

EU Type Examination Certificate Number: 0120/SGS0434

# **Zhejiang CHINT Instrument & Meter Co., Ltd**

Wenzhou Bridge Industrial Zone Yueqing Zhejiang P.R. China

Instrument Identification:

DDSU666, DDSU666-CT

Single-phase, Active Import/Export kWh, DIN Rail, Transformer Operated/Direct Connected, Smart, Electricity Meter

Instrument Traceable Number 0120/SGS0434

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 13<sup>th</sup> March 2020 until 12<sup>th</sup> March 2030 Issue 1

Certification is based on report number(s) SHES190501593601 dated 5<sup>th</sup> March 2020, EMA273816/1

Authorised Signature



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DU\_CST-ME-002 Rev 2 EU Type Examination Cert.



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Issue Number: 1 Dated: 13<sup>th</sup> March 2020

#### 1. Technical Data

Manufacturer	Zhejiang CHINT Instrument & Meter Co., Ltd.
Meter Type	DDSU666 DDSU666-CT
Voltage Rating (Un)	220V – 240V
Current Rating (Imin – Iref (Imax))	DDSU666: 0.25-5(80)A DDSU666-CT: 0.015-1.5(6)A
Frequency (Fn)	50Hz
Active Accuracy Class (kWh)	DDSU666: Class B DDSU666-CT: Class C
Type of circuit	1p2w
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	DDSU666: V5.03 DDSU666-CT: V1.02
CRC Checksum No's	DDSU666: A596 DDSU666-CT: 43C7
Identification Location	LCD
Bill Of Materials No's	BOM-DDSU666 5(80)A V2.1 BOM-DDSU666-CT 1.5(6)A V2.1
IP Rating	Meter to be installed in a suitable IP rated enclosure
Insulation Protective Class	Class II
LED Pulse Constant	DDSU666: 800imp/kWh DDSU666-CT: 6400imp/kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	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	Associated Documents



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#### 2. Photographs of Meters and Example of Sealing Plan





Terminal cover sealing points

Main cover sealing point



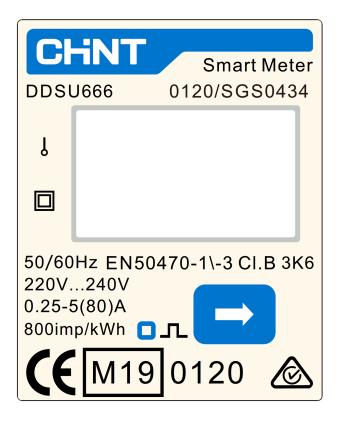


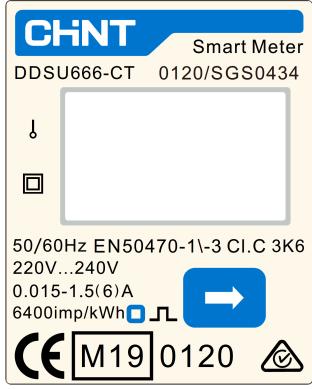


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#### **Examples of Nameplates**







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#### 3. 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

 $\delta e(T, I, \cos \varphi) = Additional error due to variation of the temperature at the same load <math>\delta e(U, I, \cos \varphi) = Additional error due to variation of the voltage at the same load <math>\delta e(f, I, \cos \varphi) = Additional error due to variation of the frequency at the same load$ 

#### DDSU666-CT

	Influence Factors for temperature, frequency and volta				l voltage		
Current	PF Cos	-25	-10	5	30	40	55
Imin	1.0	0.61	0.46	0.35	0.29	0.39	1.22
ltr	1.0	0.58	0.35	0.18	0.05	0.12	0.44
10ltr	1.0	0.61	0.36	0.17	0.04	0.07	0.13
Imax	1.0	0.62	0.37	0.18	0.04	0.07	0.12
ltr	0.5ind	0.46	0.27	0.17	0.09	0.13	0.69
10ltr	0.5ind	0.53	0.28	0.16	0.04	0.07	0.09
Imax	0.5ind	0.51	0.29	0.14	0.12	0.16	0.19
ltr	0.8cap	0.66	0.40	0.21	0.07	0.14	0.59
10ltr	0.8cap	0.64	0.39	0.18	0.04	0.08	0.16
Imax	0.8cap	0.63	0.37	0.16	0.03	0.06	0.13

#### **DDSU666**

Influence Factors for temperat				ature, freq	uency and	l voltage	
Current	PF Cos	-25	-10	5	30	40	55
Imin	1.0	0.65	0.66	0.67	0.66	0.66	0.65
ltr	1.0	0.31	0.31	0.31	0.31	0.31	0.31
10ltr	1.0	0.05	0.05	0.05	0.05	0.05	0.05
Imax	1.0	1.39	1.44	1.50	1.54	1.54	1.54
ltr	0.5ind	0.64	0.64	0.64	0.64	0.64	0.64
10ltr	0.5ind	0.07	0.07	0.06	0.07	0.07	0.09
Imax	0.5ind	0.20	0.10	0.05	0.07	0.07	0.07
ltr	0.8cap	0.38	0.38	0.38	0.39	0.39	0.38
10ltr	0.8cap	0.06	0.05	0.06	0.06	0.06	0.05
Imax	0.8cap	0.21	0.12	0.06	0.10	0.10	0.11



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#### 4. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter		
DDSU666	Direct Connected, 220-240V, 5(80)A		
DDSU666-CT	Transformer Operated, 220-240V, 5(6)A		

Modifications to the meter(s) described according to approval No.0120/SGS0434 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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#### 5. Document Revision History

Issue	Date	Comments
1	13/03/2020	Initial Issue

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