

EU Type Examination Certificate Number: 0120/SGS0534

Zhejiang Eastron Electronic Co., Ltd.

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

Instrument Identification:
SDM630MCT-ML-*

**Polyphase, Active Import/Export (kWh), Transformer Operated,
DIN Rail, Electricity Meter**

Instrument Traceable Number
0120/SGS0534

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

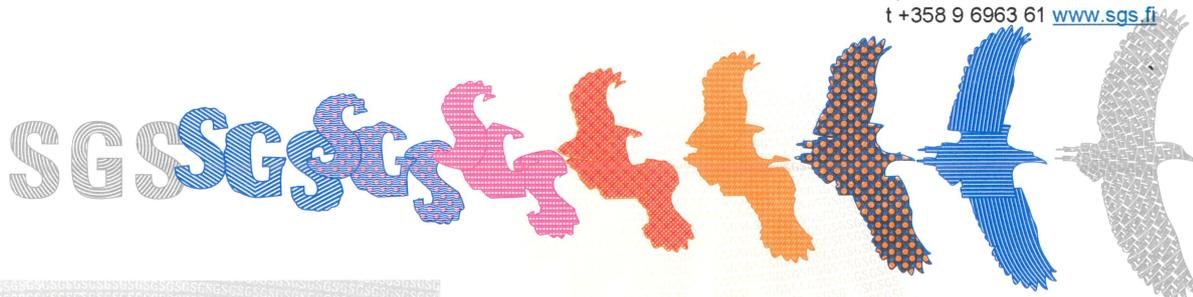
This certificate is valid for 10 years from 16th March 2022 until 15th March 2032
Issue 1

Certification is based on report number(s):
EMA293874/1 Dated 16th March 2022

Authorised Signature

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EU-Type Examination Certificate Number:

0120/SGS0534

Issue Number: 1

Dated: 16th March 2022**1. Technical Data`**

Manufacturer	Zhejiang Eastron Electronic Co., Ltd
Meter Types	SDM630MCT-ML-1, SDM630MCT-ML-2, SDM630MCT-ML-3, SDM630MCT-ML-4
Voltage Rating (<i>Un</i>)	3x230/400 V
Current Rating (<i>I_{min}</i> – <i>I_{ref}</i> (<i>I_{max}</i>))	100mA/5(6)A
This meter must be calibrated so that the combined effect of the meter and the current transformer operate within the marked class of the meter. The only current transformers to be used must comply with IEC/BS 61869-2, class 0.2S and must be provided by the manufacture of the meter	
Frequency (<i>F_n</i>)	50Hz
Active Accuracy Class (<i>kWh</i>)	A or B(kWh)
Type of circuit	1p2w, 3p3w, 3p4w
Temperature Range	-40°C to +70°C
Software/ Firmware Version No	V01.01
CRC Checksum	DE20D183
Identification Location	LCD
BOM No.'s	SDM630MCT-ML-4: DH-JS-190018 V1.0 SDM630MCT-ML-3: DH-JS-220015 V1.0 SDM630MCT-ML-2: DH-JS-220014 V1.0 SDM630MCT-ML-1: DH-JS-220013 V1.0
IP Rating	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 Sealing Type	Main cover glued and sealed with tamper proof sealing tape
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	Nameplate or Associated Documents

SGS

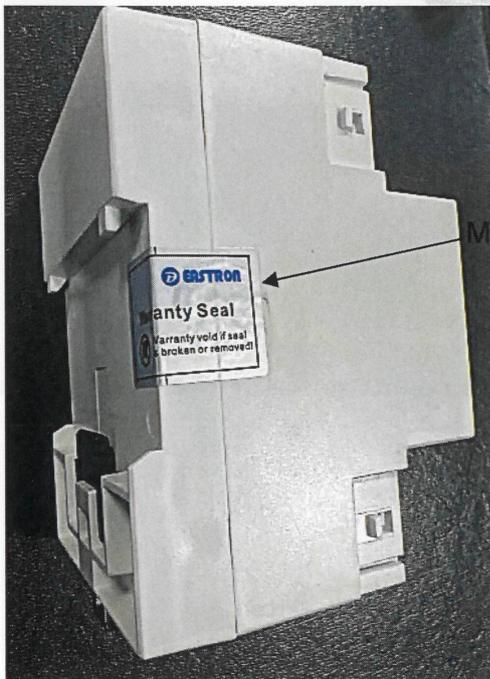
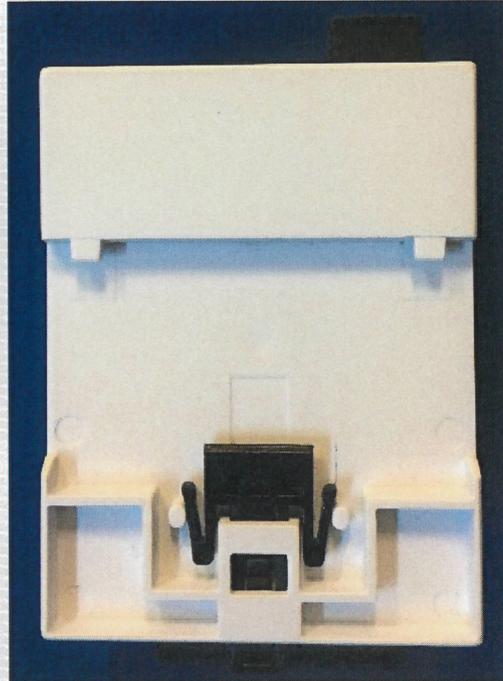
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2. Photograph of Meter and Sealing Plan



Main Cover Security Seal

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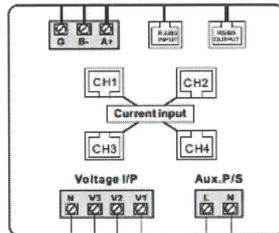
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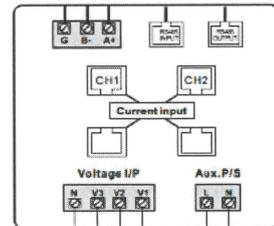
3. Examples of Nameplates



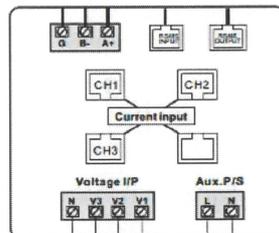
Manufactured by Zhejiang Eastron Electronic Co., Ltd.
No. 1369 Chengnan Rd. Jiaxing, Zhejiang, China



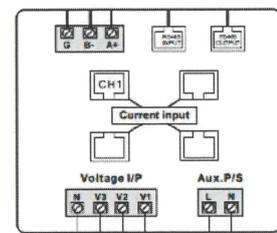
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4. Calculation of the composite error/ MPE

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:-

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

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

		Influence Factors for Temperature, Frequency & Voltage							
Current	PF Cos	-40°C	-25°C	-10°C	5°C	30°C	40°C	55°C	70°C
I _{min}	1.0	2.42	2.17	1.70	1.26	1.28	1.28	1.83	2.58
I _{tr}	1.0	2.42	2.17	1.70	1.26	1.27	1.27	1.83	2.55
10I _{tr}	1.0	2.43	2.19	1.71	1.27	1.27	1.27	1.83	2.55
I _{max}	1.0	2.44	2.21	1.73	1.28	1.26	1.26	1.82	2.54
I _{tr}	0.5ind	3.12	2.88	1.70	1.23	0.16	0.16	0.60	1.36
10I _{tr}	0.5ind	2.28	2.04	1.49	0.87	0.69	0.69	1.47	2.22
I _{max}	0.5ind	2.40	2.16	1.61	1.00	0.62	0.62	1.37	2.12
I _{tr}	0.8cap	1.79	1.93	0.98	0.36	0.85	0.85	2.00	2.78
10I _{tr}	0.8cap	2.17	1.92	1.36	0.75	0.81	0.81	1.61	2.39
I _{max}	0.8cap	2.19	1.93	1.37	0.76	0.80	0.80	1.60	2.38
L1						0.00			
I _{tr}	1.0	2.10	1.86	1.31	0.70	0.85	0.85	1.65	2.41
10I _{tr}	1.0	2.13	1.89	1.34	0.73	0.83	0.83	1.63	2.38
I _{max}	1.0	2.14	1.90	1.35	0.74	0.82	0.82	1.62	2.38
I _{tr}	0.5ind	3.05	2.81	2.27	1.28	0.11	0.11	0.66	1.39
10I _{tr}	0.5ind	2.09	1.84	1.30	0.68	0.88	0.88	1.63	2.37
I _{max}	0.5ind	2.09	1.85	1.30	0.68	0.87	0.87	1.62	2.37
L2									
I _{tr}	1.0	2.09	1.83	1.26	0.63	0.95	0.95	1.76	2.54
10I _{tr}	1.0	2.13	1.86	1.29	0.67	0.92	0.92	1.73	2.51
I _{max}	1.0	2.15	1.87	1.31	0.68	0.91	0.91	1.72	2.48
I _{tr}	0.5ind	3.10	2.82	2.27	1.27	0.09	0.09	0.73	1.50
10I _{tr}	0.5ind	2.22	1.94	1.38	0.75	0.85	0.85	1.63	2.41
I _{max}	0.5ind	2.23	1.96	1.39	0.76	0.84	0.84	1.63	2.40
L3									
I _{tr}	1.0	2.39	2.11	1.57	0.97	0.12	0.57	1.34	2.11
10I _{tr}	1.0	2.41	2.13	1.59	0.99	0.10	0.55	1.33	2.09
I _{max}	1.0	2.42	2.14	1.60	1.00	0.09	0.54	1.33	2.09
I _{tr}	0.5ind	3.31	3.04	2.28	1.28	0.82	0.67	0.41	1.12
10I _{tr}	0.5ind	2.65	2.37	1.84	1.24	0.17	0.32	1.08	1.82
I _{max}	0.5ind	2.65	2.37	1.84	1.24	0.15	0.32	1.06	1.81



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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
SDM630MCT-ML-1	3x230/400V, 100mA/5(6)A, Active Import/Export (kWh), Transformer operated, Multifunction, RS485 Modbus RTU, One current input
SDM630MCT-ML-2	3x230/400V, 100mA/5(6)A, Active Import/Export (kWh), Transformer operated, Multifunction, RS485 Modbus RTU, Two current inputs
SDM630MCT-ML-3	3x230/400V, 100mA/5(6)A, Active Import/Export (kWh), Transformer operated, Multifunction, RS485 Modbus RTU, Three current inputs
SDM630MCT-ML-4	3x230/400V, 100mA/5(6)A, Active Import/Export (kWh), Transformer operated, Multifunction, RS485 Modbus RTU, Four current inputs

Modifications to the meter(s) described according to approval No. **0120/SGS0534** 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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	Issue Number: 1	Dated: 16 th March 2022

6. Document Revision History

Issue	Date	Comments
1	16/03/2022	Initial Issue

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END OF CERTIFICATE