EU Type Examination Certificate Number: **0120/SGS0716**

Zhejiang Chint IoT Technology Co., Ltd.

Wenzhou Bridge Industrial Zone
Yueqing
Zhejiang
P.R. China

Instrument Identification:
DTSU666, DTSU666-CT

Polyphase, Active Import/Export kWh, DIN Rail, Transformer Operated/Direct Connected, Smart, Electricity Meter

Instrument Traceable Number
0120/SGS0716

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 until 22nd January 2030
Issue 1

Certification is based on report number(s) Certification is based on report number(s)
SHES190501593702 issue 1 dated 11th April 2024
EMA324738/1

Authorised Signature

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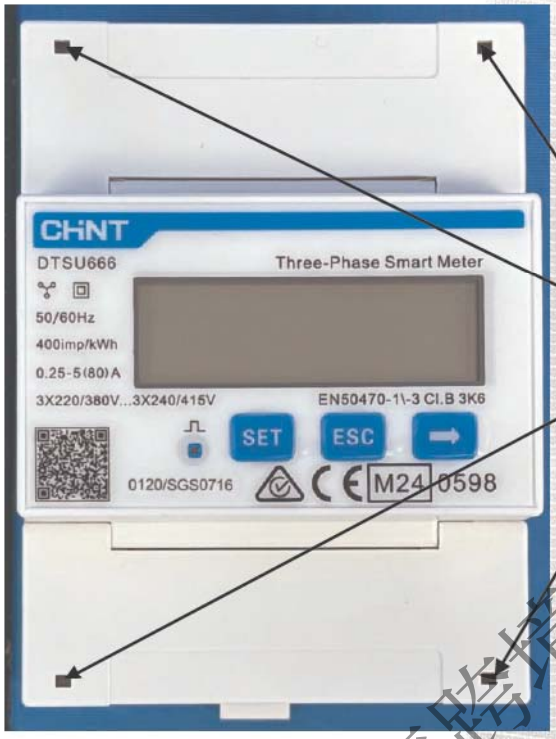
	EU-Type Examination Certificate Number:	
SGS	0120/SGS0716	
	Issue Number: 1	Dated: 3rd June 2024

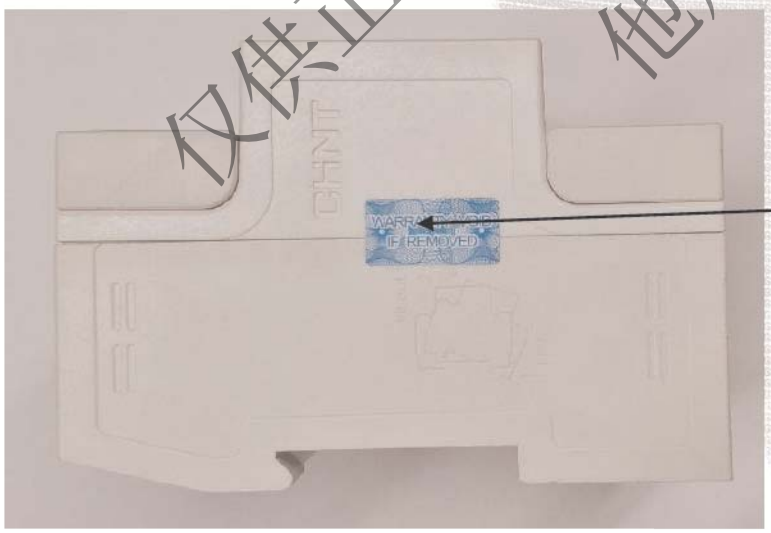
1. Technical Data

Manufacturer	Zhejiang Chint IoT Technology Co., Ltd.
Meter Type	DTSU666 DTSU666-CT
Voltage Rating *(Un)*	3*220/380V 3*230/400V 3*240/415V
Current Rating *(Imin – Iref (Imax))*	DTSU666: 0.25-5(80)A DTSU666-CT: 0.015-1.5(6)A
Frequency *(Fn)*	50Hz
Active Accuracy Class *(kWh)*	DTSU666: Class B DTSU666-CT: Class C
Type of circuit	3P4W, 3P3W, 1P2W
Temperature Range	-25°C to +55°C
Software/ Firmware Version No's	DTSU666: DTSU666 5(80)A V108 DTSU666-CT: DTSU666-CT 1.5(6)A V128
CRC Checksum No's	DTSU666: 2508 DTSU666-CT: CBE2
Identification Location	LCD
Bill of Materials No's	DTSU666: BOM-DTSU666 5(80)A V2.1 DTSU666-CT: BOM-DTSU666-CT 1.5(6)A V2.1
IP Rating	IP51
Insulation Protective Class	Class II
LED Pulse Constant	DTSU666: 400imp/kWh DTSU666-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

2. Photograph of Meter and Sealing Plan

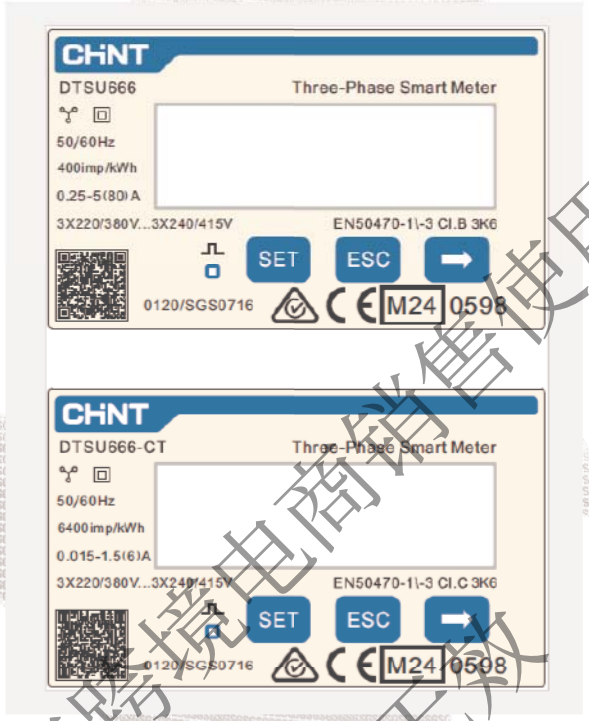


Terminal cover sealing points



Main cover sealing point

3. Examples of Nameplates



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

DTSU666

		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
Imin	1.0	0.13	0.13	0.09	0.05	0.11	0.22
Itr	1.0	0.15	0.15	0.12	0.02	0.10	0.23
10Itr	1.0	0.16	0.16	0.12	0.03	0.11	0.26
Imax	1.0	0.21	0.21	0.17	0.03	0.06	0.22
Itr	0.5ind	0.14	0.15	0.13	0.04	0.08	0.20
10Itr	0.5ind	0.12	0.13	0.10	0.04	0.10	0.25
Imax	0.5ind	0.25	0.25	0.22	0.09	0.10	0.31
Itr	0.8cap	0.17	0.16	0.13	0.04	0.09	0.20
10Itr	0.8cap	0.18	0.17	0.14	0.05	0.12	0.27
Imax	0.8cap	0.22	0.21	0.18	0.06	0.05	0.18
					0.00	0.00	0.00
L1							
Itr	1.0	0.19	0.19	0.16	0.02	0.08	0.22
10Itr	1.0	0.18	0.16	0.13	0.04	0.12	0.28
Imax	1.0	0.21	0.20	0.17	0.02	0.08	0.24
Itr	0.5ind	0.17	0.18	0.16	0.04	0.07	0.22
10Itr	0.5ind	0.12	0.12	0.10	0.04	0.11	0.28
Imax	0.5ind	0.26	0.24	0.19	0.04	0.09	0.35
L2							
Itr	1.0	0.09	0.10	0.09	0.03	0.09	0.23
10Itr	1.0	0.12	0.13	0.11	0.01	0.08	0.21
Imax	1.0	0.17	0.19	0.16	0.04	0.03	0.17
Itr	0.5ind	0.05	0.06	0.06	0.05	0.12	0.25
10Itr	0.5ind	0.10	0.10	0.10	0.03	0.07	0.18
Imax	0.5ind	0.26	0.26	0.23	0.15	0.13	0.23
L3							
Itr	1.0	0.17	0.16	0.12	0.04	0.11	0.24
10Itr	1.0	0.18	0.17	0.12	0.05	0.13	0.30
Imax	1.0	0.21	0.20	0.15	0.03	0.11	0.28
Itr	0.5ind	0.11	0.10	0.07	0.06	0.15	0.22
10Itr	0.5ind	0.16	0.15	0.12	0.03	0.15	0.28
Imax	0.5ind	0.24	0.27	0.11	0.05	0.17	0.29

DTSU666-CT

		Influence Factors for Temperature. Frequency & Voltage					
Current	PF Cos	-25°C	-10°C	5°C	30°C	40°C	55°C
Imin	1.0	0.02	0.04	0.04	0.03	0.08	0.21
Itr	1.0	0.01	0.05	0.06	0.02	0.08	0.21
10Itr	1.0	0.02	0.05	0.06	0.02	0.08	0.21
Imax	1.0	0.01	0.06	0.06	0.02	0.08	0.21
Itr	0.5ind	0.05	0.03	0.05	0.02	0.09	0.26
10Itr	0.5ind	0.10	0.09	0.08	0.08	0.12	0.26
Imax	0.5ind	0.06	0.37	0.05	0.05	0.16	0.23
Itr	0.8cap	0.06	0.07	0.07	0.02	0.07	0.19
10Itr	0.8cap	0.04	0.10	0.08	0.03	0.09	0.20
Imax	0.8cap	0.03	0.13	0.07	0.02	0.06	0.22
					0.00	0.00	0.00
L1							
Itr	1.0	0.04	0.08	0.08	0.04	0.07	0.20
10Itr	1.0	0.01	0.06	0.06	0.01	0.08	0.21
Imax	1.0	0.01	0.06	0.06	0.02	0.08	0.21
Itr	0.5ind	0.06	0.11	0.12	0.06	0.09	0.29
10Itr	0.5ind	0.10	0.09	0.10	0.08	0.12	0.29
Imax	0.5ind	0.01	0.07	0.07	0.01	0.07	0.25
L2							
Itr	1.0	0.02	0.05	0.05	0.02	0.08	0.21
10Itr	1.0	0.02	0.06	0.06	0.01	0.07	0.19
Imax	1.0	0.06	0.10	0.11	0.06	0.07	0.18
Itr	0.5ind	0.04	0.07	0.08	0.04	0.10	0.21
10Itr	0.5ind	0.22	0.06	0.10	0.06	0.08	0.19
Imax	0.5ind	0.40	0.38	0.46	0.38	0.34	0.35
L3							
Itr	1.0	0.07	0.11	0.11	0.06	0.08	0.20
10Itr	1.0	0.01	0.07	0.07	0.02	0.09	0.23
Imax	1.0	0.01	0.08	0.07	0.02	0.09	0.23
Itr	0.5ind	0.11	0.12	0.14	0.11	0.11	0.20
10Itr	0.5ind	0.09	0.04	0.05	0.05	0.07	0.22
Imax	0.5ind	0.04	0.05	0.05	0.01	0.06	0.19

5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
DTSU666	Direct connected, 3x220/380V – 240/415V, 5(80)A
DTSU666-CT	Transformer operated, 3x220/380V – 240/415V, 1.5(6)A

Modifications to the meter(s) described according to approval No.**0120/SGS0716** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

6. Document Revision History

Issue	Date	Comments
1	03/06/2024	Initial Issue

END OF CERTIFICATE