



EC Type Examination Certificate Number: **0120/SGS0170**

GE Energy Management-Industrial Solutions

Nieuweaart 51
9000 Gent
Belgium

Instrument Identification:
MT+D1i 45 1M MID

Instrument Traceable Number
0120/SGS0170

Single Phase, Active Import (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 19th November 2014 to 17th February 2024
Issue 1

Certification is based on report number(s) SHES130800321401 dated 18th February 2014

Authorised Signature


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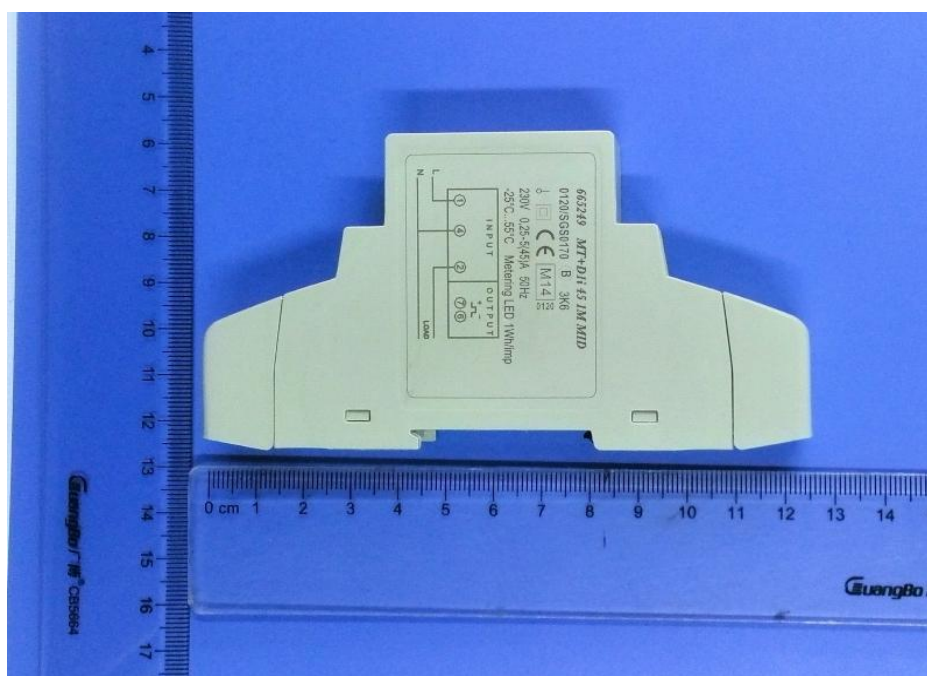
	EC-Type Examination Certificate Number:	
	0120/ SGS0170	
	Issue Number: 1	Dated: 19 th November 2014


1. Technical Data

Manufacturer	GE Energy Management-Industrial Solutions
Meter Type	MT+D1i 45 1M MID
Voltage Rating (<i>Un</i>)	230V
Current Rating (<i>I_{min}</i> – <i>I_{ref}</i> (<i>I_{max}</i>))	0.25-5(45)A
Frequency (<i>Fn</i>)	50Hz
Active Accuracy Class (<i>kWh</i>)	A or B (kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software Version No.	SWV1.2
Identification Location	Name Plate
Bill Of Materials No.'s	SDM120DB V2.1
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	4 x Wire & Crimp
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Indoor
Type of Register	LCD with backlight

	EC-Type Examination Certificate Number:	
	0120/ SGS0170	
	Issue Number: 1	Dated: 19 th November 2014

2. Photographs of Meter



	EC-Type Examination Certificate Number:	
	0120/ SGS0170	
	Issue Number: 1	Dated: 19 th November 2014

3. Influence factors for temperature, frequency and voltage


		Influence Factors for temperature, frequency and voltage					
Current	PF Cos	-25	-10	5	30	40	55
I _{min}	1.0	0.12	0.12	0.12	0.13	0.12	0.12
I _{tr}	1.0	0.16	0.16	0.16	0.16	0.16	0.16
10I _{tr}	1.0	0.17	0.16	0.16	0.16	0.16	0.16
I _{max}	1.0	0.13	0.13	0.13	0.13	0.13	0.13
I _{tr}	0.5ind	0.29	0.29	0.29	0.29	0.29	0.29
10I _{tr}	0.5ind	0.40	0.40	0.40	0.40	0.40	0.40
I _{max}	0.5ind	0.16	0.16	0.16	0.16	0.16	0.16
I _{tr}	0.8cap	0.24	0.24	0.24	0.24	0.24	0.24
10I _{tr}	0.8cap	0.31	0.31	0.31	0.31	0.31	0.31
I _{max}	0.8cap	0.09	0.09	0.09	0.09	0.09	0.09

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:-

$$\square e(T, U, f) = I (\square e^2(T, I, \cos\phi) + \square e^2(U, I, \cos\phi) + \square e^2(f, I, \cos\phi))$$

where

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

	EC-Type Examination Certificate Number:	
	0120/ SGS0170	
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4. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
MT+D1i 45 1M MID	Single Phase 230V, 0.25-5(45)A LCD Display with backlight
Modifications to the meter(s) described according to approval No. 0120/ SGS0170 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	19/11/14	Initial Issue