



EU Type Examination Certificate Number: 0120/SGS0703

Zhejiang Eastron Electronic Co., Ltd

No.52, Dongjin Road
Nanhu
Jiaxing
Zhejiang
China

Instrument Identification:
SDM630MCT Series

Polyphase, Active Import/Export (kWh) Indoor, Electricity Meter

Instrument Traceable Number
0120/SGS0703

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

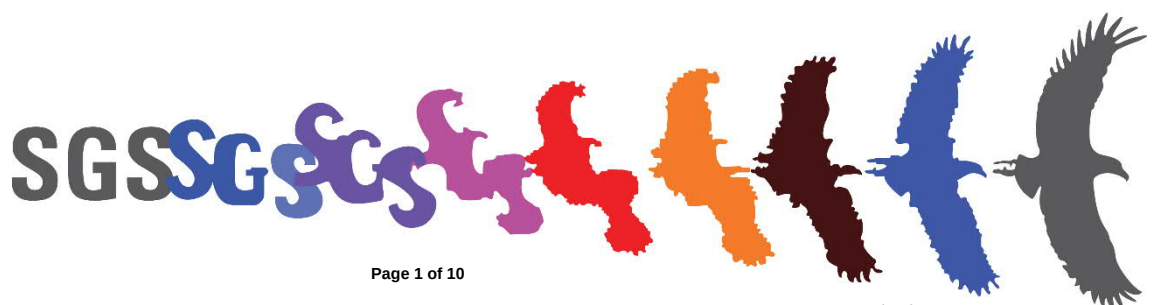
This certificate is valid from 17 June 2024 until 16 June 2034
Issue 1

Certification is based on report number(s): SHES240100078801 Dated 7th June 2024, SHES240100078802 Dated 7th June 2024
EMA325963/1

Authorised Signature

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	EU-Type Examination Certificate Number:	
	0120/SGS0703	
	Issue Number: 1	Dated: 17 th June 2024

1. Technical Data`

Manufacturer	Zhejiang Eastron Electronic Co., Ltd.
Meter Type(s)	SDM630MCT-2T, SDM630MCT-MT, SDM630MCT, SDM630MCT-2T-MB, SDM630MCT-MB, SDM630MCT-E, SDM630MCT-DI, SDM630MCT-LR, SDM630MCT-TCP
Voltage Rating (<i>Un</i>)	3x230/400V
Current Rating (<i>I_{min}</i> – <i>I_{ref}</i> (<i>I_{max}</i>))	0.05-5(6)A
Frequency (<i>Fn</i>)	50/60Hz
Active Accuracy Class (<i>kWh</i>)	A or B or C (kWh)
Type of circuit	1p2w, 3p3w, 3p4w
Temperature Range	-40°C to +70°C
Software/ Firmware Version No's	V01.04
CRC Checksum No's	SDM630MCT-2T: 84EDA549 SDM630MCT-MT: 1A47DD5E SDM630MCT: 84EDA549 SDM630MCT-2T-MB: 0EFC9E7E SDM630MCT-MB: 14BF1CC5 SDM630MCT-E: BDDC493C SDM630MCT-DI: 0AC5AA6F SDM630MCT-LR: 3444F9A5 SDM630MCT-TCP: EED7CC01
Identification Location	Nameplate
Bill of Materials No's	SDM630MCT-2T: DH-JS-230051 V1.0 SDM630MCT-MT: DH-JS-230061 V1.0 SDM630MCT: DH-JS-230062 V1.0 SDM630MCT-2T-MB: DH-JS-230063 V1.0 SDM630MCT-MB: DH-JS-230064 V1.0 SDM630MCT-E: DH-JS-230065 V1.0 SDM630MCT-DI: DH-JS-230066 V1.0 SDM630MCT-LR: DH-JS-230067 V1.0 SDM630MCT-TCP: DH-JS-230068V1.0
IP Rating	IP51 Front Display Meter body not rated. Must be installed in a suitable IP rated enclosure
Insulation Protective Class	Class II
LED Pulse Constant	3200imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
	Main cover laser welded.

SGS

EU-Type Examination Certificate Number:

0120/SGS0703

Issue Number: 1

Dated: 17th June 2024

Main Cover Sealing Type

Sealed with tamper proof security label

Integrity of meter

Inaccessible without breaking seals

Intended Location of the Meter

Indoor

Type of Register

LCD

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EU-Type Examination Certificate Number:

0120/SGS0703

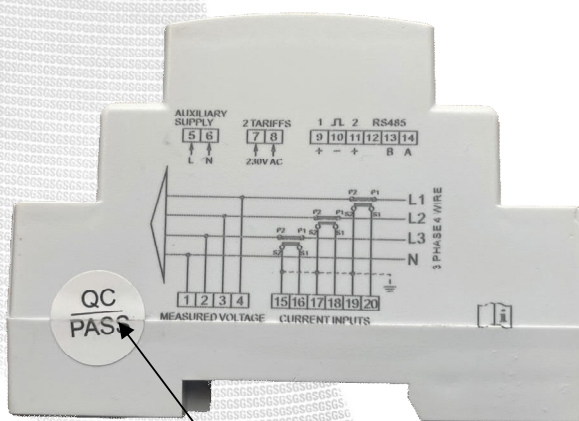
Issue Number: 1

Dated: 17th June 2024

2. Photograph of Meter and Sealing Plan

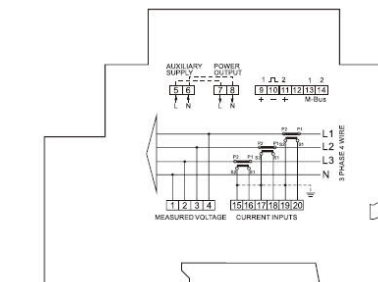
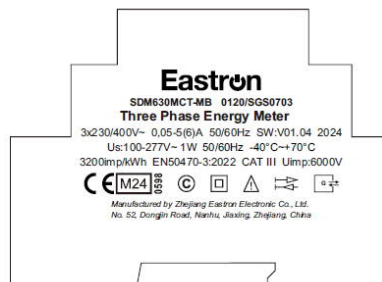
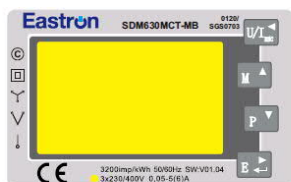
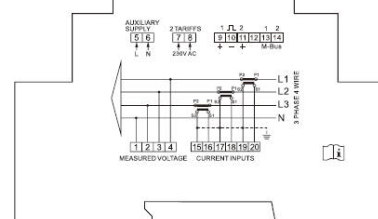
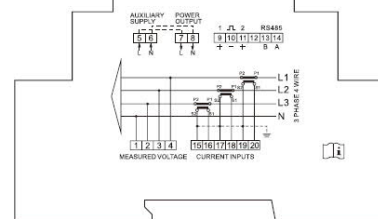
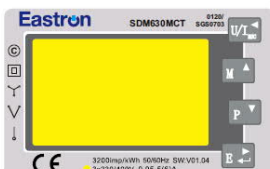
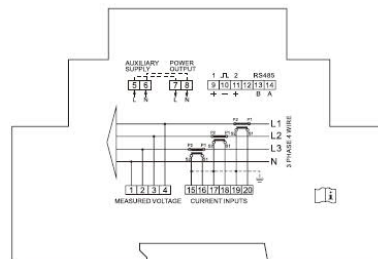
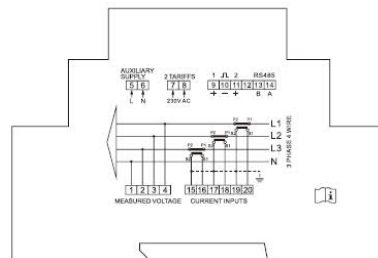


Terminal Cover Sealing Points



Main Cover Sealing Point

3. Examples of Nameplates



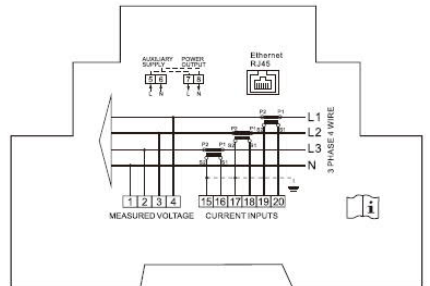
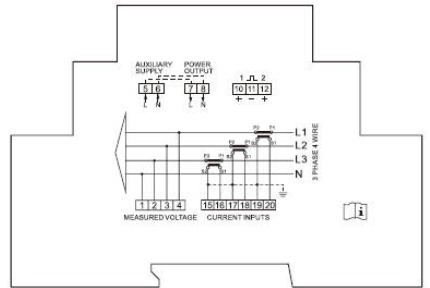
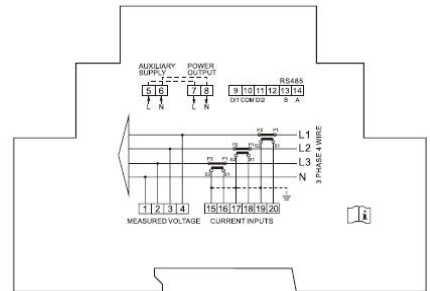
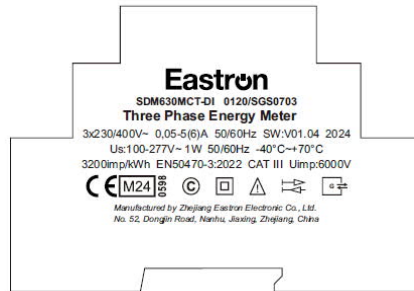
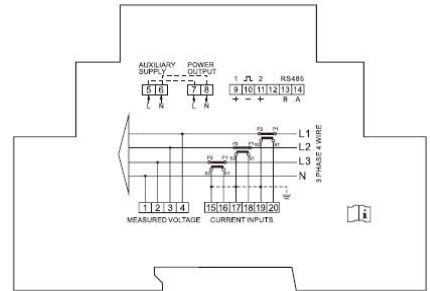
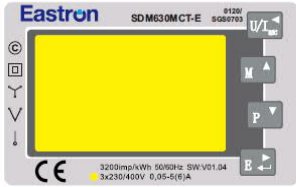
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EU-Type Examination Certificate Number:

0120/SGS0703

Issue Number: 1

Dated: 17th June 2024





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0120/SGS0703

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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/SGS0703

Issue Number: 1

Dated: 17th June 2024

		Influence Factors for temperature, frequency and voltage							
Current	PF Cos	-40°C	-25°C	-10°C	5°C	30°C	40°C	55°C	70°C
I _{min}	1.0	0.45	0.38	0.13	0.08	0.09	0.10	0.21	0.43
I _{tr}	1.0	0.48	0.39	0.24	0.13	0.13	0.17	0.28	0.45
10I _{tr}	1.0	0.39	0.31	0.14	0.08	0.08	0.09	0.18	0.34
I _{max}	1.0	0.37	0.36	0.20	0.08	0.09	0.08	0.16	0.31
I _{tr}	0.5ind	0.30	0.19	0.09	0.12	0.10	0.12	0.28	0.55
10I _{tr}	0.5ind	0.35	0.26	0.11	0.04	0.04	0.08	0.23	0.44
I _{max}	0.5ind	0.30	0.27	0.15	0.15	0.16	0.13	0.18	0.35
I _{tr}	0.8cap	0.67	0.68	0.74	0.80	0.82	0.79	0.75	0.70
10I _{tr}	0.8cap	0.43	0.34	0.16	0.05	0.03	0.07	0.16	0.33
I _{max}	0.8cap	0.41	0.37	0.21	0.06	0.04	0.06	0.16	0.31
L1									0.00
I _{tr}	1.0	0.41	0.23	0.08	0.06	0.05	0.09	0.21	0.43
10I _{tr}	1.0	0.39	0.20	0.08	0.07	0.07	0.09	0.21	0.42
I _{max}	1.0	0.38	0.22	0.08	0.04	0.04	0.09	0.17	0.43
I _{tr}	0.5ind	0.40	0.24	0.08	0.06	0.07	0.15	0.31	0.60
10I _{tr}	0.5ind	0.32	0.16	0.13	0.16	0.14	0.13	0.21	0.44
I _{max}	0.5ind	0.28	0.15	0.12	0.15	0.14	0.12	0.17	0.41
L2									
I _{tr}	1.0	0.60	0.39	0.24	0.17	0.18	0.23	0.33	0.51
10I _{tr}	1.0	0.44	0.25	0.13	0.13	0.13	0.12	0.19	0.35
I _{max}	1.0	0.44	0.26	0.13	0.12	0.12	0.11	0.18	0.35
I _{tr}	0.5ind	0.36	0.17	0.08	0.09	0.08	0.14	0.30	0.58
10I _{tr}	0.5ind	0.40	0.32	0.33	0.36	0.35	0.32	0.32	0.43
I _{max}	0.5ind	0.41	0.35	0.37	0.41	0.40	0.36	0.35	0.43
L3									
I _{tr}	1.0	0.48	0.26	0.10	0.05	0.05	0.07	0.19	0.37
10I _{tr}	1.0	0.49	0.27	0.11	0.06	0.06	0.07	0.16	0.34
I _{max}	1.0	0.50	0.27	0.10	0.03	0.03	0.06	0.16	0.33
I _{tr}	0.5ind	0.42	0.22	0.11	0.09	0.14	0.22	0.45	0.75
10I _{tr}	0.5ind	0.45	0.24	0.11	0.06	0.07	0.13	0.30	0.51
I _{max}	0.5ind	0.46	0.25	0.11	0.05	0.04	0.13	0.27	0.49



EU-Type Examination Certificate Number:

0120/SGS0703

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Dated: 17th June 2024

5. Annex of Variants

Product Variant Identification Details:

Model No.	SDM630MCT-2T	SDM630MCT-MT	SDM630MCT	SDM630MCT-2T-MB	SDM630MCT-MB	SDM630MCT-E	SDM630MCT-DI	SDM630MCT-LoRa	SDM630MCT-TCP
Voltage range	3x230/400V, 230V, 3x400V					3x230/400V, 230V	3x230/400V, 230V, 3x400V		
Current range	0.05-5(6)A								
Frequency range	50/60Hz								
1 Optical pulse output	3200imp/kWh								
2 Electrical pulse output	•	•	•	•	•	•		•	
2 DI input							•		
1 RS485 communication	•	•	•			•	•		
1 M-Bus communication				•	•				
1 Ethernet TCP									•
Auxiliary supply	100~277V								
2 Tariffs	•			•					
Power output		•	•		•	•	•	•	•

Modifications to the meter(s) described according to approval No.0120/SGS0703 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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6. Document Revision History

Issue	Date	Comments
1	17/06/2024	Initial Issue

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