



EXECUTIVE AGENCY
BULGARIAN ACCREDITATION SERVICE

BAS reg. № 23 ЛК

From: 30.08.2024
Valid until: 30.08.2028

CERTIFICATE OF ACCREDITATION

EMSYST-6 LTD
CALIBRATION LABORATORY EMSYST

Management and Laboratory address:
Bulgaria, 1784 Sofia, 133 Tsarigradsko Shosse Blvd, BIC IZOT, Office 304

UIC: 121599480

Scope of accreditation

To perform calibration of:

Electronic standard electricity meters, single-phase and three-phase, for active energy;
Electronic standard electricity meters, single-phase and three-phase, for reactive energy;
Test Benches using standard electricity meter for metrological verification of electricity meters, single-phase and three-phase, for active and reactive energy; Flow rate meters and portable flow rate meter stations, calibrated with operating fluid water within the range from 0,006 m³/h to 70,00 m³/h.

ACCREDITED ACCORDING TO БДС EN ISO/IEC 17025:2018

Order № A 330/30.08.2024 is an integral part of the certificate of accreditation, total 5 pages.

Date of initial accreditation: 21.01.2008
Re-accreditation date: 30.08.2024

Executive director:

Eng. Irena Borislavova

EA BAS

BG 2024215



ORDER

№ A 330

Sofia, 30.08.2024

Pursuant to Art. 10, para. 1, item 4, Art. 28, para. 1 of the Law on National Accreditation of Conformity Assessment Bodies, item 6 of the BAS QR 2 Accreditation Procedure, in connection with an open procedure reg. № 26/23 ЛК/ПА/09.02.2024, reports reg. № 26/23 ЛК/7/В/30.05.2024, reg. № 26/23 ЛК/10/В/17.07.2024 and statement of the Accreditation Commission reg. № 26/23 ЛК/ПА/11/В/12.08.2024, I hereby

RE-ACCREDIT

EMSYST-6 LTD.

CALIBRATION LABORATORY EMSYST

Management and Laboratory address:

Bulgaria, 1784 Sofia, 133 Tsarigradsko Shosse Blvd, BIC IZOT, Office 304

To perform calibrating of:

Type of the scope: <i>Fixed</i>					
№	Measuring Instrument	Measure and, Measurement Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
1.	Standard Electricity Meters, Electronic, Single-Phase and Three-Phase for Active Energy	Electrical Energy, Active, kWh	Per phase From 1,25 Ws to 21,6.10 ⁶ Ws Voltage (U): From 50 V to 300 V Current (I): from 0,05 A to 120 A Power Factor: From 1 to 0,5 lagging, or from 1 to 0,8 leading	0,020 % at cos phi=1 U ≤ 230 V 0,025 % at cos phi=1 U > 230 V and at cos phi=0,5 i/ cos phi=0,8 c U ≤ 230 V I ≤ 12 A 0,030 %	WI 7.6.1-1 № E-MK-01/20

Type of the scope: *Fixed*

№	Measuring Instrument	Measure and, Measurement Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
			Time from 1 s to 600 s	at cos phi=0,5 i/ cos phi=0,8 c I > 12 A	
2.	Standard Electricity Meters, Electronic, Single-Phase and Three-Phase for Reactive Energy	Electrical Energy, Reactive, kvarh	Per phase From 0,625 vars to 21,6.10 ⁶ vars Voltage (U) from 50 V to 300 V Current (I) from 0,05 A to 120 A Power Factor From 1 to 0,25 lagging, or leading Time from 1 s to 600 s	0,025 % at sin phi=1 U ≤ 230 V 0,030 % at sin phi=1 U > 230 V and at sin phi=0,25 i/c U ≤ 230 V I ≤ 12 A 0,035 % at sin phi=0,25 i/c I > 12 A	WI 7.6.1-1 № E-MK-01/20
3.	Test Benches with Standard Electricity Meter for Metrological Verification of Electricity Meters, Single-Phase and Three-Phase, for Active and Reactive Energy	Electrical Energy, Active, kWh, and Reactive, kvarh	For active energy, per phase from 1,25 Ws to 21,6.10 ⁶ Ws Voltage (U) From 50 V to 300 V Current (I) from 0,05 A to 120 A Power Factor from 1 to 0,5 lagging, or from 1 to 0,8 leading Time from 1 s to 600 s	0,020 % at cos phi=1 U ≤ 230 V 0,025 % at cos phi=1 U > 230 V and at cos phi=0,5 i/ cos phi=0,8 c U ≤ 230 V I ≤ 12 A 0,030 % at cos phi=0,5 i/ cos phi=0,8 c I > 12 A	WI 7.6.1-4 № EY-MK-04/20

Type of the scope: <i>Fixed</i>					
Nº	Measuring Instrument	Measure and, Measure ment Unit	Measurement Range	Measurement Uncertainty	Calibration Method
1	2	3	4	5	6
			For reactive energy per phase From 0,625 vars to 21,6.10 ⁶ vars Voltage (U) From 50 V to 300 V Current (I) from 0,05 A to 120 A Power Factor from 1 to 0,25 lagging, or leading Time from 1 s to 600 s	0,025 % at sin phi=1 U ≤ 230 V 0,030 % at sin phi=1 U > 230 V and at sin phi=0,25 i/c U ≤ 230 V I ≤ 12 A 0,035 % at sin phi=0,25 i/c I > 12 A	
4.	Flow Meters and Portable Flow Meter Stations, Calibrated with Operating Fluid Water in the range from 0,006 m ³ /h to 70,00 m ³ /h	Volume, m ³	From 0,001 m ³ to 0,3 m ³ (at the range from 0,006 m ³ /h to 30,0 m ³ /h) (at the range from 30,0 m ³ /h to 70,0 m ³ /h)	0,10 % 0,20%	WI 7.6.1-2 Nº P-MK-01/20

References:

1. WI 7.6.1-1 Nº E-MK-01/20 Calibration Methodology for Standard Electronic Electricity Meters, validated on 17.07.2020;
2. WI 7.6.1-4 Nº EY-MK-04/20 Calibration Methodology for Test Benches with a Standard Electricity Meter for Metrological Verification of single-phase and three-phase electricity meters for active and reactive energy, validated on 18.06.2024;
3. WI 7.6.1-2 Nº P-MK-01/20 Calibration Methodology for Flow Meters and Portable Flow Meter Stations, validated on 03.09.2020.

Note:

*The calibrations of measurement instruments for positions 1, 2 and 3 shall be carried out in the Laboratory premises, and on the customer's site.
The calibrations of measurement instruments for position 4 shall be carried out only in the Laboratory premises.*

I ORDER

To issue the certificate of accreditation reg. № 23 ЛК/30.08.2024, valid until 30.08.2028 and this order as an integral part of it.

The certificate of accreditation with the enclosure should be obtained from the manager of EMSYST-6 LTD, head of the Calibration Laboratory EMSYST, at EMSYST-6 LTD, or other authorized person in the office of EA BAS.

Upon receipt of the certificate issued and enclosure, the accredited person is obliged to return to EA BAS the originals of the certificate of accreditation reg. № 23 ЛК/25.01.2024, valid until 31.08.2024 and its enclosure - EA BAS order reg.№ A 45/25.01.2024.

This order shall be notified to the EMSYST-6 LTD within 3(three) days from its issuance.

Eng. Irena Borislavova

Executive Director of EA BAS

