

EU Type Examination Certificate Number: 0120/SGS0316

# **DMM Electric**

Komplek Pergudangan T8 No.31 Alam Sutera Serpong Utara Tangerang Selatan Banten Indonesia

Instrument Identification:

**DM011 Series** 

Single Phase, Active Import/ Export (kWh), Indoor, Electricity Meter

Instrument Traceable Number 0120/SGS0316

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 14<sup>th</sup> October 2025 Issue 1

Certification is based on report number(s) SHES150800466201 issued 14<sup>th</sup> October 2015 EMA241870

**Authorised Signature** 

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DU\_CST-ME-002 Rev 1 EU Type Examination Cert.



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Issue Number: 1 Dated: 12<sup>th</sup> July 2017

#### 1. Technical Data

Manufacturer	DMM Electric		
Meter Type	DM011D DM011M		
	DM011Mb		
Voltage Rating (Un)	230V		
Current Rating (Imin – Iref (Imax))	0.5-10(100)A		
Frequency (Fn)	50Hz		
Active Accuracy Class (kWh)	A or B (kWh)		
Type of circuit	1p2w		
Temperature Range	-25°C to +55°C		
Software/ Firmware Version No	415.3.0 (DM011D)		
	415.3.2 (DM011M) 415.2.0 (DM011Mb)		
CRC Checksum	AECB (DM011D)		
	B5D6 (DM011M) 9709 (DM011Mb)		
Identification Location	Nameplate		
Bill Of Materials Number	FQ-JS-301-304		
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	4 x 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		

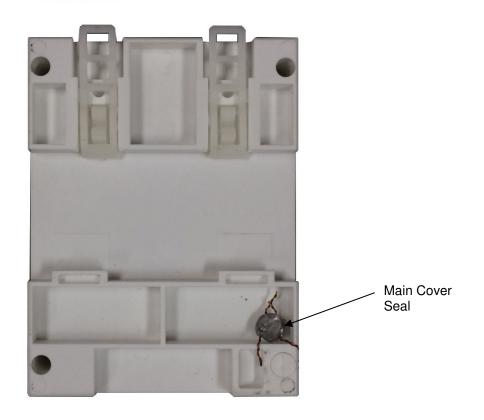


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### 2. Photograph of Meter and Sealing Plan







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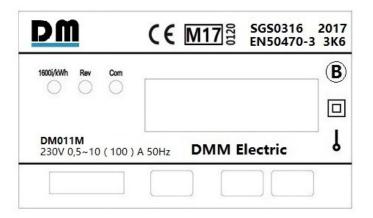


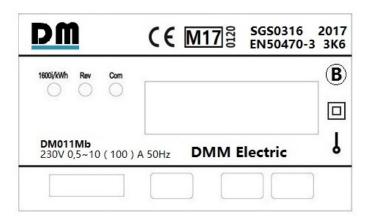


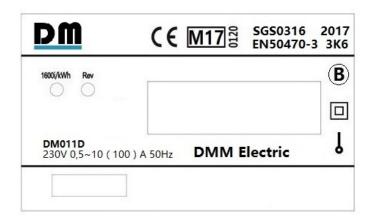
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#### 3. Examples of Nameplates









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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:-

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

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 Additional error due to variation of the frequency at the same load

		Influenc	e Factors	for Tempe	rature, Vo	Itage & Fre	equency
Current	PF Cos	-25℃	-10℃	5℃	30℃	40℃	55℃
lmin	1.0	1.37	0.95	0.65	0.14	0.38	0.84
ltr	1.0	1.36	0.98	0.52	0.21	0.49	0.90
10ltr	1.0	1.36	0.96	0.55	0.24	0.53	0.91
Imax	1.0	1.50	1.10	0.71	0.16	0.37	0.76
ltr	0.5ind	1.34	0.92	0.52	0.21	0.46	0.94
10ltr	0.5ind	1.37	0.91	0.49	0.28	0.56	0.97
lmax	0.5ind	1.76	1.36	0.91	0.27	0.63	1.37
ltr	0.8cap	1.36	0.88	0.54	0.23	0.50	0.86
10ltr	0.8cap	1.36	0.92	0.51	0.26	0.52	0.93
Imax	0.8cap	1.27	0.85	0.46	0.29	0.42	0.65



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#### 5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
DM011D	Single phase energy meter with pulse output
DM011M	Single phase energy meter with modbus
DM011Mb	Single phase energy meter with M-bus

Modifications to the meter(s) described according to approval No.0120/SGS0316 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	12/07/2017	Initial Issue

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