



EU Type Examination Certificate Number: **0120/SGS0142**

Zhejiang Eastron Electronic Co., Ltd.

No. 1369, Chengnan Road,
Jiaxing,
Zhejiang,
China,
314001

Instrument Identification:
SDM 630M CT Series

**Poly Phase, Active Import/ Export , Indoor, Multi-Function, Transformer Operated, Electricity
Meter**

Instrument Traceable Number
0120/SGS0142

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 9th March 2024
Issue 3

Certification is based on report number(s) EMA174647/1/MID dated 30th January 2014

Authorised Signature


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	EU-Type Examination Certificate Number:	
	0120/SGS0142	
	Issue Number: 3	Dated: 21 st December 2018


1. Technical Data

Manufacturer	Zhejiang Eastron Electronic Co., Ltd.
Meter Type	SDM630M CT V1, SDM630M CT V2, SDM630M CT-Mbus V2, SDM630M CT-2T V2, SDM630MCT-E
Voltage Rating (U_n)	3x230/400V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0.25-5(6)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	3p4w, 3p3w, 1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No CRC Checksum No's	SDM630M CT: V1.3 SDM630M CT-2T: V1.4 SDM630M CT-Mbus: V1.5 SDM630MCT-E: V1.6 SDM630MCT: 0x0000D5C8 SDM630MCT-2T: 0x0000D279 SDM630MCT-Mbus : 0x00001516 SDM630MCT-E: 0x000080FA
Identification Location	LCD
Bill Of Materials No's	SDM630MCT V1: SDM630-1 V1.5 SDM630MCT V2: DH-JS-150046-1.4 SDM630MCT-Mbus V2: DH-JS-160008-1.4 SDM630MCT-2T V2: DH-JS-160004-1.4 SDM630MCT-E: DH-JS-150046-1.4
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	3200imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	2 x Wire & Crimp
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	Side of meter

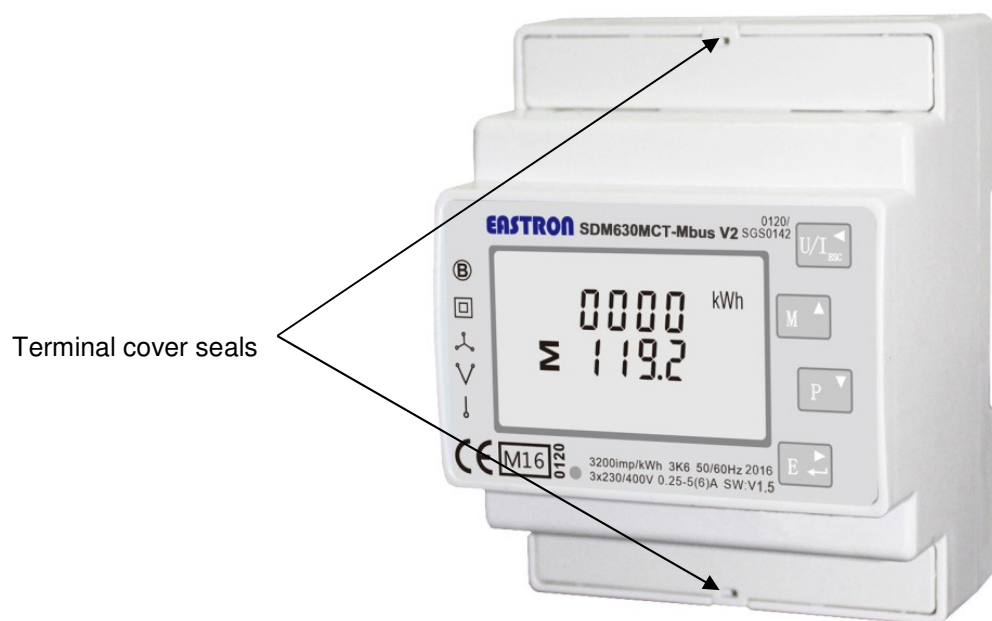
	EU-Type Examination Certificate Number:	
	0120/SGS0142	
	Issue Number: 3	Dated: 21 st December 2018

2. Photographs of Meter

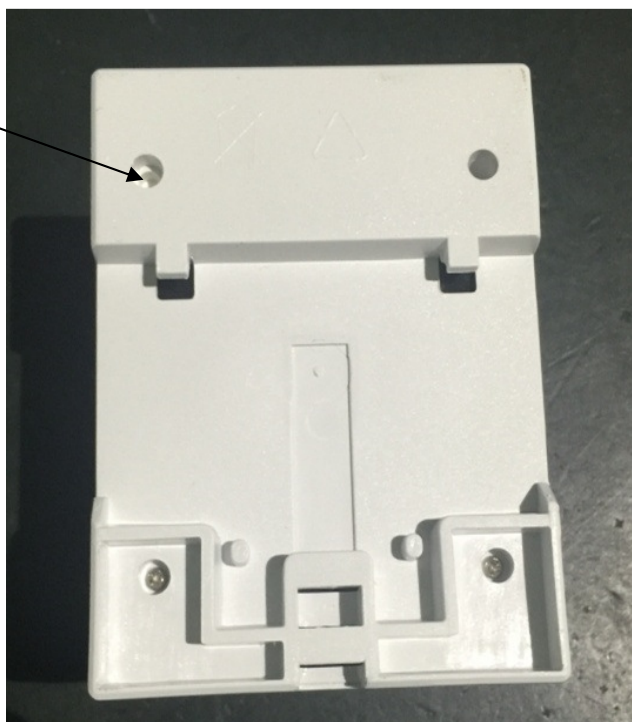



	EU-Type Examination Certificate Number:	
	0120/SGS0142	
	Issue Number: 3	Dated: 21 st December 2018

3. Meter Sealing Points



Main cover seal



	EU-Type Examination Certificate Number:	
	0120/SGS0142	
	Issue Number: 3	Dated: 21 st December 2018

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:-

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

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




EU-Type Examination Certificate Number:

0120/SGS0142

Issue Number: 3

Dated: 21st December 2018

		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	0.39	0.30	0.71	0.16	0.25	0.39
I _{tr}	1.0	0.33	0.27	0.28	0.18	0.25	0.47
10I _{tr}	1.0	0.35	0.31	0.24	0.22	0.29	0.49
I _{max}	1.0	0.36	0.31	0.25	0.21	0.28	0.47
I _{tr}	0.5ind	0.26	0.25	0.36	0.16	0.23	0.44
10I _{tr}	0.5ind	0.38	0.34	0.29	0.27	0.34	0.52
I _{max}	0.5ind	0.42	0.38	0.32	0.30	0.36	0.52
I _{tr}	0.8cap	0.31	0.42	0.43	0.32	0.37	0.50
10I _{tr}	0.8cap	0.32	0.27	0.21	0.17	0.26	0.45
I _{max}	0.8cap	0.34	0.28	0.21	0.15	0.24	0.43
L1							
I _{tr}	1.0	0.37	0.39	0.44	0.14	0.28	0.35
10I _{tr}	1.0	0.34	0.30	0.24	0.20	0.27	0.47
I _{max}	1.0	0.33	0.30	0.23	0.21	0.28	0.47
I _{tr}	0.5ind	0.41	0.56	0.96	0.14	0.15	0.16
10I _{tr}	0.5ind	0.49	0.46	0.42	0.38	0.43	0.62
I _{max}	0.5ind	0.49	0.46	0.42	0.39	0.44	0.60
L2							
I _{tr}	1.0	0.25	0.20	0.12	0.18	0.31	0.51
10I _{tr}	1.0	0.38	0.32	0.23	0.19	0.28	0.45
I _{max}	1.0	0.38	0.32	0.23	0.21	0.28	0.47
I _{tr}	0.5ind	0.12	0.12	0.13	0.25	0.38	0.59
10I _{tr}	0.5ind	0.36	0.33	0.25	0.25	0.32	0.49
I _{max}	0.5ind	0.39	0.35	0.28	0.27	0.34	0.49
L3							
I _{tr}	1.0	0.32	0.27	0.21	0.19	0.27	0.46
10I _{tr}	1.0	0.32	0.28	0.22	0.21	0.30	0.50
I _{max}	1.0	0.33	0.30	0.23	0.22	0.30	0.50
I _{tr}	0.5ind	0.32	0.32	0.24	0.20	0.29	0.53
10I _{tr}	0.5ind	0.34	0.29	0.23	0.23	0.33	0.54
I _{max}	0.5ind	0.35	0.31	0.25	0.13	0.33	0.53


	EU-Type Examination Certificate Number:	
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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
SDM 630MCT	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated (Terminal 7 and 8 used as power output for next meter in daisy connection)
SDM 630MCT 2T	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated (Terminal 7 and 8 is used as signal input for two tariff shifting)
SDM 630MCT Mbus	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated, Mbus communication
SDM630MCT-E	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated

Modifications to the meter(s) described according to approval No.**0120/SGS0142** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

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	0120/SGS0142	
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6. Document Revision History

Issue	Date	Comments
1	10/03/2014	Initial Issue
2	11/10/2016	SDM630MC -2T and SDM630MCT-Mbus added to approval
3	21/12/2018	SDM630MCT-E added to approval

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END OF CERTIFICATE