



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

**Polyphase, Active Import/ Export kWh, 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 6

Certification is based on report number(s) EMA174647/1/MID dated 30th January 2014
EMA174647/1/MID/iss 2 dated 9th October 2019
EMA281302/1

Authorised Signature


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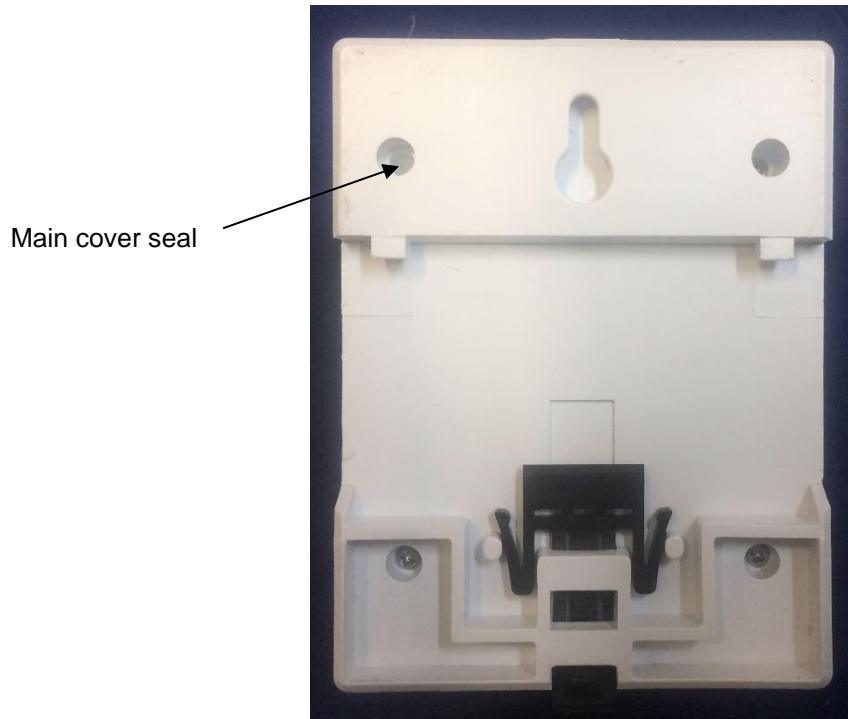
	EU-Type Examination Certificate Number:	
	0120/SGS0142	
	Issue Number: 6	Dated: 14 th September 2020


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, SDM630MCT-DI, SDM630MCT-2T-Mbus, SDM630MCT-MT, SDM630MCT-LoRa
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)	B or C (kWh)
Type of circuit	3p4w, 3p3w, 1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	SDM630M CT: V1.3 SDM630M CT-2T: V1.4 SDM630M CT-Mbus: V1.5 SDM630MCT-E: V1.6 SDM630MCT-DI: V1.8 SDM630MCT-2T-Mbus: V1.9 SDM630MCT-MT: V1.7 SDM630MCT-LoRa: V3.4
CRC Checksum No's	SDM630MCT: 0x0000D5C8 SDM630MCT-2T: 0x0000D279 SDM630MCT-Mbus : 0x00001516 SDM630MCT-E: 0x000080FA SDM630MCT-Di : 0x005D2CB2 SDM630MCT-2T-Mbus: 0x0000147B SDM630MCT-MT: 0x00597DE9 SDM630MCT -LoRa: 0x7227CB
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 SDM630MCT-DI: DH-JS-190005-1.0 SDM630CT-2T-Mbus: DH-JS-190019-V1.1 SDM630MCT-MT: DH-JS-190004-V1.1 SDM630MCT-LoRa: DH-JS-200013-V1.0
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

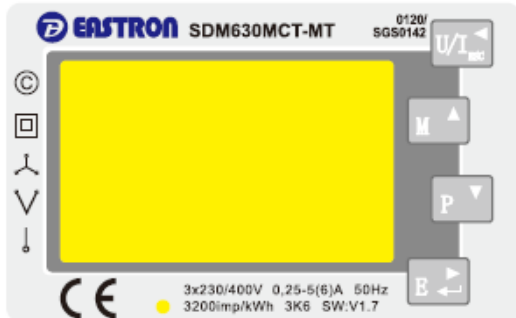
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




2. Photograph of Example Meter & Sealing Points

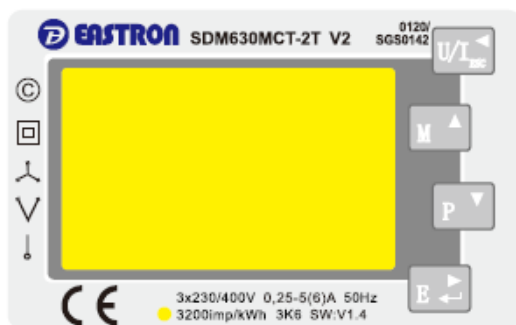





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3. Nameplates & Markings




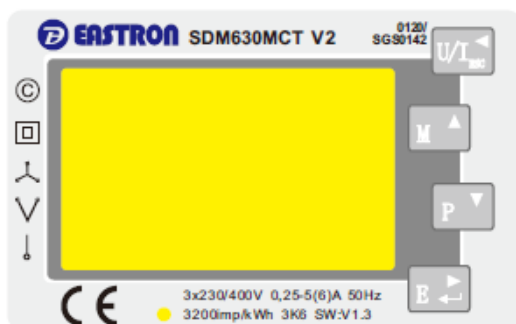

SDM630MCT-MT V2 0120/SGS0142
Three Phase Energy Meter
 3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
 3200imp/kWh EN50470-1/3 SW:1.7 CAT III






3K6
Manufactured by Zhejiang Eastron Electronic Co., Ltd.
 No.1369, Chengnan Rd., Jiaxing, Zhejiang, China











SDM630MCT-2T V2 0120/SGS0142
Three Phase Energy Meter
 3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
 3200imp/kWh EN50470-1/3 SW:1.4 CAT III






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SDM630MCT V2 0120/SGS0142
Three Phase Energy Meter
 3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
 3200imp/kWh EN50470-1/3 SW:1.3 CAT III






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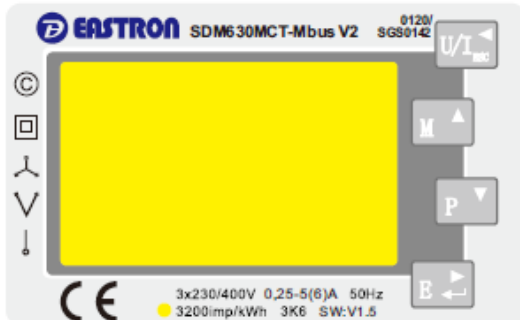
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EASTRON
SDM630MCT-Modus V2 0120/SGS0142
Three Phase Energy Meter
3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
3200imp/kWh EN50470-1/3 SW:1.5 CAT III

CE M19 0120 © □ △ 3K6

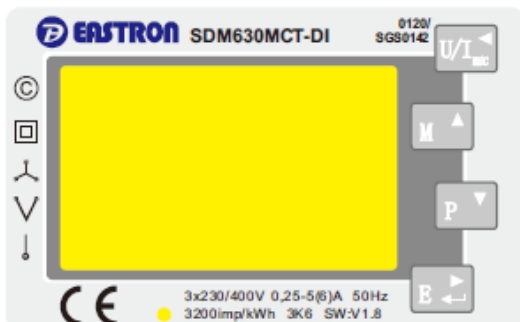
Manufactured by Zhejiang Eastron Electronic Co., Ltd.
No.1369, Chengnan Rd. Jiaxing, Zhejiang, China



EASTRON
SDM630MCT-E 0120/SGS0142
Three Phase Energy Meter
3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
3200imp/kWh EN50470-1/3 SW:1.6 CAT III

CE M19 0120 © □ △ 3K6

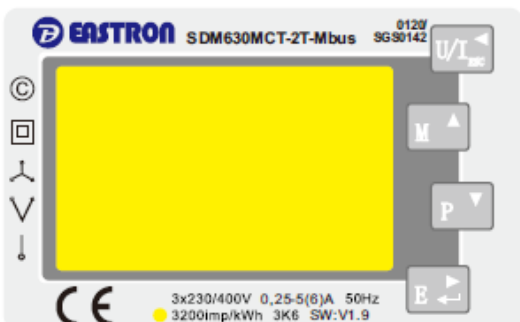
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EASTRON
SDM630MCT-DI V2 0120/SGS0142
Three Phase Energy Meter
3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
3200imp/kWh EN50470-1/3 SW:1.8 CAT III

CE M19 0120 © □ △ 3K6


Manufactured by Zhejiang Eastron Electronic Co., Ltd.
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EASTRON
SDM630MCT-2T-Mbus V2 0120/SGS0142
Three Phase Energy Meter
3x230/400V AC 0,25-5(6)A 50Hz IP51 2019
3200imp/kWh EN50470-1/3 SW:1.9 CAT III


CE M19 0120 © □ △ 3K6

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SN:20280001
Lot No.:200999



 0120/SGS0142
 SDM630MCT-LoRa SW V3.4
Three Phase Energy Meter
 1Φ2W, 1Φ3W, 3Φ3W, 3Φ4W
 3x230/400V AC 0.25-5(6)A 50Hz
 3200imp/kWh EN50470-1/3 Cl.B CAT III Y2020






3K6 IP51

Manufactured by Zhejiang Eastron Electronic Co., Ltd.
 No.1389, 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




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		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	0.85	0.50	0.07	0.12	0.13	0.15
I _{tr}	1.0	0.91	0.54	0.25	0.10	0.14	0.16
10I _{tr}	1.0	0.85	0.50	0.23	0.03	0.09	0.12
I _{max}	1.0	0.86	0.51	0.24	0.05	0.08	0.12
I _{tr}	0.5ind	1.08	0.70	0.37	0.16	0.16	0.17
10I _{tr}	0.5ind	0.79	0.43	0.17	0.09	0.13	0.18
I _{max}	0.5ind	0.79	0.43	0.18	0.10	0.15	0.17
I _{tr}	0.8cap	0.85	0.48	0.21	0.06	0.10	0.15
10I _{tr}	0.8cap	0.87	0.51	0.24	0.02	0.06	0.11
I _{max}	0.8cap	0.89	0.51	0.26	0.03	0.06	0.10
L1							
I _{tr}	1.0	0.92	0.38	0.20	0.11	0.13	0.13
10I _{tr}	1.0	0.85	0.48	0.22	0.05	0.12	0.17
I _{max}	1.0	0.87	0.50	0.24	0.05	0.10	0.16
I _{tr}	0.5ind	0.90	0.48	0.17	0.31	0.21	0.13
10I _{tr}	0.5ind	0.88	0.50	0.22	0.05	0.15	0.16
I _{max}	0.5ind	0.88	0.50	0.24	0.05	0.10	0.14
L2							
I _{tr}	1.0	0.86	0.51	0.23	0.04	0.09	0.13
10I _{tr}	1.0	0.82	0.47	0.21	0.04	0.08	0.12
I _{max}	1.0	0.83	0.48	0.22	0.04	0.08	0.11
I _{tr}	0.5ind	1.03	0.61	0.26	0.14	0.22	0.23
10I _{tr}	0.5ind	0.69	0.35	0.10	0.15	0.21	0.24
I _{max}	0.5ind	0.67	0.32	0.06	0.18	0.24	0.28
L3							
I _{tr}	1.0	0.87	0.50	0.24	0.05	0.10	0.12
10I _{tr}	1.0	0.85	0.48	0.22	0.04	0.09	0.11
I _{max}	1.0	0.84	0.48	0.22	0.05	0.09	0.12
I _{tr}	0.5ind	0.97	0.56	0.27	0.09	0.13	0.13
10I _{tr}	0.5ind	0.83	0.47	0.21	0.06	0.08	0.11
I _{max}	0.5ind	0.83	0.47	0.21	0.04	0.09	0.11


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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
SDM630MCT-DI	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated. Digital inputs
SDM630MCT-2T-Mbus	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Transformer Operated, Mbus communication (Terminal 7 and 8 is used as signal input for two tariff shifting)
SDM630MCT-MT	0.25-5(6)A – Polyphase, Active Import/Export kWh, Multifunction, Multi-tariff, Transformer Operated, Modbus communication
SDM630MCT-LoRa	0.25-5(6)A – Polyphase, Single tariff, total active energy, resettable active energy, import active energy, export active energy, total reactive energy, import reactive energy, export reactive energy, active power, reactive power, voltage, current, frequency, power factor, power demand, LoRa communication.

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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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
4	08/08/2019	SDM630CT-DI, SDM630MCT-2T-Mbus, SDM630MCT-MT added to approval
5	31/10/2019	Meter accuracy improved to meet Class C limits
6	14/09/2020	SDM630MCT-LoRa added to approval

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END OF CERTIFICATE