Test Verification of Conformity

Applicant: **FOXESS CO., LTD.**

No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China

Product: **PV-Grid-Tied Inverter**

Model(s): **R75, R100, R110**

Use in accordance with regulations:

Three-phase PV-Grid-Tied Inverter corresponding to grid connection code listed above, with integrated protection relay and disconnection device for the connection to and parallel operation with low-voltage distribution networks.

Applied standards and guidelines:

EN 50549-1:2019

Requirements for generating plants to be connected in parallel with distribution networks - Part 1-1: Connection to a LV distribution network - Generating plants up to and including Type B

At the time of issue of this verification. a representative test sample of the product named above corresponds to the requirements of the listed test standards for the intended use.

This verification does not imply assessment of the production of the product.

Report No: **221026BWA119-EG-EU-001**

Verification No: **221026BWA119-EG-EU-C001**

Date of issue: **2023-02-28**

GUANGDONG HUACHUANG TECHNOLOGY SERVICE CO., LTD. HUA CHUANG

James Huang

Technical Director / New Energy Department

Release No.: 1.0(2022)

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Supplement to verification no. 221026BWA119-EG-EU-C001

A.1 Technical data of the Power Generating Units

Manufacturer:	**FOXESS CO., LTD.** No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China

Model designation:	**R75**	**R100**	**R110**
Rated output active power (AC) [kW]:	75,0	100,0	110,0
Max. output apparent power (AC)[kVA]:	82,5	110,0	121,0
Max. output current (AC) [A]:	119,6	166,7	175,3
AC nominal voltage [V]:	400, 3/N/PE		
AC nominal frequency [Hz]:	50		

Software version:	Master: V1.04 Slave: V1.00 Manager: V1.06

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CERTIFICATE OF CONFORMITY

Certificate No.: **221026BWA119-EG-EU-C002**

Date of issue: 2023-04-28

Applicant:	**FOXESS CO., LTD.** No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, China
Device Type:	PV-Grid-Tied Inverter
Model(s):	**R75, R100, R110**
Trademark:	FOX ESS
Technical data:	Rated output power [kW]: 75.0 ~ 110.0 Nominal output AC voltage: 3/N/PE, 220/380 V, 230/400 V, 50/60 Hz (For further details see *Technical data of the generating unit(s) on p.2*)
Software version:	Master:V1.04 Slave:V1.00 Manager:V1.06
Applied standard(s) / guideline(s):	**EN 50549-1:2019** Requirements for generating plants to be connected in parallel with distribution networks - Part 1-1: Connection to a LV distribution network - Generating plants up to and including Type B
Certification scheme:	**CMPD-01**
Test report no.:	**221026BWA119-EG-EU-001** (2023-04-26)

The above-mentioned generating unit(s) are certified for type A generating modules.

This certificate confirms that the above-mentioned generating unit(s) with corresponding software meet the requirements of the referenced standard(s) / guideline(s) at the time of issuance of the certificate.

The generating units are considered to be compliant with the relevant articles (see Annex H, EN 50549-1:2019) of *Commission Regulation (EU) 2016/631 of 14 April 2016 establishing a network code on requirements for grid connection of generators* (NC RfG), provided that all settings as specified by the DSO and responsible party are complied with.

The certificate is comprised of 2 pages (including Annex of 1 pages).

LYNS-TCi TECHNOLOGY

Dipl.-Ing. Weizhao Zheng
Certification Officer

Certification body Lyns-tci Technology Guangdong Co., Ltd. accredited according to ISO/IEC 17065

Release No.: 1.1 (2023)

Lyns-tci Technology Guangdong Co., Ltd.
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Annex to the Certificate No.: **221026BWA119-EG-EU-C002**

1. Technical data of the generating unit(s)

Model	**R75**	**R100**	**R110**
Max. Input voltage [V]	1100		
MPP input voltage range [V]	200 ~ 1000		
Rated full load MPPT voltage [V]	550 ~ 850		
Nominal operating voltage [V]	600		
Max. input DC current	9 * 26 A		10 * 26 A
Nominal output AC voltage	3/N/PE, 220/380 V, 230/400 V, 50/60 Hz		
Max. output AC current [A]	113.7* / 119.6	166.7	175.3
Nominal active output power [kW]	75.0	100.0	110.0
Max. apparent output power [kVA]	75.0* / 82.5	110.0	121.0
Note: marked * only valid in Brazil.			

Operating temperature range	-30°C ~ +60°C
Degree of protection	IP66 (according to EN 60529)
Protection class	I (according to IEC 62109-1)
Type of internal transformer	No internal transformer (transformerless)

Software version	Master:V1.04 Slave:V1.00 Manager:V1.06

Manufacturer	**FOXESS CO., LTD.** No.939, Jinhai Third Road, New Airport Industry Area, Longwan District, Wenzhou, Zhejiang, 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	2022-10-28 - 2023-02-25

2. Conformity assessment

Based on the test results submitted, this certificate provides the following conformity assessment according to the specifications listed on the cover sheet:

Electrical characteristics		**Type testing performed**	**Assessment**
4.4	Normal operating range	☒	Compliant
4.5	Immunity to disturbances	☒	Compliant
4.6	Active response to frequency deviation	☒	Compliant
4.7	Power response to voltage variations and voltage changes	☒	Compliant
4.8	EMC and power quality	☒	Compliant
4.9	Interface protection	☒	Compliant
4.10	Connection and starting to generate electrical power	☒	Compliant
4.11	Ceasing and reduction of active power on set point	☒	Compliant
4.12	Remote information exchange	☐	Not applicable
4.13	Requirements regarding single fault tolerance of interface protection system and interface switch	☒	Compliant

C E R T I F I C A T E
of Conformity

TÜVRheinland®

Registration No.: AK 50581593 0001

Report No.: CN23FYQN 001

Holder:
FOXESS CO., LTD.
No.939, Jinhai Third Road,
New Airport Industry Area, Longwan District,
Wenzhou,
325025 Zhejiang
P.R. China

Product:
PV-Inverter
(PV Grid-Connected Inverter)

Identification:

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Type Designation : R75  R100  R110
Serial Number    : Engineering Samples
Firmware version : Master V1.05 Slave V1.00
                   Manager V1.07
Remark(s)        : Refer to report CN23FYQN 001 for details.
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Tested acc. to:

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TOR Erzeuger Typ A Version 1.2
TOR Erzeuger Typ B Version 1.2
OVE-Richtlinie R25/03.20
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The certificate of conformity refers to the above mentioned product. This is to certify that the specimen is in conformity with the assessment requirement mentioned above. This certificate does not imply assessment of the production of the product and does not permit the use of a TÜV Rheinland mark of conformity.

Certification Body

Date 23.05.2023

TÜV Rheinland LGA Products GmbH TÜVRheinland®

Weichun Li

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg