



EU Type Examination Certificate Number: **0120/ SGS0099**

Schneider Electric

Wuxi Pro-Face Electronics Co. Ltd
51-A block of Wuxi High-tech Industrial Development Zone
Wuxi
Jiangsu, 214028
P.R.C

Instrument Identification:
iEM32xx

Poly Phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter

Instrument Traceable Number

0120/ SGS0099

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 2nd April 2022
Issue 7

Certification is based on report number(s)
EMA153420-1 Issue 2 dated 3rd April 2012, EMA153420/1/1p4w dated 21st August 2015

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, Unit 10, South Industrial Estate, Bowburn, Durham, DH6 5AD UK
t +44 (0)191 377 2000 f +44 (0)191 377 2020 www.sgs.com

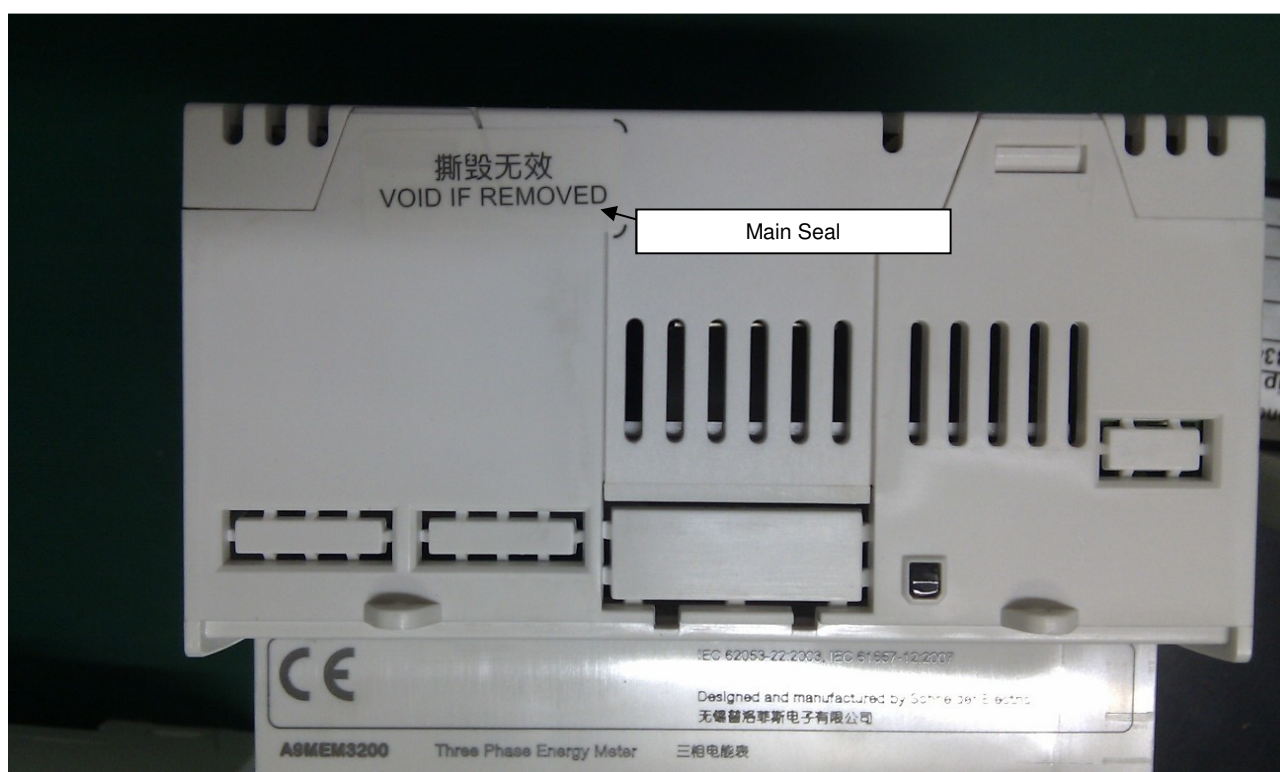
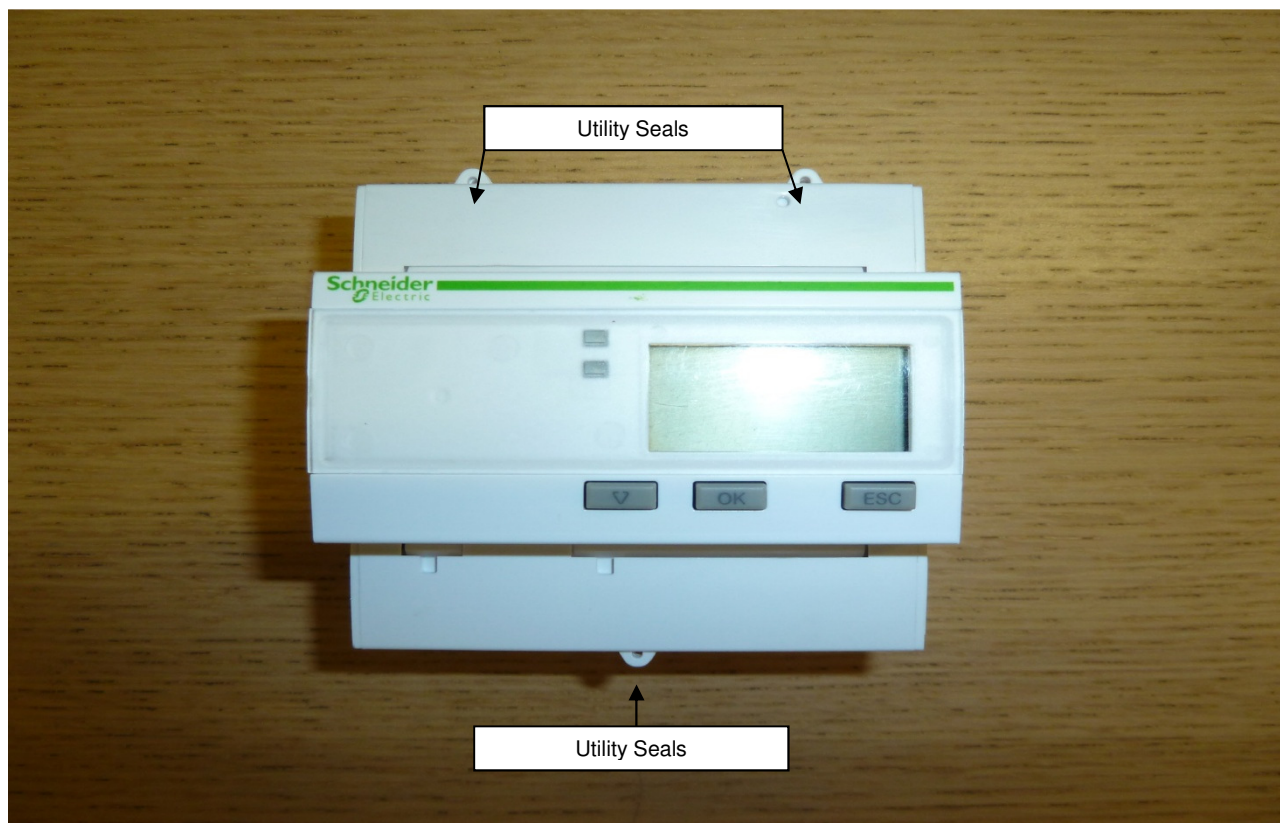
	EU-Type Examination Certificate Number:	
	0120/ SGS0099	
	Issue Number: 7	Dated: 14 th March 2019

1. Technical Data

Manufacturer	Schneider Electric
Meter Type	iEM32xx
Voltage Rating (U_n)	100/ 173V – 277/ 480V
Current Rating (I_{min} – I_{ref} (I_{max}))	0,05-5(6)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	C (kWh)
Type of circuit	3p4w, 1p4w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	1.0.XXX or 1.2.XXX or 1.3.XXX or 1.4.XXX
CRC Checksum No's	0X24E427A OR 0X24E0B20 OR 0X23C8A0E OR 0X2228602 OR 0X400B9E4 OR 0X040E6DE9
Identification Location	LCD
Bill Of Materials No's	iEM3210 - S1B73147 iEM3255 -S1B73150
IP Rating *= The meter casing is only IP20 complaint. Therefore the meter MUST always be fitted into an IP51 approved enclosure.	IP20 Casing*
Insulation Protective Class	Class II
LED Pulse Constant	5000 imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	1 x Tamper-proof Adhesive Label
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	BS
Location of Manufacturers Address	Nameplate

	EU-Type Examination Certificate Number:	
	0120/ SGS0099	
	Issue Number: 7	Dated: 14 th March 2019

2. Photograph of Meter and Sealing Plan



	EU-Type Examination Certificate Number:	
	0120/ SGS0099	
	Issue Number: 7	Dated: 14 th March 2019

3. Calculation of the composite error/ MPE

In addition to the accuracy requirements the composite error e_c of the meter is shown below

The composite error at a certain load is calculated from the following formula:

$$e_c = \sqrt{e^2(I.\cos\theta) + e^2(T.I.\cos\theta) + e^2(U.I.\cos\theta) + e^2(f.I.\cos\theta)}$$

where

$e^2(I.\cos\theta)$	=	Intrinsic error of meter at a certain load
$e^2(T.I.\cos\theta)$	=	Additional error due to variation of the temperature at the same load
$e^2(U.I.\cos\theta)$	=	Additional error due to variation of the voltage at the same load
$e^2(f.I.\cos\theta)$	=	Additional error due to variation of the frequency at the same load

Ambient Temperature Range 5 to 30 Degrees C						
Current	PF Cos	$e(I\cos)$	$e(TI\cos)$	$e(UI\cos)$	$e(fI\cos)$	%MPE
Imin	1.0	-0.11	-0.09	-0.09	-0.13	0.21
Itr	1.0	-0.05	-0.07	-0.06	-0.02	0.11
10Itr	1.0	-0.03	-0.05	-0.06	-0.01	0.08
Imax	1.0	0.05	0.03	0.04	0.07	0.10
Itr	0.5ind	0.05	-0.04	-0.05	-0.03	0.09
10Itr	0.5ind	0.28	0.09	0.08	0.13	0.33
Imax	0.5ind	0.34	0.09	0.09	0.15	0.39
Itr	0.8cap	-0.09	-0.07	-0.20	-0.04	0.23
10Itr	0.8cap	-0.06	0.05	0.03	0.07	0.11
Imax	0.8cap	-0.07	0.03	0.03	0.06	0.10

Ambient Temperature Range -10 to 40 Degrees C						
Current	PF Cos	$e(I\cos)$	$e(TI\cos)$	$e(UI\cos)$	$e(fI\cos)$	%MPE
Imin	1.0	-0.11	-0.16	-0.09	-0.13	0.25
Itr	1.0	-0.05	-0.06	-0.06	-0.02	0.10
10Itr	1.0	-0.03	-0.05	-0.06	-0.01	0.08
Imax	1.0	0.05	0.03	0.04	0.07	0.10
Itr	0.5ind	0.05	-0.05	-0.05	-0.03	0.09
10Itr	0.5ind	0.28	0.10	0.08	0.13	0.33
Imax	0.5ind	0.34	0.17	0.09	0.15	0.42
Itr	0.8cap	-0.09	-0.07	-0.20	-0.04	0.23
10Itr	0.8cap	-0.06	0.06	0.03	0.07	0.11
Imax	0.8cap	-0.07	0.03	0.03	0.06	0.10

	EU-Type Examination Certificate Number:	
	0120/ SGS0099	
	Issue Number: 7	Dated: 14 th March 2019

Ambient Temperature Range -25 to 55 Degrees C						
Current	PF Cos	e(lcos)	e(Tlcos)	e(Ulcos)	e(flcos)	%MPE
I _{min}	1.0	-0.11	-0.16	-0.09	-0.13	0.25
I _{tr}	1.0	-0.05	-0.03	-0.06	-0.02	0.09
10I _{tr}	1.0	-0.03	-0.05	-0.06	-0.01	0.08
I _{max}	1.0	0.05	0.11	0.04	0.07	0.15
I _{tr}	0.5ind	0.05	-0.06	-0.05	-0.03	0.10
10I _{tr}	0.5ind	0.28	0.16	0.08	0.13	0.36
I _{max}	0.5ind	0.34	0.19	0.09	0.15	0.43
I _{tr}	0.8cap	-0.09	-0.01	-0.20	-0.04	0.22
10I _{tr}	0.8cap	-0.06	0.06	0.03	0.07	0.11
I _{max}	0.8cap	-0.07	0.07	0.03	0.06	0.12

	EU-Type Examination Certificate Number:	
	0120/ SGS0099	
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4. Annex of Variants

Product Variant Identification Details:

Type Designation		Description of meter
Model	-	Description
iEM3210	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With 1 pulse output
iEM3215	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With Multi-tariff by 2 Digital Inputs
iEM3255	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With 1 Digital Input & 1 Digital Output and modbus communication
iEM3235	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With 1 Digital Input & 1 Digital Output and M-Bus communication.
iEM3265	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With 1 Digital Input & 1 Digital Output and BACnet communication.
iEM3275	-	Poly phase, Active Import/ Export (kWh), Transformer Operated, Electricity Meter, With 1 Digital Input and LonWorks communication

Modifications to the meter(s) described according to approval No.**0120/ SGS0099** 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/ SGS0099	
	Issue Number: 7	Dated: 14 th March 2019

5. Document Revision History

Issue	Date	Comments
1	03/04/2012	Initial Issue
2	17/04/2012	Updated Address and Sealing Plan
3	10/06/2013	Minor Firmware update to V1.05.00 and additional comms build options
4	24/07/2013	iEM3265 additional comms build option
5	21/08/2015	1P4W wiring configuration added
6	27/11/2015	Firmware update
7	04/03/2019	New firmware version V1.4.002 & BOM numbers