EU-TYPE EXAMINATION CERTIFICATE

LONGI METER CO., LTD
No.25 Guangming Road, Xixia District
750021, Yinchuan, Ningxia
China

EU-Type Examination
Certificate No.
103346402-25
Revision 3

Type LGG380K

Object Electronic three-phase four-wire energy meter.
Direct connected

The object has been assessed and meets the requirements of

EU Directive 2014/32/EU
Module B

The energy meter(s) meet(s) the essential requirements of Annex V of EU Directive 2014/32/EU, on the harmonization of the laws of Member States relating to the making available on the market of measuring instruments (recast).

This Certification is based on the report(s) listed in the report list in this Certificate.

This Certificate is valid until: December 18, 2035.

This Certificate comprises 8 pages in total.

Issued by KEMA B.V.
Klingelbeekseweg 195,
Arnhem, The Netherlands
Notified Body 2290

Marten Dekker
Operations Director Netherlands

Arnhem, April 8, 2026

REVISION OVERVIEW

The edition with the highest revision number always replaces the earlier issued editions.

Rev. No.	Date of issue	Reason
0	December 18, 2025	First issue
1	-	- Not issued
2	March 30, 2026	- Report 109769402-26 added - Class 0,5/C added
3	April 8, 2026	- Clause 3 picture added

REPORT LIST

This Certificate is issued based on the following reports.

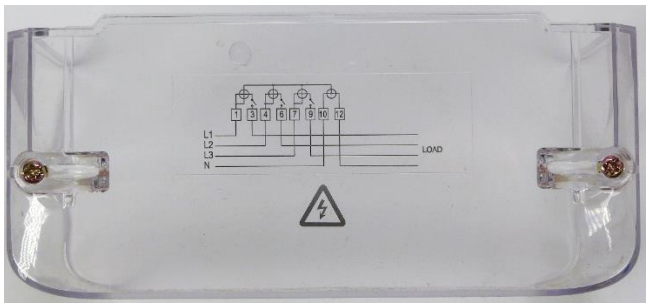
Report number	Revision	Firmware version
103346403-25	R0	V4.04
103346404-25	R0	V4.04
103346405-25	R0	V4.04
109769402-26	R0	V4.04

1 TECHNICAL DATA

Manufacturer	LONGI METER CO., LTD No.25 Guangming Road, Xixia District 750021, Yinchuan, Ningxia China	
Production location	LONGI METER CO., LTD No.25 Guangming Road, Xixia District 750021, Yinchuan, Ningxia China	
Type	LGG380K	
Model	-	
Connection	Direct	
Type of circuit	3P4W	
Accuracy class Wh	1/B	0,5/C
Accuracy class varh	2	
Meter constant	1000 imp/kWh 1000 imp/kvarh	
V range	3x230/400 V	
I range I_{min}-I_n(I_{max})	0,25 – 5(100) A	
Frequency	50 Hz	
Temperature range	-25 .. 70 °C	
Use	Indoor	
IP rating	IP54	
Protection Class	II	
Impulse voltage	8 kV	
Internal clock	Crystal controlled	
Environmental class	M1, M2, E1 and E2, CISPR32 class B	
Utilisation category	UC3	
LR Firmware ID	V4.04	
LR Firmware CRC	60C186F1	
Register	LCD	
Registry method(s):	Vectoral computation method	

2 PHOTOGRAPHS AND SEALING

3 EXAMPLES OF NAME PLATES



4 CALCULATION OF THE COMPOSITE ERROR / MPE

During the type approval test the intrinsic errors for temperature, voltage and frequency variation are determined per load point. The composite error is determined with the following formula:

$$\varepsilon_m = \sqrt{\varepsilon^2(I, cos\varphi) + \delta^2(T, I, cos\varphi) + +\delta^2(U, I, cos\varphi) + \delta^2(f, I, cos\varphi)}$$

Where
$\varepsilon^2(I, cos\varphi)$ = Intrinsic error of the meter at a certain load
$\delta^2(T, I, cos\varphi)$ = Additional error due to the variation of the temperature at the same load
$\delta^2(U, I, cos\varphi)$ = Additional error due to the variation of the voltage at the same load
$\delta^2(f, I, cos\varphi)$ = Additional error due to the variation of the frequency at the same load

Results are in the table below:

			Composite error							
Current	**cosϕ**	**Phase**	**-40°C**	**-25°C**	**-10°C**	**5°C**	**30°C**	**40°C**	**55°C**	**70°C**
Imin	**1**	**3ph**	0,09%	0,10%	0,11%	0,08%	0,03%	0,05%	0,11%	0,19%
Itr	**1**	**3ph**	0,09%	0,11%	0,09%	0,06%	0,04%	0,07%	0,13%	0,22%
Itr	**1**	**1ph,1**	0,19%	0,17%	0,14%	0,10%	0,04%	0,10%	0,20%	0,32%
Itr	**1**	**1ph,2**	0,07%	0,09%	0,07%	0,07%	0,05%	0,07%	0,12%	0,20%
Itr	**1**	**1ph,3**	0,05%	0,08%	0,07%	0,07%	0,06%	0,07%	0,11%	0,15%
Itr	**0,5i**	**3ph**	0,12%	0,14%	0,10%	0,08%	0,08%	0,09%	0,15%	0,23%
Itr	**0,5i**	**1ph,1**	0,18%	0,17%	0,15%	0,09%	0,05%	0,09%	0,20%	0,33%
Itr	**0,5i**	**1ph,2**	0,12%	0,10%	0,11%	0,10%	0,08%	0,11%	0,14%	0,19%
Itr	**0,5i**	**1ph,3**	0,08%	0,09%	0,08%	0,08%	0,08%	0,09%	0,12%	0,13%
Itr	**0,8c**	**3ph**	0,08%	0,08%	0,07%	0,04%	0,03%	0,06%	0,14%	0,22%
In	**1**	**3ph**	0,11%	0,12%	0,10%	0,09%	0,07%	0,09%	0,15%	0,23%
In	**1**	**1ph,1**	0,18%	0,18%	0,15%	0,09%	0,07%	0,12%	0,21%	0,34%
In	**1**	**1ph,2**	0,11%	0,12%	0,11%	0,11%	0,09%	0,11%	0,15%	0,21%
In	**1**	**1ph,3**	0,10%	0,11%	0,11%	0,10%	0,11%	0,11%	0,15%	0,18%
In	**0,5i**	**3ph**	0,11%	0,11%	0,10%	0,07%	0,04%	0,07%	0,13%	0,21%
In	**0,5i**	**1ph,1**	0,20%	0,20%	0,16%	0,09%	0,04%	0,10%	0,19%	0,32%
In	**0,5i**	**1ph,2**	0,09%	0,10%	0,09%	0,08%	0,06%	0,08%	0,13%	0,19%
In	**0,5i**	**1ph,3**	0,09%	0,10%	0,09%	0,09%	0,09%	0,09%	0,13%	0,17%
In	**0,8c**	**3ph**	0,11%	0,12%	0,11%	0,10%	0,09%	0,11%	0,16%	0,24%
Imax	**1**	**3ph**	0,34%	0,26%	0,18%	0,10%	0,05%	0,10%	0,20%	0,31%
Imax	**1**	**1ph,1**	0,57%	0,43%	0,31%	0,19%	0,10%	0,18%	0,33%	0,48%
Imax	**1**	**1ph,2**	0,43%	0,31%	0,23%	0,13%	0,07%	0,12%	0,21%	0,30%
Imax	**1**	**1ph,3**	0,31%	0,25%	0,17%	0,10%	0,06%	0,08%	0,17%	0,25%
Imax	**0,5i**	**3ph**	0,47%	0,36%	0,24%	0,13%	0,06%	0,12%	0,23%	0,34%
Imax	**0,5i**	**1ph,1**	0,59%	0,45%	0,32%	0,20%	0,12%	0,20%	0,34%	0,49%
Imax	**0,5i**	**1ph,2**	0,47%	0,35%	0,25%	0,15%	0,08%	0,12%	0,22%	0,30%
Imax	**0,5i**	**1ph,3**	0,37%	0,30%	0,20%	0,12%	0,05%	0,08%	0,17%	0,25%
Imax	**0,8c**	**3ph**	0,45%	0,35%	0,23%	0,13%	0,06%	0,12%	0,24%	0,36%

5 OPTIONS AND VARIANTS

Overview of variants with details

Type designation	Details of the meter
LGG380K	• Communication options: optical port • Supply control switch • Keypad

END OF DOCUMENT

The laboratories of KEMA Labs are:

- CESI S.p.A., Milan, Italy, accredited by ACCREDIA in accordance with ISO/IEC 17025:2017 under no. 0030L.
- FGH Engineering & Test GmbH, Mannheim, Germany, accredited by DAkkS in accordance with DIN EN ISO/IEC 17025:2018 under no. D-PL-12110-01-00.
- IPH Institut "Prüffeld für elektrische Hochleistungstechnik" GmbH, Berlin, Germany accredited by DAkkS in accordance with DIN EN ISO/IEC 17025:2018 under nos. D-PL-12107-01-00 and D-K-12107-01-00.
- KEMA B.V., Arnhem, The Netherlands, accredited by RvA in accordance with EN ISO/IEC 17025:2017 under nos. L020, L218 and K006 and with EN ISO/IEC 17065:2012 under no. C685.
- KEMA Labs, Zkušebnictví, a.s., Prague, the Czech Republic, testing laboratory no. 1035 accredited by CAI in accordance with ČSN EN ISO/IEC 17025:2018.
- KEMA-Powertest, LLC, Chalfont, United States, accredited by A2LA in accordance with ISO/IEC 17025:2017 under no. 0553.01.

Tests are carried out under the scope of accreditation, unless otherwise indicated in the chapter 'Tests carried out'.