

EU Type Examination Certificate Number: 0120/ SGS0275

# Zhejiang Yongtailong Electronic Co., Ltd.

No. 320 Tongsheng Road, Tongxiang, Jiaxing, Zhejiang P.R., China

> Instrument Identification: DDS353I-1/2

#### Single Phase, Active Import (kWh), Electricity Meter

Instrument Traceable Number 0120/ SGS0275

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 15<sup>th</sup> February 2017 until 14<sup>th</sup> February 2027 Issue 1

Certification is based on report number(s) SHES1612010346001 Dated 13th February 2017

Authorised Signature

SGS United Kingdom Limited, Notified Body 0120 Unit 202B Worle Parkway, Weston-super-Mare, BS22 6WA□UK t +44 (0)1934 522917 f +44 (0)1934 522137 www.sgs.com

Contact Address SGS United Kingdom Ltd, Units 12A & 12B, South Industrial Estate, Bowburn, Durham, DH6 5AD UK

t +44 (0)191 377 2000 f +44 (0)191 377 2020 www.sgs.com



EU-Type Examination Certificate Number:

## 0120/SGS0275

Issue Number: 1

Dated: 15<sup>th</sup> February 2017

### 1. Technical Data

Manufacturer	Zhejiang Yongtailong Electronic Co., Ltd.
Meter Types	DDS353I-1 DDS353I-2
Voltage Rating (Un)	230V
Current Rating (Imin – Iref (Imax))	0.25-5(30)A, 0.25-5(32)A, 0.25-5(40)A, 0.25-5(45)A, 0.25-5(50)A, 0.25-5(60)A, 0.25-5(63)A,
Frequency <i>(Fn)</i>	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	1P2W
Temperature Range	-25°C to +55°C
Software/ Firmware Version No	V1.01
Checksum	0x6BD8
Identification Location	LCD & Nameplate
Bill Of Materials Numbers	DDS353I-1: D124030 DDS353I-2: D124030-01
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	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	Nameplate & Documentation



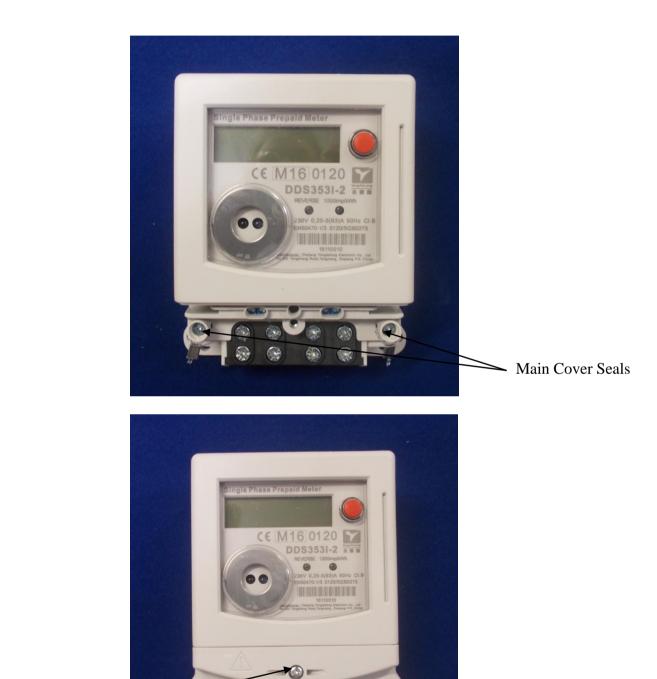
EU-Type Examination Certificate Number:

# 0120/SGS0275

Issue Number: 1

Dated: 15<sup>th</sup> February 2017

### 2. Photograph of Meter and Sealing Plan



Terminal Cover Seal -



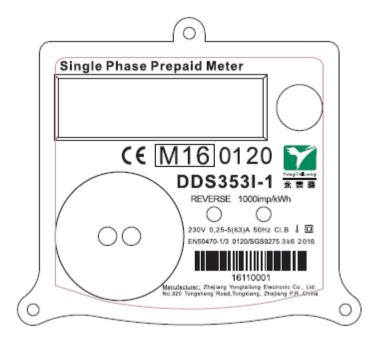
EU-Type Examination Certificate Number:

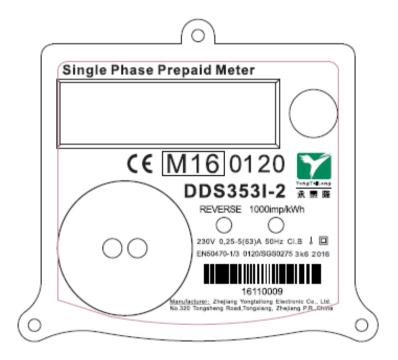
# 0120/SGS0275

Issue Number: 1

Dated: 15<sup>th</sup> February 2017

### 3. Nameplate Examples







# 0120/SGS0275

Issue Number: 1

Dated: 15<sup>th</sup> February 2017

### 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:-

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

where

$\delta e(T, I, \cos \phi) =$	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 & Voltage					
Current	PF Cos	-25	-10	5	30	40	55
Imin	1.0	0.55	0.39	0.25	0.11	0.22	0.44
ltr	1.0	0.53	0.39	0.22	0.09	0.24	0.44
10ltr	1.0	0.55	0.40	0.22	0.07	0.22	0.43
Imax	1.0	0.49	0.37	0.22	0.05	0.17	0.38
ltr	0.5ind	0.76	0.59	0.41	0.20	0.28	0.45
10ltr	0.5ind	0.65	0.47	0.26	0.12	0.28	0.49
Imax	0.5ind	0.60	0.45	0.27	0.09	0.23	0.43
ltr	0.8cap	0.49	0.35	0.19	0.09	0.22	0.43
10ltr	0.8cap	0.49	0.34	0.19	0.08	0.21	0.43
Imax	0.8cap	0.43	0.32	0.19	0.06	0.17	0.37

000	EU-Type Examination Certificate Number:			
SGS	0120/SGS0275			
·	Issue Number: 1	Dated: 15 <sup>th</sup> February 2017		
5. Annex of Variants				
Product Variant Identification Details:				

Type Designation	Description of meter
DDS353I-1	230V, 0.25-5(x), Single Rate, Two IC card setting
DDS353I-2	230V, 0.25-5(x), Single Rate, One IC card setting

Modifications to the meter(s) described according to approval No.**0120/ SGS0275** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).



# 0120/SGS0275

Issue Number: 1

Dated: 15<sup>th</sup> February 2017

### 6. Document Revision History

Issue	Date	Comments
1	15/02/2017	Initial Issue

"This document is issued by the Company subject to its General Conditions of Service available on request or accessible at <a href="http://www.sgs.com/en/Terms-and-Conditions.aspx">http://www.sgs.com/en/Terms-and-Conditions.aspx</a> and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at <a href="www.sgs.com/enrms-e-document.htm">www.sgs.com/enrms-e-document.htm</a>. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law."
"Unless otherwise stated the results shown in this test certificate refer only to the sample(s) tested and such sample(s) are retained for 28 days only."

\*\* End of Document \*\*