

# ROMANIAN ACCREDITATION ASSOCIATION - RENAR

Bucharest, Calea Vitan no. 242, sector 3, zip code 031301

CIF RO 4311980



*RENAR is EA-MLA signatory for Testing.*

## ACCREDITATION CERTIFICATE

No. LI 1072

Romanian Accreditation Association – RENAR, being recognized as National Accreditation Body by OG 23/2009, herewith attests that the organization:

### ADD PRODUCTION SRL

Chişinău, no. 139 B-dul Decebal, MD-2060, Republica Moldova

through

**Testing laboratory**

fulfills the requirements of **SR EN ISO/CEI 17025:2005** and is competent to carry on **TESTING** activities, as it is detailed in the Annex of the present accreditation certificate.

This accreditation is maintained provided that the accreditation criteria established by the Romanian Accreditation Association – RENAR are met continuously.

The present certificate includes Annex no. 1 (2 pages), which is an integrated part of this certificate.

In order to check the validity of the accreditation certificate, including the Annex, the website of RENAR shall be consulted: [www.renar.ro](http://www.renar.ro).

Date of initial accreditation: 16.10.2015

The accreditation is valid until: 15.10.2019

GENERAL DIRECTOR

PRESIDENT OF THE ACCREDITATION COUNCIL

Cătălina Viorica NEAGUE

PhD. Eng. Dumitru DINU



**Annex no. 1 to Accreditation Certificate no. LI 1072**  
**Annex no. 1 Issue Date: 16.10.2015**

**Testing laboratory**

**Chişinău, no. 36 Dragomirna street, Republica Moldova**

**belonging to ADD Production SRL**

**Tests performed in permanent sites**

No.	Activity area/Analytical principle / Name of the test	Material / product	Reference document
<b>Accuracy tests at reference conditions</b>			
1.	Accuracy at reference conditions.	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.2 EN 50470-3:2005, Clause 8.7.2 SM SR EN 62053-23:2010, Clause 8.1 EN 62053-23:2003, Clause 8.1 WI-053-01
<b>Tests of effects of influence quantities</b>			
2.	Voltage variation	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.5.3 EN 50470-3:2005, Clause 8.7.5.3 SM SR EN 62053-23:2010, Clause 8.2 EN 62053-23:2003, Clause 8.2 WI-053-06
3.	Frequency variation	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.5.4 EN 50470-3:2005, Clause 8.7.5.4 SM SR EN 62053-23:2010, Clause 8.2 EN 62053-23:2003, Clause 8.2 WI-053-07
<b>Tests of effects of disturbances of long duration:</b>			
4	Reversed phase sequence.	Single and three-phase static meters for active energy.	SM SR EN 50470-3:2010, Clause 8.7.7.3 EN 50470-3:2005, Clause 8.7.7.3 WI-053-10
5	Voltage unbalance.	Single and three-phase static meters for active energy	SM SR EN 50470-3:2010, Clause 8.7.7.4 EN 50470-3:2005, Clause 8.7.7.4 WI-053-11
6	Self-heating	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.7.5 EN 50470-3:2005, Clause 8.7.7.5 SM SR EN 62053-23:2010, Clause 7.3 EN 62053-23:2003, Clause 7.3 WI-053-09
7	Accuracy in the presence of harmonics	Single and three-phase static meters for active energy	SM SR EN 50470-3:2010, Clause 8.7.7.7 EN 50470-3:2005, Clause 8.7.7.7 WI-053-08
<b>Tests of starting and no - load conditions</b>			
8	Initial start - up	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.9.2 EN 50470-3:2005, Clause 8.7.9.1 SM SR EN 62053-23:2010, Clause 8.3.1 EN 62053-23:2003, Clause 8.3.1 WI-053-04
9.	No – load condition test	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.9.3 EN 50470-3:2005, Clause 8.7.9.2 SM SR EN 62053-23:2010, Clause 8.3.2 EN 62053-23:2003, Clause 8.3.2 WI-053-03
10	Starting	Single and three-phase static meters for active energy Single and three-phase static	SM SR EN 50470-3:2010, Clause 8.7.9.4 EN 50470-3:2005, Clause 8.7.9.3 SM SR EN 62053-23:2010, Clause 8.3.3

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No.	Activity area/Analytical principle / Name of the test	Material / product	Reference document
		meters for reactive energy	EN 62053-23:2003, Clause 8.3.3 WI-053-01
<b>Meter constant</b>			
11	Metre constant	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 8.7.10 EN 50470-3:2005, Clause 8.7.10 SM SR EN 62053-23:2010, Clause 8.4 EN 62053-23:2003, Clause 8.4 WI-053-05
<b>Testing of the insulation</b>			
12	AC voltage test	Single and three-phase static meters for active energy Single and three-phase static meters for reactive energy	SM SR EN 50470-3:2010, Clause 7.2 EN 50470-3:2005, Clause 7.2 SM SR EN 62053-23:2010, Clause 1.4 EN 62053-23:2003, Clause 7.4 W1-053-12

**Note 1:** Single-phase static meters (for active and reactive energy):

$U_n$  (V): 230;  $I_{st}$  (A): 0,02-0,04;  $I_{min}$  (A): 0,25-0,5 ;  $I_{tr}$  (A): 0,5 -1;  
 $I_{ref}$  (A): 5 -10 ;  $I_{max}$  (A): 80-100;  $f_{ref}$  (Hz): 50.

accuracy class: A (according to SM SR EN 50470-3:2010 )  
 B (according to SM SR EN 50470-3:2010 )  
 2 (according to SM SR EN 62053-23:2010)

**Note 2:** Three – phase static meters (for active and reactive energy):

$U_n$  : 3x57,7V/100V; 3x230V/400V;  $f_{ref}$  : 50 Hz

direct connection:  $I_{st}$  : 0,025A; 0,05A;  $I_{st}$  : 0,02A; 0,04A;  $I_{min}$  : 0,25A; 0,5A;  
 $I_{tr}$  : 0,5A; 1A;  $I_{ref}$  : 5A; 10A;  $I_{max}$  : 80A; 100A

accuracy class:

A (according to SM SR EN 50470-3:2010 )  
 B (according to SM SR EN 50470-3:2010 )  
 2 (according to SM SR EN 62053-23:2010)

transformer connection:  $I_{st}$  : 0,0025A; 0,005A;  $I_{min}$  : 0,025A; 0,05A  
 $I_{tr}$  : 0,125A; 0,25A;  $I_n$  : 5A;  $I_{max}$  : 10A

accuracy class:

B (according to SM SR EN 50470-3:2010)  
 C (according to SM SR EN 50470-3:2010)  
 2 (according to SM SR EN 62053-23:2010)

*End of document*

/ **GENERAL DIRECTOR**  
**Cătălina Viorica NEAGUE**

