

# CERTIFICATE

## of Conformity

**Registration No.:** AK 50657070 0001  
**Report No.:** CN23X0AE 004  
**Holder:** MADEnR  
20 Avenue Marcel Liabastre  
14600 Honfleur  
France  
**Product:** PV-Inverter  
(Utility-Interactive Inverter)

### Type designation listed on the next page

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 on the next page. 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.

**Date:** 2024-12-11

**Certification Body**



Dean Cao



**TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg**

# CERTIFICATE

## of Conformity

**Registration No.:** AK 50657070 0001

**Product:** PV-Inverter  
(Utility-Interactive Inverter)

**Tested according to:** EN 62109-1:2010  
EN 62109-2:2011  
IEC 62109-1:2010  
IEC 62109-2:2011

**Identification:** Type Designation  
1) MI 600 LC , 2) MI 800 LC ,  
3) MI 1000 LC , 4) MI 600 P2 ,  
5) MI 800 P2 , 6) MI 1000 P2

Serial number: 2410150278

Remark(s) : Refer to test report CN23X0AE 004  
for details.



**TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg**



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# Certificate of compliance

**Applicant:** MADEnR  
20 Avenue Marcel Liabastre, 14600 Honfleur  
France

**Product:** Photovoltaic inverter

**Model:** MI 600 LC, MI 800 LC, MI 1000 LC,  
MI 600 P2, MI 800 P2, MI 1000 P2

**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-P24101056

**Certificate number:** U24-1050

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

**Date of issue:** 2024-11-08

**Accreditation**



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. U24-1050

Extract from test report ASUE-ESH-P24101056 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

|  |   |                   |                   |                   |
|--|---|-------------------|-------------------|-------------------|
| <b>Manufacturer</b>                            | <b>MADEnR</b><br>20 Avenue Marcel Liabastre, 14600 Honfleur<br>France |                   |                   |                   |
| <b>Product type</b>                            | Photovoltaic inverter   |                   |                   |                   |
| <b>Static converter model</b>                  | <b>MI 600 LC</b>  | <b>MI 800 LC</b>  | <b>MI 1000 LC</b> | <b>MI 600 P2</b>  |
| <b>Input (DC photovoltaic)</b>                 |   |                   |                   |                   |
| 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              |
| <b>Output (AC)</b>                             |   |                   |                   |                   |
| 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 <sub>NINV</sub> ) [W] | 600   | 800               | 1000              | 600               |
| Max. apparent power [VA]                       | 600   | 800               | 1000              | 600               |

| Type Approval and declaration of compliance with the requirements of EN 50549-1 and Commission Regulation (EU) 2016/631 of 14 April 2016 |  |                   |    |    |
|--|--|-------------------|----|----|
| <b>Manufacturer</b>  | <b>MADEnR</b><br>20 Avenue Marcel Liabastre, 14600 Honfleur<br><b>France</b>   |                   |    |    |
| <b>Product type</b>  | Photovoltaic inverter  |                   |    |    |
| <b>Static converter model</b>  | <b>MI 800 P2</b>   | <b>MI 1000 P2</b> | -- | -- |
| <b>Input (DC photovoltaic)</b>   |  |                   |    |    |
| MPP voltage range [V]  | 25-55  | 25-55             | -- | -- |
| Max. input voltage [V]   | 60   | 60                | -- | -- |
| Max. input current [A]   | 18*2   | 18*2              | -- | -- |
| <b>Output (AC)</b>   |  |                   |    |    |
| Rated AC voltage [V]   | 230, L/N/PE, 50Hz  | 230, L/N/PE, 50Hz | -- | -- |
| Max. output current [A]  | 3,5  | 4,4               | -- | -- |
| Nom. converter output (P <sub>NINV</sub> ) [W]   | 800  | 1000              | -- | -- |
| Max. apparent power [VA]   | 800  | 1000              | -- | -- |
| <b>Interface protection system and interface switch (Network and system protection "NS-protection")</b>                                  |  |                   |    |    |
| <b>Type of protection</b>  | integrated NS-protection   |                   |    |    |
| <b>Assigned to generation unit type</b>  | <b>MI 600 LC, MI 800 LC, MI 1000 LC,</b><br><b>MI 600 P2, MI 800 P2, MI 1000 P2</b>  |                   |    |    |
| <b>Integrated interface switch</b>   | Type of switching equipment 1: galvanic separation HF-Transformer<br>Type of switching equipment 2: Relay (Model HF140FF)<br>Note: The output is switched off by the inverter bridge and one relay in series in each line and neutral.   |                   |    |    |
| <b>Firmware version</b>  | 0308-1426  |                   |    |    |
| <b>Note</b>  | <p>The settings of the interface protection are password protected adjustable.</p> <p>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.</p> <p>The above stated generators are tested according to the requirements in the EN 50549-1:2019 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.</p> |                   |    |    |

# CERTIFICATE

## of Conformity Directive 2014/53/EU Radio Equipment

**Registration No.:** AT 50659617 0001  
**Report No.:** CN24DGYQ 001  
**Holder:** MADEnR  
20 Avenue Marcel Liabastre  
14600 Honfleur  
France

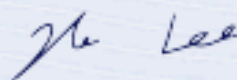
**Product:** PV-Inverter  
(Utility-Interactive Inverter)

**Type designation listed on the next page**

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. This is to certify that the tested sample is in conformity with relevant clauses of Article 3 of Directive 2014/53/EU (details see next page). This certificate does not imply assessment of the production and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate as part of the technical documentation and in combination with the EC Declaration of Conformity. This is not an EU-Type Examination Certificate.

**Date:** 2025-01-14

**Certification Body**



Tongle Lee



**TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg**

# CERTIFICATE

## of Conformity Directive 2014/53/EU Radio Equipment

|                             |   |
|-----------------------------|---|
| <b>Registration No.:</b>    | AT 50659617 0001  |
| <b>Product:</b>             | PV-Inverter<br><i>(Utility-Interactive Inverter)</i>  |
| <b>Tested according to:</b> | EN 300328 V 2.2.2:2019<br>EN 301489-1 V 2.2.3:2019<br>EN 301489-17 V 3.2.4:2020<br>EN 55011:2016+A1+A11+A2<br>EN 62109-1:2010<br>EN 62109-2:2011<br>EN 62920:2017+A11+A1<br>IEC 62109-1:2010<br>IEC 62109-2:2011<br>IEC 62920:2017+A1<br>EN IEC 61000-6-1:2019<br>EN IEC 61000-6-2:2019<br>EN IEC 61000-6-3:2021<br>EN IEC 61000-6-4:2019<br>EN IEC 62311:2020<br>CISPR 11:2015+A1+A2 |
| <b>Identification:</b>      | Type Designation<br>MI 600 LC, MI 800 LC, MI 1000 LC,<br>MI 600 P2, MI 800 P2, MI 1000 P2   |



**TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg**