



EC Type Examination Certificate Number: **0120/SGS0189**

Inepro Metering BV
Pondweg 7
2153PK Nieuw-Vennep
The Netherlands

Instrument Identification:
KDK3-80AM-41

Poly Phase, Active Import, Indoor, Electricity Meter

Instrument Traceable Number
0120/SGS0189

has been assessed and certified as meeting the requirements of

EC Directive 2004/22/EC
on Measuring Instruments Annex 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 MI-003 of EC Directive 2004/22/EC

This certificate must be used in conjunction with a certificate covering the product verification as required in Annex D or Annex F.

This certificate is valid until 18th September 2024
Issue 1


Certification is based on report number(s)
SHES140600277301 issued 18th September 2014
SHES150400182201 issued 22nd May 2015

Authorised Signature

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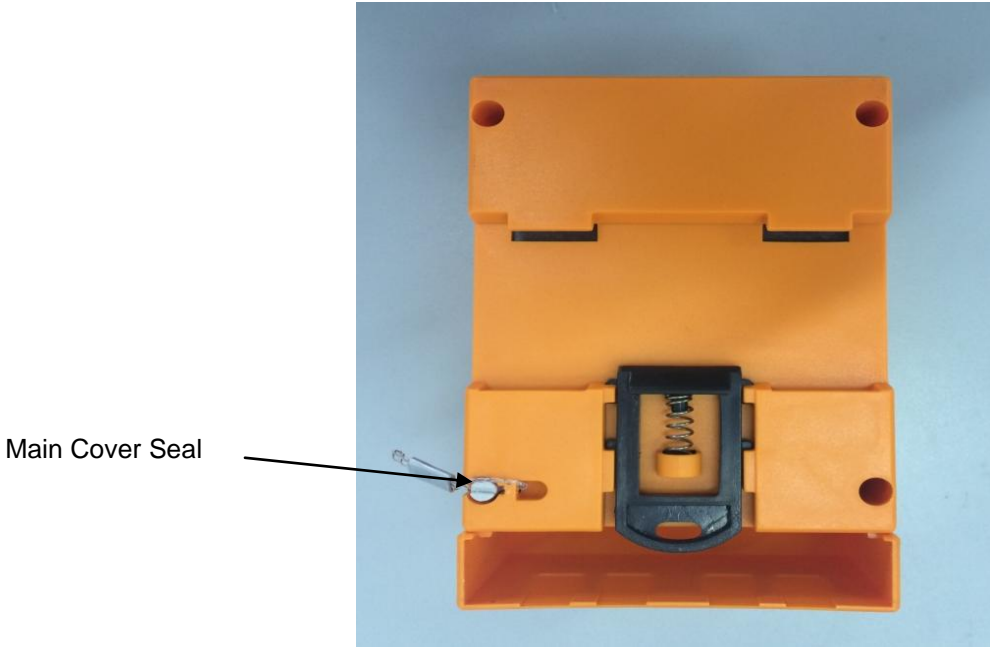
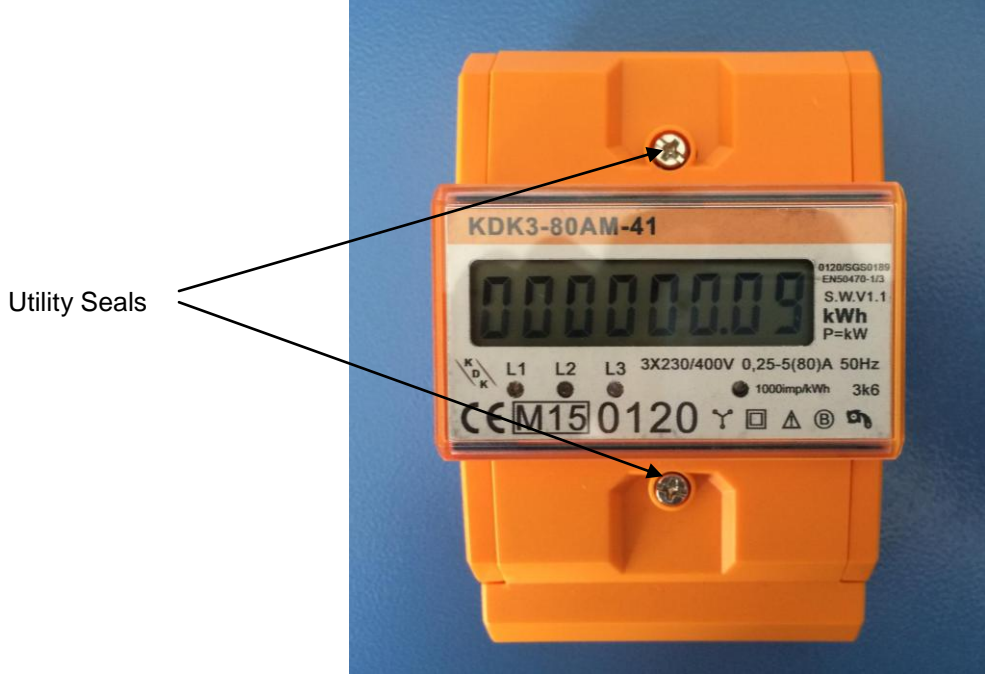
	EC-Type Examination Certificate Number:	
	0120/ SGS0189	
	Issue Number: 1	Dated: 3 rd July 2015


1. Technical Data

Manufacturer	Inepro Metering BV
Meter Type	KDK3-80AM-41
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's	V1.1 0014e573
Identification Location	Nameplate
Bill Of Materials Numbers	D512057
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	1000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	2 x Wire & Crimp
Terminal 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)	DIN

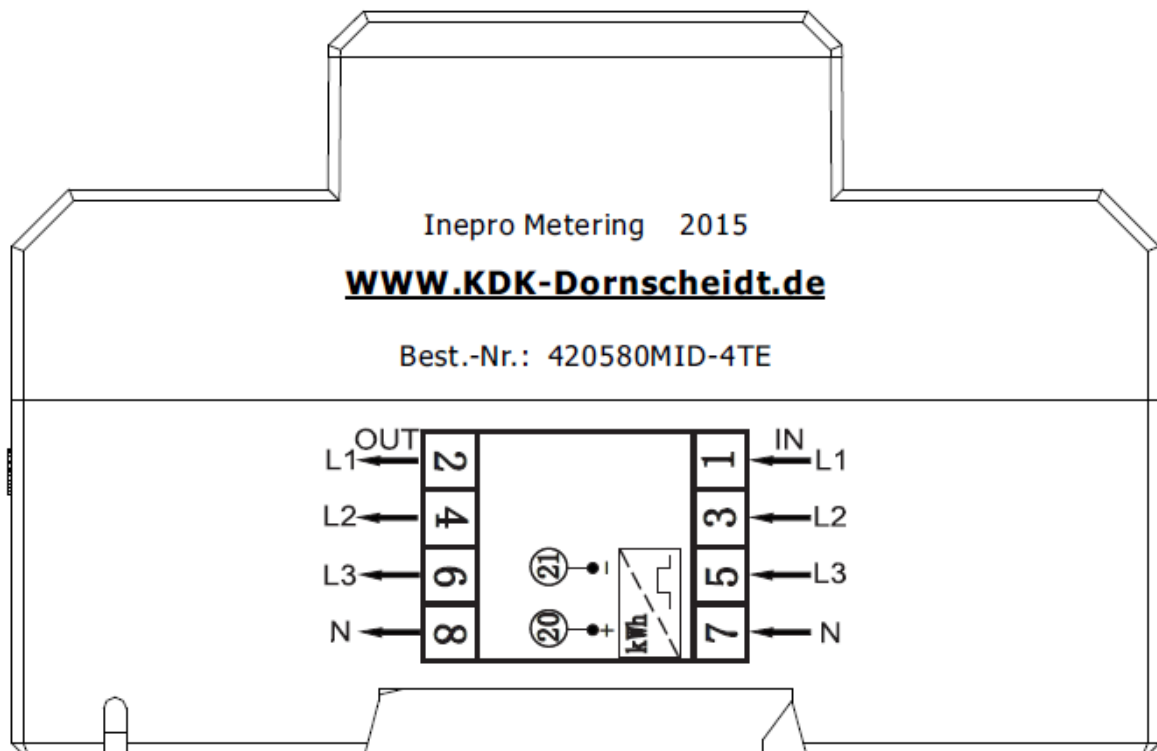
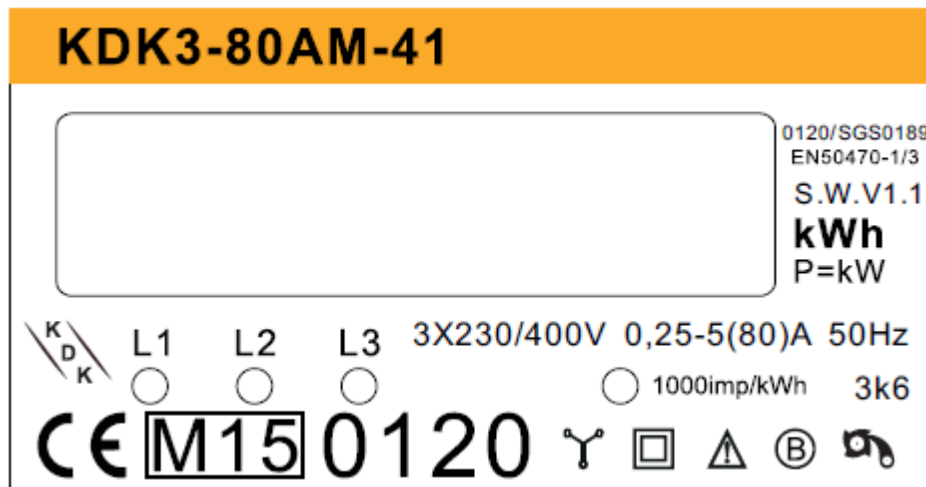
	EC-Type Examination Certificate Number:	
	0120/ SGS0189	
	Issue Number: 1	Dated: 3 rd July 2015


2. Meter Sealing Points



	EC-Type Examination Certificate Number:	
	0120/ SGS0189	
	Issue Number: 1	Dated: 3 rd July 2015

3. Name-plates



	EC-Type Examination Certificate Number:	
	0120/ SGS0189	
	Issue Number: 1	Dated: 3 rd July 2015

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 presents the sum of the square values per load, determined via the following formula:-

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

where

- $\delta e(T, I, \cos\varphi) =$ Additional error due to variation of the temperature at the same load
- $\delta e(U, I, \cos\varphi) =$ Additional error due to variation of the voltage at the same load
- $\delta e(f, I, \cos\varphi) =$ Additional error due to variation of the frequency at the same load




EC-Type Examination Certificate Number:

0120/ SGS0189

Issue Number: 1

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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
KDK3-80AM-41	3x230/400V, 5(80)A, Active Import, 1000imp/kWh, kWh, Power and Software Checksum by scrolling display, Orange Cover

Modifications to the meter(s) described according to approval No. **0120/ SGS0189** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

6. Document Revision History

Issue	Date	Comments
1	03/07/2015	Initial Issue