



EU Type Examination Certificate Number: **0120/ SGS0272**

Shenzhen Chuangren Technology Co Ltd

Building 33, No. 3 Industrial Area
Mashantou, Gongming Street,
New Guangming District, Shenzhen City
Guangdong Province, 518106, China

Instrument Identification:
WSZ12 Series

Single Phase, Active Import (kWh), Electricity Meter
Instrument Traceable Number

0120/ SGS0272

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 8th November 2016 until 7th November 2026
Issue 2


Certification is based on report number(s) SHES150800499601 issue 1, Dated 8th November 2016
EMA231269

Authorised Signature

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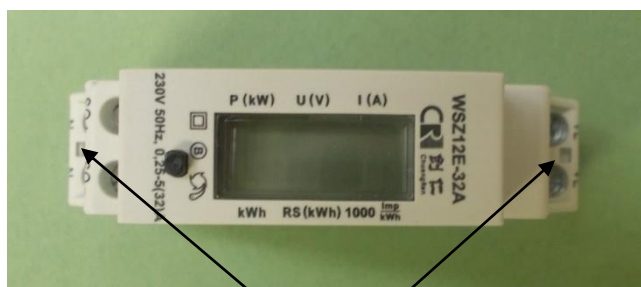
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1. Technical Data

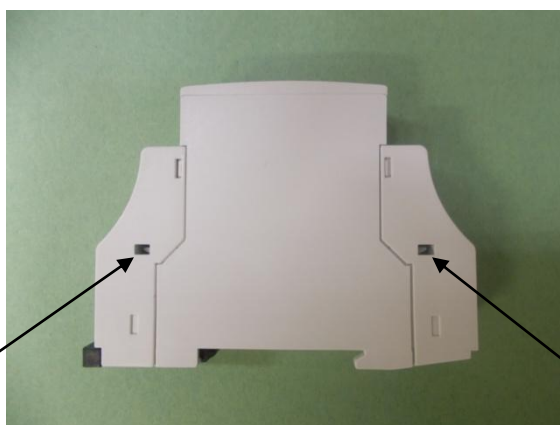
Manufacturer	Shenzhen Chuangren Technology Co Ltd
Meter Type(s)	WSZ12E-32A, WSZ12D-32A, WSZ12D-65A, WSZ12A-32A, WSZ15D-32A, WSZ15D-65A
Voltage Rating (U_n)	230V
Current Rating ($I_{min} - I_{ref} (I_{max})$)	WSZ12E: 0.25-5(32)A, WSZ12D: 0.25-5(32)A WSZ12D: 0.5-10(65)A, WSZ12A: 0.25-5(32)A WSZ15D-32A : 0.25-5(32)A, WSZ15D-65A: 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	V1.0
Identification Location	LCD
Bill Of Materials Numbers	WSZ12D-65A V0, WSZ12D-32A V0, WSZ12E-32A V0, WSZ12A-32A V0, WSZ15D-32A: V0, WSZ15D-65A: V0
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	Terminal covers are wire & crimp 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

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2. Photograph of Meter and Sealing Plan

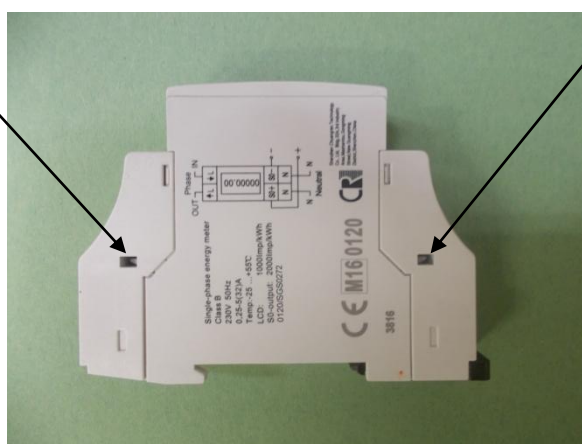



Terminal cover sealing points



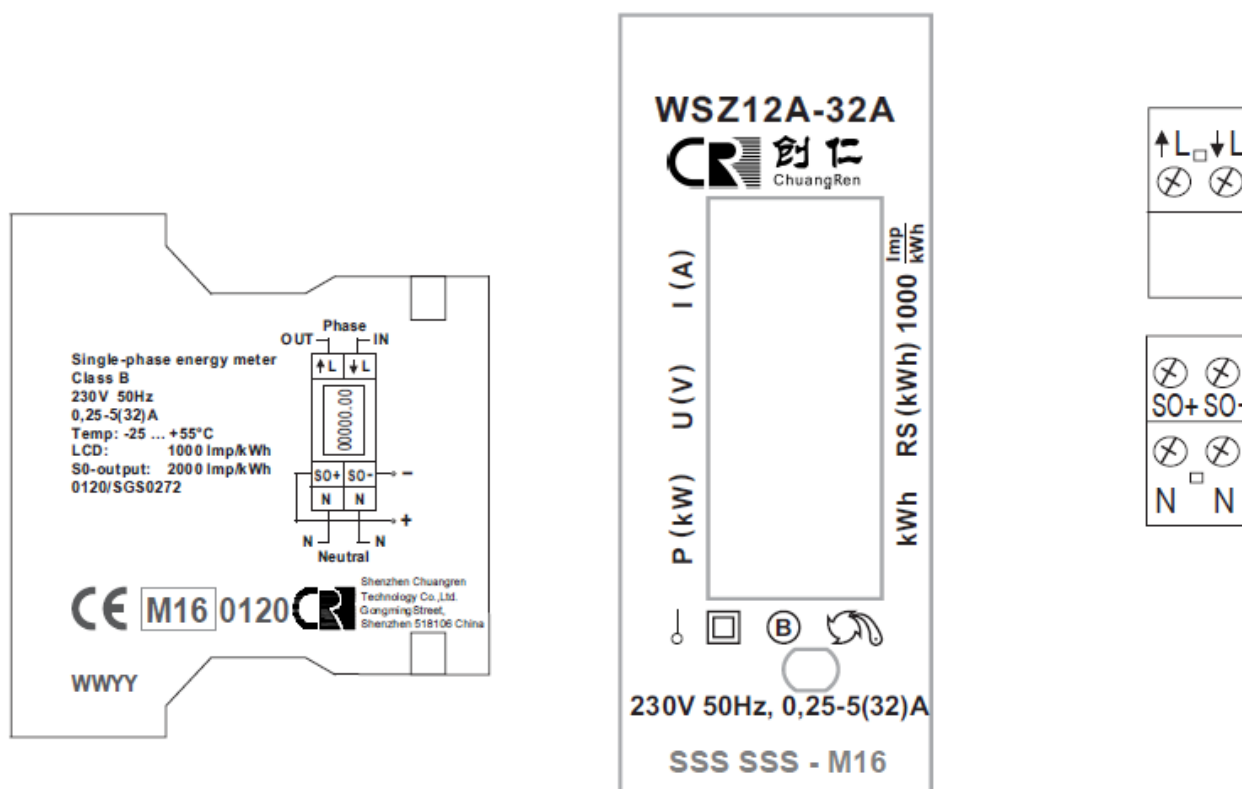
Main cover sealing points


Main cover sealing points

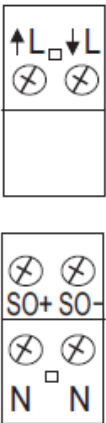
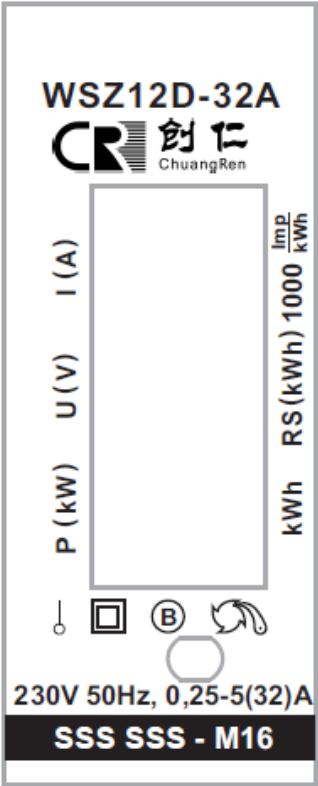
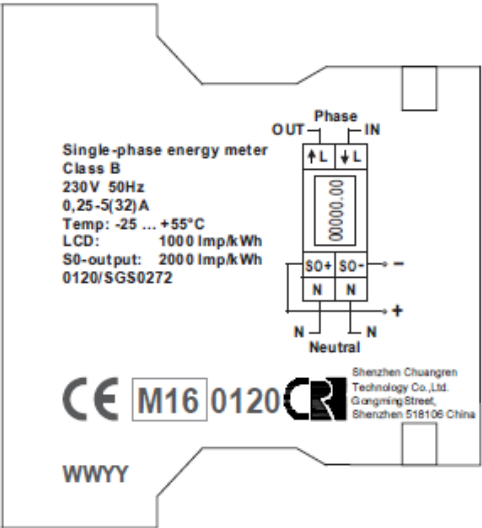



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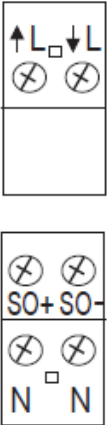
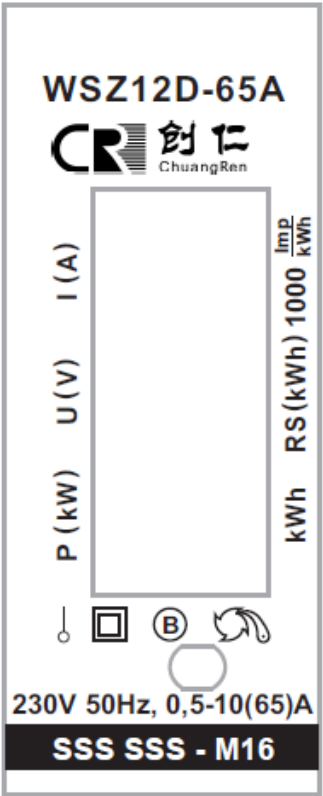
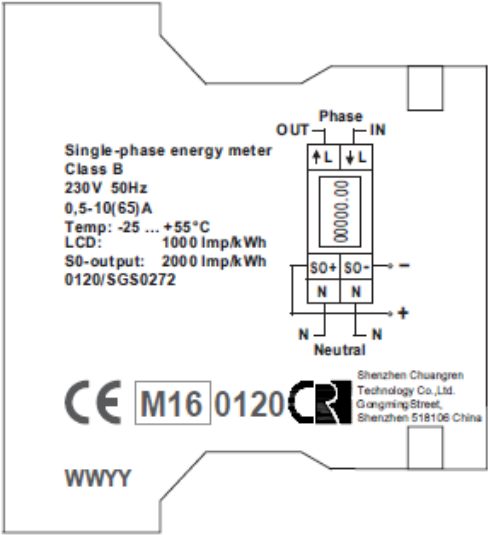
3. Nameplates




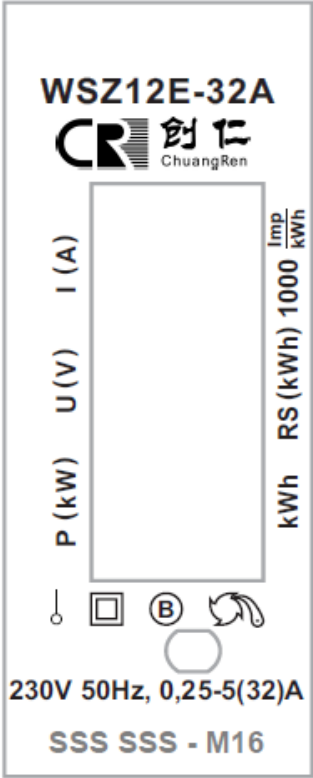
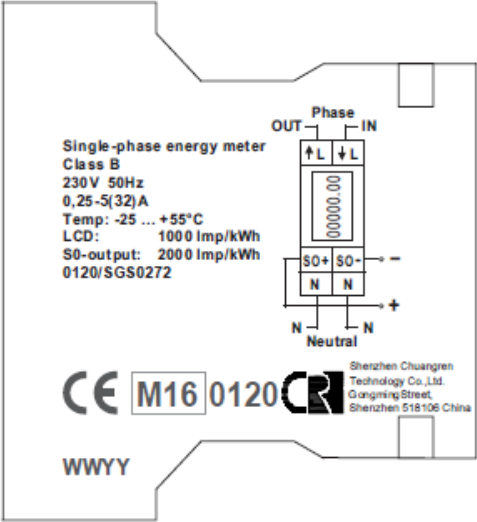
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4. Calculation of the composite error/ MPE


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
 $\delta e(f, I, \cos\varphi) =$ Additional error due to variation of the frequency at the same load

		Influence Factors for Temperature, Voltage & Frequency					
Current	PF Cos	-25	-10	5	30	40	55
I _{min}	1.0	0.15	0.08	0.08	0.08	0.12	0.27
I _{tr}	1.0	0.13	0.04	0.06	0.06	0.11	0.30
10I _{tr}	1.0	0.23	0.18	0.18	0.20	0.26	0.45
I _{max}	1.0	0.38	0.33	0.34	0.40	0.47	0.66
I _{tr}	0.5ind	0.13	0.06	0.06	0.05	0.12	0.27
10I _{tr}	0.5ind	0.27	0.21	0.21	0.21	0.27	0.44
I _{max}	0.5ind	0.51	0.50	0.54	0.62	0.70	0.91
I _{tr}	0.8cap	0.17	0.09	0.07	0.07	0.14	0.30
10I _{tr}	0.8cap	0.24	0.18	0.16	0.18	0.25	0.43
I _{max}	0.8cap	0.33	0.34	0.37	0.48	0.58	0.81


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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
WSZ12A-32A	Single Phase, 230V, 0.25-5(32)A, Blue & Hoar case colour
WSZ12E-32A	Single Phase, 230V, 0.25-5(32)A, Silver & Grey case colour
WSZ12D-32A	Single Phase, 230V, 0.25-5(32)A, Blue & Hoar case colour
WSZ12D-65A	Single Phase, 230V, 0.5-10(65)A, Blue & Hoar case colour
WSZ15D-32A	Single Phase, 230V, 0.25-5(32)A
WSZ15D-65A	Single Phase, 230V, 0.5-10(65)A

Modifications to the meter(s) described according to approval No.**0120/ SGS0272** 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	08/11/2016	Initial Issue

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