



EU Type Examination Certificate Number: **0120/ SGS0310**

North Smart Equipment Co. Ltd

No. 8 Xinluo Street
Hunnan District
Shenyang
110179
China

Instrument Identification:
WSZ12D-32A & WSZ12D-65A

Single phase, Active Import (kWh), Electricity Meter

Instrument Traceable Number
0120/ SGS0310

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 September 2017 until 4th September 2027
Issue 1

Certification is based on report number(s) SHES170500381501 5th September 2017
EMA243848/1

Authorised Signature


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	0120/ SGS0310	
	Issue Number: 1	Dated: 5 th September 2017

1. Technical Data

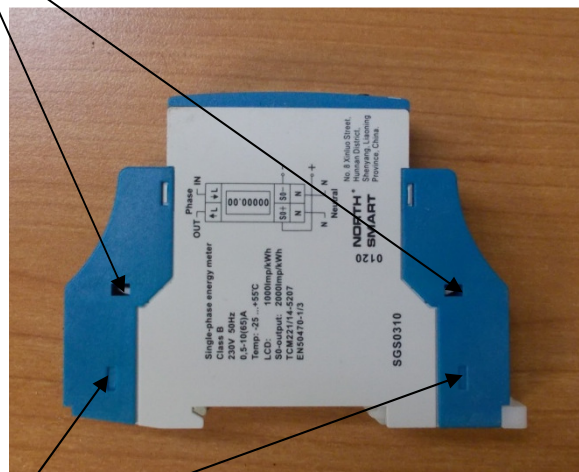
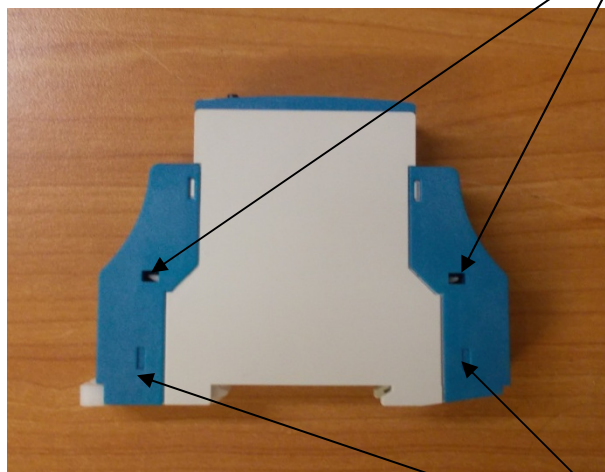
Manufacturer	North Smart Equipment Co. Ltd
Meter Types	WSZ12D-32A & WSZ12D-65A
Voltage Rating (U_n)	230V
Current Rating (I_{min} – I_{ref} (I_{max}))	0.25-5(32)A, 0.5-10(65)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	B(kWh)
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No.	RS217DR4-1MB-V10
CRC Checksum No.	0x1723
Software Version Identification Location	LCD
Bill Of Materials Numbers	5(32)A: RS2B-217DR4-1-001 10(65)A: RS2B-217DR4-1-002
IP Rating	The meter casing is only IP50 complaint. The meter MUST always be fitted into an IP51 approved enclosure.
Insulation Protective Class	Class II
Pulse Constant	2000imp/ kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Main cover clipped in place and sealed with tamper proof sealing tape
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	Nameplate

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2. Photograph of Meter and Sealing Plan



Terminal covers sealing points

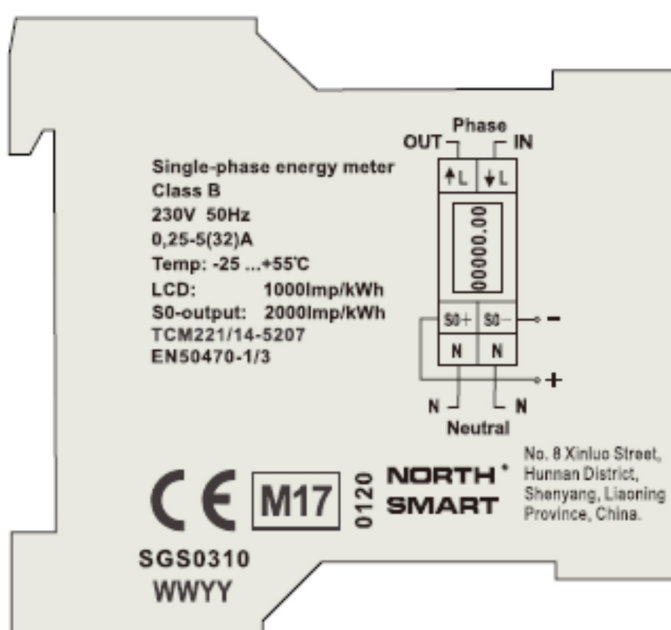


Main cover sealing points

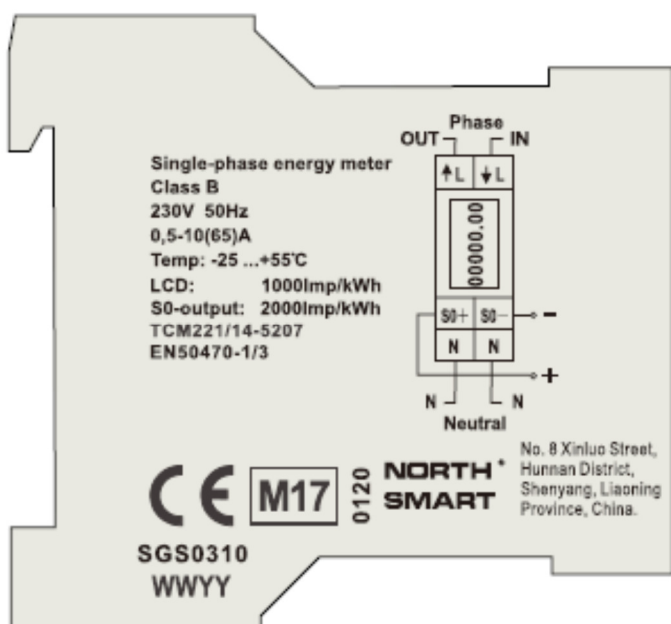
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3. Nameplates

WSZ12D-32A



WSZ12D-65A



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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:-

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


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

		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	1.00	0.69	0.31	0.06	0.08	0.13
I _{tr}	1.0	0.96	0.57	0.35	0.03	0.09	0.14
10I _{tr}	1.0	0.78	0.49	0.18	0.06	0.09	0.14
I _{max}	1.0	0.80	0.46	0.21	0.04	0.07	0.13
I _{tr}	0.5ind	0.95	0.64	0.38	0.03	0.08	0.13
10I _{tr}	0.5ind	0.86	0.52	0.25	0.05	0.09	0.12
I _{max}	0.5ind	0.63	0.38	0.18	0.10	0.12	0.12
I _{tr}	0.8cap	1.02	0.73	0.39	0.03	0.08	0.14
10I _{tr}	0.8cap	0.92	0.59	0.28	0.04	0.09	0.13
I _{max}	0.8cap	0.60	0.38	0.12	0.13	0.09	0.11


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
WSZ12D-32A	230V, 0.25-5(32)A,
WSZ12D-65A	230V, 0.5-10(65)A

Modifications to the meter(s) described according to approval No.**0120/ SGS0310** 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	05/09/2017	Initial Issue

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