



EU Type Examination Certificate Number: **0120/ SGS0238**

Aclara Meters S.L.

Polígono Industrial Ugaldeguren III, Par 27
48170 - Zamudio (Spain)

Instrument Identification:
SGM14**

Single Phase, Active Import/Export (kWh), Credit/ Pre-payment, Multi Rate, Electricity Meter

Instrument Traceable Number
0120/ SGS0238

has been assessed and certified as meeting the requirements of

EU Directive 2014/32/EU **on Measuring Instruments Annex II, Module B**

It is certified that the manufacturer's technical design and specimen for the above instrument has been examined and, based on the evidence submitted, it is considered that the instrument conforms to the requirements of Annex V of EU Directive 2014/32/EU

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex II, Module D or Annex II, Module F


This certificate is valid until 31st July 2026
Issue 8

Certification is based on report number(s)
EMA224778/1/MID dated 28th July 2016

Authorised Signature


SGS United Kingdom Limited, Notified Body 0120
Unit 202B Worle Parkway, Weston-super-Mare, BS22 6WA UK
t +44 (0)1934 522917 f +44 (0)1934 522137 www.sgs.com

Contact Address
SGS United Kingdom Ltd, Units 12A & 12B, South Industrial Estate, Bowburn, Durham, DH6 5AD UK
t +44 (0)191 377 2000 f +44 (0)191 377 2020 www.sgs.com

	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018


1. Technical Data

Manufacturer	Aclara
Meter Type(s)	SGM1411, SGM 1412
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0,5-10(100)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	Metrology Firmware V01.00.11 Application Firmware V4.1.4, V4.4.0, V4.8.0, V4.10.2
CRC Checksum No.	0x37917DE7
Identification Location	LCD
Bill Of Materials No's	104X3540G001 Rev 1 104X3540G002 Rev 1
IP Rating	IP53
Insulation Protective Class	Class II
LED Pulse Constant	1000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	BS
Location of Manufacturers Name and Address	Name Plate

	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018


2. Photograph of Meter and Sealing Plan



	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018

3. Name-plate



	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018

4. Influence factors for temperature, frequency and voltage


During the type approval examination the influence factors for temperature, frequency and voltage are determined per load point. The table below represents the sum of the square values per load, determined via the following formula:-

$$\delta e(T, U, f) = \sqrt{(\delta e^2(T, I, \cos\phi) + \delta e^2(U, I, \cos\phi) + \delta e^2(f, I, \cos\phi))}$$

where

$\delta e(T, I, \cos\phi) =$ Additional error due to variation of the temperature at the same load
 $\delta e(U, I, \cos\phi) =$ Additional error due to variation of the voltage at the same load
 $\delta e(f, I, \cos\phi) =$ Additional error due to variation of the frequency at the same load

Current	PF Cos	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C
I _{min}	1.0	0.74	0.54	0.26	0.19	0.40	0.73
I _{tr}	1.0	0.78	0.55	0.32	0.13	0.29	0.64
10I _{tr}	1.0	0.78	0.55	0.32	0.12	0.28	0.62
I _{max}	1.0	0.15	0.16	0.17	0.17	0.16	0.14
I _{tr}	0.5ind	0.76	0.56	0.41	0.18	0.25	0.57
10I _{tr}	0.5ind	0.72	0.52	0.29	0.17	0.34	0.62
I _{max}	0.5ind	0.19	0.20	0.23	0.21	0.20	0.18
I _{tr}	0.8cap	0.77	0.58	0.33	0.08	0.27	0.56
10I _{tr}	0.8cap	0.73	0.52	0.29	0.17	0.33	0.62
I _{max}	0.8cap	0.26	0.29	0.29	0.28	0.28	0.26


	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018

5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
SGM1411	Single Phase, 230V, 0,5-10(100A, 100A Contactor
SGM1412	Single Phase, 230V, 0,5-10(100A, 100A Contactor, 2A Auxiliary Relay

Modifications to the meter(s) described according to approval No.**0120/ SGS0238** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

	EU-Type Examination Certificate Number:	
	0120/ SGS0238	
	Issue Number: 8	Dated: 27 th September 2018

6. Document Revision History

Issue	Date	Comments
1	01/08/2016	Initial Issue
2	25/11/2016	Accuracy class corrected from B or C (kWh) to A or B (kWh)
3	25/04/2017	New BOM number
4	21/07/2017	Minor firmware revision update.
5	06/09/2017	New BOM revision due to change of terminal screw type
6	28/11/2017	New application firmware version V4.4.0
7	27/04/2018	New application firmware version V4.8.0
8	27/09/2018	New application firmware version V4.10.2

"This document is issued by the Company subject to its General Conditions of Service available on request or accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law."

"Unless otherwise stated the results shown in this test certificate refer only to the sample(s) tested *and such sample(s) are retained for 28 days only.*"

**** End of Document ****
