



OIML Member State
P. R. China



OIML Certificate No.
R46/2012-A-CN2-26.03

OIML CERTIFICATE

ISSUED UNDER SCHEME A

OIML Issuing Authority Name: National Institute of Metrology, China
Address: No.18, Bei San Huan Dong Lu, Chaoyang Dist., Beijing, P. R. China
Person responsible: Mr. Li Wentao

Applicant Name: ELECTRICAL CIRCUIT BREAKERS FACTORY FOR INDUSTRY-ECB
Address: Second Industrial Area, Exit 15, Riyadh Region, Saudi Arabia 14332

Manufacturer Name: ELECTRICAL CIRCUIT BREAKERS FACTORY FOR INDUSTRY-ECB
Address: Second Industrial Area, Exit 15, Riyadh Region, Saudi Arabia 14332

Identification of the certified type 3 Phase 4 Wire Electronic Meter
EC3005AF, 3×133/230V, 3×230/400V, 0.5-10(100)A, 60Hz
(Further characteristics on page 2)

This OIML Certificate attests the conformity of the above identified type (represented by the sample(s) identified in the OIML type evaluation report) with the requirements of the following Recommendation of the International Organization of Legal Metrology (OIML):

OIML R46 – Edition 2012

For accuracy class: **Class B (Class 1)**

This OIML Certificate relates only to metrological and technical characteristics of the type of measuring instrument covered by the relevant OIML Recommendation identified above.

This OIML Certificate does not bestow any form of legal international approval.

Important note: Apart from the mention of the Certificate's reference number and the name of the OIML Member State in which the Certificate is issued, partial quotation of the Certificate and of the associated OIML type evaluation report(s) is not permitted, although either may be reproduced in full.

OIML Issuing Authority: **National Institute of Metrology, China**

Date: 09 February 2026



No.18, Bei San Huan Dong Lu,
Chaoyang Dist, Beijing,
100029, P.R.China
+86 10 64525646
oimlia@nim.ac.cn
www.nim.ac.cn

Li Wentao
Director
National Institute of Metrology, China

The conformity was established by the results of tests and examinations provided in the associated OIML type evaluation report:

No. TER-R46/2012-CN2-26.03 dated 09 February 2026 that includes 19 pages
and the associated OIML test report:

No. ZQS-NJDLO-2025120001 dated 08 January 2026 that includes 67 pages

OIML Certificate History

Revision No.	Date	Description of the modification
0	09 February 2026	Initial issue

Characteristics of the Instrument

Meter type (electromechanical/static):	Static
Accuracy class:	Class B (Class 1)
Nominal voltage, U_{nom} :	133 V, 230 V
Nominal frequency, f_{nom} :	60 Hz
Maximum current, I_{max} :	100 A
Transitional current, I_{tr} :	1 A
Minimum current, I_{min} :	0.5 A
Starting current, I_{st} :	0.04 A
Connection mode (phases, wires, elements):	Direct-connected, Three phases four wires, three elements
Direction of energy flow / registers:	Two-register, bi-directional
Register multiplier:	1
Meter constant:	1000 imp/kWh
Specified clock frequencies:	Metering MCU: 32.768kHz, Main MCU: 32.768kHz
Indoor / Outdoor:	Indoor
IP Rating:	IP 54
Terminal arrangement (e.g: BS, DIN):	BS
Insulation protection class:	II
Lower specified temperature:	-40 °C
Upper specified temperature:	+75 °C
Humidity class:	H2
Tilt / Mounting position:	Any position is allowed
Hardware version(s):	DTSD-AFD5-VF1.2_2024.09.14 DTSD-AFZ5-VF1.2_2024.09.14
Software version(s):	Metering MCU: 200.3 2025-02-28, Checksum :1328

Remarks:

1. The upper temperature of the meter is specified by the customer.
2. Communication interfaces: 1 optical port, 2 RS485 ports, 1NB-IoT Module.