

OIML Member State
The Netherlands

Number R46/2012-A-NL1-20.07 revision 1
Project number 2509324
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Issuing authority
Person responsible: NMi Certin B.V.
M. Boudewijns

Applicant and
Manufacturer: Alfano Electrical Division
Alfano industrial city
New Alkharj Road
14338 Riyadh
Saudi Arabia

Identification of the
certified type: **A measuring instrument**
Type: DTSD545-ALF

Characteristics: See page 2 and further

This OIML Certificate is issued under scheme A

This 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):

R 46-1/-2 (2012) "Active electrical energy meters"

Accuracy class: B

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

Issuing Authority: **NMi Certin B.V., OIML Issuing Authority NL1**
31 March 2021

Certification Board

The conformity was established by the results of tests and examinations provided in the associated reports:

- No. NMI-2509324-01a dated 30 March 2021 that includes 62 pages;
- No. NMI-2509324-02a dated 30 March 2021 that includes 13 pages.

Characteristics of the measuring instrument

In Table 1 the general characteristics of the measuring instrument are presented.

Table 1 General characteristics

General characteristics	
Meter type	static
Connection mode (phase, wires, elements)	3p, 4w, 3e
Direction of energy flow / registers	bi-directional; Import Active energy (1.8.0) = +A1 + +A2 + +A3 ; Export Active energy (2.8.0) = -A1 + -A2 + -A3 ; Absolute active energy (15.8.0) = +A1 + +A2 + +A3 + -A1 + -A2 + -A3
Terminal arrangement	BS
Protective class	Category 2
Environmental application	
Ambient temperature range	-40 °C to +70 °C (3k7): tested up to +75°C as a specific customer requirement
Humidity class	H2
IP Rating / environmental use	IP54 / indoor
Meter quantities	
Nominal voltage (U_{nom})	3x133/230 V and 3x230/400 V
Nominal frequency (f_{nom})	60 Hz
Maximum current (I_{max})	100 A
Transitional current (I_{tr})	1 A ($I_b = 10$ A)
Minimum current (I_{min})	0,5 A
Starting current (I_{st})	0,04 A
Meter constant	1.000 imp./kWh
Product version	
Hardware version	17-X100-01VS1.1
Software identification	Version number: ALHWCV1-20200618 Checksum: AB66FBBE



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Certificate history:

This revision replaces the previous version.

Revision	Date	Description of the modification
Initial	3 December 2020	-
1	31 March 2021	Editorial changes & associated report references revised.