



5386

SGS

UKCA Type Examination Certificate Number: **0120/SGS0545/UK**

Autel New Energy Co., Ltd.

Room 101, Building 1, Rainbow Technology Building,
No.36, Gaoxin Sixth Road(N),
Nanshan District,
Shenzhen,
Guangdong,
China

Instrument Identification:

MaxiCharger AC Wallbox

Polyphase, Active Import, Outdoor, EV Charger

Instrument Traceable Number

0120/SGS0545

has been assessed and certified as meeting the requirements of

Measuring Instruments Regulations 2016 (as amended)

on Active electrical energy meters, Schedule 1B, 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 UK Measuring Instruments Regulations 2016

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 18th May 2032
Issue 2

Certification is based on report number(s):

SHES210701314901 issue 1 dated 18th May 2022, SHES210701314901 issue 2 dated 28th June 2022
SHES210701314901 issue 3 dated 18th July 2022
EMA303933/1, EMA304502/1


Authorised Signature

Rae Jackson

Contact Address


SGS United Kingdom Limited, Approved Body 0120
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




	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

1. Technical Data

Manufacturer	Autel New Energy Co., Ltd	
Meter Type	MaxiCharger AC Wallbox Maxi Series	
Voltage Rating (U_n)	3x230/400V	
Current Rating ($I_{min} - I_{ref} (I_{max})$)	0.25-5(16)A, 0.25-5(32)A	
Frequency (F_n)	50Hz	
Active Accuracy Class (kWh)	A or B or C (kWh)	
Type of circuit	3p5w	
Temperature Range	-40°C to +55°C	
Software/ Firmware Version No.	V00.25	
CRC Checksum	99A2	
Identification Location	LCD	
Bill of Materials No's.	106000306 Maxi C-SE AC W22-S-4G-L-M-SV 106000307 Maxi C-SE AC W22-S-4G-L-M-RG 106000308 Maxi C-SE AC W22-S-4G-L-M-WH 106000309 Maxi C-SE AC W22-S-4G-L-M-DG 106000075 Maxi EU AC W22-S-4G-L-M-SV 106000074 Maxi EU AC W22-S-4G-L-M-RG 106000070 Maxi EU AC W22-S-4G-L-M-WH 106000069 Maxi EU AC W22-S-4G-L-M-DG 106000460 Maxi C-SE AC W11-C5-4G-L-M-DG 106000461 Maxi C-SE AC W11-C5-4G-L-M-RG 106000462 Maxi C-SE AC W11-C5-4G-L-M-SV 106000463 Maxi C-SE AC W11-C5-4G-L-M-WH 106000268 Maxi EU AC W11-S-4G-L-M-DG 106000269 Maxi EU AC W11-S-4G-L-M-WH 106000270 Maxi EU AC W11-S-4G-L-M-RG 106000271 Maxi EU AC W11-S-4G-L-M-SV 106000259 Maxi EU AC W22-H-4G-L-M-DG 106000276 Maxi EU AC W22-H-4G-L-M-WH 106000277 Maxi EU AC W22-H-4G-L-M-RG 106000278 Maxi EU AC W22-H-4G-L-M-SV 106000272 Maxi EU AC W11-H-4G-L-M-DG 106000273 Maxi EU AC W11-H-4G-L-M-WH 106000274 Maxi EU AC W11-H-4G-L-M-RG 106000275 Maxi EU AC W11-H-4G-L-M-SV 106000310 Maxi C-SE AC W22-C5-4G-L-M-SV 106000311 Maxi C-SE AC W22-C5-4G-L-M-RG 106000312 Maxi C-SE AC W22-C5-4G-L-M-WH 106000313 Maxi C-SE AC W22-C5-4G-L-M-DG 106000460 Maxi C-SE AC W11-C5-4G-L-M-DG 106000461 Maxi C-SE AC W11-C5-4G-L-M-RG 106000462 Maxi C-SE AC W11-C5-4G-L-M-SV 106000463 Maxi C-SE AC W11-C5-4G-L-M-WH 106000067 Maxi EU AC W22-C5-4G-L-M-SV 106000066 Maxi EU AC W22-C5-4G-L-M-RG 106000062 Maxi EU AC W22-C5-4G-L-M-WH 106000061 Maxi EU AC W22-C5-4G-L-M-DG 106000264 Maxi EU AC W11-C5-4G-L-M-DG 106000265 Maxi EU AC W11-C5-4G-L-M-WH 106000266 Maxi EU AC W11-C5-4G-L-M-RG 106000267 Maxi EU AC W11-C5-4G-L-M-SV	

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022


IP Rating	Cable model: IP65 Socket model: IP54
Insulation Protective Class	Class I
LED Pulse Constant	1000 imp/kWh
Impulse Voltage Rating	6kV
AC Voltage Rating	4kV
Main Cover Sealing Type	Tamper Proof Label
Integrity of meter	Inaccessible without breaking seals
Intended Location of the Meter	Outdoor
Type of Register	LCD
Terminal Arrangement(s)	DIN
Location of Manufacturers Address	Nameplate

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

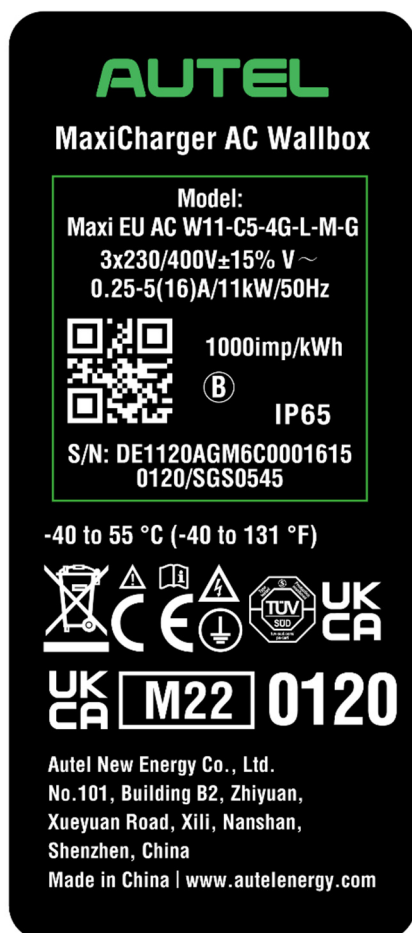
2. Photograph of Meter and Sealing Plan




Main Cover Sealing Point

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

3. Examples of Nameplates



	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022


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

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

		Influence Factors for temperature, frequency and voltage						
Current	PF Cos	-40 °C	-25 °C	-10 °C	5 °C	30 °C	40 °C	55 °C
I _{min}	1.0	0.14	0.15	0.12	0.13	0.06	0.03	0.10
I _{tr}	1.0	0.11	0.12	0.10	0.09	0.06	0.08	0.14
10I _{tr}	1.0	0.13	0.14	0.12	0.12	0.10	0.11	0.15
I _{max}	1.0	0.27	0.27	0.26	0.26	0.25	0.26	0.27
I _{tr}	0.5ind	0.16	0.18	0.17	0.16	0.07	0.09	0.24
10I _{tr}	0.5ind	0.19	0.20	0.19	0.19	0.16	0.18	0.25
I _{max}	0.5ind	0.75	0.75	0.75	0.74	0.74	0.74	0.75
I _{tr}	0.8cap	0.10	0.11	0.09	0.08	0.06	0.07	0.10
10I _{tr}	0.8cap	0.11	0.11	0.10	0.09	0.08	0.09	0.12
I _{max}	0.8cap	0.25	0.25	0.25	0.25	0.24	0.24	0.25
L1						0.00	0.00	0.00
I _{tr}	1.0	0.19	0.19	0.15	0.12	0.09	0.10	0.15
10I _{tr}	1.0	0.21	0.20	0.18	0.16	0.15	0.17	0.21
I _{max}	1.0	0.37	0.37	0.36	0.35	0.35	0.35	0.37
I _{tr}	0.5ind	0.34	0.34	0.31	0.28	0.24	0.27	0.37
10I _{tr}	0.5ind	0.35	0.35	0.33	0.31	0.29	0.31	0.35
I _{max}	0.5ind	0.87	0.86	0.85	0.85	0.84	0.85	0.87
L2								
I _{tr}	1.0	0.09	0.09	0.09	0.09	0.08	0.10	0.16
10I _{tr}	1.0	0.04	0.05	0.04	0.03	0.03	0.06	0.13
I _{max}	1.0	0.29	0.29	0.29	0.29	0.28	0.28	0.30
I _{tr}	0.5ind	0.34	0.35	0.36	0.36	0.34	0.36	0.45
10I _{tr}	0.5ind	0.11	0.12	0.13	0.13	0.11	0.14	0.24
I _{max}	0.5ind	0.88	0.88	0.88	0.88	0.88	0.88	0.89
L3								
I _{tr}	1.0	0.16	0.16	0.16	0.16	0.15	0.16	0.20
10I _{tr}	1.0	0.19	0.19	0.19	0.19	0.18	0.19	0.21
I _{max}	1.0	0.30	0.31	0.31	0.30	0.30	0.30	0.31
I _{tr}	0.5ind	0.30	0.31	0.31	0.30	0.28	0.29	0.35
10I _{tr}	0.5ind	0.33	0.34	0.34	0.34	0.33	0.33	0.36
I _{max}	0.5ind	0.75	0.76	0.75	0.79	0.28	0.74	0.75

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

5. Annex of Variants

Product Variant Identification Details:

Maxi Series

Maxi U W - XX - YY - L - M - ZZ

I II III IV V VI VII

I: "U" donates for basic model designation, "U" can be:

EU AC: EU AC Series

EU1 AC: EU1 AC Series

C-SE AC: PME AC Series

II: "W" donates for power, "W" can be:

W11: 11kW

W22: 22kW

III: "XX" donates for vehicle connection method, "XX" can be:

BC3: vehicle connector with 3m cable at the condition of without holder

BC5: vehicle connector with 5m cable at the condition of without holder

BC7: vehicle connector with 7.5m cable at the condition of without holder

C3: vehicle connector with 3m cable

C5: vehicle connector with 5m cable

C7: vehicle connector with 7.5m cable

S: socket-outlet

H: shutter-outlet

IV: "YY" donates for wireless function, "YY" can be:

4G: 4G function embedded

Blank: Standard type

V: "L" donates for LCD panel function

VI: "M" donates for MID function

VII: "ZZ" donates for colour, "ZZ" can be:


DG: dark grey

WH: white

RG: rose gold

SV: silver

Modifications to the meter(s) described according to approval No. **0120/SGS0545** must be notified to the issuing body to confirm the meter(s) continuing compliance to the relevant pattern approval standard(s).

	UKCA Type Examination Certificate Number:	
	0120/SGS0545	
	Issue Number: 2	Dated: 2 nd September 2022

6. Document Revision History

Issue	Date	Comments
1	08/06/2022	Initial Issue
2	02/09/2022	<p>"not for 11kW models" deleted. Manufacturer address changed, New nameplates.</p> <p>Powerboard EC2121_PWRBD upgraded from V5 to V8 and added PME circuit for PME AC series</p> <p>Control board EC2121_MAIN upgraded from V4 to V5.</p>

This document is issued by the Company subject to its General Conditions for Certification Services, available on request or accessible at <https://www.sgs.com/en/terms-and-conditions/general-conditions-for-certification-services-english>

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 report refer only to the sample(s) tested and such sample(s) are retained for 28 days only.

END OF CERTIFICATE