



EU Type Examination Certificate Number: **0120/SGS0268**

Secure Meters (UK) Ltd

Moorside Road
Winnall
Winchester
SO23 7RX

Instrument Identification:
Liberty 3P E3PD-0****

Polyphase, Active/Import (kWh), Pre-payment, Electricity Meter

Instrument Traceable Number
0120/ SGS0268

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 April 2017 until 4th April 2027
Issue1

Certification is based on report number(s) EMA230691/1/MID dated 5th April 2017

Authorised Signature


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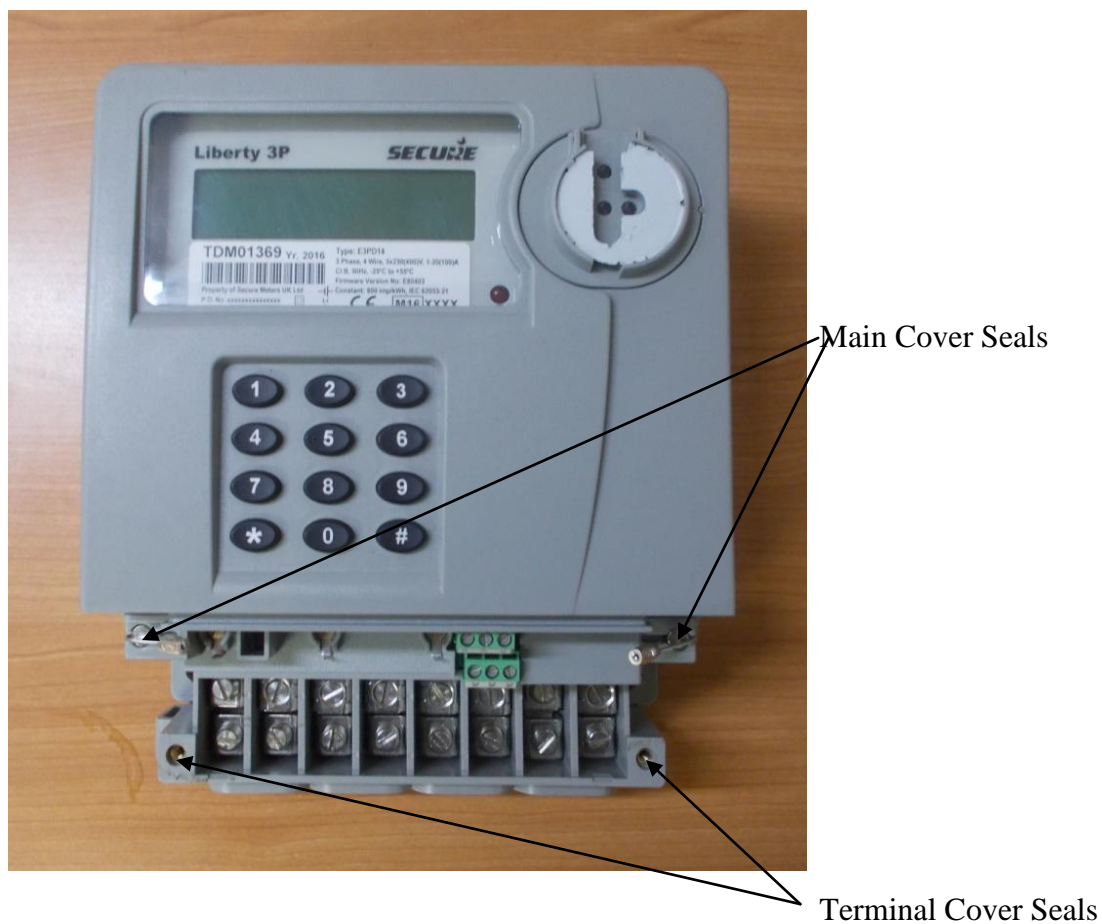
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1. Technical Data

Manufacturer	Secure Meters (UK) Ltd
Meter Type	Liberty 3P E3PD**-0**
Voltage Rating (<i>Un</i>)	3x220/380V – 3x240/415V
Current Rating (<i>I_{min}</i> – <i>I_{ref}</i> (<i>I_{max}</i>))	1-20(80)A 1-20(100)A
Frequency (<i>Fn</i>)	50Hz
Active Accuracy Class (<i>kWh</i>)	A or B(kWh)
Type of circuit	3P4W
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	E80403
Checksum	005A9400
Identification Location	Nameplate
Mechanical Environment	M1
Electromagnetic environment	E2
Bill Of Materials Number	E3PDB4-041 R001
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	800imp/ 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)	DIN
Location of Manufacturers Address	Associated Documents





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2. Photograph of Meter and Sealing Plan



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3. Nameplate

XXXXXXXXXX... Type: E3PDB4 3 Phase, 4 Wire, 3x230(400)V
1-20(100)A, Cl B, 50Hz, -25°C to +55°C
  Firmware Version No: E80403
  0120  Constant: 800 Imp/kWh
Property of Secure Meters UK Ltd
MFG BY : Secure Meters UK Ltd,
SO237RX. Year XXXX
EN50470-1 EN50470-3 UK/0120/SGS0268 P.O. No. xxxxxxxxxxxxxxxxxxxx...

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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:-


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

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

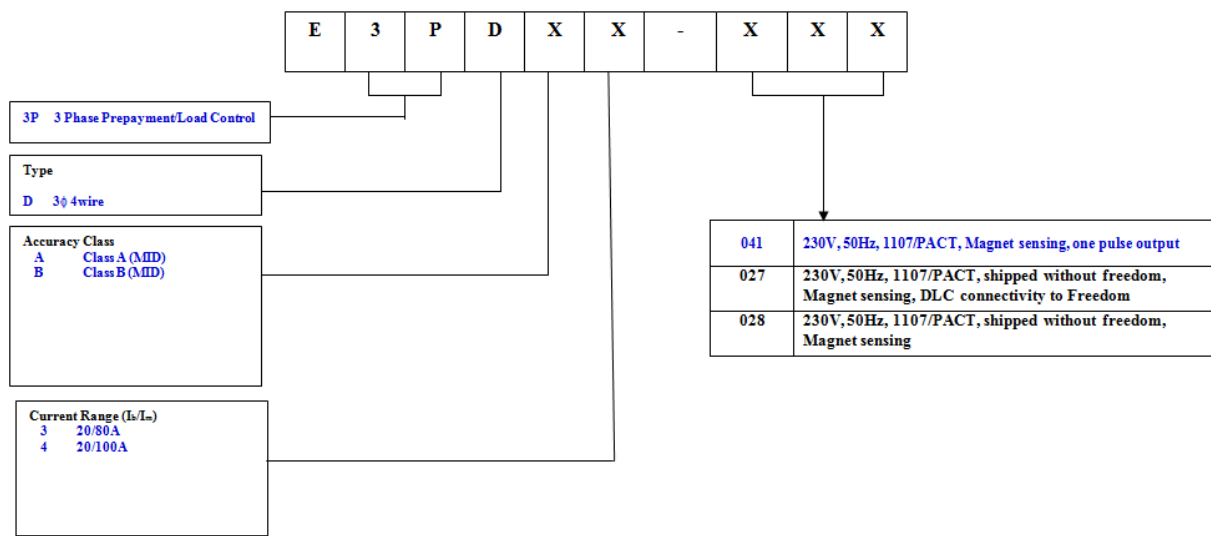
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		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25	-10	5	30	40	55
I _{min}	1.0	0.13	0.13	0.13	0.14	0.13	0.14
I _{tr}	1.0	0.11	0.12	0.11	0.11	0.11	0.11
10I _{tr}	1.0	0.09	0.10	0.10	0.09	0.09	0.10
I _{max}	1.0	0.10	0.10	0.11	0.09	0.10	0.09
I _{tr}	0.5ind	0.64	0.65	0.49	0.32	0.38	0.62
10I _{tr}	0.5ind	0.60	0.63	0.45	0.31	0.42	0.60
I _{max}	0.5ind	0.71	0.72	0.52	0.35	0.43	0.61
I _{tr}	0.8cap	0.29	0.27	0.21	0.06	0.11	0.20
10I _{tr}	0.8cap	0.22	0.19	0.08	0.07	0.17	0.22
I _{max}	0.8cap	0.20	0.14	0.06	0.12	0.26	0.32
L1					0.00	0.00	0.00
I _{tr}	1.0	0.43	0.36	0.24	0.10	0.19	0.25
10I _{tr}	1.0	0.44	0.35	0.23	0.06	0.11	0.25
I _{max}	1.0	0.45	0.36	0.25	0.09	0.11	0.23
I _{tr}	0.5ind	0.96	0.64	0.44	0.25	0.66	0.96
10I _{tr}	0.5ind	0.99	0.77	0.56	0.51	0.71	1.01
I _{max}	0.5ind	1.09	0.84	0.57	0.41	0.61	0.93
L2							
I _{tr}	1.0	0.36	0.25	0.20	0.11	0.13	0.17
10I _{tr}	1.0	0.31	0.20	0.11	0.08	0.11	0.15
I _{max}	1.0	0.24	0.13	0.04	0.13	0.19	0.24
I _{tr}	0.5ind	0.68	0.67	0.59	0.32	0.33	0.65
10I _{tr}	0.5ind	0.51	0.45	0.36	0.35	0.43	0.57
I _{max}	0.5ind	0.68	0.57	0.45	0.39	0.46	0.60
L3							
I _{tr}	1.0	0.08	0.07	0.06	0.06	0.06	0.08
10I _{tr}	1.0	0.09	0.06	0.05	0.07	0.07	0.06
I _{max}	1.0	0.39	0.38	0.39	0.39	0.39	0.39
I _{tr}	0.5ind	0.72	0.57	0.42	0.42	0.51	0.74
10I _{tr}	0.5ind	0.65	0.50	0.34	0.27	0.40	0.65
I _{max}	0.5ind	0.78	0.60	0.64	0.06	0.34	0.58


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5. Product Variant Identification Details

CODIFICATION FOR 3 PHASE PRE-PAYMENT (LIBERTY)



Modifications to the meter(s) described according to approval No. **0120/ SGS0268** 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	05/04/2017	Initial Issue

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