



EC Type Examination Certificate Number: **0120/SGS0194**

Owen Brothers Metering UK

New Phoenix Works
Glen Trading Estate
Wellyhole Street
Oldham
OL4 3BF

Instrument Identification:
OB418

Instrument Traceable Number
0120/SGS0194

Single Phase, Active Import/ Export (kWh), Indoor, Electricity Meter
has been assessed and certified as meeting the requirements of

EC Directive 2004/22/EC

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 from 07th August 2015 to 2nd August 2025
Issue 1


Certification is based on report number(s) SHES150600288201 dated 3rd August 2015
EMA 207752/1 dated 07 August 2015

Authorised Signature

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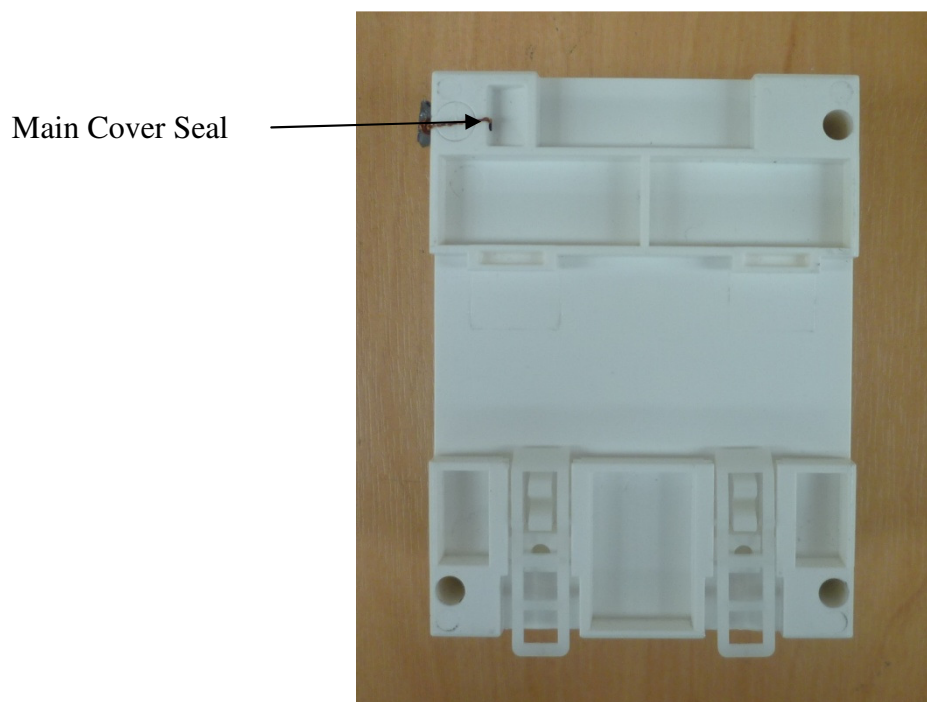
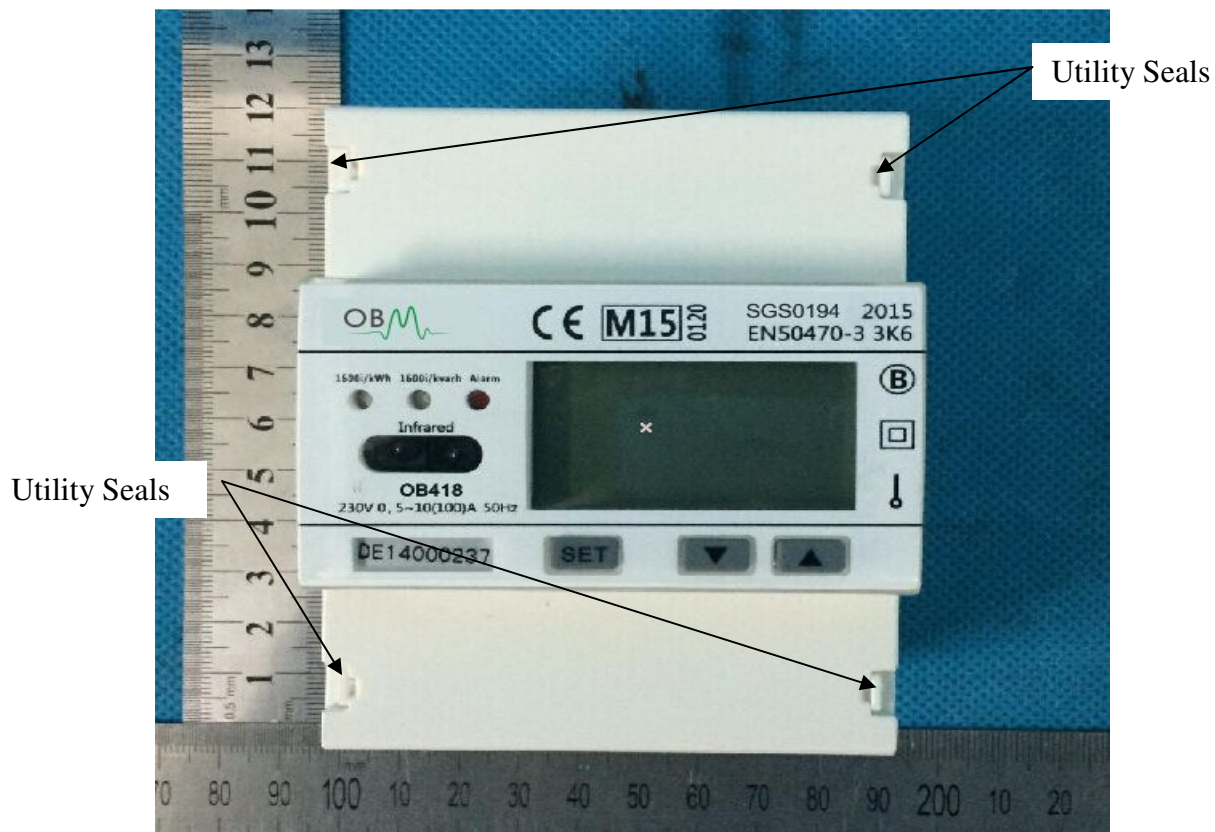
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1. Technical Data

Manufacturer	Owen Brothers Metering UK
Meter Type	OB418
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0.5-10(100)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 Version No.	0418.00.03
Identification Location	LCD
Bill Of Materials No.'s	
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	1600imp/ 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

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2. Photograph of Meter



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3. Influence factors for temperature, frequency and voltage


		Influence Factors for temperature, frequency and voltage					
Current	PF Cos	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C
I _{min}	1.0	1.43	1.07	0.60	0.29	0.64	1.17
I _{tr}	1.0	1.42	1.11	0.61	0.29	0.61	1.16
10I _{tr}	1.0	1.50	1.20	0.69	0.20	0.52	1.05
I _{max}	1.0	1.53	1.24	0.72	0.19	0.51	1.01
I _{tr}	0.5ind	1.78	1.48	1.07	0.71	0.81	1.19
10I _{tr}	0.5ind	1.97	1.71	1.25	0.69	0.64	0.89
I _{max}	0.5ind	1.67	1.57	0.99	0.45	1.03	1.92
I _{tr}	0.8cap	1.25	0.94	0.50	0.56	0.89	0.51
10I _{tr}	0.8cap	1.18	0.88	0.49	0.69	1.01	1.52
I _{max}	0.8cap	1.77	1.50	1.07	0.83	0.82	0.92

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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4. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
OB418	0.5-10(10)A – Single Phase, Active Import/Export kWh, Multifunction, Electricity Meter

Modifications to the meter(s) described according to approval No.**0120/ SGS0194** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

5. Document Revision History

Issue	Date	Comments
1	07/08/2015	Initial Issue