



EU Type Examination Certificate Number: **0120/ SGS0036**

Secure Meters (Sweden) AB

Box 1006
SE 61129
Nyköping
Sweden

Instrument Identification:

Poly Phase, Programmable, Transformer Operated, Active Import/ Export, Multi-rate, Credit, Electricity Meter

Instrument Traceable Number
0120/ SGS0036

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 1st October 2019
Issue 7

Certification is based on report number(s)
EMA125852 dated 29th September 2009
EMA137699 dated 6th September 2010
EMA18906/MID dated 27th August 2015

Authorised Signature


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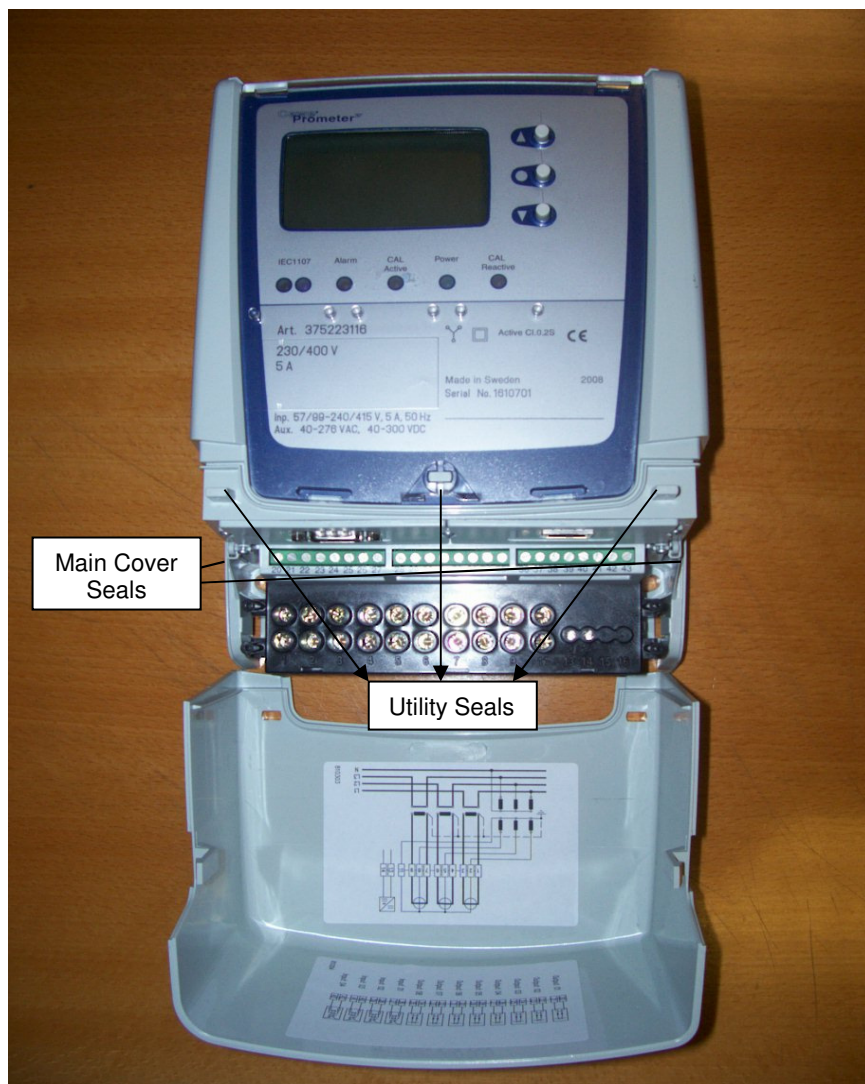
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1. Technical Data

Manufacturer	Secure Meters (Sweden) AB
Meter Type	Prometer-W
Voltage Rating (U_n)	57/ 99V -240/ 415V (3p4w) 100 – 240V (3p3w)
Current Rating ($I_{min} - I_n(I_{max})$)	0,01-1(2)A 0,01-1(6)A 0,01-1(10)A 0,01-1(2)A or 0,05-5(10)A User Programmable (Current Range Variant 4 only)
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	B or C (kWh)
Type of circuit	3p3w or 3p4w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	2.0, 2.1, 3.0, 3.4, 3.5
Identification Location	Nameplate
Bill Of Materials Number	376213116
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	User Programmable
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
Location of Manufacturers Address	Associated Documents

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2. Photograph of Meter and Sealing Plan



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3. 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 above 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	0.06	0.07	0.02	0.02	0.05	0.06
I _{tr}	1.0	0.07	0.07	0.01	0.01	0.04	0.07
10I _{tr}	1.0	0.07	0.04	0.03	0.04	0.07	0.10
I _{max}	1.0	0.06	0.04	0.02	0.02	0.06	0.10
I _{tr}	0.5ind	0.20	0.42	0.20	0.07	0.09	0.12
10I _{tr}	0.5ind	0.25	0.36	0.25	0.09	0.11	0.16
I _{max}	0.5ind	0.23	0.33	0.23	0.05	0.10	0.15
I _{tr}	0.8cap	0.03	0.04	0.09	0.02	0.05	0.04
10I _{tr}	0.8cap	0.19	0.09	0.07	0.05	0.07	0.08
I _{max}	0.8cap	0.17	0.07	0.05	0.02	0.05	0.06
L1							
I _{tr}	1.0	0.10	0.21	0.01	0.02	0.02	0.04
10I _{tr}	1.0	0.10	0.05	0.05	0.05	0.08	0.09
I _{max}	1.0	0.09	0.01	0.01	0.02	0.07	0.08
I _{tr}	0.5ind	0.05	0.58	0.18	0.05	0.07	0.11
10I _{tr}	0.5ind	0.15	0.26	0.23	0.15	0.17	0.19
I _{max}	0.5ind	0.05	0.20	0.18	0.04	0.11	0.14
L2							
I _{tr}	1.0	0.17	0.02	0.03	0.01	0.03	0.11
10I _{tr}	1.0	0.05	0.07	0.06	0.05	0.06	0.12
I _{max}	1.0	0.03	0.06	0.04	0.02	0.05	0.11
I _{tr}	0.5ind	0.06	0.22	0.09	0.06	0.09	0.22
10I _{tr}	0.5ind	0.30	0.40	0.25	0.10	0.12	0.20
I _{max}	0.5ind	0.30	0.39	0.24	0.07	0.10	0.19
L3							
I _{tr}	1.0	0.08	0.09	0.09	0.04	0.18	0.13
10I _{tr}	1.0	0.05	0.06	0.05	0.02	0.14	0.08
I _{max}	1.0	0.06	0.06	0.04	0.02	0.14	0.07
I _{tr}	0.5ind	0.62	0.52	0.30	0.11	0.29	0.28
10I _{tr}	0.5ind	0.42	0.50	0.28	0.09	0.18	0.18
I _{max}	0.5ind	0.40	0.46	0.26	0.03	0.18	0.16


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4. Annex of Variants

Product Variant Identification Details:

Type Designation		Description of meter	
Meter specification		Code	Sample
Product group			
CewePrometer-W	<input type="checkbox"/>	37	
Accuracy class			
C 2-element (3wire) measuring	<input type="checkbox"/>	1	
B 2-element (3wire) measuring	<input type="checkbox"/>	2	
C 3-element (4wire) measuring	<input type="checkbox"/>	6	
B 3-element (4wire) measuring	<input type="checkbox"/>	7	
Measuring module			
<i>3-element meter</i>	<i>2-element meter</i>		
3x57/99 – 240/415 V	50 Hz	<input type="checkbox"/>	2
3x57/99 – 240/415 V	60 Hz	<input type="checkbox"/>	3
	3x100 – 240 V	<input type="checkbox"/>	8
	3x100 – 240 V	<input type="checkbox"/>	9
Current			
1(6) A	<input type="checkbox"/>	1	
1(2) A or 5(10)A FW version 3.3 and below	<input type="checkbox"/>	4	
1(10) A FW version 3.4 and above	<input type="checkbox"/>	4	
Auxiliary supply			
Self powered	<i>Internal supply</i>	<input type="checkbox"/>	2
40–276 VAC/DC	<i>Single aux. supply</i>	<input type="checkbox"/>	3
I/O module			
CewePrometer-W			
No inputs and no outputs	<input type="checkbox"/>	0	
4 inputs and 8 outputs	<input type="checkbox"/>	1	
Communication			
No communication	<input type="checkbox"/>	10	
RS422 + RS232	<input type="checkbox"/>	11	
RS422 + RS422	<input type="checkbox"/>	12	
RS232 + RS232	<input type="checkbox"/>	13	
RS422	<input type="checkbox"/>	14	
RS232	<input type="checkbox"/>	15	
RS232 + Ethernet	<input type="checkbox"/>	16	
RS422 + Ethernet	<input type="checkbox"/>	17	
Ethernet	<input type="checkbox"/>	18	

Modifications to the meter(s) described according to approval No. **0120/ SGS0036** 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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5. Document Revision History

Issue	Date	Comments
1	02/10/2009	Initial Issue
2	06/09/2010	New Firmware Version 2.1 and a hardware minor modification
3	07/10/2010	New Firmware Version 3.0 - Added the user programmable Current Range feature.
4	08/08/2011	Reformat of certificate
5	08/09/2015	Additional current range added
6	01/12/2017	Manufacturers name change from Cewe Instruments AB to Secure Meters (Sweden) AB. Issued on updated certificate template.
7	15/12/2017	New metrology firmware version 3.5 added to approval

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