 61000-3-11:2019

Electromagnetic compatibility (EMC) - Part 3-11: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems - Equipment with rated current ≤ 75 A and subject to conditional connection

EN 61000-3-12:2011

Electromagnetic compatibility (EMC) - Part 3-12: Limits - Limits for harmonic currents produced by equipment connected to public low-voltage systems with input current > 16 A and ≤ 75 A per phase

ETSI EN 301 489-1 V2.2.3 (2019-11)

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU and the essential requirements of article 6 of Directive 2014/30/EU

ETSI EN 301 489-3 V2.3.2 (2023-01)

ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 246 GHz; Harmonised Standard covering the essential requirements of article 3.1(b) of Directive 2014/53/EU



Signature

Name: Damon Wang

Position: Team Leader

Date: 19 December 2024

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Specification<s>/Standards:

ETSI EN 301 489-17 V3.3.1 (2024-09)
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 17:
Specific conditions for Broadband and Wideband Data Transmission Systems;
Harmonised Standard for ElectroMagnetic Compatibility

ETSI EN 301 489-52 V1.3.1 (2024-11)
ElectroMagnetic Compatibility (EMC) standard for radio equipment and services; Part 52:
Specific conditions for Cellular Communication User Equipment (UE) radio and ancillary
equipment; Harmonised Standard for ElectroMagnetic Compatibility

ETSI EN 300 328 V2.2.2 (2019-07)
Wideband transmission systems; Data transmission equipment operating in the 2,4 GHz
ISM band and using wide band modulation techniques; Harmonised Standard covering
the essential requirements of article 3.2 of Directive 2014/53/EU

ETSI EN 301 893 V2.2.1 (2024-11)
5 GHz WAS/RLAN; Harmonised Standard for access to radio spectrum

ETSI EN 300 440 V2.2.1 (2018-07)
Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz
frequency range; Harmonised Standard covering the essential requirements of article 3.2
of Directive 2014/53/EU

ETSI EN 301 511 V12.5.1 (2017-03)
Global System for Mobile communications (GSM); Mobile Stations (MS) equipment;
Harmonised Standard covering the essential requirements of article 3.2 of Directive
2014/53/EU

ETSI EN 301 908-1 V15.2.1 (2023-01)
IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 1:
Introduction and common requirements; Release 15

ETSI EN 301 908-13 V13.3.1 (2024-10)
IMT cellular networks; Harmonised Standard for access to radio spectrum; Part 13:
Evolved Universal Terrestrial Radio Access (E-UTRA) User Equipment (UE)

EN IEC 62311: 2020
Assessment of electronic and electrical equipment related to human exposure
restrictions for electromagnetic fields (0Hz – 300GHz)



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Ratings & Principle Characteristics:

Inverter-input Specifications	
AC Input	
Rated power	10800VA
Rated voltage	400Vac(3W+N+PE)
Rated current	15.6A*3
Max input current	16A*3
AC voltage range	184-264Vac
Frequency range	50/60Hz
Inverter-output Specifications	
AC Output(On-Grid Side)	
Rated power	10800VA
Rated voltage	400Vac(3W+N+PE)
Rated current	15.6A*3
Max output current	15.8A*3
Max power factor	>0.99
Frequency range	50/60Hz
Max efficiency	97%
Europe efficiency	96%
AC Output(Off-Grid Side)	
Rated power	10800VA(PF=1)
Rated output voltage	400Vac(3W+N+PE)
Rated output frequency	50/60Hz±0.5
Max power output	10800VA
Switch time	10ms
Wave form	Pure sine wave
General Specifications	
General	
Dimensions(W/H/D)	590x 278x 547mm
Weight	42±2kg
Topology	Transformerless isolation
Cooling	Forced air
Noise	<50dB
Self-consumption	<150W
Altitude	2000m(degraded 1% per 100m above 2000m)
Relative humidity	0~95%
Operation temperature	-20°C~55°C
Storage temperature	-25°C~60°C
Display	No
Communication	RS485(Electrical Meter)
4G/WiFi/BlueTooth/LoRa	YES/YES/YES/YES
Protection	
Battery under-voltage protection(settable)	settable
Battery over-voltage protection(settable)	settable
AC input under-voltage protection	184Vac
AC input over-voltage protection	264Vac
AC output under-voltage protection	184Vac
AC output over-voltage protection	282Vac
AC output over-temperature protection	
AC output overload protection	
Anti-island protection	
Insulation impedance detection	
Residual current detection	
AC surge protection(three grade)	

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