



EU Type Examination Certificate Number: **0120/SGS0391**

Eastron Zhejiang Electronic Co. Ltd

No. 1369. Chengnan Road
Jiaxing
Zhejiang
China

Instrument Identification:
SDM320Y Series

Single Phase, Active, Import/ Export (kWh), Pre-payment, Electricity Meter

Instrument Traceable Number
0120/SGS0391

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 5th November 2018 until 4th November 2028
Issue 1

Certification is based on report number(s) EMA255473/1 dated 20th November 2018, EMA255473/1/TR50579 dated 14th August 2018
Authorised Signature


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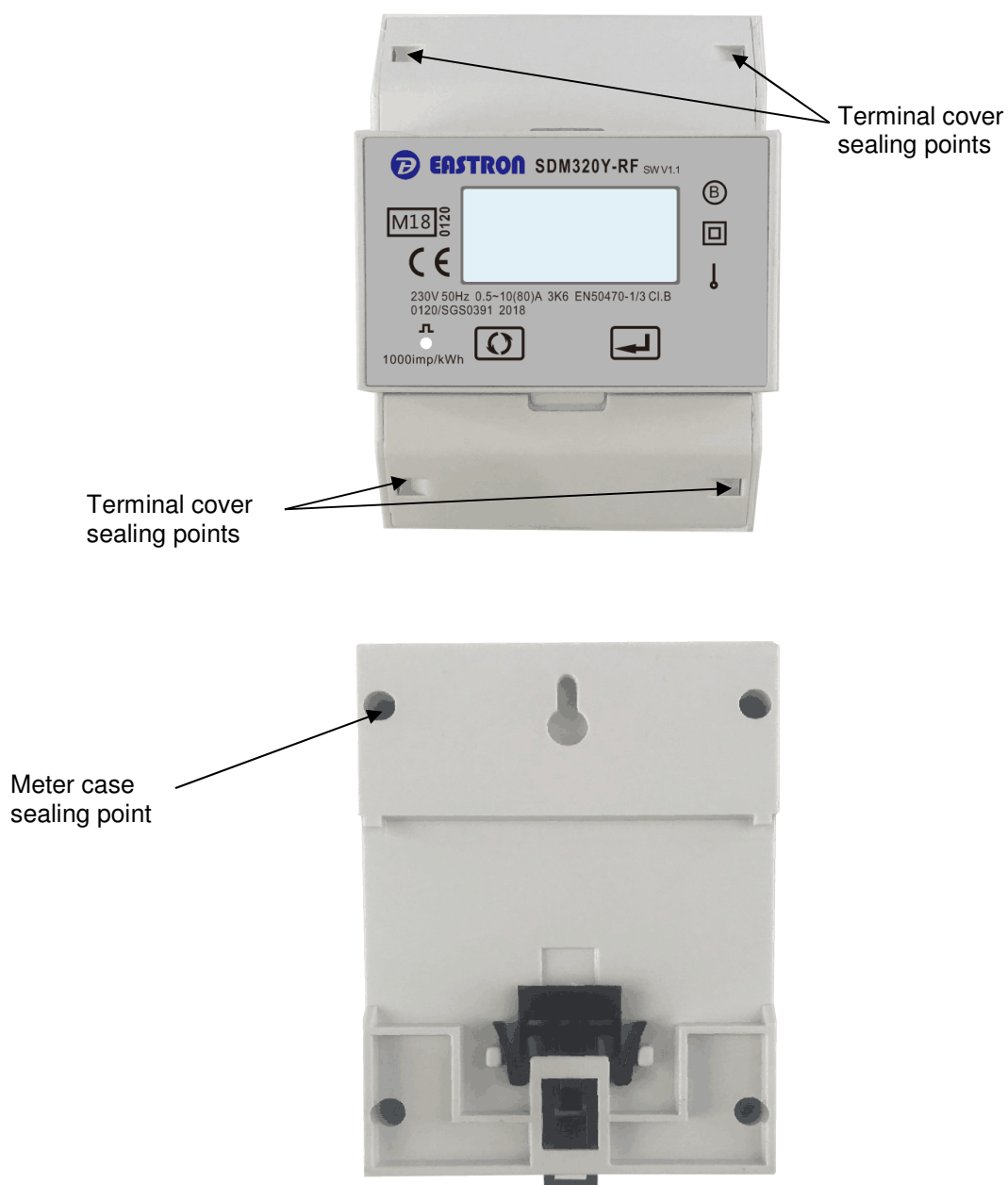
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	Issue Number: 1	Dated: 5 th December 2018


1. Technical Data

Manufacturer	Zhejiang Eastron Electronic Co., Ltd
Meter Type's	SDM320Y-RF SDM320Y-D
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0,5-10(80)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	SDM320Y-RF: V1.1 SDM320Y-D: V1.2
CRC Checksum No's	SDM320Y-RF: 0x0000C70D SDM320Y-D: 0x0000F401
Identification Location	LCD & Nameplate
Bill Of Materials No's	SDM320Y-RF: DH-JS-180004-1.0 SDM320Y-D: DH-JS-180030-1.0
IP Rating	IP51 Must be installed in a suitable IP rated enclosure
Insulation Protective Class	Class II
LED Pulse Constant	1000imp/kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	4 x screws. 1 sealed with plastic plug
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

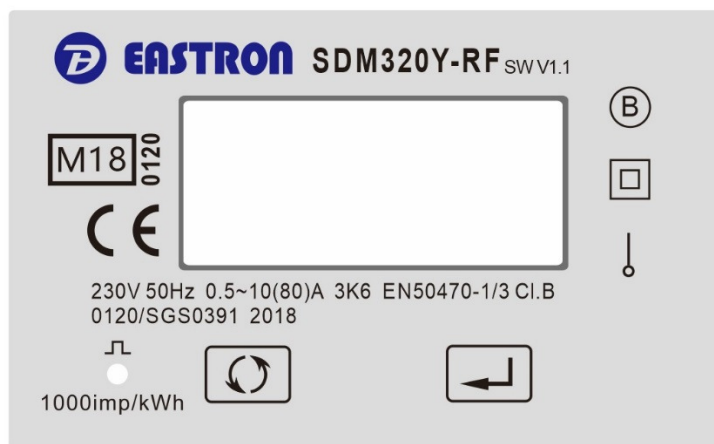
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2. Photograph of Meter and Sealing Plan

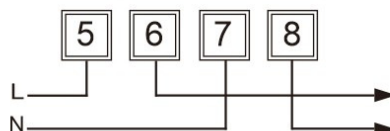


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3. Example of Nameplate



EASTRON 0120/SGS0391
SDM320Y-RF CE M18 0120
Single Phase Energy Meter
230V AC 0,5-10(80)A AC 50Hz 2018
1000imp/kWh EN50470-1/3
ⓑ ⓐ ⓑ 3K6 IP51



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

Current	PF Cos	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C
I _{min}	1.0	0.74	0.49	0.32	0.19	0.22	0.32
I _{tr}	1.0	0.74	0.49	0.29	0.09	0.15	0.25
10I _{tr}	1.0	0.76	0.51	0.32	0.03	0.07	0.19
I _{max}	1.0	0.48	0.33	0.23	0.09	0.10	0.15
I _{tr}	0.5ind	0.82	0.59	0.38	0.18	0.21	0.28
10I _{tr}	0.5ind	0.79	0.53	0.33	0.04	0.11	0.22
I _{max}	0.5ind	0.59	0.44	0.31	0.10	0.07	0.10
I _{tr}	0.8cap	0.71	0.48	0.30	0.11	0.14	0.22
10I _{tr}	0.8cap	0.68	0.44	0.28	0.06	0.12	0.22
I _{max}	0.8cap	0.46	0.32	0.23	0.07	0.06	0.10


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
SDM320Y-D	230V, 0.5A-10(80)A, pulse output
SDM320Y-RF	230V, 0.5A-10(80)A, RS485 Modbus communication

Modifications to the meter(s) described according to approval No.**0120/SGS0391** 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	05/12/2018	Initial Issue

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END OF CERTIFICATE