



## OIML Certificate

#### **OIML Member State** The Netherlands

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Issuing authority NMi Certin B.V.

Person responsible: M.Ph.D. Schmidt

Applicant and manufacturer

Landis+Gyr AG

Alte Steinhauserstrasse 18

CH-6330 Cham **Switzerland** 

Identification of the certified type

A static Poly Phase Electrical Energy Meter

Manufacturers mark:

Landis+Gyr

Type:

E860 (f9 – rack-mounted version)

Characteristics See following page(s)

This OIML Certificate is issued under scheme A.

This Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML Type Evaluation Report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

R 46-1/-2 (2012) "Active electrical energy meters"

Accuracy class D

This Certificate relates only to the metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML International Recommendation identified above. This Certificate does not bestow any form of legal international approval.

This certificate and supporting reports comply with the requirements of OIML-CS-PD-07 clause 6.2.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate was issued, partial quotation of the Certificate and of the associated OIML Type Evaluation Report(s) is not permitted, although either may be reproduced in full.

**Issuing Authority** 

NMi Certin B.V., OIML Issuing Authority NL1 7 March 2024

Certification Board

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This document is issued under the provision that no liability is accepted and that the applicant shall indemnify third-party liability.

The notification of NMi Certin B.V. as Issuing Authority can be verified at www.oiml.org

This document is digitally signed and sealed. The digital signature can be verified in the blue ribbon at the top of the electronic version of this certificate.











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The conformity was established by the results of tests and examinations provided in the associated report(s):

- No. NMi-3522680-14 dated 4 July 2023 that includes 55 pages.

### **Characteristics of the measuring instrument**

In Table 1 the general characteristics of the measuring instrument are presented. In Table 2 the characteristics of the family of instruments are presented. The construction of the measuring instrument is recorded in the Documentation folder no. R46-2012-A-NL1-23.02-1.

#### **Table 1 General characteristics**

General characteristics		
Meter type	static	
Connection mode (phase, wires, elements)	3p, 4w, 3e 3p, 3w, 2e	
Direction of energy flow / registers	Two-registers, bi-directional.	
Terminal arrangement	Direct plug-in Essailec connectors	
Protective class	Category 1	
Environmental application		
Ambient temperature range	-25 °C to +55 °C	
Humidity class	H1	
IP Rating / environmental use	IP51 / indoor	
Meter quantities		
Nominal voltage ( <i>U</i> <sub>nom</sub> )	Nominal voltage Un (3-phase, 4-wire) 3 x 58/100 to 69/120 V 3 x 110/190 to 133/230 V Nominal voltage Un (3-phase, 3-wire) 3 x 100 to 120 V 3 x 190 to 230 V	
Nominal frequency ( $f_{nom}$ )	50 Hz or 60 Hz	
Maximum current (I <sub>max</sub> )	$I_n = 1 \text{ A} - I_{\text{max}} 1.2 \text{ A}, 1.5 \text{ A}, 2 \text{ A} \text{ or } 10 \text{ A}$ $I_n = 5 \text{ A} - I_{\text{max}} 6 \text{ A}, 7.5 \text{ A} \text{ or } 10 \text{ A}$	
Transitional current (/tr)	0.05 A (I <sub>n</sub> = 1A), 0.25 A (I <sub>n</sub> = 5 A)	
Minimum current (I <sub>min</sub> )	0.01 A (I <sub>n</sub> = 1A), 0.05 A (I <sub>n</sub> = 5 A)	
Starting current (Ist)	0.001 A (I <sub>n</sub> = 1A), 0.005 A (I <sub>n</sub> = 5 A)	





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Meter constant	5.000 imp/kWh, 10.000 imp/kWh, 20.000 imp/kWh, 40.000 imp/kWh, 50.000 imp/kWh, 100.000 imp/kWh, 200.000 imp/kWh			
Product version				
Hardware version	S1			
	Version number: U.201.04.08 Checksum: 0647C93E6D9DEFE29B240DEA4CE847335645C1D246BE B47C848D6AC9B19AD19CD2CF594D83D253DD70F664 A10E006819			
Software identification	Version number: U.201.05.02 Checksum: 13A1A7D6AB9B5027A3725812CE1B804932887181B3D7 322C5C9DE0F0BCFCA0E4B41E8EC2D93CBD8FAD712B9 1C4290005			
	Version number: U.201.05.03 Checksum: 52BD0C34AFA5F64DE3DE95EC6B46D3538ACE3D1E832 59EFE8AA8388AD6E31037AF590E79B79BC8ADE7E7E0E 975B07C84			

#### **Production location**

The measuring instrument is produced at one of the following production locations:

Landis+Gyr A.E. 78 km National Road Athens-Corinth GR-20100 Corinth Greece













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### **Certificate history:**



Revision	Date	Description of the modification
0	11-12-2023	Firmware update of the meter type E860 (f9 – rack-mounted version) with added features and OBIS code change of the FW and checksum identification to IDIS standardised OBIS codes.  New firmware version U201.05.02
1	07-03-2023	<ul> <li>Firmware update of the meter type E860 (f9 – rack-mounted version).</li> <li>New firmware version U.201.05.03</li> <li>Editorial corrections of the firmware versions.</li> </ul>









