



EU Type Examination Certificate Number: 0120/SGS0558

Zhejiang CHINT Instrument & Meter Co., Ltd

Wenzhou Bridge Industrial Zone
Yueqing
Zhejiang
P. R. China

Instrument Identification:
CHS320

Polyphase, Active Import/Export (kWh), Smart, Electricity Meter

Instrument Traceable Number
0120/SGS0558

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 6th September 2022 until 5th September 2032
Issue 1

Certification is based on report number(s):
SHES220400607701 dated 26th August 2022, EMA305083/TR50579 dated 12th July 2022
EMA305083/1

Authorised Signature

Mikko Välimäki

SGS Fimko OY, Notified Body 0598
Takomotie 8, FI-00380 Helsinki, Finland
t +358 9 6963 61 www.sgs.fi





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Dated: 6th September 2022**1. Technical Data**

Manufacturer	Zhejiang CHINT Instrument & Meter Co., Ltd
Meter Type	CHS320
Voltage Rating (U_n)	3x220/380V – 3x240/415V
Current Rating (I_{min} – I_{ref} (I_{max}))	0.25-5(100)A
Frequency (F_n)	50Hz
Active Accuracy Class (kWh)	A or B (kWh)
Type of circuit	3p4w
Temperature Range	-40°C to +70°C
Software/ Firmware Version No	V1.00
CRC Checksum	0x78F312AB
Identification Location	LCD
BoM No.	3194V4.2_0002_230_5(100)
IP Rating	IP54
Insulation Protective Class	Class II
LED Pulse Constant	1000 imp/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	Associated Documents

SGS

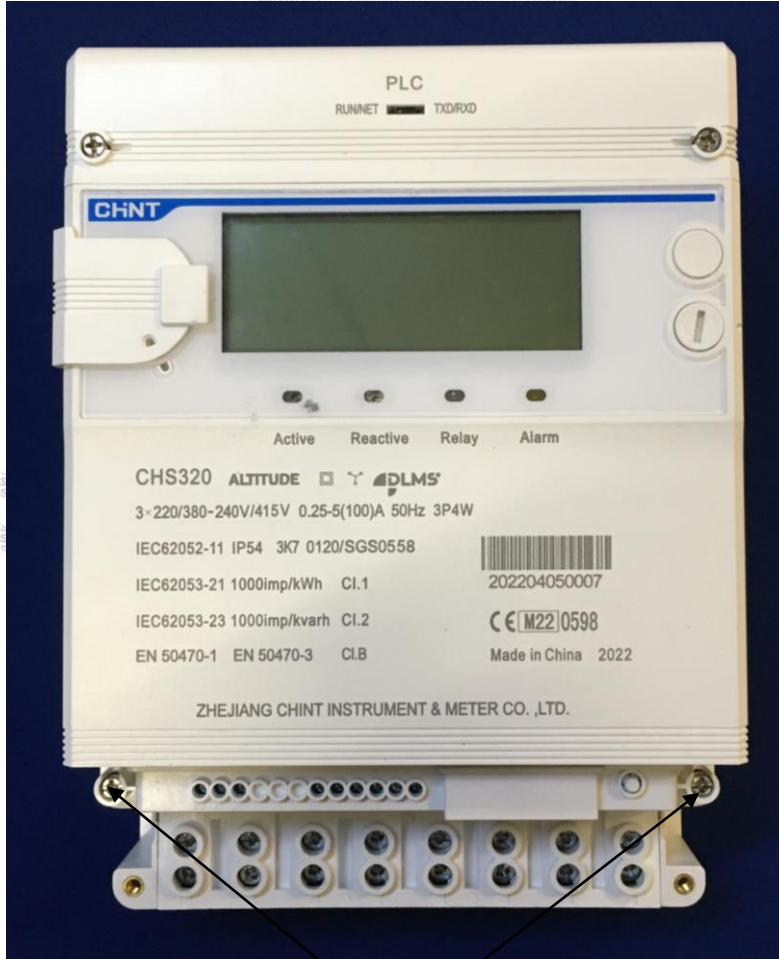
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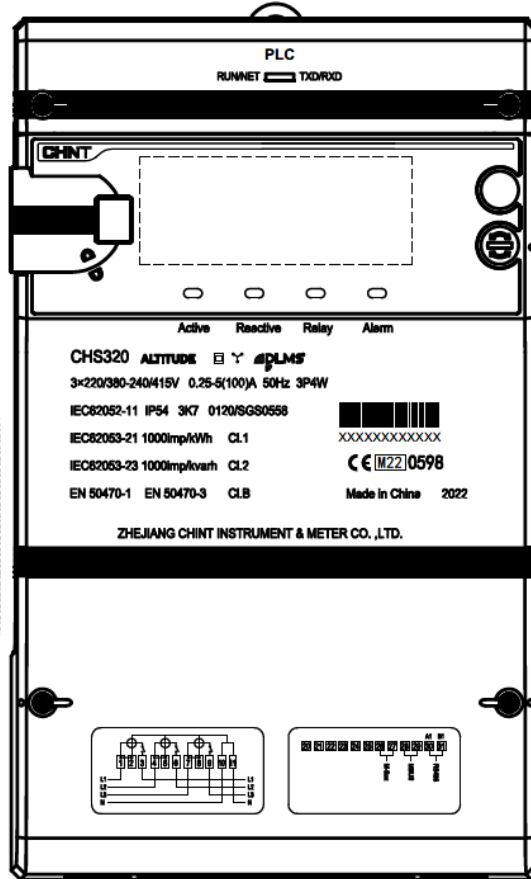
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2. Photograph of Meter and Sealing Plan



Main Cover Sealing Points

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:-

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

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 & Voltage							
Current	PF Cos	-40°C	-25°C	-10°C	5°C	30°C	40°C	55°C	70°C
Imin	1.0	0.15	0.16	0.18	0.14	0.06	0.12	0.25	0.53
Itr	1.0	0.15	0.17	0.19	0.16	0.06	0.11	0.27	0.53
10Itr	1.0	0.10	0.13	0.15	0.11	0.03	0.14	0.31	0.57
Imax	1.0	0.50	0.52	0.53	0.51	0.41	0.35	0.32	0.43
Itr	0.5ind	0.16	0.18	0.21	0.18	0.09	0.13	0.28	0.64
10Itr	0.5ind	0.06	0.09	0.12	0.09	0.04	0.15	0.35	0.68
Imax	0.5ind	0.25	0.27	0.29	0.26	0.11	0.05	0.20	0.44
Itr	0.8cap	0.20	0.22	0.23	0.19	0.09	0.11	0.23	0.43
10Itr	0.8cap	0.14	0.16	0.17	0.13	0.03	0.14	0.30	0.51
Imax	0.8cap	0.59	0.60	0.60	0.59	0.55	0.55	0.60	0.72
						0.00	0.00	0.00	0.00
L1									
Itr	1.0	0.18	0.21	0.20	0.16	0.04	0.12	0.27	0.53
10Itr	1.0	0.15	0.17	0.17	0.12	0.07	0.17	0.35	0.58
Imax	1.0	0.20	0.23	0.22	0.17	0.05	0.13	0.30	0.53
Itr	0.5ind	0.11	0.15	0.15	0.13	0.03	0.13	0.34	0.69
10Itr	0.5ind	0.06	0.08	0.09	0.07	0.11	0.22	0.44	0.72
Imax	0.5ind	0.22	0.24	0.22	0.17	0.07	0.14	0.31	0.54
L2									
Itr	1.0	0.14	0.17	0.18	0.13	0.05	0.15	0.32	0.54
10Itr	1.0	0.14	0.17	0.18	0.13	0.08	0.17	0.35	0.57
Imax	1.0	0.23	0.25	0.25	0.22	0.06	0.09	0.26	0.49
Itr	0.5ind	0.16	0.18	0.18	0.13	0.07	0.17	0.35	0.60
10Itr	0.5ind	0.16	0.18	0.20	0.15	0.06	0.15	0.34	0.60
Imax	0.5ind	0.33	0.37	0.38	0.33	0.17	0.09	0.19	0.37
L3									
Itr	1.0	0.03	0.08	0.11	0.09	0.05	0.14	0.29	0.50
10Itr	1.0	0.03	0.08	0.10	0.08	0.07	0.15	0.32	0.54
Imax	1.0	0.09	0.14	0.17	0.15	0.02	0.08	0.26	0.46
Itr	0.5ind	0.04	0.05	0.07	0.05	0.08	0.16	0.34	0.64
10Itr	0.5ind	0.05	0.04	0.07	0.07	0.05	0.15	0.36	0.63
Imax	0.5ind	0.15	0.20	0.22	0.10	0.04	0.11	0.26	0.45



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5. Annex of Variants

Product Variant Identification Details:

Type Designation	Description of meter
CHS320	3x220/380V -3x240/415V, 0.25-5(100)A, Active Import/Export (kWh)

Modifications to the meter(s) described according to approval No.**0120/SGS0558** 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	06/09/2022	Initial Issue

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END OF CERTIFICATE