



SLOVENSKÁ NÁRODNÁ
AKREDITAČNÁ SLUŽBA

CERTIFICATE OF ACCREDITATION

No. S-358

dated 01.06.2025

The Slovak National Accreditation Service issues a Certificate of Accreditation to an accredited body pursuant to Section 26 par.6 of Act No. 53/2023 Coll. on Accreditation of Conformity Assessment Bodies (hereinafter referred to as the "Accreditation Act").

Slovenská legálna metrológia, n. o.

Geologická 9966/1, 821 06 Bratislava – mestská časť Podunajské Biskupice
ID Number: 37 954 521

Organizational unit performing the activity of the Accredited Body:
Calibration laboratory

Workplace of the Accredited Body:
listed in the annex

Identification number of the Accredited Body: 058/S-358

Area of accreditation: Testing laboratory

The accredited body demonstrated its competence to perform the accredited activity fulfilling the accreditation requirements of **ISO/IEC 17025: 2017** Standard when performing testing of non-automatic weighing instruments, water meters, electricity meters, heat meters, measuring system for continuous and dynamic measurement of quantities of liquids other than water, automatic weighing instruments, taximeters, material measures of volume – capacity serving measures, exhaust gas analyzers and legal measurement of personal dosimeters and expert measurement of temperature and humidity within the accreditation scope delineated in the Annex of this Certificate of Accreditation. The Annex shall form an integral part of the Certificate of Accreditation.

Number and date of issue of the accreditation decision: No. 058/12002/2025/1 dated 13.05.2025

Validity of the accreditation decision:

The accreditation decision No. 058/12002/2025/1 dated 30.10.2024 is valid from 03.07.2025 to 03.07.2030.

The validity of this Accreditation Certificate expires upon the expiry of the accreditation decision, the decision on withdrawal of the accreditation pursuant to Section 31 or the expiry of the accreditation pursuant to Section 32 of the Accreditation Act.




Štefan Král
director

record number: 12002/350051

SNAS is signatory to the EA MLA and ILAC MRA.

Annex to Certificate of accreditation No. S-358 dated 01.06.2025.

The Annex is an integral part
of this Certificate**Activity specification****Name of the accredited subject:** Slovak legal metrology, n.o.

Geologická 9966/1, 821 06 Bratislava

Organizational unit performing the activity of an accredited subject:

Testing laboratory

Accredited person identification number: 058/S-358**Place of performance of accredited activities:**

Laboratory / workplaces	Workplace Bratislava Geologická 1, 821 06 Bratislava	Workplace Nitra Kmeťkova 3, 949 01 Nitra	Workplace Banská Bystrica Hviezdoslavova 31, 974 01 Banská Bystrica	Workplace Žilina Závodského 33, 010 04 Žilina	Workplace Košice Zemplínska 46, 040 01 Košice
Laboratory of length					
Taximeter	1.1	-	-	-	-
Taximeter (Accuracy verification)	1.2	-	-	-	-
Laboratory of volume, flow					
Water meter	2.1	-	-	-	-
Measuring system for the continuous and dynamic measurement of quantities of liquids other than water	2.2	-	2.2	-	-
Measuring system for the continuous and dynamic measurement of quantities of liquids other than water (Qualitative and quantitative tests)	2.3	-	2.3	-	-
Material measure – capacity serving measure	-	-	2.4	-	-
Laboratory of mass					
Non-automatic weighing instrument * only performance test	3.1	3.1*	3.1*	3.1*	3.1*
Automatic weighing instrument ** only performance test	3.2 – 3.6	-	3.2** – 3.6**	-	-
Laboratory of temperature and heat					
The heat meter	4.1- 4.4	-	-	-	-
Thermal field generation device	4.5	-	-	-	-
Laboratory of electrical quantities, frequency, time					
Active electrical energy meter	-	-	-	-	5.1
Laboratory of physico-chemical quantities					
Exhaust gas analysers of motor vehicles	6.1	-	-	-	-
Humidity field generating device	6.2	-	-	-	-



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LABORATORY WITH FIXED ACCREDITATION SCOPE

LABORATORY OF LENGTH

Item	Test subject		Method applied		Other specifications (modification/validation/interpretations, workplace etc.) Test subject
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
1.1	Taximeter	Voltage range test	supply voltage variations and measurement with voltmeter	STN EN 50148 OIML R 21 Part A.5 (PP-57-01)	SLM
		Voltage range test	supply voltage variations and measurement with voltmeter	STN EN 50148 OIML R 21 Part A.5 (PP-57-01)	
		Test of time pulse counting accuracy	comparison with timer	STN EN 50148 OIML R 21 Part A.4 (PP-57-01)	
		Visual examination and performance test	qualitative test	STN EN 50148 OIML R 21 Part A.4 (PP-57-01)	
		Dry heat test	qualitative test	STN EN 50148 OIML R 21 Part A.5 (PP-57-01)	
		Cyclic damp heat test			
1.2	Taximeter	Cold test	comparison with pulse generator and with timer	STN EN 50148 OIML R 21 (PP-57-02)	EXT
		Accuracy verification – test of travelled distance in km and elapsed time in s			

Notes:

SLM internal performance in SLM laboratory

EXT external performance of SLM

LABORATORY OF VOLUME, FLOW

Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
2.1	Water meter	Static pressure test	direct pressure method	STN EN ISO 4064-2, OIML R 49-2, cl. 7.3 (PP-51-01)	SLM
		Determination of intrinsic errors (of indication)	mass method	STN EN ISO 4064-2, OIML R 49-2, cl. 7.4 (PP-51-01)	
		Water temperature test	mass method, volume method	STN EN ISO 4064-2, OIML R 49-2 cl. 7.5 (PP-51-01)	
		Overload water temperature test	mass method	STN EN ISO 4064-2, OIML R 49-2 cl. 7.6 (PP-51-01)	
		Water pressure test	mass method at a certain pressure	STN EN ISO 4064-2, OIML R 49-2, cl. 7.7 (PP-51-01)	
		Reverse flow test	mass method	STN EN ISO 4064-2, OIML R 49-2, cl. 7.8 (PP-51-01)	
		Pressure loss test	water meter inlet and outlet pressure difference measurement	STN EN ISO 4064-2, OIML R 49-2, cl. 7.9 (PP-51-01)	
		Flow disturbance tests	mass method	STN EN ISO 4064-2, OIML R 49-2 cl. 7.10 (PP-51-01)	

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Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
2.1	Water meter	Durability tests	mass method	STN EN ISO 4064-2, OIML R 49-2 čl. 7.11 (PP-51-01)	SLM
		Static magnetic field	mass method at a certain magnetic field	STN EN ISO 4064-2, OIML R 49-2 cl. 7.12 a 8.16 (PP-51-01)	
		Tests on ancillary devices of a water meter	mass method	STN EN ISO 4064-2, OIML R 49-2 cl. 7.13 (PP-51-01)	
		Dry heat (non-condensing) test	direct method using a climatic chamber	STN EN ISO 4064-2, OIML R 49-2 cl. 8.2 (PP-51-01)	
		Cold test	direct method using a climatic chamber	STN EN ISO 4064-2, OIML R 49-2 cl. 8.3 (PP-51-01)	
		Cyclic damp heat (condensing) test	direct method using a climatic chamber	STN EN ISO 4064-2, OIML R 49-2 cl. 8.4 (PP-51-01)	
		Power supply variation)	direct method using a power supply	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.5 (PP-51-01)	
		Vibration (random))	volume method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.6 (PP-51-01)	
		Mechanical shock	mass method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.7 (PP-51-01)	
		AC mains voltage dips, short interruptions and voltage variations)	volume method	STN EN ISO 4064-2 a OIML R 49-2 čl. 8.8 (PP-51-01)	
		Bursts on signal lines*)	volume method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.9 (PP-51-01)	

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Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
2.1	Water meter	Bursts (transients) on AC and DC mains*)	volume method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.10 (PP-51-01)	SLM
		Electrostatic discharge)	volume method	STN EN ISO 4064-2 a OIML R 49-2 čl. 8.11 (PP-51-01)	
		Radiated electromagnetic fields)	volume method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.12 (PP-51-01)	
		Conducted electromagnetic fields)	volume method	STN EN ISO 4064-2 a OIML R 49-2, cl. 8.13 (PP-51-01)	
		Surges on signal, data and control lines*)	volume method	STN EN ISO 4064-2 a OIML R 49-2, cl. 8.14 (PP-51-01)	
		Surges on AC and DC mains power lines*)	volume method	STN EN ISO 4064-2 a OIML R 49-2 cl. 8.15 (PP-51-01)	
		Absence of flow test	qualitative test	STN EN ISO 4064-2 a OIML R 49-2, cl. 8.17 (PP-51-01)	
		Accuracy verification (test)	mass method	STN EN ISO 4064-2, OIML R 49-2, cl. 9 (PP-51-02)	
2.2	Measuring system for the continuous and dynamic measurement of quantities of liquids other than water	Dry heat	Simulated method	OIML R117-2, cl. 4.8 (PP-55-01)	EXT
		Cold			
		Cyclic damp heat			
		Zero reading	simulated or volume method	OIML R117-2, cl. 5.3.1 (PP-55-01)	
		Accuracy test		OIML R117-2, cl. 5.3.2 (PP-55-01)	
		Accuracy test at limits of temperature, pressure, conductivity and density of liquid		OIML R117-2, cl. 5.3.3 (PP-55-01)	
		Disturbance test		OIML R117-2, cl. 5.3.4 (PP-55-01)	
		Endurance test		OIML R117-2, cl. 5.4 (PP-55-01)	
2.3	Measuring system for the continuous and dynamic measurement of quantities of liquids other than water	Qualitative and quantitative tests	volume method – using measuring vessel	OIML R117-1, cl. 6.2 (PP-55-02)	SLM EXT
			volume method – using flow meter	OIML R117-1 cl. 6.2 (PP-55-04), (PP-55-06)	
2.4	Material measure – capacity serving measures	Geometric dimensions	direct comparison	OIML R-138 cl. 4, OIML R-138 cl. 6 (PP-58-01), (PP-58-02)	SLM
		Performance tests	mass method		

Notes

SLM internal performance in SLM laboratory

EXT external performance of SLM

*) outside the permanent laboratory premises - at EVPÚ a.s.

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LABORATORY OF MASS

Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
3.1	Non-automatic weighing instrument Accuracy classes I, II, III and IIII	Performance tests *	Direct comparison	STN EN 45 501, cl. 8.3, Annex A, cl. A.4 and Annex C, cl. 3 OIML R 76-1 (PP-00-01) (PP-00-02)	SLM EXT
		Tilting	Direct comparison	STN EN 45 501, Annex A.5.1 OIML R 76-1 (PP-00-01) (PP-00-02)	
		Warm-up time test	Direct comparison	STN EN 45 501, Annex A.5.2 OIML R 76-1 (PP-00-01)	
		Temperature tests	Direct comparison	STN EN 45 501, Annex A.5.3 OIML R 76-1 (PP-00-01)	
		Voltage variations	Direct comparison	STN EN 45 501, Annex A.5.4 OIML R 76-1 (PP-00-01)	
		Endurance test	Direct comparison	STN EN 45 501, Annex A.6 OIML R 76-1 (PP-00-01)	
		Damp heat test	Direct comparison	STN EN 45 501, Annex B.2 OIML R 76-1 (PP-00-01)	
		Span stability test	Direct comparison	STN EN 45 501, Annex B.4 OIML R 76-1 (PP-00-01)	
		Indicators tests	Direct comparison, or simulation tests	STN EN 45 501, Annex C.3 OIML R 76-1 (PP-00-01)	SLM
3.2	Continuous totalizing automatic weighing instrument	Performance tests**	Direct comparison	OIML R 50-1 Annex A, cl. A.4, A.6, A.6.1, A.6.2 (PP-56-01) (PP-56-06)	EXT
		Influencing factors	Direct comparison	OIML R 50-1 Annex A, cl. A.7 (PP-56-01)	SLM
		Tests on the site of installation	Direct comparison	OIML R 50-1 Annex A, cl. A.9, A.10, A.11 (PP-56-01) (PP-56-06)	
3.3	Discontinuous totalizing automatic weighing instrument	Performance tests**	Direct comparison	OIML R 107-1 Annex A, cl. A.4.1, A.5, A.6, A.9 (PP-56-02) (PP-56-07)	SLM EXT
		Influencing factors	Direct comparison	OIML R 107-1 Annex A, cl. A.7 (PP-56-02)	
		Stability test	Direct comparison	OIML R 107-1 Annex A, cl. A.8 (PP-56-02)	

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Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
3.4	Automatic catchweighing instrument	Performance tests**	Direct comparison	OIML R 51-1 Annex A, cl. A.4 and A.5 (PP-56-03) (PP-56-08)	SLM EXT
		Influencing factors	Direct comparison	OIML R 51-1 Annex A, cl. A.6.1, A.6.2. (PP-56-03)	
		Span stability tests	Direct comparison	OIML R 51-1 Annex A, cl. A.7, (PP-56-03)	
3.5	Automatic gravimetric (filling) instruments	Performance tests**	Direct comparison	OIML R 61-1 Annex A, cl. A.4, A.5 (PP-56-04) (PP-56-09)	SLM EXT
		Influencing factors	Direct comparison	OIML R 61-1 Annex A, cl. A.6.1, A.6.2 (PP-56-04)	
		Span stability tests	Direct comparison	OIML R 61-1 Annex A, cl. A.7 (PP-56-04)	
		Material tests	Direct comparison	OIML R 61-1 Annex A, cl. A.8 (PP-56-04) (PP-56-09)	
3.6	Automatic rail-weighbridges	Performance tests**	Direct comparison	OIML R 106-1 Annex A, cl. A.6, A.7, (PP-56-05) (PP-56-10)	SLM EXT
		Influencing factors	Direct comparison	OIML R 106-1 Annex A, cl. A.8 (PP-56-05)	
		Span stability tests	Direct comparison	OIML R 106-1 Annex A, cl. A.10 (PP-56-05)	
		Tests on the site of installation	Direct comparison	OIML R 106-1 Annex A, cl. A.11 (PP-56-05)	

Notes:

SLM internal performance in SLM laboratory

EXT external performance of SLM

*) The marked examinations are carried out at the SLM workplaces in BA, NR, BB, ZA, KE or externally.

**) The marked examinations are carried out at the SLM workplaces in BA, BB or externally.



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LABORATORY OF TEMPERATURE AND HEAT

Item	Test subject		Method applied		Other specifications (modification/validation/ interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
4.1	Heat meter, part Calorimetric counters	Accuracy test / operational tests	indirect method using simulation of input quantities (resistance, number of pulses)	EN 1434-4 OIML R 75 (PP-54-01)	SLM EXT
		Dry heat test	*	EN 1434-4 OIML R 75 EN 60068-2-2 EN 60068-3-1 (PP-54-01)	SLM
		Cold test	*	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-01)	
		Static deviations in supply voltage test	*	EN 1434-4 OIML R 75 (PP-54-01)	
		Cyclic damp heat test	*	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-01)	
		Static magnetic field test	*	EN 1434-4 OIML R 75 (PP-54-01)	
		24-hour interruption in the mains power supply voltage test	*	EN 1434-4 OIML R 75 (PP-54-01)	
4.2	Heat meter, part Temperature sensor pairs	Accuracy test / operational tests	comparison with standard RTS, or thermometer	EN 1434-4 OIML R 75 (PP-54-05)	SLM
		Immersion depth test	direct measurement of immersion depth	EN 1434-4 OIML R 75 EN 60751 (PP-54-05)	
		Temperature response time test	direct measurement of temperature response time	EN 1434-4 OIML R 75 EN 60751 (PP-54-05)	
		Pocket impact test	*	EN 1434-4 OIML R 75 EN 60751 (PP-54-05)	
		Isolation resistance test	direct measurement of isolation resistance	EN 1434-5 OIML R 75 EN 60751 (PP-54-05)	
		Stability test	*	EN 1434-4 OIML R 75 (PP-54-05)	
4.3	Heat meter, part Flow meter	Accuracy test / operational tests	direct method using flow meter Indirect method using weighing scales	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	SLM EXT
		Dry heat test	direct method using climatic chamber	EN 1434-4 OIML R 75 EN 60068-2-2 EN 60068-3-1 (PP-54-03) (PP-54-04)	SLM
		Cold test	direct method using climatic chamber	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-03) (PP-54-04)	

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Item	Test subject		Method applied		Other specifications (modification/validation/ interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
4.3	Heat meter, part Flow meter	Static deviations in supply voltage test	direct method using power supply	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	SLM
		Stability test	indirect method	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
		Cyclic damp heat test	direct method using climatic chamber	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-03) (PP-54-04)	
		Static magnetic field test	indirect method using permanent magnets	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
		Internal pressure test	direct method using pressure gauge	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
		Pressure loss test	flow meter inlet and outlet pressure difference measurement	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
		24-hour interruption in the mains power supply voltage test	direct method	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
		Flow disturbance test	direct method using flow disturbers	EN 1434-4 OIML R 75 (PP-54-03) (PP-54-04)	
4.4	Combined, complete, hybrid and compact heat meter	Accuracy test / operational tests	indirect method using simulation of input quantities (resistance, number of pulses)	EN 1434-4 OIML R 75 (PP-54-01)	SLM EXT
			comparison with standard RTS, or thermometer		
			direct method		
		Dry heat test	indirect method	EN 1434-4 OIML R 75 EN 60068-2-2 EN 60068-3-1 (PP-54-01)	SLM
			*		
			*		
			*		
		Cold test	*	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-01)	SLM
			*		
			*		
		Static deviations in supply voltage test	*	EN 1434-4 OIML R 75 (PP-54-01)	SLM
		Stability test	*	EN 1434-4 OIML R 75 (PP-54-01)	
		Cyclic damp heat test	*	EN 1434-4 OIML R 75 EN 60068-2-1 EN 60068-3-1 (PP-54-01)	
		Static magnetic field test	*	EN 1434-4 OIML R 75 (PP-54-01)	

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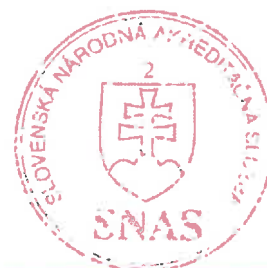
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Item	Test subject		Method applied		Other specifications (modification/validation/ interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
4.4	Combined, complete, hybrid and compact heat meter	Internal pressure test	*	EN 1434-4 OIML R 75 (PP-54-01)	SLM
		Pressure loss test	direct measurement of pressure loss	EN 1434-4 OIML R 75 (PP-54-01)	
		24-hour interruption in the mains power supply voltage test	*	EN 1434-4 OIML R 75 (PP-54-01)	
		Flow disturbance test	*	EN 1434-4 OIML R 75 (PP-54-01)	

Notes:

SLM internal performance in SLM laboratory,
EXT external performance at the customer's or subcontractor's premises
* the method and scope are the same as for the accuracy test/operational test

Item	Test subject		Method applied		Other specifications (modification/validation/interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
4.5	Temperature field generating device*	Temperature	measurement with a thermometer or temperature sensor	PP-31-05	SLM EXT
* Dryers, sterilizers, vacuum sterilizers, muffle furnaces, refrigerators, freezers, climatic, temperature, solar, corrosion chambers, storage, office, production and laboratory areas, liquid and block thermostats, incubators, test equipment generating a temperature field, horizontal furnaces, technological equipment generating a temperature field, transportation spaces in motor vehicles.					



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LABORATORY OF ELECTRICAL QUANTITIES, FREQUENCY, TIME

Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
5.1	Active electrical energy meter	Impulse voltage test	-	EN 50470-1 čl. 7.3.3 OIML R 46 EN 62052-11 čl. 7.3.2 (PP-53-01)	SLM
		AC voltage test	-	EN 50470-1 čl. 7.3.4 EN 50470-2 čl. 7.2 EN 50470-3 čl. 7.2 OIML R 46 EN 62058-21 čl. 5.3 EN 62058-31 čl. 5.3 EN 62052-11 čl. 7.3.3 EN 62053-21 čl. 7.4 EN 62053-22 čl. 7.4 EN 62053-23 čl. 7.4 (PP-53-01)	
		Accuracy test under reference conditions	priame s etalónom elektrickej energie	EN 50470-2 čl. 8.7.2 EN 50470-3 čl. 8.7.2 OIML R 46 EN 62058-21 čl. 5.6 EN 62058-31 čl. 5.6 EN 62053-21 čl. 8.1 a 8.5 EN 62053-22 čl. 8.1 a 8.5 EN 62053-23 čl. 8.1 a 8.5 (PP-53-01)	SLM EXT
		Repeatability test		EN 50470-2 čl. 8.7.4 EN 50470-3 čl. 8.7.4 OIML R 46 (PP-53-01)	
		Test of meter constant		EN 50470-2 čl. 8.7.10 EN 50470-3 čl. 8.7.10 OIML R 46 EN 62058-21 čl. 5.7 EN 62058-31 čl. 5.7 EN 62053-21 čl. 8.4 EN 62053-22 čl. 8.4 EN 62053-23 čl. 8.4 (PP-53-01)	
		Test of starting conditions		EN 50470-2 čl. 8.7.9.3 EN 50470-3 čl. 8.7.9.3 OIML R 46 EN 62058-21 čl. 5.5 EN 62058-31 čl. 5.5 EN 62053-21 čl. 8.3.1 a 8.3.3 EN 62053-22 čl. 8.3.1 a 8.3.3 EN 62053-23 čl. 8.3.1 a 8.3.3 (PP-53-01)	
		Test of no load condition	-	EN 50470-2 čl. 8.7.9.2 EN 50470-3 čl. 8.7.9.2 OIML R 46 EN 62058-21 čl. 5.4 EN 62058-31 čl. 5.4 EN 62053-21 čl. 8.3.2 EN 62053-22 čl. 8.3.2 EN 62053-23 čl. 8.3.2 (PP-53-01)	
		Test of effects of influence quantities	-	EN 50470-2 čl. 8.7.5 EN 50470-3 čl. 8.7.5 OIML R 46 EN 62053-22 čl. 8.2 (PP-53-01)	
		Adjustment	-	EN 50470-2 čl. 8.7.11 OIML R 46 (PP-53-01)	
		Significant voltage changes	-	EN 50470-2 čl. 8.7.7.2 EN 50470-3 čl. 8.7.7.2 OIML R 46 (PP-53-01)	

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Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
5.1	Active electrical energy meter	Reversed phase sequence	-	EN 50470-2 čl. 8.7.7.3 EN 50470-3 čl. 8.7.7.3 OIML R 46 EN 62053-22 čl. 8.2 (PP-53-01)	SLM
		Voltage unbalance	-	EN 50470-2 čl. 8.7.7.4 EN 50470-3 čl. 8.7.7.4 OIML R 46 EN 62053-22 čl. 8.2 (PP-53-01)	
		Influence of short-time overcurrents	-	EN 50470-2 čl. 8.7.8 EN 50470-3 čl. 8.7.8 OIML R 46 EN 62053-21 čl. 7.2 EN 62053-22 čl. 7.2 EN 62053-23 čl. 7.2 (PP-53-01)	
		Influence of self heating	-	EN 50470-2 čl. 8.7.7.5 EN 50470-3 čl. 8.7.7.5 OIML R 46 EN 62053-21 čl. 7.3 EN 62053-22 čl. 7.3 EN 62053-23 čl. 7.3 (PP-53-01)	
		Earth fault accuracy test	-	EN 50470-2 čl. 8.7.7.6 EN 50470-3 čl. 8.7.7.6 OIML R 46 EN 62052-11 čl. 7.4 (PP-53-01)	
		Accuracy with harmonic components present	-	EN 50470-2 čl. 8.7.7.7 EN 50470-3 čl. 8.7.7.7 OIML R 46 EN 62053-21 čl. 8.2.1 EN 62053-22 čl. 8.2.1 (PP-53-01)	
		Odd harmonics and sub-harmonics	-	EN 50470-3 čl. 8.7.7.9 OIML R 46 EN 62053-21 čl. 8.2.2 EN 62053-22 čl. 8.2.2 (PP-53-01)	
		DC and even harmonics	-	EN 50470-3 čl. 8.7.7.8 OIML R 46 EN 62053-21 čl. 8.2.3 EN 62053-23 čl. 8.2.1 (PP-53-01)	
		Accuracy test during operation of auxiliary equipment	-	EN 50470-2 čl. 8.7.7.10 EN 50470-3 čl. 8.7.7.13 OIML R 46 EN 62053-22 čl. 8.2 (PP-53-01)	
		Mechanical load of the register	-	EN 50470-2 čl. 8.7.7.11 OIML R 46 (PP-53-01)	
		Effect of oblique suspension	-	EN 50470-2 čl. 8.7.7.12 OIML R 46 (PP-53-01)	
		Power consumption	direct measurement of power consumption	EN 50470-2 čl. 7.1 EN 50470-3 čl. 7.1 OIML R 46 EN 62053-21 čl. 7.1 EN 62053-22 čl. 7.1 EN 62053-23 čl. 7.1 (PP-53-01)	
		Self-heating test	direct measurement of surface temperature	EN 50470-1 čl. 7.2 OIML R 46 EN 62052-11 čl. 7.2 (PP-53-01)	

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Item	Test subject		Method applied		Other specifications (modification/validation, opinions/interpretations, workplace, etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
5.1	Active electrical energy meter	Continuous magnetic induction of external origin		EN 50470-1 čl. 7.4.11 EN 50470-2 čl. 8.7.7.8 EN 50470-3 čl. 8.7.7.10 OIML R 46 EN 62053-21 čl. 8.2.4 EN 62053-22 čl. 8.2.3 EN 62053-23 čl. 8.2.2 (PP-53-01)	SLM
		Dry heat test		EN 50470-1 čl. 6.3.2 OIML R 46 EN 62052-11 čl. 6.3.1 EN 60068-2-2 EN 60068-3-1 (PP-53-01)	
		Cold test		EN 50470-1 čl. 6.3.3 OIML R 46 EN 62052-11 čl. 6.3.2 EN 60068-2-1 EN 60068-3-1 (PP-53-01)	
		Cyclic damp heat test		EN 50470-1 čl. 6.3.4 OIML R 46 EN 62052-11 čl. 6.3.3 EN 60068-2-30 EN 60068-3-4 (PP-53-01)	
		Durability test		EN 62059-32-1 (PP-53-01)	

Notes:

SLM internal performance in SLM laboratory,
EXT external performance at the customer's or subcontractor's premises



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LABORATORY OF PHYSICO-CHEMICAL QUANTITIES

Item	Test subject		Method applied		Other specifications (modification/validation/interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
6.1	Exhaust gas analyser of motor vehicles with spark ignition engine	EGA check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.2, 7.1	SLM
		calibration curve check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.3 b), Annex A.2	SLM Gas mixtures E, F, G
				OIML R 99-1, 2 cl. 9.1, Annex A.2 (PP-50-01)	SLM Gas mixtures E, F, G, H, L
		system leakage check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.3 c), Annex A.22 (PP-50-02)	SLM Gas mixtures B
		HC residue check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.3 d), Annex A.23 (PP-50-02)	SLM Gas mixtures I
		low flow check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.3 e), Annex A.21 (PP-50-02)	SLM Gas mixtures B
		response time check	direct measurement of CRM values	OIML R 99 - 1, 2; cl. 8.2.3 f), Annex A.20 (PP-50-02)	SLM Gas mixtures B
		check of stability of EGA with time (drift)	direct measurement of CRM values	OIML R 99-1, 2 cl. 9.2, Annex A.3 (PP-50-01)	SLM Gas mixtures A
		EGA repeatability check	direct measurement of CRM values	OIML R 99-1, 2 cl. 5.13, Annex A.4 (PP-50-01)	SLM Gas mixtures A
		EGA cross sensitivity test	direct measurement of CRM values	OIML R 99-1, 2 cl. 5.6.3, Annex A.10 (PP-50-01)	SLM Gas mixtures D, J, K binary mixtures
		EGA warm-up time check	direct measurement of CRM values	OIML R 99-1, 2 cl. 5.9, Annex A.19 (PP-50-01)	SLM Gas mixtures A
		EGA propane/hexane equivalency factor check	direct measurement of CRM values	OIML R 99-1, 2 cl. 5.10, Annex A.26 (PP-50-01)	SLM binary mixtures

Notes:

- SLM internal performance in SLM laboratory
 EGA exhaust gas analyser
 % vol volume fraction of the gas components expressed as a percentage (CO, CO₂ and O₂...),
 CRM certified reference material
 HC hydrocarbons

Gas mixtures A, B, D, E, F, G, H, I, J, K, L and binary (two-component) mixtures CO/N₂, CO₂/N₂, HC/N₂, O₂/N₂, HC/N₂ and C₃H₈/N₂, are composed according to Annex B.4, Table B.1 OIML R-99-1 and 2:2008.

Item	Test subject		Method applied		Other specifications (modification/validation/interpretations, workplace etc.)
	Subject / Matrix / Environment	Property / Parameter / Index / Analyt	Principle / Kind / Type	Identification	
6.2	Humidity field generating device*	Humidity	Measurement with a hygrometer or standard humidity sensor	PNÚ 3410.2 PP-70-05	Relative humidity (10 to 70) %
* dryers, refrigerators, climatic chambers, storage, office, production and laboratory areas, incubators, test equipment generating a humidity field, technological equipment generating a humidity field, transportation spaces in motor vehicles.					

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