

EU Type Examination Certificate Number: **0120/SGS0586**

RS Components Ltd

Birchington Road
Corby, Northamptonshire
NN17 9RS, United Kingdom

Instrument Identification:
236-9299

Polyphase, Active Import/Export (kWh), Indoor, Transformer Operated, Multi-function, Electricity Meter

Instrument Traceable Number
0120/SGS0586

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 23rd April 2027
Issue 1

Certification is based on report number(s) EMA234440/2 dated 24th April 2017
EMA305851/1


Authorised Signature



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	EU-Type Examination Certificate Number:	
	0120/SGS0586	
	Issue Number: 1	Dated: 01 st December 2022

1. Technical Data

Manufacturer	RS Components Ltd
Meter Types	236-9299
Voltage Rating (<i>Un</i>)	1P2W: 230V, 3P3W: 3x230V, 3P4W: 3 x 230/400V
Current Rating (<i>I_{min}</i> – <i>I_{ref}</i> (<i>I_{max}</i>))	0.25-5(6)A
Frequency (<i>F_n</i>)	50Hz
Active Accuracy Class (<i>kWh</i>)	B or C (kWh)
Type of circuit	1p2w, 3p3w, 3p4w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	V1.3
CRC Checksum No's	0x0059DD5E
Identification Location	LCD
Bill Of Materials No's	Smart X96-5: DH-JS-160010-1.3
IP Rating	IP51 Front Display Meter body not rated. Must be installed in a suitable IP rated enclosure
Insulation Protective Class	Class I / Class II
LED Pulse Constant	3200imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp & Laser Welded
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	DIN
Location of Manufacturers Address	Associated Documents

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EU-Type Examination Certificate Number:

0120/SGS0586


Issue Number: 1

Dated: 01st December 2022

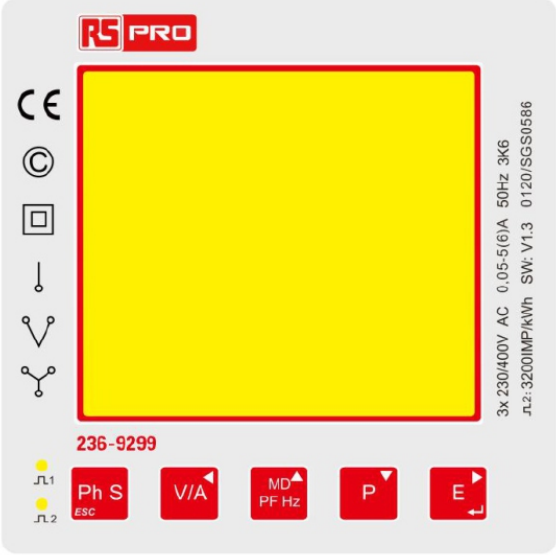
2. Photograph of Meter and Sealing Plan




Terminal covers
sealing points

	EU-Type Examination Certificate Number:	
	0120/SGS0586	
	Issue Number: 1	Dated: 01st December 2022

3. Nameplates



	EU-Type Examination Certificate Number:	
	0120/SGS0586	
	Issue Number: 1	Dated: 01 st December 2022

4. Calculation of the composite error/ MPE

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:-

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

where

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



EU-Type Examination Certificate Number:

0120/SGS0586

Issue Number: 1

Dated: 01st December 2022

		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
I _{min}	1.0	0.21	0.20	0.14	0.07	0.19	0.39
I _{tr}	1.0	0.25	0.24	0.20	0.10	0.17	0.37
10I _{tr}	1.0	0.24	0.23	0.19	0.10	0.20	0.39
I _{max}	1.0	0.24	0.24	0.18	0.10	0.18	0.39
I _{tr}	0.5ind	0.25	0.25	0.21	0.10	0.19	0.44
10I _{tr}	0.5ind	0.20	0.06	0.11	0.31	0.56	0.70
I _{max}	0.5ind	0.23	0.19	0.10	0.36	0.51	0.51
I _{tr}	0.8cap	0.25	0.25	0.20	0.12	0.18	0.37
10I _{tr}	0.8cap	0.35	0.30	0.23	0.09	0.11	0.33
I _{max}	0.8cap	0.33	0.29	0.27	0.16	0.18	0.30
L1							
I _{tr}	1.0	0.19	0.17	0.11	0.08	0.19	0.40
10I _{tr}	1.0	0.18	0.17	0.11	0.10	0.20	0.41
I _{max}	1.0	0.18	0.16	0.10	0.10	0.20	0.40
I _{tr}	0.5ind	0.21	0.19	0.13	0.07	0.20	0.45
10I _{tr}	0.5ind	0.23	0.22	0.17	0.12	0.18	0.39
I _{max}	0.5ind	0.19	0.17	0.13	0.09	0.19	0.41
L2							
I _{tr}	1.0	0.35	0.35	0.31	0.19	0.21	0.40
10I _{tr}	1.0	0.29	0.30	0.25	0.16	0.22	0.47
I _{max}	1.0	0.30	0.30	0.27	0.15	0.20	0.43
I _{tr}	0.5ind	0.31	0.32	0.28	0.16	0.16	0.35
10I _{tr}	0.5ind	0.74	0.14	0.33	0.77	0.46	0.92
I _{max}	0.5ind	0.33	0.34	0.37	0.63	0.47	1.19
L3							
I _{tr}	1.0	0.16	0.15	0.10	0.08	0.19	0.40
10I _{tr}	1.0	0.18	0.16	0.10	0.10	0.20	0.41
I _{max}	1.0	0.17	0.16	0.10	0.11	0.21	0.41
I _{tr}	0.5ind	0.17	0.20	0.17	0.12	0.26	0.58
10I _{tr}	0.5ind	0.18	0.18	0.11	0.36	0.40	0.62
I _{max}	0.5ind		0.15	0.08	0.62	0.37	0.57



EU-Type Examination Certificate Number:

0120/SGS0586

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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
236-9299	Active Import/Export (kWh), 3x230/400V, 5(6)A, Transformer operated, Multifunction, RS485 Modbus RTU

Modifications to the meter(s) described according to approval No. **0120/SGS0586** 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/SGS0586	
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6. Document Revision History

Issue	Date	Comments
1	01/12/2022	Initial Issue

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END OF CERTIFICATE