



EU Type Examination Certificate Number: **0120/SGS0366**

SIA “ATTA-1”

Jurkalnes Street 1
Riga
Latvia

Instrument Identification:
Thorgeon 01006

Poly Phase, Active Import, Indoor, Electricity Meter

Instrument Traceable Number
0120/SGS0366

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 18th September 2024
Issue 2

Certification is based on report number(s) SHES140600277301 Issued 18th September 2024
EMA255543

Authorised Signature


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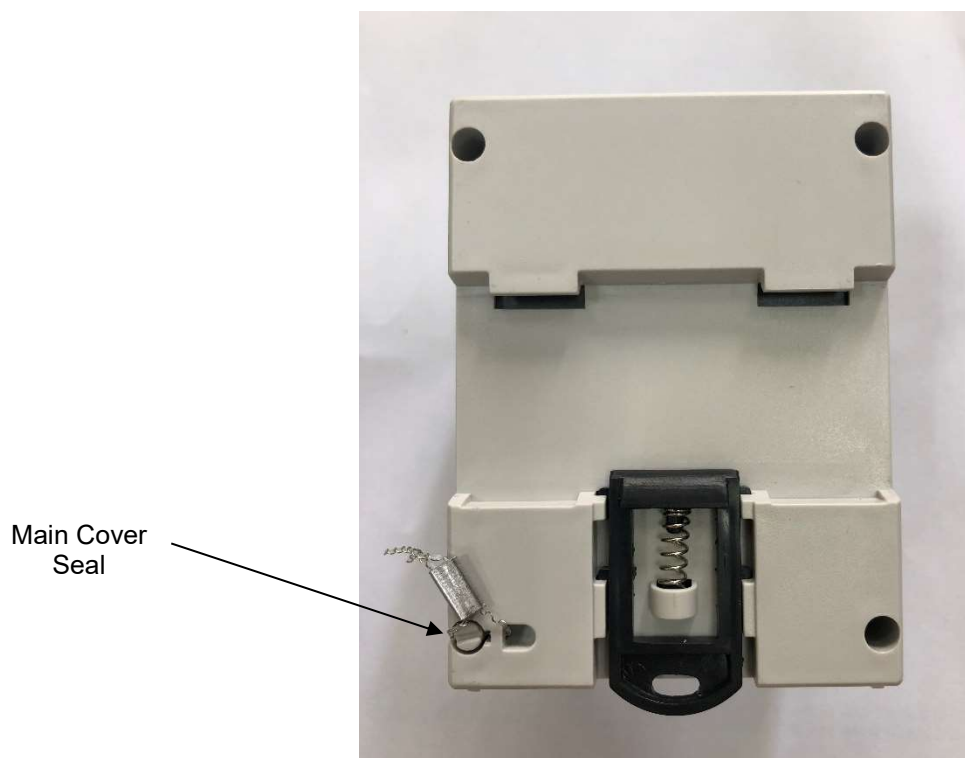
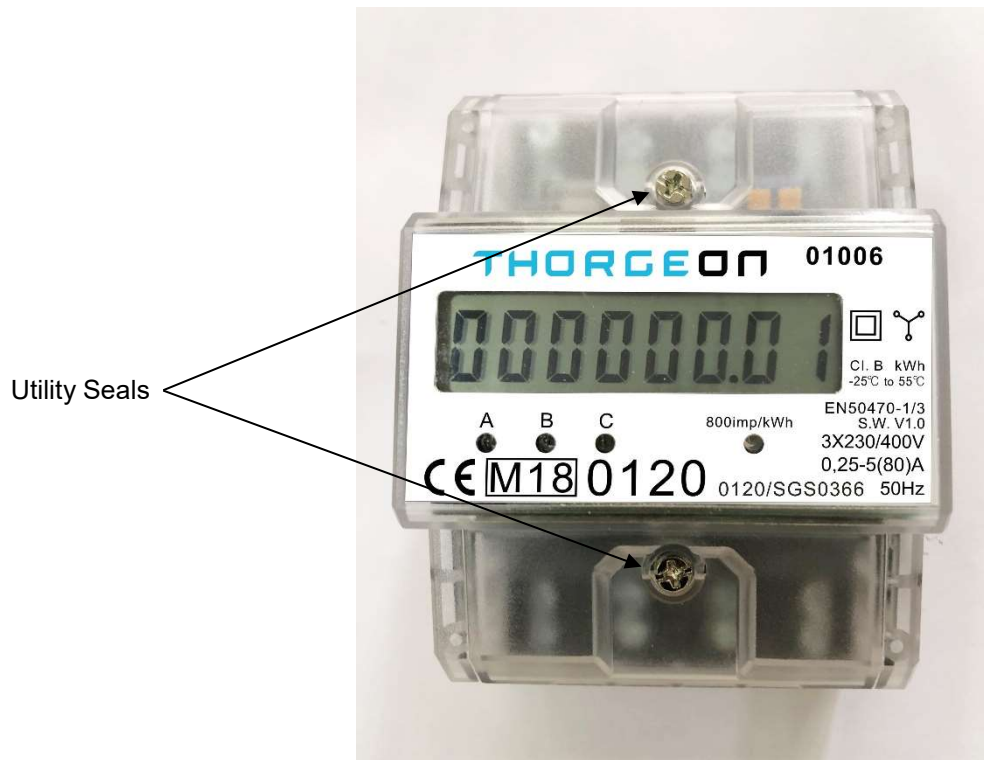
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1. Technical Data

Manufacturer	SIA "ATTA-1"
Meter Type	Thorgeon 01006
Voltage Rating (U_n)	3x230/400V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0,25-5(80)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	3p4w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	V1.0
Identification Location	Nameplate
Bill Of Materials Number	BD-JS-YJ007 0/A
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	800 imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD
Terminal Arrangement(s)	BS
Location of Manufacturers Address	Nameplate and associated documents

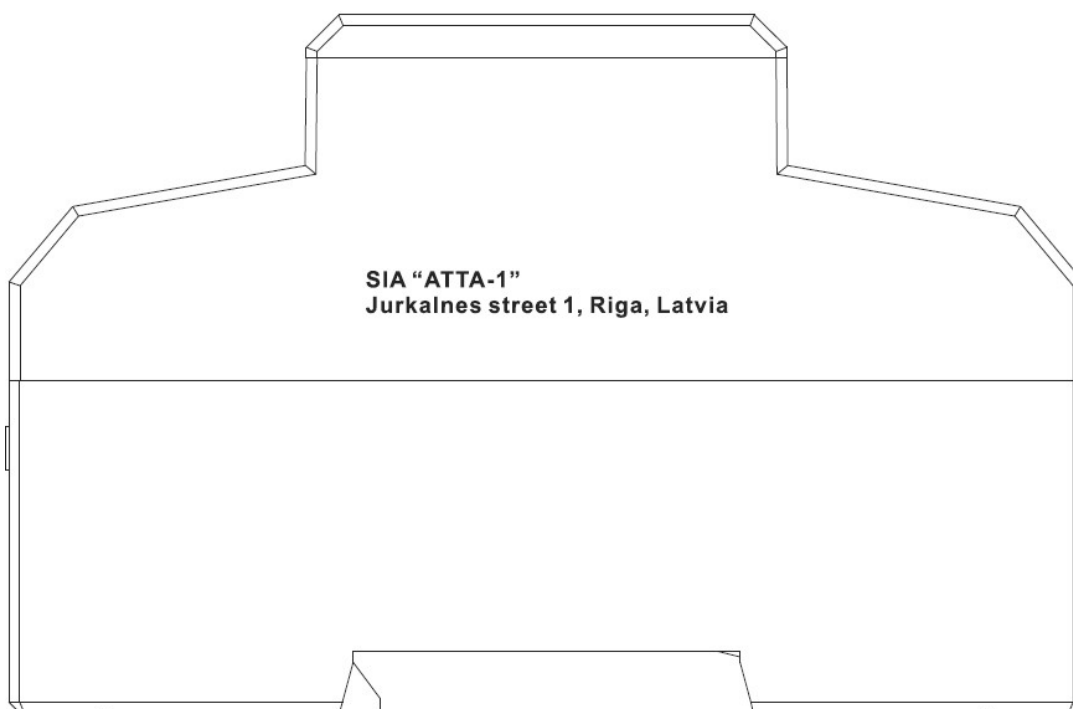
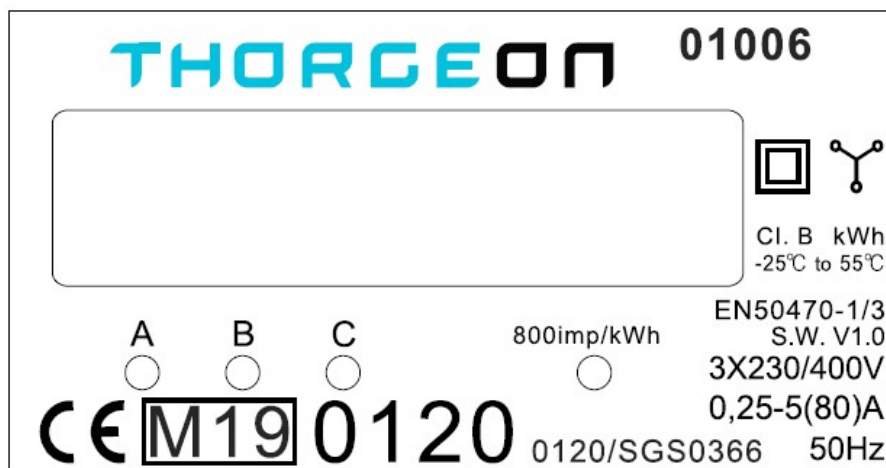
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2. Photograph of Meter and Sealing Plan



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3. Examples of Nameplates



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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	0.65	0.60	0.25	0.16	0.31	0.36
I _{tr}	1.0	0.59	0.46	0.42	0.42	0.48	0.60
10I _{tr}	1.0	0.68	0.54	0.42	0.39	0.50	0.68
I _{max}	1.0	0.67	0.53	0.44	0.49	0.61	0.83
I _{tr}	0.5ind	0.43	0.37	0.29	0.06	0.15	0.31
10I _{tr}	0.5ind	0.48	0.41	0.38	0.45	0.60	0.77
I _{max}	0.5ind	0.45	0.34	0.26	0.34	0.47	0.65
I _{tr}	0.8cap	0.60	0.45	0.30	0.27	0.40	0.52
10I _{tr}	0.8cap	1.27	1.17	1.00	0.67	0.60	0.56
I _{max}	0.8cap	0.68	0.47	0.37	0.39	0.48	0.69
L1							
I _{tr}	1.0	1.02	0.89	0.56	0.20	0.32	0.60
10I _{tr}	1.0	1.01	0.77	0.51	0.17	0.34	0.64
I _{max}	1.0	1.04	0.76	0.48	0.16	0.33	0.64
I _{tr}	0.5ind	1.12	0.68	0.44	0.25	0.39	0.56
10I _{tr}	0.5ind	1.01	0.59	0.42	0.21	0.41	0.67
I _{max}	0.5ind	0.77	0.52	0.27	0.24	0.42	0.69
L2							
I _{tr}	1.0	0.62	0.47	0.35	0.16	0.14	0.21
10I _{tr}	1.0	0.49	0.40	0.31	0.12	0.13	0.25
I _{max}	1.0	0.44	0.32	0.18	0.11	0.20	0.38
I _{tr}	0.5ind	0.37	0.35	0.24	0.12	0.13	0.17
10I _{tr}	0.5ind	0.25	0.32	0.36	0.23	0.18	0.28
I _{max}	0.5ind	0.28	0.19	0.15	0.12	0.20	0.32
L3							
I _{tr}	1.0	0.80	0.66	0.41	0.29	0.25	0.42
10I _{tr}	1.0	0.82	0.67	0.46	0.20	0.24	0.42
I _{max}	1.0	0.68	0.49	0.30	0.15	0.29	0.55
I _{tr}	0.5ind	0.33	0.33	0.23	0.22	0.22	0.46
10I _{tr}	0.5ind	0.52	0.22	0.12	0.28	0.24	0.45
I _{max}	0.5ind	0.42	0.31	0.19	0.19	0.36	0.58


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
Thorgeon 01006	0,25-5(80)A - Poly Phase, Active Import, Electricity Meter

Modifications to the meter(s) described according to approval No.**0120/SGS0366** 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	18/07/2018	Initial Issue
2	31/01/2019	Model name change from Norgeon 01006 to Thorgeon 01006

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END OF CERTIFICATE