



EA MLA Signatory Český institut pro akreditaci, o.p.s. Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. 574/2021

KZB-Kalibrace s.r.o. with registered office Mikoláše Alše 2240, 434 01 Most, Company Registration No. 03113205

to the Calibration Laboratory No. **2374**Calibration Laboratory

Scope of accreditation:

Calibration of gauges of length, plane angle, torque, pressure, time, temperature and electrical quantities to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 683/2020 of 10. 11. 2020, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: 10. 11. 2025

Prague: 8. 11. 2021



Lukáš Burda
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute
Public Service Company



Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Length

gauges 10 mm to 1. Micrometer gauges /	90.
0 mm 10	
micrometer	1 500 mm
3 mm to	200 mm
three-contact internal	
Two-contact and	
1,000 mm to 1,	,500 mm
100 mm to 1,	,000 mm
25 mm to	100 mm
gauges 0 mm to	25 mm
micrometer depth	
micropasameters,	
pasameters,	
micrometers,	
	Joon Hill
Linear height gauges 0 mm to 1.	.000 mm
1,000 mm to	2,000 mm
0 mm to	1,000 mm
height gauges, gear	9
rules, depth gauges,	
Slide gauges / slide	
100 mm to	500 mm
0.5 mm to	100 mm
Parallel gauge blocks	2004 A005
Subject of calibration min. unit m	max. unit
Calibrated quantity / Nominal range	lge

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Ord.	Calibrated quantity /	Nominal range	drange		Lowest expanded		Calibration	Work-
1	Subject of calibration	min, unit	max. unit	r at afficter (8) of the fileas, quantity	uncertainty specified ²	Calibration principle	procedure identification ³	place
	Micrometric heads	0 mm to	o 100 mm		1 µm			
	Setting gauges for micrometer gauges	0 mm to			(1L + 0.4) μm			
		0 mm to	o 950 mm		1.8 µm	Direct measurement on a linear height gauge		
6	Indicators / direct,					Direct measurement by a length	Kp 01-003	
	lever indicators and					gauge		
	internal gauges with							
	indicator	0 mm to	o 100 mm		0.5 µm			
7*	Indicators / direct,					Direct measurement on a	Kp 01-003	
	lever indicators and					portable measuring device	3	
	internal gauges with				1000 1000 1000	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	indicator	0 mm to	o 50 mm		2.9 µm			
8	Linear sensors	0 mm	100 mm		0 5	Direct measurement by a length	Kp 01-003	
0	Rules / precise ganges				0.5 µIII	Direct management by a least	V= 01 004	
l i	and measuring					gauge	To to day	
	magnifiers	0 mm to	o 100 mm		0.5 µm	Com Co		
					e l	Direct measurement by a		
		0 mm to	o 200 mm		2.1 µm	microscope		
		200 mm to	o 400 mm		2.7 µm	į		
		400 mm to	o 600 mm		3.7 µm			
	Steel rules					Comparison with a standard		
		0 mm to	o 1,000 mm		42 μm	gauge		
		1,000 mm to	o 2,000 mm		59 µm			
	Tape measures					Comparison with a standard		
		0 m to	o 8 m	The ord	0.17 mm	track		
		8 m to	0 10 m	Still Page	0.32 mm			
				ský in				
				1 3 · · · · · · · · · ·				

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

	1/2/				,										10*		-	Ord.
conical	Thread gauges - female	Thread gauges – plug gauges	Setting gauges for layer thickness gauges	Measuring wires	Cylindrical gauges	Feeler gauges and wedges		Slot gauges		Cylindrical gauges	700	Setting rings and snap gauges		Tane measures	Rules / steel gauges	Tape measures, wooden rulers and rulers of 2m length	Subject of calibration	Calibrated quantity /
0 mm	5 mm	0 mm	0 mm	0 mm	0 mm	0 mm	100 mm	0 mm	100 mm	0 mm	10 mm	0.95 mm	0 m		0 mm	0 m	min. unit	Nomi
to 100 mm	to 200 mm	to 300 mm	to 25 mm	to 10 mm	to 100 mm	to 100 mm	to 500 mm	to 100 mm	to 500 mm	to 100 mm	to 275 mm	to 10 mm	to 10 m		to 500 mm	to 100 m	max. unit	Nominal range
Ský institute Dio akr	0000																a arameter (s) or the meast quantity	Parameter(s) of the meas quantity
5 µm	4 μm	3.1 µm	0.8 µm	0.5 µm	0.5 µm	0.5 µm	lμm	0.5 µm	l μm	0.5 µm	$(4.3L + 0.7) \mu m$	l µm	(0.07L + 0.19) mm		0.12 mm	(0.015L + 0.18) mm	uncertainty specified ²	Lowest expanded
Direct measurement on a length gauge and linear height gauge	Direct measurement by a microscope											Direct and comparative measurement on a length gauge	gauge	Comparison with a standard	Measurement of parallel gauge blocks		Canoration principie	Colibration principle
	-											Kp 01-005	150 01-004	Kp 01-004	Kp 01-004, Kp 01-015		identification ³	Calibration
																	place	Work-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

0 mm to 10 mm 4 μm 0 mm to 100 mm 2 μm 0 mm to 100 mm 1.5 μm 0 mm to 30 mm 1.5 μm 0 mm to 30 mm 5 μm 0 mm to 500 mm 5 μm 0 mm to 500 mm 2.2 μm 0 mm to 500 mm 3.7 μm 0 mm to 25 mm dry layers 1.4 μm 0 mm to 5 mm length up to 300 mm 3.7 μm 0 mm to 5 mm length up to 300 mm 3.4 μm 0 mm to 5 mm length up to 1,000 mm 5.1 μm 0 mm to 5 mm length up to 2,000 mm 5.1 μm 0 mm to 5 mm 2.2 μm	Ord. number	Calibrated quantity / Subject of calibration	min. Non	Nominal range	ange max. unit	Parameter(s) of the meas, quantity	Lowest expanded measurement	Calibration principle	
Cylindrical gauges		Efflux viscometers						Direct meas	rement by a
Cylindrical gauges 0 mm to 100 mm 2 μm Slot gauges 0 mm to 100 mm 2 μm Feeler gauges and wedges 0 mm to 100 mm 1.5 μm Cylindrical gauges and wedges 0 mm to 30 mm 1.5 μm Thickness gauges and callipers 0 mm to 500 mm 5 μm Thickness gauges and callipers 0 mm to 500 mm measurement 2.2 μm Dry layer thickness gauges 0 mm to 500 mm internal measurement 3.7 μm Dry layer thickness gauges 0 mm to 500 mm measurement 3.7 μm Dry layer thickness gauges 0 mm to 500 mm measurement 3.7 μm Dry layer thickness gauges 0 mm to 500 mm measurement 3.7 μm Dry layer thickness 0 mm to 500 mm measurement 3.7 μm Burface plates / straightness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm 5 mm length up to 2,000 mm 5.1 μm Blade rules / straightnes			0 mm	to	10 mm		4 µm	microscope	3.
Slot gauges O mm to 100 mm Eeler gauges and wedges O mm to 100 mm Eeler gauges and wedges O mm to 30 mm External S μm External gauges O mm to 500 mm External S μm External External External External External External External External Extern	12*	Cylindrical gauges						Direct meas	Direct measurement with a
Slot gauges 0 mm to 100 mm 1			0 mm	to	100 mm		2 μm	micropasam	micropasameter or micrometer
Feeler gauges and wedges 0 mm 10 30 mm 1.5 μm Cylindrical gauges 0 mm 10 30 mm Thread gauges - plug 0 mm 10 75 mm external callipers 0 mm 10 500 mm measurement 2.2 μm measurement 2.2 μm measurement 2.2 μm measurement 2.2 μm measurement 3.7 μm		Slot gauges	0 mm	to	100 mm		2 μm		
wedges 0 mm to 30 mm 1.5 μm Cylindrical gauges 0 mm to 30 mm 1.5 μm Thread gauges – plug gauges 0 mm to 30 mm 1.5 μm Thickness gauges and callipers 0 mm to 500 mm external internal internal internal internal internal gauges 2.2 μm Dry layer thickness gauges and callipers 0 mm to 500 mm measurement 3.7 μm Wet layer thickness gauges 0 mm to 25 mm dry layers 1.4 μm Wet layer thickness gauges 0 mm to 15 mm wet layers 1.4 μm Surface plates / flatness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm to 5 mm length up to 1,000 mm 3.4 μm Blade rules / straightness 0 mm to 5 mm length up to 1,000 mm 5.1 μm Blade rules / straightness 0 mm to 5 mm internal intern		Feeler gauges and							
Cylindrical gauges 0 mm to 30 mm 1.5 μm Thread gauges – plug gauges 0 mm to 75 mm 5 μm Thickness gauges and callipers 0 mm to 500 mm external internal int		wedges	0 mm	to	30 mm		1.5 µm		
Thread gauges plug gauges 0 mm to 75 mm external external measurement 5 μm Thickness gauges and callipers 0 mm to 500 mm external internal i		Cylindrical gauges	0 mm	to	30 mm		1.5 µm		
gauges 0 mm to 75 mm external external measurement 5 μm Thickness gauges and callipers 0 mm to 500 mm measurement 2.2 μm Dry layer thickness gauges 0 mm to 500 mm dry layers 3.7 μm Dry layer thickness gauges 0 mm to 25 mm dry layers 1.4 μm Wet layer thickness gauges 0 mm to 15 mm wet layers 1.4 μm Surface plates / flatness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm to 5 mm length up to 1,000 mm 3.4 μm Blade rules / straightness 0 mm to 5 mm length up to 2,000 mm 5.1 μm Blade rules / straightness 0 mm to 5 mm length up to 2,000 mm 5.1 μm 2.2 μm 2.2 μm 2.2 μm		Thread gauges - plug							
Thickness gauges and callipers and callipers and callipers of the callipers of the callipers and callipers are all the callipers and callipers are all the callipers and to 500 mm to 500 mm and the callipers and the callipers are all the callipers and to 500 mm and the callipers are all the callipers and to 500 mm and the callipers are all the callipers and to 500 mm and to 15 mm and to 15 mm and to 1000 mm and to 1000 mm and the callipers are all the callipers are all the callipers and to 5 mm and to 1,000 mm and the callipers are all the callipers are all the callipers and the callipers are all the call		gauges	0 mm	to	75 mm		5 µm		
callipers 0 mm to 500 mm measurement 2.2 μm Dry layer thickness gauges 3 mm to 500 mm measurement 3.7 μm Wet layer thickness gauges 0 mm to 25 mm dry layers 1.4 μm Surface plates / flatness 0 mm to 15 mm wet layers 1 μm Surface rules / straightness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm to 5 mm length up to 1,000 mm 3.4 μm Blade rules / straightness 0 mm to 5 mm length up to 2,000 mm 5.1 μm Blade rules / straightness 0 mm to 5 mm length up to 2,000 mm 5.1 μm Straightness 0 mm 5 mm length up to 2,000 mm 5.1 μm	13*	Thickness gauges and	0.000			external	10 mm 1 m	Comparis	Comparison with parallel gauge
Blade rules/ straightness Bauges Dry layer thickness gauges O mm To Som To To To To To To To To To		callipers	0 mm	to	500 mm	measurement	2.2 µm	blocks or t	blocks or thickness standard
Dry layer thickness gauges Dry layer thickness gauges O mm Vet layer thickness gauges O mm To 1.4 μm Wet layers Vet layers O mm To I pm Wet layers O mm To I pm Wet layers O mm To I pm Wet layers I pm Up to 1,000 mm Up to 2,000 mm Surface rules / Straightness O mm To S mm I pro O mm To S mm I pro O mm O mm To S mm I pro O mm O m			3 mm	to	500 mm	internal measurement	3.7 µm	Compariso blocks or s	Comparison with parallel gauge blocks or setting rings
gauges 0 mm to 25 mm dry layers 1.4 μm	14*	Dry layer thickness						Comparati	Comparative measurement by a
Wet layer thickness gauges 0 mm to 15 mm wet layers 1 μm Surface plates / flatness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm to 5 mm length up to 1,000 mm 34 μm Blade rules / straightness 0 mm to 5 mm length up to 2,000 mm 5.1 μm Blade rules / straightness 0 mm to 5 mm 2.2 μm		gauges	0 mm	to	25 mm	dry layers	1.4 µm	thickness r	thickness reference standard
Surface plates / flatness 0 mm to 15 mm wet layers 1 μm	15	Wet layer thickness	1					Direct mea	Direct measurement on a length
Surface plates / flatness 0 mm to 5 mm length up to 300 mm 3.7 μm Surface rules / straightness 0 mm to 5 mm up to 1,000 mm 6.2 μm Blade rules / straightness 0 mm to 5 mm length up to 1,000 mm 5.1 μm Blade rules / straightness 0 mm to 5 mm 2.2 μm		gauges	0 mm	to	15 mm	wet layers	1 μm	gauge or a	gauge or a microscope
0 mm to 5 mm length up to 300 mm 3.7 μm up to 1,000 mm 4.2 μm up to 2,000 mm 34 μm 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m 1 m	16*	Surface plates /						Comparis	Comparison with parallel gauge
1 0 mm to 5 mm length up to 2,000 mm 34 μm 34 μm length up to 1,000 mm 5.1 μm μp to 2,000 mm 5.1 μm μp to 2,000 mm 6.2 μm δ μμ to 2,000 mm 2.2 μm 2.5 μm 2.5 μm		flatness	0 mm	to	5 mm	length up to 300 mm	3.7 µm	blocks	
1 0 mm to 5 mm length up to 2,000 mm 5.1 μm 6.2 μm 6.2 μm 0 mm to 5 mm ignit length up to 3,000 mm 2.5 μm 2.5 μm						up to 1,000 mm	6.2 µm		
0 mm to 5 mm length up to 1,000 mm 5.1 μm 6.2 μm 6.2 μm 0 mm to 5 mm εξων ρτο 3,000 mm 2.2 μm 2.5 μm						up to 2,000 mm	34 µm		
0 mm to 5 mm length up to 1,000 mm 5.1 μm 0 mm to 5 mm μp to 2,000 mm 6.2 μm 0 mm to 5 mm 2.2 μm 2.5 μm		Surface rules /						Compari	Comparison with parallel gauge
0 mm to 5 mm		straightness	0 mm	to		length up to 1,000 mm	5.1 µm	blocks	11
0 mm to 5 mm is length up to 300 mm 2.2 μm 2.5 μm						up to 2,000 mm	6.2 µm		
0 mm to 5 mm in length up to 300 mm 2.2 μm 2.5 μm		Blade rules /				t pro ak		Compariso	Comparison with parallel gauge
		straightness	0 mm	to		length up to 100 mm	2.2 µm	blocks	
			?` <u></u>			up to 300 mm	2.5 µm		

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

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Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).



^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory

Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Plane angle

Ord.	Calibrated quantity /		Nominal range	ge	Parameter(s) of the	Lowest expanded		Calibration
1	Subject of calibration	min. unit		max. unit	meas. quantity	uncertainty specified ²	Calibration principle	procedure identification ³
*	Angle gauges						Comparison with angle Kp 02-002	Kp 02-002,
	9	0 °	to	360°		2.4	gauges	Kp 01-015
2*	Measuring jigs and						Direct measurement by Kp 01-017,	Kp 01-017,
	profile gauges	0 °	to	360°		0.9	a microscope	Kp 01-015
رى *	Measuring microscopes						Comparison with angle Kp 01-019	Kp 01-019
	and profile projectors	0°	to	360°		0.6	gauges	

Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

used (including any changes) If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is



^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory

Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Force, mechanical tests

Cladinia	
Clockwise	Clockwise
Clockwise	Clockwise
Clockwise	Clockwise

Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

used (including any changes) If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is



^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Pressure, mechanical stress

Ord.	Calibrated quantity / Subject of calibration	Nomi	Nominal range	lge	Parameter(s) of the	he meas.	Lowest expanded		Calibration	
1 Inniii Dei	number campraced quantity / Subject of campration	min. unit		max. unit	quantity		measurement uncertainty specified ²	Calibration principle	procedure identification ³	
*	Deformation pressure gauges, digital pressure gauges, pressure transducers				negative			Comparison with a pressure gauge	Kp 05-001	
	and pressure measuring chains	-95 kPa	to	0 kPa	gauge pressure	gas	0.1 % + 61 Pa			
					positive gauge					
		0 kPa	to	100 kPa	pressure	gas	0.1% + 64 Pa			
		0.1 MPa	to	0.7 MPa			0.1 % + 480 Pa			
		0.7 MPa	to	1.7 MPa			0.1 % + 1.1 kPa			
					positive gauge					
		0 MPa	to	0.7 MPa	pressure	liquid	0.1 % + 480 Pa			
		0.7 MPa	to	1.7 MPa	1		0.1% + 1.1 kPa			
		1.7 MPa	to	7 MPa			0.1 % + 6.6 kPa			
		7 MPa	to	70 MPa			0.1 % + 46 kPa			
		70 MPa	to	100 MPa			0.72 MPa			

Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes)

^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Temperature

																					2	-2	
									, i	ယ *					2				,	*	umber 1	Ord.	
								ī	temperature sensor processing units	Simulation of temperature sensor signals /					Non-contact thermometers			!	measuring chains	Indicating thermometers and temperature	Calibrated quantity / Subject of calibration	32 33 33 34 35 36 37 37 37 37 37 37 37 37 37 37 37 37 37	
250 °C	0 °C	-250 °C	120 °C	-100 °C	-200 °C	760 °C	150 °C	-100 °C	-210 °C		400 °C	300 °C	200 °C	100 °C	30 °C	100 °C	50 °C	-5 °C	-20 °C		min. unit	Nomi	
	5 5	t to	to	to	to	to	to	to	to		to	to	to	to	to	to	to	to	to		27	inal rai	
1,760 %	250 00	-150 °C	1,370 °C	120 °C	-100 °C	1,200 °C	760 °C	150 °C	-100 °C		500 °C	400 °C	300 °C	200 °C	D° 001	650 °C	J° 001	50 °C	-5 °C		max. unit	nge	
pro ak		Ŧ			K				J												of the meas. quantity	Parameter(s)	
1.2 °C	0.37 °C	1.5 °C	0.63 °C	0.40 °C	0.66°C	0.48 °C	0.38 °C	0.33 °C	0.57 °C		3.3 °C	3.0 °C	2.7 °C	2.6 °C	1.7 °C	0.64 °C	0.48 °C	0.27 °C	0.34 °C		uncertainty specified ²	Lowest expanded	
					,			10 m (m) 1 m (including cold junction compensation	Voltage calibrator simulation					Comparison with a target black body				calibrating oven	Comparison with a thermometer in a	Calibration principle		
									rap or oor	Kn 04-001					Kp 07-002				NO 07-001	Kn 07-001	procedure identification ³	Calibration	
										1										1	place	=	
	to 1,760 °C pro ak	to 250 °C R to 1,760 °Q 11 Pro ar	to -150 °C T to 400 °C to 250 °C R to 1,760 °C R	to 1,370 °C to -150 °C to 400 °C to 250 °C to 1,760 °C pro ak	to 120 °C to 1,370 °C to -150 °C to 400 °C to 250 °C to 1,760 °C pro ak	to -100 °C K to 120 °C to 1,370 °C to -150 °C to 400 °C to 250 °C to 1,760 °C R	to 1,200 °C to -100 °C to 120 °C to 1,370 °C to -150 °C to 400 °C to 250 °C to 1,760 °C pro ak	to 760 °C to 1,200 °C to 1,200 °C K to 120 °C to 1370 °C to -150 °C T to 400 °C to 250 °C to 1,760 °C P TO 1,760 °C T	to 150 °C 0.33 °C to 760 °C 0.38 °C to 1,200 °C K 0.66 °C to 120 °C K 0.60 °C to 1,370 °C 0.63 °C to -150 °C T 1.5 °C to 250 °C R 1.9 °C to 1,760 °C P 0.37 °C	temperature sensor processing units -210 °C to -100 °C J 0.57 °C including cold junction compensation -100 °C to 150 °C 0.33 °C 0.38 °C 0.38 °C 0.38 °C 0.38 °C 0.48 °C 0.48 °C 0.48 °C 0.48 °C 0.48 °C 0.40 °C 0.37	gnals / -210 °C to -100 °C J 0.57 °C -100 °C to 150 °C 0.33 °C 150 °C to 760 °C 0.38 °C 760 °C to 1,200 °C K 0.66 °C -200 °C to 120 °C K 0.40 °C 120 °C to 1,370 °C T 1.5 °C -250 °C to 400 °C T 1.5 °C -250 °C to 1,760 °C K 1.9 °C 250 °C to 1,760 °C K 1.9 °C 1.9 °C 250 °C to 1,760 °C K 1.2 °C	Simulation of temperature sensor signals / temperature sensor processing units	300 °C to 400 °C 3.0 °C 400 °C to 500 °C 3.3 °C Simulation of temperature sensor signals / temperature sensor processing units -210 °C to -100 °C J 0.57 °C 150 °C to 760 °C to 1,200 °C 0.33 °C -200 °C to 1,200 °C to -100 °C 0.48 °C -100 °C to 1,370 °C 0.40 °C -250 °C to 1,370 °C T 1.5 °C -150 °C to 250 °C 1,760 °Q 10 °C -250 °C to 1,760 °Q 10 °C -150 °C to 1,760 °Q 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °C -250 °C to 1,760 °C 10 °C 10 °	200 °C to 300 °C 3.00 °C 400 °C 5.00 °	100 °C	Non-contact thermometers 30 °C to 100 °C 1.7 °C Comparison with a target black body 100 °C to 200 °C 2.0 °C 2.6 °C 2.6 °C 2.7 °C 200 °C to 300 °C to 400 °C 2.7 °C 3.0 °C 3.0 °C Simulation of temperature sensor signals/ -210 °C to 150 °C J 0.57 °C Voltage calibrator simulation 150 °C 150 °C 10 150 °C 0.33 °C Voltage calibrator simulation 150 °C 10 120 °C 0.38 °C Voltage calibrator simulation -200 °C 10 120 °C 0.38 °C Voltage calibrator simulation -100 °C 10 120 °C 0.48 °C Voltage calibrator simulation -200 °C 10 120 °C 0.48 °C Voltage calibrator simulation -150 °C 10 120 °C 0.48 °C Voltage calibrator simulation -150 °C 10 120 °C 0.48 °C 0.48 °C -150 °C 10 120 °C 0.43 °C 0.40 °C -150 °C 0.40 °C 0.33 °C 0.40 °C -150 °C 0.40 °C	Non-contact thermometers Non-contact thermometers Non-contact thermometers Non-contact thermometers 100 °C to 100 °C to 200 °C 2.6 °C 2.6 °C 200 °C to 300 °C 400 °C 2.7 °C 200 °C 10 300 °C 400 °C 3.0 °C 400 °C 500 °	S0 °C to 100 °C 0.48 °C 0.64 °C 0.65 °	Simulation of temperature sensor processing units 1.50°C to 100°C to 1.200°C to 1.200°	The starting chains	Indicating thermometers and temperature measuring chains 2.0 °C to 5 °C 0.34 °C Comparison with a thermometer in a calibrating oven 5 °C to 50 °C to 50 °C 0.27 °C 0.27 °C 0.27 °C 5 °C to 100 °C to 650 °C 0.64 °C 0.64 °C 0.64 °C Non-contact thermometers 100 °C to 100 °C 1.7 °C Comparison with a target black body Simulation of temperature sensor signals / temperature sensor processing units -210 °C to 400 °C 3.0 °C 3.3 °C 150 °C 150 °C to 760 °C J 0.57 °C Voltage calibrator simulation compensation 150 °C 150 °C to 120 °C 0.48 °C 0.48 °C Voltage calibrator simulation compensation 150 °C 150 °C 150 °C 0.48 °C 0.48 °C 0.48 °C -200 °C 150 °C 150 °C 0.49 °C 0.49 °C 0.49 °C -100 °C 150 °C 0.40 °C 0.63 °C 0.63 °C 0.63 °C -200 °C 10 400 °C 0.40 °C 0.37 °C 0.40 °C 0.40 °C	Calibration min. unit max. unit min. unit max. min. max. min. max. min. max. min. max. min. min. max. max.	Calibrated quantity/Subject of calibration Nominal range min. unit max. unit bowest expanded of the mess. uncertainty for the mess. uncertainty and temperature measuring thermoneters and temperature measuring chains Lowest expanded parameter for the mess. uncertainty and temperature uncertainty and temperature sensor processing units Lowest expanded procedure and the measurement of the mess. uncertainty specified? Lowest expanded parameters uncertainty and the measurement uncertainty specified? Calibration principle procedure in a procedure in a specified? Calibration principle indentification. Comparison with a thermoneter in a procedure indentification. Kp 07-001 Non-contact thermometers 2.0° C 100° C 0.40° C 2.2° C 2.2° C Comparison with a target black body. Kp 07-002 Simulation of temperature sensor processing units -10° C 10 -10° C J.0.57° C Voltage calibrator simulation including cold junction compensation. Kp 04-001 -10° C 1.20° C 0.40° C

-3-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

Ord.		Nomi	Nominal range	Parameter(s)	T	
number	Calibrated quantity / Subject of calibration	min. unit	max. unit		uncertainty specified ²	Calibration principle
		0°C	to 250 °C	S	1.9 °C	
		250 °C	to 1,760 °C		1.2 °C	
		O° 009	to 1,820 °C	В	1.8 °C	
		-200 °C	to -100 °C	z	1.0 °C	
		-100 °C	to 410 °C		0.51 °C	
		410 °C	to 1,300 °C		0.59 °C	
		-250 °C	to -100 °C	m	1.3 °C	
		-100 °C	to 650 °C		0.47 °C	
		650 °C	to 1,000 °C		0.51 °C	
		-200 °C	to 900 °C	Т	0.81 °C	
		-200 °C	to 600°C	U	0.95 °C	
		0°C	to 1,000 °C	С	0.72 °C	
		1,800 °C	to 2,310 °C		1.7 °C	
		-200 °C	to 0 °C		0.35 °C	Resistance calibrator simulation
		0°C	to 800 °C	Pt 100	0.58 °C	

Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

used (including any changes) If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is



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^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

KZB-Kalibrace s.r.o.Calibration Laboratory Mikoláše Alšed 2240, 434 01 Most

CMC for the field of measured quantity: Electrical quantities

							_	_	_		_	_	_		_		_		_				_		
											2*												*	number	Ord.
		Direct current meters									Direct current sources					General	DC voltage meters					The state of the s	DC voltage sources	calibration	Calibrated quantity / Subject of
	0.1 mA	0 μΑ	3 A	1 A	0.4 A	100 mA	10 mA	1 mA	0.1 mA	0 μΑ		V 001			0.1 V	0 mV				٧١	0.1 V	0 mV		min. unit	Nomina
	to 1 mA to 10 mA		to 10 A	to 3 A	to 1 A	to 400 mA	to 100 mA	to 10 mA	to 1 mA	to 100 μA		to 1,000 V	to 100 V	to 10 V	to 1 V	to 100 mV	- 1	-	to 100 V	to 10 V	to 1 V	to 100 mV		max. unit	Nominal range
Page 12 of Jo	instite Pupo	A pro ak																V						meas. quantity	Parameter(s) of the
	0.03 % + 0.12 μA 0.03 % + 1.2 μA	0.03 % + 35 nA	0.15 % + 1.6 mA	0.10 % + 0.8 mA	0.05% + 0.3 mA	$0.05\% + 73 \mu A$	$0.05\% + 14 \mu A$	$0.05\% + 2.5 \mu A$	$0.05\% + 0.12 \mu A$	0.05% + 37 nA		0.008 % + 35 mV	0.008 % + 3.5 mV	0.008 % + 0.35 mV	$0.008\% + 35 \mu V$	$0.008 \% + 12 \mu V$	STATE OF THE STATE	0.0041 % + 36 mV	0.0038 % + 3.6 mV	0.0024 % + 0.36 mV	$0.0025\% + 37 \mu V$	$0.0037\% + 13 \mu V$		uncertainty specified ²	Lowest expanded
		Direct generation with a standard calibrator								multimeter	Direct measurement by a standard					calibrator	Direct generation with a standard					multimeter	Direct measurement by a standard	Canoration principle	Calibration principle
																						20)	Kp 04-001	identification ³	Calibration
																								place	Work-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

	4* Alte		AC		3* AC			Ord. C	
	Alternating current sources		AC voltage meters		AC voltage sources			Calibrated quantity / Subject of calibration	
10 mA 100 mA 0.4 A 1 A	0.1 μA 0.1 mA 1 mA	1 V 10 V	0.1 mV	100 V 10 V 1 V	0.1 mV	0 A	10 mA 0.1 A	Nomin min. unit	
to 100 mA to 400 mA to 1 A to 3 A	to 100 μA to 1 mA to 10 mA	to 10 V to 100 V to 1,000 V	=	1,0	to 100 mV	to 500 A	_	Nominal range unit max. unit	
10 Hz to 2 kHz 10 Hz to 1 kHz 10 Hz to 2 kHz 10 Hz to 2 kHz 10 Hz to 2 kHz	10 Hz to 2 kHz 10 Hz to 2 kHz 10 Hz to 2 kHz	10 Hz to 2 kHz 10 Hz to 2 kHz 40 Hz to 1 kHz 40 Hz to 1 kHz	10 Hz to 2 kHz	10 Hz to 20 kHz 10 Hz to 20 kHz 10 Hz to 20 kHz	10 Hz to 20 kHz			Parameter(s) of the meas, quantity	
0.10 % + 56 μA 0.10 % + 0.51 mA 0.10 % + 0.8 mA 0.15 % + 2.4 mA	0.15 % + 80 nA 0.10 % + 0.54 μA 0.15 % + 7.5 μA	0.08 % + 0.39 mV 0.08 % + 4.0 mV 0.08 % + 43 mV 0.08 % + 0.60 V	0.08 % + 43 μV	0.06 % + 3.6 mV 0.06 % + 37 mV 0.06 % + 0.29 V	$0.06 \% + 54 \mu\text{V}$ 0.06 % + 0.36 mV	0.05 % + 2.4 mA 0.50 % + 0.49 A	0.03 % + 12 μA 0.03 % + 0.18 mA	Lowest expanded measurement uncertainty specified ²	
	Direct measurement by a standard multimeter		Direct generation with a standard calibrator		Direct measurement by a standard multimeter	Simulation using current coil		Calibration principle	
					Kp 04-001			Calibration procedure identification ³	
								Work- place	

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	_		_				_			_	_	_	_	_	_	_		_		_	_		_	_	
														à	*									number'	Ord.
		DC resistance meters												resistance boxes	DC resistance / resistors and							ť	Alternating current meters	calibration	Calibrated quantity / Subject of
1 kΩ 10 kΩ	Ω 001 25 01	000	1Ω	0.1 Ω	0.01Ω	100 MΩ	10 MΩ	I MΩ	0.1 MΩ	10 kΩ	1 152	100Ω	10 \O	0Ω		0 A	1 A	0.I A	10 mA	l mA	0.1 mA	0.1 μΑ		min. unit	Nomin
			to	to	to	to	to 1	to	to	to	to	to	to	to		to	to	to	to	to	to	to		m;	Nominal range
			10 Ω	1 2	0.1Ω	I GΩ	00 MΩ	10 MΩ	1 MΩ	00 kΩ	10 kΩ	1 kΩ	00 Ω	10 \O		500 A	10 A	I A	00 mA	10 mA	1 mA	00 μΑ		tx. unit	e
ký ins	Little O. C.	Dro ex														30 Hz to 60 Hz	10 Hz to 2 kHz	10 Hz to 2 kHz	10 Hz to 2 kHz	10 Hz to 2 kHz	10 Hz to 2 kHz	10 Hz to 2 kHz		meas, quantity	Parameter(s) of the
			0.14 %	0.052%	65 μΩ	$2.0\% + 0.21 \text{ M}\Omega$	$0.8\% + 35 \text{ k}\Omega$	$0.04\% + 1.3 \text{ k}\Omega$	$0.01\% + 32\Omega$	$0.01\% + 2.1\Omega$	$0.01\%\pm0.17\Omega$	$0.01\% + 59 \mathrm{m}\Omega$	$0.01\% + 58 \text{ m}\Omega$	$0.01\% + 12 \text{ m}\Omega$							$0.1\% + 0.96 \mu A$	$0.1\% + 0.47 \mu A$		uncertainty specified ²	Lowest expanded
		Direct generation with a standard calibrator			Ohm method							,		multimeter	Direct measurement by a standard	Simulation using current coil						calibrator	Direct generation with a standard	Cambration principle	Calibration principle
		Kp 04-001		18	Kp 04-002								8	Kp 04-002	K 04 001									identification ³	Calibration
																								place	Work-
	to 10 kΩ ins	to $100 \text{ k}\Omega$ to $10 \text{ k}\Omega$	10 Ω to 10 Ω 10 Ω to 100 Ω 100 Ω to 1 kΩ 1 kΩ to 10 kΩ 10 kΩ to 100 kΩ 20 mΩ 40 mΩ 0.27 Ω 2.4 Ω 24 Ω	to 10Ω 0.14% Direct generation with a standard to 10Ω to 10Ω 40 m Ω calibrator to $1\mathrm{k}\Omega$ to $1\mathrm{k}\Omega$ 5 to $10\mathrm{k}\Omega$ 5 to $10\mathrm{k}\Omega$ 5 to $10\mathrm{k}\Omega$ 5 to $100\mathrm{k}\Omega$ 5 to $100\mathrm{k}\Omega$ 5 to $100\mathrm{k}\Omega$ 6 to $100\mathrm{k}\Omega$ 7 to $100\mathrm{k}\Omega$ 8 to $100\mathrm{k}\Omega$ 9 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 2 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 2 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 2 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 1 to $100\mathrm{k}\Omega$ 2 to $100\mathrm{k}\Omega$ 1 to 100	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0.01Ω to 0.1Ω 65 μΩ Ohm method 0.1Ω to 10Ω 0.052% 0.052% 1Ω to 10Ω 0.14% Direct generation with a standard calibrator 10Ω to 10Ω 0.27Ω 0.27Ω 10Ω to 10Ω 0.27Ω 10Ω to 10Ω 0.27Ω	$100 M\Omega$ to $1 G\Omega$ $2.0 \% + 0.21 M\Omega$ 0.01Ω to 0.1Ω $65 \mu\Omega$ Ohm method 0.1Ω to 10Ω 0.052% Ohm method 1Ω to 10Ω 0.14% Direct generation with a standard calibrator 10Ω to 10Ω 0.27Ω Direct generation with a standard calibrator $10 K\Omega$ to $10 K\Omega$ 0.27Ω 0.27Ω $10 K\Omega$ to $10 K\Omega$ 0.27Ω	10 MΩ to 100 MΩ $2.0\% + 35 k\Omega$ 100 MΩ to 1 GΩ $2.0\% + 0.21$ MΩ $2.0\% + 0.21$ MΩ 0.01Ω to 0.1Ω 0.052% 1 Ω to 10 Ω 0.052% 10 Ω to 10 Ω 0.14% 10 Ω to 10 Ω 0.052% 10 Ω to 10 Ω 0.052% 20 mΩ 0.052% 10 Ω to 10 0.00 10 Ω to 10 0.00 10 Ω to 10 0.00 20 mΩ 0.000 20 mΩ calibrator 10 Ω to 10 kΩ 0.000 22 0.000 24 Ω 0.000	$1 \text{ M}\Omega$ to $10 \text{ M}\Omega$ $0.04 \% + 1.3 \text{ k}\Omega$ $10 \text{ M}\Omega$ to $100 \text{ M}\Omega$ $0.8 \% + 35 \text{ k}\Omega$ $100 \text{ M}\Omega$ to 11Ω $2.0 \% + 0.21 \text{ M}\Omega$ 0.01Ω to 0.1Ω $65 \mu\Omega$ Ohm method 0.1Ω to 10Ω 0.052% Ohm method 10Ω to 10Ω 0.14% Direct generation with a standard calibrator 10Ω to 10Ω 0.27Ω 0.27Ω 10Ω to $10 0 \Omega$ 0.27Ω 0.24Ω	0.1 MΩ to 1 MΩ 10 MΩ 2.0 % + 0.21 MΩ 100 MΩ to 1 Ω Ω 65 μΩ 2.0 % + 0.21 MΩ 1Ω 1Ω 1Ω 10 Ω 10 Ω 10 Ω 2.0 % 40 mΩ 2.0 mΩ 2.0 mΩ 10 MΩ	10 kΩ to 100 kΩ	1 kΩ to 10 kΩ 0.01 % + 0.17 Ω	100 Ω	10 Ω to 100 Ω 0.01 % + 58 mΩ 100 Ω to 1 kΩ 0.01 % + 59 mΩ 1 kΩ to 10 kΩ 0.01 % + 0.17 Ω 10 kΩ to 100 kΩ 0.01 % + 2.1 Ω 0.1 MΩ to 10 MΩ 0.01 % + 32 Ω 10 MΩ to 10 MΩ 0.04 % + 1.3 kΩ 100 MΩ to 1 GΩ 0.8 % + 35 kΩ 100 MΩ to 1 Ω Ω 0.052 % 1 Ω to 10 Ω Ω 0.04 % 10 Ω to 10 Ω Ω 0.052 % 10 Ω to 10 Ω Ω 0.014 % 10 Ω to 10 Ω Ω 0.014 % 10 Ω to 10 kΩ 0.02 Ω 1 kΩ to 10 kΩ	Presistance boxes 0 Ω 10 Ω 0.01 % + 12 mΩ 0.01 % + 12 mΩ 0.01 % + 58 mΩ 0.01 % + 58 mΩ 0.01 % + 58 mΩ 0.01 % + 59 mΩ 0.01 % + 59 mΩ 0.01 % + 59 mΩ 0.01 % + 2.1 Ω 0.01 % + 32 Ω 0.01 MΩ 0.01 % + 32 Ω 0.01 MΩ 0.01 % + 32 Ω 0.01 Ω 0.052 % 0.052 % 0.052 % 0.052 % 0.052 Ω 0	resistors and 0 Ω to 10 Ω 10 Ω to 10 Ω Ω 10 Ω to 10 Ω Ω 10 Ω to 10 Ω Ω 0.01 % + 58 mΩ 0.01 % + 59 mΩ 10 Ω to 10 MΩ 0.01 % + 32 Ω 100 MΩ to 10 Ω Ω 100 MΩ to 10 Ω Ω 0.01 % + 32 Ω 100 MΩ to 10 Ω Ω 0.01 % + 32 Ω 100 Ω to 10 Ω Ω 0.01 % + 32 Ω 100 Ω to 10 Ω Ω 0.08 % + 35 Ω 0.01 Ω to 10 Ω Ω 0.052 % 0.14 % 0.052 % 0.14 % Direct generation with a standard call of the color of the call	DC resistance / resistors and resistance meters 0 A 10 500 A 30 Hz to 60 Hz 0.34 % + 0.071 A Simulation using current coil DC resistance boxes 10 Ω to 10 Ω 0.01 % + 12 mΩ Direct measurement by a standard resistance boxes 10 Ω to 10 Ω 0.01 % + 58 mΩ 0.01 % + 58 mΩ 0.01 % + 58 mΩ 10 Ω to 10 kΩ 0.01 % + 59 mΩ 0.01 % + 2.1 Ω 0.01 % + 2.1 Ω 10 MΩ to 10 MΩ 0.01 % + 2.1 Ω 0.01 % + 2.1 Ω 0.01 % + 2.1 Ω 10 MΩ to 10 MΩ 0.04 % + 1.3 kΩ 0.04 % + 1.3 kΩ 0.04 % + 1.3 kΩ 100 MΩ to 10 Ω 0.04 % + 0.21 MΩ 0.8 % + 35 kΩ 0.8 % + 35 kΩ 0.1 Ω to 10 Ω 0.052 % 0.052 % 0.04 % + 0.21 MΩ 0.1 Ω to 10 Ω 0.052 % 0.04 % + 0.21 MΩ Ohm method 0.1 Ω to 10 Ω 0.052 % 0.04 % + 0.21 MΩ Ohm method 0.1 W to 10 Ω 0.052 % 0.07 Ω Ohm method 0.1 W to 10 Ω 0.07 Ω 0.07 Ω 0.07 Ω <	1 A 10 10 A 10 Hz to 2 kHz 0.1 %+ 20 mA 0 A 10 Hz to 2 kHz 0.1 %+ 20 mA 0 A 10 Hz to 60 Hz 0.34 %+ 0.071 A Simulation using current coil DC resistance / resistors and resistance boxes 10 Ω 10 Ω 10 Ω Ω 0.01 %+ 12 mΩ Direct measurement by a standard resistance boxes 10 Ω 10 Ω Ω 0.01 %+ 59 mΩ 0.01 %+ 2.1 Ω 0.01 %+ 2.1 Ω 0.01 %+ 2.1 Ω 0.01 %+ 33 Ω Ω 10 MΩ 10 MΩ 0.01 MΩ 0.01 %+ 33 Ω Ω 0.01 %+ 0.21 MΩ 0.052 % 0.04 %+ 1.3 Ω Ω 0.052 % 0.04 %+ 0.21 MΩ 0.052 % 0.052 % 0.052 % 0.04 % 0.052 % 0.052 % 0.04 % 0.052	DC resistance / resistors and resistance boxes DC resistance Tesistors and DC resistance DC resistance Tesistors and DC resistance DC resistance Tesistors and DC resistance DC resista	10 mA 10 Hz to 2 kHz 0.1 % + 96 μA 0.1 A 10 Hz to 2 kHz 0.1 % + 95 mA 0.1 A 10 Hz to 2 kHz 0.1 % + 0.95 mA 0.1 A 10 Hz to 2 kHz 0.1 % + 0.95 mA 0.1 % + 0.9 mA 0.1 % + 0.95 mA 0.1 % + 12 mΩ 0.01 % + 85 mΩ 0.01 % + 85 mΩ 0.01 % + 85 mΩ 0.01 % + 2.1 Ω 0.01 % + 2.1 Ω 0.01 % + 2.1 Ω 0.01 % + 2.2 Ω 0.01 % + 2.3 Ω 0.04 % + 1.3 kΩ 0.01 Ω 0.04 % + 3.5 kΩ 0.04 % + 3.5 kΩ 0.01 Ω 0.05 % + 0.21 MΩ 0.05 % + 0	1 mA to 10 mA 10 Hz to 2 kHz 0.1 % + 9.5 μA 10 mA 10 mA 10 Hz to 2 kHz 0.1 % + 9.5 μA 0.1 A 10 mA 10 Hz to 2 kHz 0.1 % + 9.5 μA 10 Hz to 2 kHz 0.1 % + 9.5 mA 10 Hz to 2 kHz 0.1 % + 9.5 mA 10 Hz to 2 kHz 0.1 % + 9.95 mA 10 Hz to 2 kHz 0.1 % + 9.95 mA 10 Hz to 2 kHz 0.1 % + 9.9 mA 10 Hz to 2 kHz 0.1 % + 9.9 mA 10 Hz to 2 kHz 0.1 % + 12 mΩ 10 MΩ 10 MΩ 10 MΩ 0.01 % + 12 mΩ 10 MΩ 10 MΩ 0.01 % + 12 mΩ 10 MΩ 10 MΩ 0.01 % + 9.0 mΩ 10 MΩ 0.01 % + 9.0 mΩ 10 MΩ 0.01 % + 9.0 mΩ 10 MΩ 0.01 % + 1.3 kΩ 0.01 % + 3.5 kΩ 10 MΩ 10 MΩ 0.01 % + 3.5 kΩ 0.04 % + 1.3 kΩ 0.04 % + 1.3 kΩ 0.01 % + 3.5 kΩ 0.04 % + 1.3 kΩ 0.04 % + 3.5 kΩ 0.052 % 0.04 % + 0.07 MΩ 0.052 % 0.04 MΩ	O.1 mA to 1 mA 10 Hz to 2 kHz O.1 %+ 0.96 μA 10 mA to 10 mA 10 Hz to 2 kHz O.1 %+ 9.5 μA 10 mA to 100 mA 10 Hz to 2 kHz O.1 %+ 9.5 μA 10 mA to 10 A 10 Hz to 2 kHz O.1 %+ 9.5 μA 10 LA to 10 A 10 Hz to 2 kHz O.1 %+ 9.5 μA 10 LA to 10 A 10 Hz to 2 kHz O.1 %+ 9.5 mA 10 LA to 10 A 10 Hz to 2 kHz O.1 %+ 9.95 mA 10 LA to 100 Ω O.1 %+ 2.0 mA 10 LA to 100 Ω O.1 %+ 2.0 mA 10 LA to 100 Ω O.1 %+ 58 mΩ 10 LA to 100 MΩ O.1 %+ 58 mΩ 10 LA to 100 MΩ O.1 %+ 9.5 μΩ 10 LA to 100 MΩ O.1 %+ 59 mΩ 10 LA to 100 MΩ O.1 %+ 32 Ω 10 LA to 100 MΩ O.1 %+ 1.3 kΩ 10 LA to 10 Ω O.1 Ω O.8 %+ 35 kΩ 10 LA to 10 Ω O.8 %+ 35 kΩ 10 LA to 10 Ω O.1 Ω O.52 % 10 LA to 10 Ω O.52 % 10 LA to 10 Ω O.14 % 10 LA to 10 RΩ O.14 % 10 LA	0.1 μA 10 10 μA 10 10 κ το 2 kHz 0.1 % + 0.4 γ μA 10 10 κ το 2 kHz 0.1 % + 0.96 μA 10 10 mA 10 10 κα 2 kHz 0.1 % + 9.5 μA 10 10 mA 10 10 κα 2 kHz 0.1 % + 9.5 μA 10 10 mA 10 10 10 10 10 10 10 1	Alternating current meters 0.1 μA 10 μΔ 10 μΔ	Calibration

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

							_						_	_							1 =	1
	-											6									number'	Ord.
			meters of transition resistance									Inspection equipment / insulation resistance meters									calibration	Calibrated quantity / Subject of
	100Ω to		0.1Ω to	60 MΩ to	10 MΩ to	6 MΩ to	I MΩ to		0.6 ΜΩ to	0.1 MΩ to	10 kΩ to		50 MΩ to	10 MΩ to	6 MΩ to	1 MΩ to	0.6 MΩ to	0.1 MΩ to	I MΩ to	0.1 MΩ to	min. unit	Nominal range
	1,000 Ω 10 kΩ		1Ω	100 MΩ	50 MΩ	9 MΩ	5 MΩ		0.9 MΩ	0.5 MΩ	100 kΩ		100 MΩ	50 MΩ	9 MΩ	5 MΩ	0.9 MΩ	0.5 MΩ	10 MΩ	1 MΩ	max. unit	range
Page 15 of 175	institute Do distribute				Measuring voltage up to 1,000 V		500 V	Measuring voltage up to			Λ 001	Measuring voltage up to									meas. quantity	Parameter(s) of the
a o di	0.05% + 1.7 msz $0.05\% + 0.13 \Omega$ $0.05\% + 1.3 \Omega$	$0.1\% + 4.7 \text{ m}\Omega$	$0.2\% + 3.7 \text{ m}\Omega$	$0.1\% + 9 \text{ k}\Omega$	$0.1\% + 2.5 \text{ k}\Omega$	$0.05\% + 0.35 \text{ k}\Omega$	$0.05\% + 0.25 \text{ k}\Omega$		$0.05\% + 15\Omega$	$0.05\%+10\Omega$	$0.05\% + 13\Omega$		$0.05\% + 9 \text{ k}\Omega$	$0.05\% + 2.5 \text{ k}\Omega$	$0.05\% + 0.35 \text{ k}\Omega$	$0.05\% + 0.25 \text{ k}\Omega$	$0.05\% + 15\Omega$	$0.05\% + 10\Omega$	5.8 kΩ	0.24Ω	uncertainty specified ²	Lowest expanded
												Direct generation using a standard resistance box						Direct generation using a standard resistance box			Campination brinchia	Calibration principle
												Kp 04-003									identification ³	Calibration
																					place	Work-

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

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1 mA to 10 mA 50 Hz to 60 Hz 0.15 % + 7.5 μA	number ¹ Calibrated quantity / Subject of calibration meters of leakage current	min. unit max. unit 0.1 mA to 1 mA	Parameter(s) of the meas, quantity 50 Hz to 60 Hz	Lowest expanded measurement uncertainty specified ² 0.10 % + 0.54 µA	Calibration principle procedure procedure identification place Direct measurement by a standard ammeter
	meters of leakage current	to	50 Hz to 60 Hz	0.10 % + 0.54 μA 0.15 % + 7.5 μA	Direct measurement by a standard ammeter

Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is



^{%.} If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95

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CMC for the field of measured quantity: Time and frequency quantities

	Kp 06-001	Comparison with a standard counter	11 ms		00 s	to 3,600 s	5 s	Time interval / mechanical and digital stopwatch, timers and other time meters	Time in	*
place	identification ³	Cambration principie	uncertainty specified ²	quantity	max. unit		min. unit			-
Work-	Calibration	Calibration principle	Lowest expanded	Parameter(s)	ge	ninal ran	Non	Calibrated quantity / Subject of calibration	Calibrat	Ord.

- Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.
- %. If not stated otherwise, the uncertainty values stated without a unit are relative to the value measured. If the calibration is carried out outside the laboratory premises, the measurement uncertainty may be affected. The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02, part of CMC, and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95
- If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes)

