

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

HES, s.r.o.
Calibration Laboratory
U Dráhy 411/11, 664 49 Ostopovice

CMC for the field of measured quantity: Pressure

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place	
		min	unit	max	unit						
1*	Deformation manometers, pointer manometers, digital manometers, pressure converters, pressure measuring chains, pressure calibrators, barometers, aircraft pressure altimeters, pressure airspeed indicators and aircraft pressure calibrators	1 kPa	to	30 kPa	gas	absolute pressure	7 Pa	Comparison with a standard digital manometer	TP40, TP41, TP42, TP43		
			to	107 kPa			8 Pa				
			to	130 kPa			12 Pa				
			to	173 kPa			16 Pa				
			to	225 kPa			20 Pa				
			to	270 kPa			24 Pa				
			to	350 kPa			32 Pa				
		0 kPa	to	2.5 kPa	gas	negative gauge pressure	2.4 Pa	Comparison with a standard digital manometer	TP40, TP41, TP42, TP43		
			to	35 kPa			32 Pa				
			to	100 kPa			45 Pa				
		0 kPa	to	20 kPa	gas	positive gauge pressure	2.4 Pa	Comparison with a standard piston manometer	TP40, TP41, TP42, TP43		
			to	200 kPa			0.011 %				

**The Appendix is an integral part of
Certificate of Accreditation No. 71/2022 of 14/02/2022**

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Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place
		min	unit	max	unit					
		0.2 MPa	to	0.7 MPa	gas	positive gauge pressure	0.17 kPa	Comparison with a standard digital manometer	TP40, TP41, TP42, TP43	
		0.7 MPa	to	3.5 MPa			0.43 kPa			
		3.5 MPa	to	20 MPa			4.7 kPa			
		20 MPa	to	30 MPa			21 kPa			
		0 kPa	to	2.5 kPa	liquid (water, alcohol, oil)	positive gauge pressure	2.4 Pa	Comparison with a standard digital manometer	TP40, TP41, TP42, TP43	
		2.5 kPa	to	35 kPa			32 Pa			
		35 kPa	to	100 kPa			2.1 kPa			
		0.1 MPa	to	1.2 MPa	liquid (water, alcohol, oil)	positive gauge pressure	0.22 kPa	Comparison with a standard piston manometer	TP40, TP41, TP42, TP43	
		1.2 MPa	to	12 MPa			0.018 %			
		12 MPa	to	35 MPa	liquid (water, alcohol, oil)	positive gauge pressure	21 kPa	Comparison with a standard digital manometer	TP40, TP41, TP42, TP43	
		35 MPa	to	70 MPa			40 kPa			

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² 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 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.

³ 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).

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CMC for the field of measured quantity: Temperature

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min	unit	max	unit					
1*	Direct indicating thermometers and temperature measuring chains, electronic and analogue thermometers, resistance thermometers, thermoelectric thermometers and thermocouples			-196	°C		0.32 °C	Comparison with a standard resistance sensor in a nitrogen vessel	TP44.1	
		-80	°C	to	-30	°C	0.20 °C	Comparison with a standard resistance sensor in liquid bath.	TP44.1	
		-30	°C	to	0	°C	0.07 °C			
		0	°C	to	50	°C	0.04 °C			
2*	Resistance temperature sensors, resistance thermometers	50	°C	to	140	°C	0.06 °C	Comparison with a standard resistance sensor in a calibrating oven	TP44.1	
		140	°C	to	300	°C	0.34 °C			
		300	°C	to	600	°C	0.62 °C			
		600	°C	to	1,000	°C	3.5 °C			
2*	Resistance temperature sensors, resistance thermometers			-196	°C		0.3 °C	Comparison with a standard resistance sensor in a nitrogen vessel	TP44.2	
		-80	°C	to	-30	°C	0.15 °C	Comparison with a standard resistance sensor in liquid bath.	TP44.2	
		-30	°C	to	0	°C	0.07 °C			
		0	°C	to	50	°C	0.03 °C			
2*	Resistance temperature sensors, resistance thermometers	50	°C	to	140	°C	0.06 °C	Comparison with a standard resistance sensor in a calibrating oven	TP44.2	
		140	°C	to	300	°C	0.26 °C			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min	unit	max	unit					
		300 °C	to	600 °C			0.5 °C			
3*	Thermoelectric cells, thermocouples	600 °C	to	1,000 °C			3.5 °C			
		-196 °C					4.0 °C	Comparison with a standard resistance sensor in a nitrogen vessel	TP44.3	
		-80 °C	to	-30 °C			1.5 °C	Comparison with a standard resistance sensor in liquid bath.	TP44.3	
		-30 °C	to	0 °C			0.9 °C			
4*	Non-contact thermometers and measuring chains of non-contact thermometers, thermal cameras, infrared thermometers	0 °C					0.7 °C			
		0 °C	to	140 °C			0.8 °C			
		140 °C					1.5 °C	Comparison with a standard resistance sensor in a calibrating oven	TP44.3	
		140 °C	to	300 °C			1.7 °C			
		300 °C	to	600 °C			3.5 °C			
5*	Temperature / Calibration of electrical part of temperature simulators, electrical parts of temperature gauges using thermocouples:	600 °C								
		-25 °C					1.9 °C			
		0 °C	to	50 °C			1.3 °C			
		50 °C	to	100 °C			1.6 °C			
		100 °C	to	300 °C			2.0 °C			
		300 °C	to	500 °C			2.5 °C			
								Direct generation and measurement by a calibrator, of equivalent DC voltage	TP1, TP21	

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		min	unit	max	unit					
	Type B	600	°C	to	800	°C		0.44 °C		
		800	°C	to	1,000	°C		0.34 °C		
		1,000	°C	to	1,550	°C		0.30 °C		
		1,550	°C	to	1,820	°C		0.33 °C		
	Type C	0	°C	to	150	°C		0.30 °C		
		150	°C	to	650	°C		0.26 °C		
		650	°C	to	1,000	°C		0.31 °C		
		1,000	°C	to	1,800	°C		0.50 °C		
		1,800	°C	to	2,316	°C		0.84 °C		
	Type E	-250	°C	to	-100	°C		0.50 °C		
		-100	°C	to	-25	°C		0.16 °C		
		-25	°C	to	350	°C		0.14 °C		
		350	°C	to	650	°C		0.16 °C		
		650	°C	to	1,000	°C		0.21 °C		
	Type J	-210	°C	to	-100	°C		0.27 °C		
		-100	°C	to	-30	°C		0.16 °C		
		-30	°C	to	150	°C		0.14 °C		
		150	°C	to	760	°C		0.17 °C		
		760	°C	to	1,200	°C		0.23 °C		
	Type K	-200	°C	to	-100	°C		0.33 °C		
		-100	°C	to	-25	°C		0.18 °C		
		-25	°C	to	120	°C		0.16 °C		
		120	°C	to	1,000	°C		0.26 °C		
		1,000	°C	to	1,372	°C		0.40 °C		
	Type L	-200	°C	to	-100	°C		0.37 °C		
		-100	°C	to	800	°C		0.26 °C		

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		min	unit	max	unit					
	Type N	800 °C	to	900 °C			0.17 °C			
		-200 °C	to	-100 °C			0.40 °C			
		-100 °C	to	-25 °C			0.22 °C			
		-25 °C	to	120 °C			0.19 °C			
		120 °C	to	410 °C			0.18 °C			
		410 °C	to	1,300 °C			0.27 °C			
	Type R	0 °C	to	250 °C			0.57 °C			
		250 °C	to	400 °C			0.35 °C			
		400 °C	to	1,000 °C			0.33 °C			
		1,000 °C	to	1,767 °C			0.40 °C			
	Type S	0 °C	to	250 °C			0.47 °C			
		250 °C	to	1,000 °C			0.36 °C			
		1,000 °C	to	1,400 °C			0.37 °C			
		1,400 °C	to	1,767 °C			0.46 °C			
	Type T	-250 °C	to	-150 °C			0.63 °C			
		-150 °C	to	0 °C			0.24 °C			
		0 °C	to	120 °C			0.16 °C			
		120 °C	to	400 °C			0.14 °C			
	Type U	-200 °C	to	0 °C			0.57 °C			
		0 °C	to	600 °C			0.27 °C			
6*	Temperature / Calibration of electric part of thermometers using RTD sensors RTD type Pt 385, 100 Ω	-200 °C	to	0 °C			0.05 °C	Direct generation by a calibrator, equivalent resistance generation	TP5, TP21	
		0 °C	to	100 °C			0.07 °C			
		100 °C	to	300 °C			0.09 °C			

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		min	unit	max	unit					
	RTD type Pt 3926, 100 Ω	300 °C	to	400 °C			0.10 °C			
		400 °C	to	630 °C			0.12 °C			
		630 °C	to	800 °C			0.23 °C			
		-200 °C	to	0 °C			0.05 °C			
		0 °C	to	100 °C			0.07 °C			
		100 °C	to	300 °C			0.09 °C			
	RTD type Pt 3916, 100 Ω	300 °C	to	400 °C			0.10 °C			
		400 °C	to	630 °C			0.12 °C			
		-200 °C	to	-190 °C			0.25 °C			
		-190 °C	to	-80 °C			0.04 °C			
		-80 °C	to	0 °C			0.05 °C			
		0 °C	to	100 °C			0.06 °C			
	RTD type Pt 385, 200 Ω	100 °C	to	260 °C			0.07 °C			
		260 °C	to	300 °C			0.08 °C			
		300 °C	to	400 °C			0.09 °C			
		400 °C	to	600 °C			0.10 °C			
		600 °C	to	630 °C			0.23 °C			
		-200 °C	to	100 °C			0.04 °C			
	RTD type Pt 385, 500 Ω	100 °C	to	260 °C			0.05 °C			
		260 °C	to	300 °C			0.12 °C			
		300 °C	to	400 °C			0.13 °C			
		400 °C	to	600 °C			0.14 °C			
		600 °C	to	630 °C			0.16 °C			
		-200 °C	to	-80 °C			0.04 °C			
		-80 °C	to	100 °C			0.05 °C			
		100 °C	to	260 °C			0.06 °C			

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		min	unit	max	unit					
	RTD type Pt 385, 1,000 Ω	260 °C	to	400 °C			0.08 °C			
		400 °C	to	600 °C			0.09 °C			
		600 °C	to	630 °C			0.11 °C			
		-200 °C	to	0 °C			0.03 °C			
		0 °C	to	100 °C			0.04 °C			
	RTD type PtNi 385 120 Ω	100 °C	to	260 °C			0.05 °C			
		260 °C	to	300 °C			0.06 °C			
		300 °C	to	600 °C			0.07 °C			
	Cu 427, 10 Ω	600 °C	to	630 °C			0.23 °C			
		-80 °C	to	100 °C			0.08 °C			
		100 °C	to	260 °C			0.14 °C			
	Temperature / Calibration of electric part of temperature simulators using RTD sensors							Direct measurement by a multimeter, equivalent resistance measurement	TP5, TP21	
	PRT 25 Ω	-200 °C	to	0 °C			0.004 °C			
		0 °C	to	660 °C			0.010 °C			
	PRT 100 Ω	-200 °C	to	0 °C			0.003 °C			
		0 °C	to	232 °C			0.005 °C			
		232 °C	to	400 °C			0.007 °C			
		400 °C	to	660 °C			0.50 °C			

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CMC for the field of measured quantity: Electrical quantities

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
1*	DC voltage / DC voltage sources	0 mV	to	20 mV	0.20 µV	Direct measurement using a multimeter	TP1, TP21	
		20 mV	to	30 mV				
		30 mV	to	40 mV				
		40 mV	to	50 mV				
		50 mV	to	90 mV				
		90 mV	to	190 mV				
		190 mV	to	300 mV				
		300 mV	to	500 mV				
		500 mV	to	1 V				
		1 V	to	2 V				
		2 V	to	3 V				
		3 V	to	5 V				
		5 V	to	10 V				
		10 V	to	20 V				
		20 V	to	30 V				
		30 V	to	50 V				
		50 V	to	100 V				
		100 V	to	200 V				
		200 V	to	250 V				
		250 V	to	400 V				
		400 V	to	600 V				
		600 V	to	1050 V				

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		min	unit	max	unit					
	DC Voltage / DC voltage meters, electrical parts of pH meters	0 mV	to	20 mV			0.8 µV	Direct generation with a calibrator	TP1, TP21	
		20 mV	to	25 mV			0.0039 %			
		25 mV	to	30 mV			0.0033 %			
		30 mV	to	35 mV			0.0029 %			
		35 mV	to	45 mV			0.0026 %			
		45 mV	to	70 mV			0.0022 %			
		70 mV	to	100 mV			0.0017 %			
		100 mV	to	150 mV			0.0015 %			
		150 mV	to	300 mV			0.0013 %			
		300 mV	to	400 mV			0.0011 %			
		400 mV	to	500 mV			0.00097 %			
		500 mV	to	1 V			0.00092 %			
		1 V	to	1.5 V			0.00082 %			
		1.5 V	to	2.2 V			0.00079 %			
		2.2 V	to	3 V			0.00087 %			
		3 V	to	4.5 V			0.00083 %			
		4.5 V	to	9 V			0.00079 %			
		9 V	to	11 V			0.00075 %			
		11 V	to	22 V			0.00077 %			
		22 V	to	45 V			0.0012 %			
		45 V	to	60 V			0.0010 %			
		60 V	to	100 V			0.00095 %			
		100 V	to	150 V			0.00090 %			
		150 V	to	220 V			0.00087 %			

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		min	unit	max	unit					
		220 V	to	350 V			0.0012 %			
		350 V	to	1,100 V			0.0011 %			
2*	AC voltage / AC voltage sources	1.2 mV	to	2 mV		10 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	4.4 µV 2.1 µV 2.3 µV 3.8 µV 13 µV	Direct measurement using a multimeter	TP2, TP21	
		2 mV	to	4 mV		10 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 50 kHz 30 kHz to 100 kHz	4.6 µV 2.5 µV 4.5 µV 6.3 µV 23 µV			
		4 mV	to	10 mV		10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 50 kHz to 100 kHz	5.4 µV 5.2 µV 3.1 µV 5.1 µV 12 µV 28 µV 35 µV			
		10 mV	to	15 mV		10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz	6.0 µV 5.7 µV 3.6 µV 5.6 µV 13 µV 31 µV			

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		min	unit					
		15 mV	to	20 mV	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	6.7 µV 6.3 µV 4.2 µV 6.2 µV 11 µV 23 µV 82 µV 0.19 mV		
		20 mV	to	30 mV	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.034 % 0.032 % 0.021 % 0.031 % 0.053 % 0.12 % 0.41 % 1.3 %		
		30 mV	to	50 mV	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.027 % 0.025 % 0.018 % 0.024 % 0.047 % 0.11 % 0.39 % 1.3 %		
		50 mV	to	100 mV	10 Hz to 40 Hz 40 Hz to 100 Hz	0.022 % 0.020 %		

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		min	unit					
				100 Hz to 2 kHz	0.015 %			
				2 kHz to 10 kHz	0.019 %			
				10 kHz to 30 kHz	0.044 %			
				30 kHz to 100 kHz	0.11 %			
				100 kHz to 300 kHz	0.38 %			
				300 kHz to 1 MHz	1.3 %			
		100 mV	to	150 mV	10 Hz to 40 Hz	0.018 %		
					40 Hz to 100 Hz	0.016 %		
					100 Hz to 2 kHz	0.013 %		
					2 kHz to 10 kHz	0.015 %		
					10 kHz to 30 kHz	0.039 %		
					30 kHz to 100 kHz	0.091 %		
					100 kHz to 300 kHz	0.45 %		
					300 kHz to 1 MHz	1.3 %		
		150 mV	to	200 mV	10 Hz to 40 Hz	0.016 %		
					40 Hz to 100 Hz	0.014 %		
					100 Hz to 2 kHz	0.012 %		
					2 kHz to 10 kHz	0.014 %		
					10 kHz to 30 kHz	0.036 %		
					30 kHz to 100 kHz	0.084 %		
					100 kHz to 300 kHz	0.43 %		
					300 kHz to 1 MHz	1.3 %		
		200 mV	to	300 mV	10 Hz to 40 Hz	0.021 %		
					40 Hz to 100 Hz	0.019 %		
					100 Hz to 2 kHz	0.017 %		
					2 kHz to 10 kHz	0.019 %		

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		min	unit					
				10 kHz to 30 kHz	0.041 %			
				30 kHz to 100 kHz	0.11 %			
				100 kHz to 300 kHz	0.41 %			
				300 kHz to 1 MHz	1.3 %			
		300 mV	to	500 mV	10 Hz to 40 Hz	0.018 %		
					40 Hz to 100 Hz	0.016 %		
					100 Hz to 2 kHz	0.014 %		
					2 kHz to 10 kHz	0.016 %		
					10 kHz to 30 kHz	0.034 %		
					30 kHz to 100 kHz	0.11 %		
					100 kHz to 300 kHz	0.39 %		
					300 kHz to 1 MHz	1.3 %		
		500 mV	to	1 V	10 Hz to 40 Hz	0.015 %		
					40 Hz to 100 Hz	0.013 %		
					100 Hz to 2 kHz	0.011 %		
					2 kHz to 10 kHz	0.013 %		
					10 kHz to 30 kHz	0.029 %		
					30 kHz to 100 kHz	0.091 %		
					100 kHz to 300 kHz	0.38 %		
					300 kHz to 1 MHz	1.2 %		
		1 V	to	1.5 V	10 Hz to 40 Hz	0.013 %		
					40 Hz to 100 Hz	0.011 %		
					100 Hz to 2 kHz	0.0086 %		
					2 kHz to 10 kHz	0.011 %		
					10 kHz to 30 kHz	0.025 %		
					30 kHz to 100 kHz	0.071 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				100 kHz to 300 kHz	0.45 %			
				300 kHz to 1 MHz	1.3 %			
		1.5 V to 2 V		10 Hz to 40 Hz	0.012 %			
				40 Hz to 100 Hz	0.0099 %			
				100 Hz to 2 kHz	0.0079 %			
				2 kHz to 10 kHz	0.010 %			
				10 kHz to 30 kHz	0.024 %			
				30 kHz to 100 kHz	0.065 %			
				100 kHz to 300 kHz	0.43 %			
				300 kHz to 1 MHz	1.3 %			
		2 V to 3 V		10 Hz to 40 Hz	0.021 %			
				40 Hz to 100 Hz	0.019 %			
				100 Hz to 2 kHz	0.017 %			
				2 kHz to 10 kHz	0.019 %			
				10 kHz to 30 kHz	0.041 %			
				30 kHz to 100 kHz	0.11 %			
				100 kHz to 300 kHz	0.41 %			
				300 kHz to 1 MHz	1.3 %			
		3 V to 5 V		10 Hz to 40 Hz	0.018 %			
				40 Hz to 100 Hz	0.016 %			
				100 Hz to 2 kHz	0.014 %			
				2 kHz to 10 kHz	0.016 %			
				10 kHz to 30 kHz	0.034 %			
				30 kHz to 100 kHz	0.11 %			
				100 kHz to 300 kHz	0.39 %			
				300 kHz to 1 MHz	1.3 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		5 V	to	10 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.015 % 0.013 % 0.011 % 0.013 % 0.029 % 0.091 % 0.38 % 1.2 %		
		10 V	to	15 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.013 % 0.011 % 0.0086 % 0.011 % 0.025 % 0.071 % 0.51 % 3.1 %		
		15 V	to	20 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.012 % 0.0099 % 0.0079 % 0.010 % 0.024 % 0.065 % 0.44 % 2.4 %		
		20 V	to	30 V	10 Hz to 40 Hz 40 Hz to 100 Hz	0.021% 0.019 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				100 Hz to 2 kHz	0.017 %			
				2 kHz to 10 kHz	0.019 %			
				10 kHz to 30 kHz	0.041 %			
				30 kHz to 100 kHz	0.16 %			
		30 V	to	50 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz	0.018 % 0.016 % 0.014 % 0.016 % 0.034 % 0.12 %		
		50 V	to	100 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz	0.015 % 0.013 % 0.011 % 0.013 % 0.029 % 0.091 %		
		100 V	to	150 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz 10 kHz to 30 kHz 30 kHz to 100 kHz	0.013 % 0.011 % 0.0086 % 0.011 % 0.025 % 0.071 %		
		150 V	to	200 V	10 Hz to 40 Hz 40 Hz to 100 Hz 100 Hz to 2 kHz 2 kHz to 10 kHz	0.012 % 0.0099 % 0.0079 % 0.010 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				10 kHz to 30 kHz	0.024 %			
				30 kHz to 100 kHz	0.065 %			
		200 V	to	300 V	40 Hz to 10 kHz			
				10 kHz to 30 kHz	0.020 %			
				30 kHz to 100 kHz	0.041 %			
		300 V	to	400 V	40 Hz to 10 kHz			
				10 kHz to 30 kHz	0.11 %			
				30 kHz to 100 kHz	0.017 %			
		400 V	to	500 V	10 kHz to 30 kHz			
				30 kHz to 100 kHz	0.034 %			
				40 kHz to 100 kHz	0.039 %			
		500 V	to	600 V	40 Hz to 10 kHz			
				10 kHz to 20 kHz	0.063 %			
				20 kHz to 30 kHz	0.017 %			
				30 kHz to 100 kHz	0.040 %			
				40 kHz to 100 kHz	0.049 %			
		600 V	to	700 V	40 Hz to 10 kHz			
				10 kHz to 20 kHz	0.065 %			
				20 kHz to 30 kHz	0.019 %			
				30 kHz to 100 kHz	0.049 %			
		700 V	to	800 V	40 Hz to 10 kHz			
				10 kHz to 20 kHz	0.066 %			
				20 kHz to 30 kHz	0.086 %			
				30 kHz to 100 kHz	0.095 %			
		800 V	to	900 V	40 Hz to 10 kHz			
				10 kHz to 20 kHz	0.027 %			

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		min	unit					
AC voltage / DC voltage meters	900 V to 1,000 V			20 kHz to 100 kHz	0.12 %			
		40 Hz	to	10 kHz	0.032 %			
		10 kHz	to	20 kHz	0.094 %			
		20 kHz	to	100 kHz	0.15 %			
	1,000 V to 1,050 V	40 Hz	to	10 kHz	0.034 %			
		10 kHz	to	20 kHz	0.11 %			
		20 kHz	to	100 kHz	0.16 %			
	0.22 mV to 0.5 mV	10 Hz	to	50 kHz	4.9 µV	Direct generation with a calibrator	TP2, TP21	
		50 kHz	to	100 kHz	7.6 µV			
		10 Hz	to	20 Hz	5.5 µV			
		20 Hz	to	40 Hz	5.2 µV			
		40 Hz	to	20 kHz	5.1 µV			
	0.5 mV to 1 mV	20 kHz	to	50 kHz	5.3 µV			
		50 kHz	to	100 kHz	8.5 µV			
		10 Hz	to	20 Hz	5.9 µV			
		20 Hz	to	20 kHz	5.2 µV			
		20 kHz	to	50 kHz	5.6 µV			
		50 kHz	to	100 kHz	9.1 µV			
		100 kHz	to	300 kHz	16 µV			
	1 mV to 2.2 mV	300 kHz	to	500 kHz	30 µV			
		500 kHz	to	1 MHz	34 µV			
		10 Hz	to	20 Hz	6.8 µV			
		20 Hz	to	40 Hz	5.8 µV			
		40 Hz	to	20 kHz	5.5 µV			
	2.2 mV to 3 mV	20 kHz	to	50 kHz	6.3 µV			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	9.7 µV 16 µV 31 µV 36 µV			
		3 mV	to	5 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	8.0 µV 6.4 µV 5.9 µV 7.1 µV 12 µV 18 µV 35 µV 43 µV		
		5 mV	to	10 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	12 µV 8.0 µV 7.1 µV 9.4 µV 17 µV 25 µV 44 µV 61 µV		
		10 mV	to	15 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz	14 µV 8.8 µV 7.3 µV 12 µV 21 µV 31 µV		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				300 kHz to 500 kHz	54 µV			
				500 kHz to 1 MHz	78 µV			
		15 mV	to	22 mV	10 Hz to 20 Hz	18 µV		
					20 Hz to 40 Hz	10 µV		
					40 Hz to 20 kHz	7.7 µV		
					20 kHz to 50 kHz	14 µV		
					50 kHz to 100 kHz	27 µV		
					100 kHz to 300 kHz	39 µV		
					300 kHz to 500 kHz	67 µV		
					500 kHz to 1 MHz	0.11 mV		
		22 mV	to	30 mV	10 Hz to 20 Hz	0.12 %		
					20 Hz to 40 Hz	0.059 %		
					40 Hz to 20 kHz	0.048 %		
					20 kHz to 50 kHz	0.072 %		
					50 kHz to 100 kHz	0.21 %		
					100 kHz to 300 kHz	0.24 %		
					300 kHz to 500 kHz	0.35 %		
					500 kHz to 1 MHz	0.72 %		
		30 mV	to	50 mV	10 Hz to 20 Hz	0.099 %		
					20 Hz to 40 Hz	0.049 %		
					40 Hz to 20 kHz	0.039 %		
					20 kHz to 50 kHz	0.062 %		
					50 kHz to 100 kHz	0.18 %		
					100 kHz to 300 kHz	0.21 %		
					300 kHz to 500 kHz	0.31 %		
					500 kHz to 1 MHz	0.62 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		50 mV	to	100 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.082 % 0.039 % 0.029 % 0.052 % 0.15 % 0.18 % 0.27 % 0.51 %		
		100 mV	to	150 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.069 % 0.031 % 0.021 % 0.045 % 0.12 % 0.15 % 0.23 % 0.44 %		
		150 mV	to	220 mV	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.065 % 0.028 % 0.017 % 0.039 % 0.11 % 0.13 % 0.21 % 0.41 %		
		220 mV	to	300 mV	10 Hz to 20 Hz 20 Hz to 40 Hz	0.087 % 0.028 %		

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		min	unit					
				40 Hz to 20 kHz	0.011 %			
				20 kHz to 50 kHz	0.020 %			
				50 kHz to 100 kHz	0.058 %			
				100 kHz to 300 kHz	0.11 %			
				300 kHz to 500 kHz	0.28 %			
				500 kHz to 1 MHz	0.61 %			
		300 mV	to	500 mV	10 Hz to 20 Hz	0.078 %		
					20 Hz to 40 Hz	0.025 %		
					40 Hz to 20 kHz	0.010 %		
					20 kHz to 50 kHz	0.018 %		
					50 kHz to 100 kHz	0.049 %		
					100 kHz to 300 kHz	0.088 %		
					300 kHz to 500 kHz	0.23 %		
					500 kHz to 1 MHz	0.51 %		
		500 mV	to	1 V	10 Hz to 20 Hz	0.067 %		
					20 Hz to 40 Hz	0.022 %		
					40 Hz to 20 kHz	0.0092 %		
					20 kHz to 50 kHz	0.016 %		
					50 kHz to 100 kHz	0.040 %		
					100 kHz to 300 kHz	0.071 %		
					300 kHz to 500 kHz	0.19 %		
					500 kHz to 1 MHz	0.40 %		
		1 V	to	1.5 V	10 Hz to 20 Hz	0.059 %		
					20 Hz to 40 Hz	0.019 %		
					40 Hz to 20 kHz	0.0086 %		
					20 kHz to 50 kHz	0.015 %		

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		min	unit					
				50 kHz to 100 kHz	0.033 %			
				100 kHz to 300 kHz	0.058 %			
				300 kHz to 500 kHz	0.16 %			
				500 kHz to 1 MHz	0.32 %			
		1.5 V	to	2.2 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.056 % 0.019 % 0.0084 % 0.014 % 0.030 % 0.053 % 0.15 % 0.29 %		
		2.2 V	to	3 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.087 % 0.028 % 0.011 % 0.020 % 0.042 % 0.12 % 0.33 % 0.67 %		
		3 V	to	5 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz	0.078 % 0.025 % 0.099 % 0.018 % 0.030 % 0.11 %		

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		min	unit						
				300 kHz to 500 kHz	0.28 %				
				500 kHz to 1 MHz	0.56 %				
		5 V	to	10 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.067 % 0.022 % 0.0091 % 0.016 % 0.033 % 0.081 % 0.23 % 0.45 %			
		10 V	to	15 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.059 % 0.019 % 0.0086 % 0.014 % 0.029 % 0.066 % 0.19 % 0.37 %			
		15 V	to	22 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 500 kHz 500 kHz to 1 MHz	0.056 % 0.019 % 0.087 % 0.014 % 0.029 % 0.061 % 0.18 % 0.34 %			

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		min	unit					
		22 V	to	30 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.087 % 0.028 % 0.013 % 0.039 % 0.087 %		
		30 V	to	50 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.078 % 0.025 % 0.012 % 0.034 % 0.078 %		
		50 V	to	100 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.067 % 0.022 % 0.011 % 0.030 % 0.067 %		
		100 V	to	150 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.059 % 0.019 % 0.010 % 0.026 % 0.059 %		
		150 V	to	220 V	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.057 % 0.019 % 0.011 % 0.027 % 0.065 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		220 V	to	300 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.030 % 0.012 % 0.026 % 0.042 %		
		300 V	to	400 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.030 % 0.012 % 0.026 % 0.042 %		
		400 V	to	500 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.028 % 0.012 % 0.025 % 0.045 %		
		500 V	to	600 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.027 % 0.011 % 0.023 % 0.053 %		
		600 V	to	700 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.028 % 0.012 % 0.025 % 0.068 %		
		700 V	to	800 V	10 Hz to 50 Hz 50 Hz to 1 kHz 1 kHz to 10 kHz 10 kHz to 30 kHz	0.030 % 0.011 % 0.028 % 0.089 %		
		800 V	to	1,050 V	10 Hz to 50 Hz 50 Hz to 1 kHz	0.040 % 0.010 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						1 kHz to 10 kHz	0.038 %			
						10 kHz to 30 kHz	0.17 %			
3*	DC current / DC current sources	0 nA	to	1 µA			0.42 nA		Direct measurement with a multimeter or indirect measurement with a current shunt	TP3, TP21
		1 µA	to	5 µA			0.47 nA			
		5 µA	to	10 µA			0.53 nA			
		10 µA	to	15 µA			0.59 nA			
		15 µA	to	20 µA			0.65 nA			
		20 µA	to	30 µA			0.0033 %			
		30 µA	to	50 µA			0.0026 %			
		50 µA	to	60 µA			0.0021 %			
		60 µA	to	90 µA			0.0019 %			
		90 µA	to	140 µA			0.0017 %			
		140 µA	to	200 µA			0.0015 %			
		200 µA	to	250 µA			0.0033 %			
		250 µA	to	300 µA			0.0029 %			
		300 µA	to	400 µA			0.0026 %			
		400 µA	to	500 µA			0.0023 %			
		500 µA	to	600 µA			0.0021 %			
		600 µA	to	900 µA			0.0019 %			
		900 µA	to	1.1 mA			0.0017 %			
		1.1 mA	to	2 mA			0.0016 %			
		2 mA	to	2.5 mA			0.0034 %			
		2.5 mA	to	3 mA			0.0030 %			

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		min	unit	max	unit					
		3 mA	to	4 mA			0.0027 %			
		4 mA	to	5 mA			0.0024 %			
		5 mA	to	6 mA			0.0022 %			
		6 mA	to	9 mA			0.0020 %			
		9 mA	to	11 mA			0.0018 %			
		11 mA	to	20 mA			0.0017 %			
		20 mA	to	25 mA			0.0077 %			
		25 mA	to	30 mA			0.0069 %			
		30 mA	to	40 mA			0.0064 %			
		40 mA	to	50 mA			0.0057 %			
		50 mA	to	60 mA			0.0053 %			
		60 mA	to	70 mA			0.0050 %			
		70 mA	to	90 mA			0.0048 %			
		90 mA	to	100 mA			0.0046 %			
		100 mA	to	130 mA			0.0045 %			
		130 mA	to	190 mA			0.0043 %			
		190 mA	to	200 mA			0.0041 %			
		200 mA	to	250 mA			0.026 %			
		250 mA	to	300 mA			0.024 %			
		300 mA	to	400 mA			0.023 %			
		400 mA	to	600 mA			0.022 %			
		600 mA	to	900 mA			0.020 %			
		900 mA	to	1.7 A			0.019 %			
		1.7 A	to	2 A			0.018 %			
		2 A	to	60 A			0.020 %			
		60 A	to	200 A			0.040 %			

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		min	unit	max	unit					
DC current / DC current meters		200 A	to	300 A			0.2 %			
		300 A	to	600 A			0.3 %			
	DC current / DC current meters	0 µA	to	20 µA			10 nA			
		20 µA	to	30 µA			0.046 %			
		30 µA	to	40 µA			0.032 %			
		40 µA	to	50 µA			0.026 %			
		50 µA	to	60 µA			0.022 %			
		60 µA	to	70 µA			0.019 %			
		70 µA	to	95 µA			0.017 %			
		95 µA	to	120 µA			0.014 %			
		120 µA	to	170 µA			0.012 %			
		170 µA	to	200 µA			0.0099 %			
		200 µA	to	220 µA			0.0092 %			
		220 µA	to	300 µA			0.0088 %			
		300 µA	to	400 µA			0.0078 %			
		400 µA	to	500 µA			0.0071 %			
		500 µA	to	600 µA			0.0067 %			
		600 µA	to	700 µA			0.0065 %			
		700 µA	to	800 µA			0.0063 %			
		800 µA	to	1 mA			0.0061 %			
		1 mA	to	1.3 mA			0.0059 %			
		1.3 mA	to	1.9 mA			0.0057 %			
		1.9 mA	to	2.2 mA			0.0055 %			
		2.2 mA	to	3 mA			0.0088 %			
		3 mA	to	4 mA			0.0078 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		4 mA	to	5 mA			0.0071 %			
		5 mA	to	6 mA			0.0067 %			
		6 mA	to	7 mA			0.0065 %			
		7 mA	to	8 mA			0.0063 %			
		8 mA	to	10 mA			0.0061 %			
		10 mA	to	13 mA			0.0059 %			
		13 mA	to	19 mA			0.0057 %			
		19 mA	to	22 mA			0.0055 %			
		22 mA	to	30 mA			0.0098 %			
		30 mA	to	40 mA			0.0088 %			
		40 mA	to	50 mA			0.0082 %			
		50 mA	to	60 mA			0.0077 %			
		60 mA	to	70 mA			0.0075 %			
		70 mA	to	80 mA			0.0073 %			
		80 mA	to	180 mA			0.0072 %			
		180 mA	to	220 mA			0.0075 %			
		220 mA	to	300 mA			0.020 %			
		300 mA	to	400 mA			0.017 %			
		400 mA	to	600 mA			0.015 %			
		600 mA	to	900 mA			0.013 %			
		900 mA	to	1 A			0.011 %			
		1 A	to	1.4 A			0.012 %			
		1.4 A	to	1.8 A			0.013 %			
		1.8 A	to	2 A			0.014 %			
		2 A	to	2.2 A			0.015 %			
		2.2 A	to	3 A			0.044 %			

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Calibration Laboratory
U Dráhy 411/11, 664 49 Ostopovice

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place
		min	unit	max	unit					
		3 A	to	4 A			0.041 %			
		4 A	to	5 A			0.038 %			
		5 A	to	6 A			0.037 %			
		6 A	to	7 A			0.036 %			
		7 A	to	8 A			0.035 %			
		8 A	to	11 A			0.034 %			
		11 A	to	20.2 A			0.033 %			
		20.2 A	to	23 A			0.043 %			
		23 A	to	30 A			0.042 %			
		30 A	to	1,000 A			0.4 %	Indirect generation with a current coil calibrator	TP3, TP21	
4*	AC current / AC current sources	10 µA	to	20 µA			10 Hz to 10 kHz	30 nA		
		20 µA	to	30 µA			10 Hz to 10 kHz	TP4, TP21		
		30 µA	to	40 µA			10 Hz to 10 kHz			
		40 µA	to	50 µA			10 Hz to 10 kHz			
		50 µA	to	60 µA			10 Hz to 10 kHz			
		60 µA	to	70 µA			10 Hz to 10 kHz			
		70 µA	to	80 µA			10 Hz to 10 kHz			
		80 µA	to	90 mA			10 Hz to 10 kHz			
		90 µA	to	100 µA			10 Hz to 10 kHz			
		100 µA	to	110 µA			10 Hz to 10 kHz			
		110 µA	to	130 µA			10 Hz to 10 kHz			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		130	µA	to	150	µA	10 Hz to 10 kHz	0.063 %		
		150	µA	to	180	µA	10 Hz to 10 kHz	0.061 %		
		180	µA	to	200	µA	10 Hz to 10 kHz	0.059 %		
		200	µA	to	250	µA	10 Hz to 10 kHz	0.13 %		
		250	µA	to	300	µA	10 Hz to 10 kHz	0.11 %		
		300	µA	to	400	µA	10 Hz to 10 kHz	0.095 %		
		400	µA	to	500	µA	10 Hz to 10 kHz	0.079 %		
		500	µA	to	600	µA	10 Hz to 10 kHz	0.069 %		
		600	µA	to	700	µA	10 Hz to 10 kHz	0.062 %		
		700	µA	to	800	µA	10 Hz to 10 kHz	0.057 %		
		800	µA	to	900	µA	10 Hz to 10 kHz	0.054 %		
		900	µA	to	1	mA	10 Hz to 10 kHz	0.051 %		
		1	mA	to	1.1	mA	10 Hz to 10 kHz	0.049 %		
		1.1	mA	to	1.2	mA	10 Hz to 10 kHz	0.047 %		
		1.2	mA	to	1.4	mA	10 Hz to 10 kHz	0.045 %		
		1.4	mA	to	1.6	mA	10 Hz to 10 kHz	0.043 %		
		1.6	mA	to	1.9	mA	10 Hz to 10 kHz	0.041 %		
		1.9	mA	to	2	mA	10 Hz to 10 kHz	0.039 %		
		2	mA	to	2.5	mA	10 Hz to 10 kHz	0.13 %		
		2.5	mA	to	3	mA	10 Hz to 10 kHz	0.11 %		
		3	mA	to	4	mA	10 Hz to 10 kHz	0.095 %		
		4	mA	to	5	mA	10 Hz to 10 kHz	0.079 %		
		5	mA	to	6	mA	10 Hz to 10 kHz	0.069 %		
		6	mA	to	7	mA	10 Hz to 10 kHz	0.062 %		
		7	mA	to	8	mA	10 Hz to 10 kHz	0.057 %		
		8	mA	to	9	mA	10 Hz to 10 kHz	0.054 %		

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		min	unit	max	unit					
		9 mA	to	10 mA		10 Hz to 10 kHz	0.051 %			
		10 mA	to	11 mA		10 Hz to 10 kHz	0.049 %			
		11 mA	to	12 mA		10 Hz to 10 kHz	0.047 %			
		12 mA	to	14 mA		10 Hz to 10 kHz	0.045 %			
		14 mA	to	16 mA		10 Hz to 10 kHz	0.043 %			
		16 mA	to	19 mA		10 Hz to 10 kHz	0.041 %			
		19 mA	to	20 mA		10 Hz to 10 kHz	0.039 %			
		20 mA	to	25 mA		10 Hz to 10 kHz	0.13 %			
		25 mA	to	30 mA		10 Hz to 10 kHz	0.11 %			
		30 mA	to	40 mA		10 Hz to 10 kHz	0.092 %			
		40 mA	to	50 mA		10 Hz to 10 kHz	0.076 %			
		50 mA	to	60 mA		10 Hz to 10 kHz	0.066 %			
		60 mA	to	70 mA		10 Hz to 10 kHz	0.059 %			
		70 mA	to	80 mA		10 Hz to 10 kHz	0.054 %			
		80 mA	to	90 mA		10 Hz to 10 kHz	0.051 %			
		90 mA	to	100 mA		10 Hz to 10 kHz	0.048 %			
		100 mA	to	110 mA		10 Hz to 10 kHz	0.046 %			
		110 mA	to	120 mA		10 Hz to 10 kHz	0.044 %			
		120 mA	to	140 mA		10 Hz to 10 kHz	0.042 %			
		140 mA	to	160 mA		10 Hz to 10 kHz	0.040 %			
		160 mA	to	190 mA		10 Hz to 10 kHz	0.038 %			
		190 mA	to	200 mA		10 Hz to 10 kHz	0.036 %			
		200 mA	to	250 mA		10 Hz to 2 kHz	0.17 %			
						2 kHz to 10 kHz	0.18 %			
		250 mA	to	300 mA		10 Hz to 2 kHz	0.15 %			
						2 kHz to 10 kHz	0.16 %			

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		min	unit	max	unit					
		300 mA	to	400 mA		10 Hz to 2 kHz	0.13 %			
						2 kHz to 10 kHz	0.14 %			
		400 mA	to	500 mA		10 Hz to 2 kHz	0.12 %			
						2 kHz to 10 kHz	0.13 %			
		500 mA	to	600 mA		10 Hz to 2 kHz	0.11 %			
						2 kHz to 10 kHz	0.12 %			
		600 mA	to	700 mA		10 Hz to 2 kHz	0.094 %			
						2 kHz to 10 kHz	0.11 %			
		700 mA	to	800 mA		10 Hz to 2 kHz	0.089 %			
						2 kHz to 10 kHz	0.099 %			
		800 mA	to	900 mA		10 Hz to 2 kHz	0.086 %			
						2 kHz to 10 kHz	0.096 %			
		900 mA	to	1 A		10 Hz to 2 kHz	0.083 %			
						2 kHz to 10 kHz	0.093 %			
		1 A	to	1.1 A		10 Hz to 2 kHz	0.081 %			
						2 kHz to 10 kHz	0.091 %			
		1.1 A	to	1.2 A		10 Hz to 2 kHz	0.079 %			
						2 kHz to 10 kHz	0.089 %			
		1.2 A	to	1.3 A		10 Hz to 2 kHz	0.077 %			
						2 kHz to 10 kHz	0.087 %			
		1.3 A	to	1.4 A		10 Hz to 2 kHz	0.076 %			
						2 kHz to 10 kHz	0.087 %			
		1.4 A	to	1.5 A		10 Hz to 2 kHz	0.076 %			
						2 kHz to 10 kHz	0.085 %			
		1.5 A	to	1.6 A		10 Hz to 2 kHz	0.074 %			
						2 kHz to 10 kHz	0.085 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		1.6 A	to	1.7 A		10 Hz to 2 kHz	0.074 %			
						2 kHz to 10 kHz	0.083 %			
		1.7 A	to	2 A		10 Hz to 2 kHz	0.072 %			
						2 kHz to 10 kHz	0.083 %			
		2 A	to	2.5 A		10 Hz to 2 kHz	0.19 %			
						2 kHz to 10 kHz	0.36 %			
		2.5 A	to	3 A		10 Hz to 2 kHz	0.16 %			
						2 kHz to 10 kHz	0.34 %			
		3 A	to	4 A		10 Hz to 2 kHz	0.15 %			
						2 kHz to 10 kHz	0.32 %			
		4 A	to	5 A		10 Hz to 2 kHz	0.14 %			
						2 kHz to 10 kHz	0.31 %			
		5 A	to	6 A		10 Hz to 2 kHz	0.13 %			
						2 kHz to 10 kHz	0.30 %			
		6 A	to	7 A		10 Hz to 2 kHz	0.12 %			
						2 kHz to 10 kHz	0.29 %			
		7 A	to	11 A		10 Hz to 2 kHz	0.11 %			
						2 kHz to 10 kHz	0.28 %			
		11 A	to	20 A		10 Hz to 2 kHz	0.10 %			
						2 kHz to 10 kHz	0.27 %			
		2 A	to	4 A		50 Hz	0.12 %			
						50 Hz	0.05 %			
		4 A	to	10 A		50 Hz	0.04 %			
		10 A	to	1200 A						
AC current / AC current meters		10 µA	to	20 µA		10 Hz to 20 Hz	40 nA	Direct generation with a calibrator	TP4, TP21	
						20 Hz to 40 Hz				

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						40 Hz to 1 kHz	18 nA			
						1 kHz to 5 kHz	47 nA			
						5 kHz to 10 kHz	97 nA			
		20 µA	to	30 µA		10 Hz to 20 Hz	0.20 %			
						20 Hz to 40 Hz	0.14 %			
						40 Hz to 1 kHz	0.095 %			
						1 kHz to 5 kHz	0.26 %			
						5 kHz to 10 kHz	0.57 %			
		30 µA	to	40 µA		10 Hz to 20 Hz	0.16 %			
						20 Hz to 40 Hz	0.11 %			
						40 Hz to 1 kHz	0.069 %			
						1 kHz to 5 kHz	0.20 %			
		40 µA	to	50 µA		5 kHz to 10 kHz	0.43 %			
						10 Hz to 20 Hz	0.14 %			
						20 Hz to 40 Hz	0.086 %			
						40 Hz to 1 kHz	0.055 %			
						1 kHz to 5 kHz	0.17 %			
		50 µA	to	60 µA		5 kHz to 10 kHz	0.37 %			
						10 Hz to 20 Hz	0.13 %			
						20 Hz to 40 Hz	0.076 %			
						40 Hz to 1 kHz	0.048 %			
						1 kHz to 5 kHz	0.15 %			
		60 µA	to	80 µA		5 kHz to 10 kHz	0.33 %			
						10 Hz to 20 Hz	0.12 %			
						20 Hz to 40 Hz	0.070 %			
						40 Hz to 1 kHz	0.042 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						1 kHz to 5 kHz	0.13 %			
						5 kHz to 10 kHz	0.30 %			
						10 Hz to 20 Hz	0.099 %			
						20 Hz to 40 Hz	0.061 %			
						40 Hz to 1 kHz	0.036 %			
						1 kHz to 5 kHz	0.12 %			
						5 kHz to 10 kHz	0.27 %			
						10 Hz to 20 Hz	0.096 %			
						20 Hz to 40 Hz	0.056 %			
						40 Hz to 1 kHz	0.032 %			
						1 kHz to 5 kHz	0.11 %			
						5 kHz to 10 kHz	0.25 %			
						10 Hz to 20 Hz	0.090 %			
						20 Hz to 40 Hz	0.052 %			
						40 Hz to 1 kHz	0.029 %			
						1 kHz to 5 kHz	0.092 %			
						5 kHz to 10 kHz	0.23 %			
						10 Hz to 20 Hz	0.085 %			
						20 Hz to 40 Hz	0.048 %			
						40 Hz to 1 kHz	0.025 %			
						1 kHz to 5 kHz	0.084 %			
						5 kHz to 10 kHz	0.21 %			
						10 Hz to 20 Hz	0.089 %			
						20 Hz to 40 Hz	0.052 %			
						40 Hz to 1 kHz	0.032 %			
						1 kHz to 5 kHz	0.25 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		300	µA	to	400	µA	5 kHz to 10 kHz 10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.53 % 0.084 % 0.048 % 0.028 % 0.20 % 0.43 %		
		400	µA	to	500	µA	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.081 % 0.045 % 0.025 % 0.17 % 0.37 %		
		500	µA	to	600	µA	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.079 % 0.044 % 0.023 % 0.15 % 0.33 %		
		600	µA	to	800	µA	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.078 % 0.043 % 0.022 % 0.13 % 0.30 %		
		800	µA	to	1	mA	10 Hz to 20 Hz 20 Hz to 40 Hz 40 Hz to 1 kHz 1 kHz to 5 kHz 5 kHz to 10 kHz	0.076 % 0.041 % 0.021 % 0.12 % 0.27 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		1 mA	to	1.3 mA		10 Hz to 20 Hz	0.075 %			
						20 Hz to 40 Hz	0.040 %			
						40 Hz to 1 kHz	0.020 %			
						1 kHz to 5 kHz	0.11 %			
						5 kHz to 10 kHz	0.25 %			
		1.3 mA	to	1.8 mA		10 Hz to 20 Hz	0.074 %			
						20 Hz to 40 Hz	0.039 %			
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.092 %			
						5 kHz to 10 kHz	0.23 %			
		1.8 mA	to	2.2 mA		10 Hz to 20 Hz	0.073 %			
						20 Hz to 40 Hz	0.074 %			
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.084 %			
						5 kHz to 10 kHz	0.21 %			
		2.2 mA	to	3 mA		10 Hz to 20 Hz	0.089 %			
						20 Hz to 40 Hz	0.052 %			
						40 Hz to 1 kHz	0.032 %			
						1 kHz to 5 kHz	0.25 %			
						5 kHz to 10 kHz	0.53 %			
		3 mA	to	4 mA		10 Hz to 20 Hz	0.084 %			
						20 Hz to 40 Hz	0.048 %			
						40 Hz to 1 kHz	0.028 %			
						1 kHz to 5 kHz	0.20 %			
						5 kHz to 10 kHz	0.43 %			
		4 mA	to	5 mA		10 Hz to 20 Hz	0.081 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				20 Hz to 40 Hz	0.045 %			
				40 Hz to 1 kHz	0.025 %			
				1 kHz to 5 kHz	0.17 %			
				5 kHz to 10 kHz	0.37 %			
		5 mA	to	6 mA	10 Hz to 20 Hz	0.079 %		
					20 Hz to 40 Hz	0.043 %		
					40 Hz to 1 kHz	0.023 %		
					1 kHz to 5 kHz	0.15 %		
					5 kHz to 10 kHz	0.33 %		
		6 mA	to	8 mA	10 Hz to 20 Hz	0.078 %		
					20 Hz to 40 Hz	0.042 %		
					40 Hz to 1 kHz	0.022 %		
					1 kHz to 5 kHz	0.13 %		
		8 mA	to	10 mA	5 kHz to 10 kHz	0.30 %		
					10 Hz to 20 Hz	0.076 %		
					20 Hz to 40 Hz	0.041 %		
					40 Hz to 1 kHz	0.021 %		
					1 kHz to 5 kHz	0.12 %		
		10 mA	to	13 mA	5 kHz to 10 kHz	0.27 %		
					10 Hz to 20 Hz	0.075 %		
					20 Hz to 40 Hz	0.040 %		
					40 Hz to 1 kHz	0.020 %		
					1 kHz to 5 kHz	0.11 %		
					5 kHz to 10 kHz	0.25 %		
		13 mA	to	18 mA	10 Hz to 20 Hz	0.074 %		
					20 Hz to 40 Hz	0.039 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.092 %			
						5 kHz to 10 kHz	0.23 %			
		18 mA	to	22 mA		10 Hz to 20 Hz	0.073 %			
						20 Hz to 40 Hz	0.039 %			
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.084 %			
						5 kHz to 10 kHz	0.21 %			
		22 mA	to	30 mA		10 Hz to 20 Hz	0.089 %			
						20 Hz to 40 Hz	0.052 %			
						40 Hz to 1 kHz	0.032 %			
		30 mA	to	40 mA		1 kHz to 5 kHz	0.25 %			
						5 kHz to 10 kHz	0.53 %			
						10 Hz to 20 Hz	0.084 %			
		40 mA	to	50 mA		20 Hz to 40 Hz	0.048 %			
						40 Hz to 1 kHz	0.028 %			
						1 kHz to 5 kHz	0.20 %			
						5 kHz to 10 kHz	0.43 %			
		50 mA	to	60 mA		10 Hz to 20 Hz	0.081 %			
						20 Hz to 40 Hz	0.045 %			
						40 Hz to 1 kHz	0.025 %			
						1 kHz to 5 kHz	0.17 %			
						5 kHz to 10 kHz	0.37 %			
						10 Hz to 20 Hz	0.079 %			
						20 Hz to 40 Hz	0.043 %			
						40 Hz to 1 kHz	0.023 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		60 mA	to	80 mA		1 kHz to 5 kHz	0.15 %			
						5 kHz to 10 kHz	0.33 %			
						10 Hz to 20 Hz	0.078 %			
						20 Hz to 40 Hz	0.042 %			
						40 Hz to 1 kHz	0.022 %			
						1 kHz to 5 kHz	0.13 %			
						5 kHz to 10 kHz	0.30 %			
		80 mA	to	100 mA		10 Hz to 20 Hz	0.076 %			
						20 Hz to 40 Hz	0.041 %			
						40 Hz to 1 kHz	0.021 %			
						1 kHz to 5 kHz	0.12 %			
						5 kHz to 10 kHz	0.27 %			
		100 mA	to	130 mA		10 Hz to 20 Hz	0.075 %			
						20 Hz to 40 Hz	0.040 %			
						40 Hz to 1 kHz	0.020 %			
						1 kHz to 5 kHz	0.11 %			
						5 kHz to 10 kHz	0.25 %			
		130 mA	to	180 mA		10 Hz to 20 Hz	0.074 %			
						20 Hz to 40 Hz	0.039 %			
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.092 %			
						5 kHz to 10 kHz	0.24 %			
		180 mA	to	220 mA		10 Hz to 20 Hz	0.073 %			
						20 Hz to 40 Hz	0.038 %			
						40 Hz to 1 kHz	0.019 %			
						1 kHz to 5 kHz	0.084 %			

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		min	unit	max	unit					
		220 mA	to	300 mA		5 kHz to 10 kHz	0.21 %			
						20 Hz to 1 kHz	0.082 %			
						1 kHz to 5 kHz	0.12 %			
						5 kHz to 10 kHz	0.93 %			
		300 mA	to	400 mA		20 Hz to 1 kHz	0.078 %			
						1 kHz to 5 kHz	0.11 %			
						5 kHz to 10 kHz	0.91 %			
		400 mA	to	500 mA		20 Hz to 1 kHz	0.075 %			
						1 kHz to 5 kHz	0.098 %			
						5 kHz to 10 kHz	0.90 %			
		500 mA	to	600 mA		20 Hz to 1 kHz	0.074 %			
						1 kHz to 5 kHz	0.094 %			
						5 kHz to 10 kHz	0.89 %			
		600 mA	to	1 A		20 Hz to 1 kHz	0.072 %			
						1 kHz to 5 kHz	0.092 %			
						5 kHz to 10 kHz	0.89 %			
		1 A	to	2.2 A		20 Hz to 1 kHz	0.070 %			
						1 kHz to 5 kHz	0.086 %			
						5 kHz to 10 kHz	0.88 %			
		2.2 A	to	3 A		10 Hz to 1 kHz	0.16 %			
						1 kHz to 5 kHz	0.22 %			
						5 kHz to 10 kHz	0.60 %			
		3 A	to	5 A		10 Hz to 1 kHz	0.14 %			
						1 kHz to 5 kHz	0.20 %			
						5 kHz to 10 kHz	0.51 %			
		5 A	to	11 A		10 Hz to 1 kHz	0.13 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						1 kHz to 5 kHz	0.18 %			
						5 kHz to 10 kHz	0.42 %			
		2.2 A	to	3 A		50 Hz	0.12 %			
		3 A	to	4 A		50 Hz	0.095 %			
		4 A	to	5 A		50 Hz	0.084 %			
		5 A	to	6 A		50 Hz	0.077 %			
		6 A	to	7 A		50 Hz	0.073 %			
		7 A	to	8 A		50 Hz	0.070 %			
		8 A	to	10 A		50 Hz	0.067 %			
		10 A	to	11 A		50 Hz	0.064 %			
		11 A	to	15 A		30 Hz to 45 Hz	0.23 %			
						45 Hz to 100 Hz	0.12 %			
						100 Hz to 1 kHz	0.52 %			
		15 A	to	25 A		30 Hz to 45 Hz	0.22 %			
						45 Hz to 100 Hz	0.12 %			
						100 Hz to 1 kHz	0.51 %			
		25 A	to	30 A		30 Hz to 45 Hz	0.21 %			
						45 Hz to 100 Hz	0.11 %			
						100 Hz to 1 kHz	0.49 %			
		30 A	to	1,000 A		50 Hz	0.5 %	Indirect generation with a current coil calibrator	TP4, TP21	
5*	DC resistance / DC resistance standards	0 Ω	to	0.1 Ω			6 μΩ	Direct measurement using a multimeter	TP5, TP21	
		0.1 Ω	to	0.5 Ω			12 μΩ			
		0.5 Ω	to	1 Ω			20 μΩ			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		1 Ω	to	2 Ω			0.0020 %			
		2 Ω	to	3 Ω			0.0017 %			
		3 Ω	to	5 Ω			0.0014 %			
		5 Ω	to	15 Ω			0.0012 %			
		15 Ω	to	19 Ω			0.0010 %			
		19 Ω	to	20 Ω			0.00098 %			
		20 Ω	to	25 Ω			0.0011 %			
		25 Ω	to	30 Ω			0.00096 %			
		30 Ω	to	50 Ω			0.00092 %			
		50 Ω	to	100 Ω			0.00086 %			
		100 Ω	to	190 Ω			0.00081 %			
		190 Ω	to	200 Ω			0.00078 %			
		200 Ω	to	250 Ω			0.0011 %			
		250 Ω	to	300 Ω			0.00096 %			
		300 Ω	to	500 Ω			0.00092 %			
		500 Ω	to	1 kΩ			0.00086 %			
		1 kΩ	to	1.9 kΩ			0.00081 %			
		1.9 kΩ	to	2 kΩ			0.00078 %			
		2 kΩ	to	2.5 kΩ			0.0011 %			
		2.5 kΩ	to	3 kΩ			0.00096 %			
		3 kΩ	to	5 kΩ			0.00092 %			
		5 kΩ	to	10 kΩ			0.00086 %			
		10 kΩ	to	19 kΩ			0.00081 %			
		19 kΩ	to	20 kΩ			0.00078 %			
		20 kΩ	to	25 kΩ			0.0011 %			
		25 kΩ	to	30 kΩ			0.00096 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		30 kΩ	to	50 kΩ			0.00092 %			
		50 kΩ	to	100 kΩ			0.00086 %			
		100 kΩ	to	190 kΩ			0.00081 %			
		190 kΩ	to	200 kΩ			0.00078 %			
		200 kΩ	to	300 kΩ			0.0014 %			
		300 kΩ	to	1 MΩ			0.0012 %			
		1 MΩ	to	1.9 MΩ			0.00096 %			
		1.9 MΩ	to	2 MΩ			0.00091 %			
		2 MΩ	to	5 MΩ			0.0021 %			
		5 MΩ	to	19 MΩ			0.0018 %			
		19 MΩ	to	20 MΩ			0.0016 %			
		20 MΩ	to	30 MΩ			0.012 %			
		30 MΩ	to	50 MΩ			0.0094 %			
		50 MΩ	to	100 MΩ			0.0081 %			
		100 MΩ	to	190 MΩ			0.0071 %			
		190 MΩ	to	200 MΩ			0.0066 %			
		200 MΩ	to	250 MΩ			0.066 %			
		250 MΩ	to	300 MΩ			0.056 %			
		300 MΩ	to	400 MΩ			0.049 %			
		400 MΩ	to	500 MΩ			0.041 %			
		500 MΩ	to	700 MΩ			0.036 %			
		700 MΩ	to	1 GΩ			0.030 %			
		1 GΩ	to	1.9 GΩ			0.026 %			
		1.9 GΩ	to	2 GΩ			0.021 %			
		2 GΩ	to	2.5 GΩ			0.56 %			
		2.5 GΩ	to	3 GΩ			0.46 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		3 GΩ	to	4 GΩ			0.39 %			
		4 GΩ	to	5 GΩ			0.31 %			
		5 GΩ	to	6 GΩ			0.26 %			
		6 GΩ	to	7 GΩ			0.23 %			
		7 GΩ	to	10 GΩ			0.20 %			
		10 GΩ	to	15 GΩ			0.16 %			
		15 GΩ	to	19 GΩ			0.13 %			
		19 GΩ	to	20 GΩ			0.11 %			
	DC resistance / DC resistance meters	0.1 mΩ					0.005 %			
		1 mΩ					0.005 %			
		10 mΩ					0.002 %			
		100 mΩ					0.001 %			
		1 Ω					0.0005 %			
		1.9 Ω					0.02 %			
		10 Ω					0.0005 %			
		19 Ω					0.004 %			
		100 Ω					0.0007 %			
		190 Ω					0.003 %			
		1 kΩ					0.0004 %			
		1.9 kΩ					0.002 %			
		10 kΩ					0.0004 %			
		19 kΩ					0.002 %			
		100 kΩ					0.0006 %			
		190 kΩ					0.003 %			
		1 MΩ					0.004 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		1.9 MΩ					0.004 %			
		10 MΩ					0.006 %			
		19 MΩ					0.008 %			
		100 MΩ					0.006 %			
		1 GΩ					0.014 %			
		10 GΩ					0.23 %			
		100 GΩ					0.80 %			
		200 GΩ					1.0 %			
		0 Ω	to	1 Ω			1.5 mΩ			
		1 Ω	to	5 Ω			0.13 %			
		5 Ω	to	10 Ω			0.021 %			
		10 Ω	to	11 Ω			0.026 %			
		11 Ω	to	20 Ω			0.030 %			
		20 Ω	to	33 Ω			0.023 %			
		33 Ω	to	330 Ω			0.016 %			
		330 Ω	to	1.1 kΩ			0.012 %			
		1.1 kΩ	to	3.3 kΩ			0.013 %			
		3.3 kΩ	to	11 kΩ			0.012 %			
		11 kΩ	to	33 kΩ			0.013 %			
		33 kΩ	to	110 kΩ			0.014 %			
		110 kΩ	to	330 kΩ			0.016 %			
		330 kΩ	to	1.1 MΩ			0.019 %			
		1.1 MΩ	to	3.3 MΩ			0.021 %			
		3.3 MΩ	to	11 MΩ			0.072 %			
		11 MΩ	to	33 MΩ			0.15 %			
		33 MΩ	to	110 MΩ			0.59 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		110 MΩ	to	330 MΩ			0.69 %			
6*	AC resistance / AC resistance standards for frequencies from 20 Hz to 1 MHz	330 MΩ	to	1.1 GΩ			2.0 %			
		50 mΩ	to	0.1 Ω		100 Hz to 100 kHz	3.1 %			
						100 kHz to 300 kHz	5.3 %			
		0.1 Ω	to	0.2 Ω		20 Hz to 50 Hz	4.9 %			
						50 Hz to 100 Hz	3.5 %			
						100 Hz to 100 kHz	1.6 %			
		0.2 Ω	to	0.5 Ω		100 kHz to 300 kHz	2.7 %			
						300 kHz to 1 MHz	3.9 %			
		0.5 Ω	to	1 Ω		20 Hz to 50 Hz	2.6 %			
						50 Hz to 100 Hz	1.9 %			
						100 Hz to 100 kHz	0.85 %			
						100 kHz to 300 kHz	1.5 %			
						300 kHz to 1 MHz	2.1 %			
		1 Ω	to	5 Ω		20 Hz to 50 Hz	1.3 %			
						50 Hz to 100 Hz	0.83 %			
						100 Hz to 100 kHz	0.44 %			
						100 kHz to 300 kHz	0.67 %			
						300 kHz to 1 MHz	0.90 %			
						20 Hz to 50 Hz	0.78 %			
						50 Hz to 100 Hz	0.49 %			
						100 Hz to 100 kHz	0.30 %			
						100 kHz to 300 kHz	0.41 %			

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		min	unit					
				300 kHz to 1 MHz	0.53 %			
		5 Ω	to	10 Ω	20 Hz to 50 Hz	0.42 %		
					50 Hz to 100 Hz	0.23 %		
					100 Hz to 100 kHz	0.19 %		
					100 kHz to 300 kHz	0.21 %		
					300 kHz to 1 MHz	0.23 %		
		10 Ω	to	15 Ω	20 Hz to 50 Hz	0.38 %		
					50 Hz to 100 Hz	0.20 %		
					100 Hz to 100 kHz	0.18 %		
					100 kHz to 1 MHz	0.20 %		
		15 Ω	to	50 Ω	20 Hz to 50 Hz	0.36 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 1 MHz	0.13 %		
		50 Ω	to	2 kΩ	20 Hz to 50 Hz	0.34 %		
					50 Hz to 100 Hz	0.17 %		
					100 Hz to 1 MHz	0.12 %		
		2 kΩ	to	4 kΩ	20 Hz to 50 Hz	0.33 %		
					50 Hz to 100 Hz	0.16 %		
					100 Hz to 300 kHz	0.11 %		
					300 kHz to 1 MHz	0.17 %		
		4 kΩ	to	20 kΩ	20 Hz to 50 Hz	0.34 %		
					50 Hz to 100 Hz	0.16 %		
					100 Hz to 100 kHz	0.11 %		
					100 kHz to 300 kHz	0.17 %		
					300 kHz to 1 MHz	0.19 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		20 kΩ	to	100 kΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.37 % 0.19 % 0.13 % 0.17 % 0.20 % 0.28 %		
		100 kΩ	to	320 kΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 30 kHz 30 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.46 % 0.26 % 0.15 % 0.20 % 0.28 % 0.55 %		
		320 kΩ	to	400 kΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.49 % 0.28 % 0.21 % 0.31 % 0.65 %		
		400 kΩ	to	500 kΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.53 % 0.31 % 0.22 % 0.34 % 0.77 %		
		500 kΩ	to	700 kΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz	0.61 % 0.37 % 0.25 % 0.42 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				300 kHz to 1 MHz	1.1 %			
		700 kΩ	to	900 kΩ	20 Hz to 50 Hz	0.69 %		
					50 Hz to 100 Hz	0.43 %		
					100 Hz to 100 kHz	0.27 %		
					100 kHz to 300 kHz	0.49 %		
					300 kHz to 1 MHz	1.3 %		
		900 kΩ	to	1 MΩ	20 Hz to 50 Hz	0.73 %		
					50 Hz to 100 Hz	0.46 %		
					100 Hz to 100 kHz	0.28 %		
					100 kHz to 300 kHz	0.53 %		
					300 kHz to 1 MHz	1.4 %		
		1 MΩ	to	2 MΩ	20 Hz to 50 Hz	1.2 %		
					50 Hz to 100 Hz	0.75 %		
					100 Hz to 100 kHz	0.41 %		
					100 kHz to 300 kHz	0.90 %		
					300 kHz to 1 MHz	2.7 %		
		2 MΩ	to	4 MΩ	20 Hz to 50 Hz	2.0 %		
					50 Hz to 100 Hz	1.4 %		
					100 Hz to 100 kHz	0.65 %		
					100 kHz to 300 kHz	1.7 %		
					300 kHz to 1 MHz	5.1 %		
		4 MΩ	to	6 MΩ	20 Hz to 50 Hz	2.8 %		
					50 Hz to 100 Hz	2.0 %		
					100 Hz to 100 kHz	0.90 %		
					100 kHz to 300 kHz	2.4 %		
					300 kHz to 1 MHz	7.6 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		6 MΩ	to	8 MΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz	3.6 % 2.6 % 1.2 % 3.2 %		
		8 MΩ	to	10 MΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz	4.4 % 3.2 % 1.4 % 3.9 %		
		10 MΩ	to	15 MΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz	6.4 % 4.8 % 2.2 % 5.8 %		
		15 MΩ	to	20 MΩ	20 Hz to 50 Hz 50 Hz to 100 Hz 100 Hz to 100 kHz 100 kHz to 300 kHz	8.4 % 6.3 % 2.8 % 7.6 %		
		20 MΩ	to	25 MΩ	100 Hz to 1 kHz 1 kHz to 100 kHz	3.5 % 3.3 %		
		25 MΩ	to	30 MΩ	100 Hz to 1 kHz 1 kHz to 100 kHz	4.1 % 3.9 %		
		0.5 Ω	to	0.6 Ω	1 MHz to 2 MHz	8.7 %		
AC resistance / AC resistance standards for frequencies from 1 MHz to 8 MHz		0.6 Ω	to	0.7 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz	7.3 % 8.7 %	Direct measurement by a LCR meter	TP6, TP24

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		min	unit					
		0.7 Ω	to	0.8 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz	6.2 % 7.5 % 8.7 %		
		0.8 Ω	to	0.9 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	5.5 % 6.5 % 7.6 % 8.7 %		
		0.9 Ω	to	1 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	4.9 % 5.8 % 6.8 % 7.8 %		
		3 Ω	to	4 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz	8.0 % 9.6 %		
		4 Ω	to	5 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	6.2 % 7.4 % 8.6 % 9.9 %		
		5 Ω	to	6 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	5.1 % 6.1 % 7.1 % 8.1 %		
		6 Ω	to	7 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	4.4 % 5.2 % 6.1 % 7.0 %		
		7 Ω	to	8 Ω	1 MHz to 2 MHz	3.9 %		

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		min	unit					
				2 MHz to 3 MHz	4.6 %			
				3 MHz to 4 MHz	5.4 %			
				4 MHz to 5 MHz	6.2 %			
				5 MHz to 6 MHz	9.2 %			
		8 Ω	to	9 Ω	1 MHz to 2 MHz	3.5 %		
					2 MHz to 3 MHz	4.2 %		
					3 MHz to 4 MHz	4.8 %		
					4 MHz to 5 MHz	5.5 %		
					5 MHz to 6 MHz	8.3 %		
					6 MHz to 7 MHz	9.6 %		
		9 Ω	to	10 Ω	1 MHz to 2 MHz	3.2 %		
					2 MHz to 3 MHz	3.8 %		
					3 MHz to 4 MHz	4.4 %		
					4 MHz to 5 MHz	5.5 %		
					5 MHz to 6 MHz	7.6 %		
					6 MHz to 7 MHz	8.8 %		
		10 Ω	to	20 Ω	1 MHz to 2 MHz	4.8 %		
					2 MHz to 3 MHz	5.8 %		
					3 MHz to 4 MHz	6.7 %		
					4 MHz to 5 MHz	7.7 %		
		20 Ω	to	30 Ω	1 MHz to 2 MHz	3.4 %		
					2 MHz to 3 MHz	4.0 %		
					3 MHz to 4 MHz	4.7 %		
					4 MHz to 5 MHz	5.4 %		
					5 MHz to 6 MHz	8.0 %		
					6 MHz to 7 MHz	9.3 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		30 Ω	to	50 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz 6 MHz to 7 MHz 7 MHz to 8 MHz	2.9 % 3.5 % 4.0 % 4.6 % 6.9 % 8.0 % 9.1 %		
		50 Ω	to	100 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz 6 MHz to 7 MHz 7 MHz to 8 MHz	2.5 % 3.0 % 3.5 % 4.0 % 5.9 % 6.9 % 7.9 %		
		100 Ω	to	300 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz 6 MHz to 7 MHz 7 MHz to 8 MHz	2.8 % 3.3 % 3.9 % 4.4 % 6.8 % 7.7 % 8.8 %		
		300 Ω	to	500 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz	3.4 % 4.0 % 4.7 % 5.4 % 8.0 %		

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		min	unit					
				6 MHz to 7 MHz	9.3 %			
		500 Ω	to	700 Ω	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz	3.9 % 4.6 % 5.5 % 6.3 % 9.4 %		
		700 Ω	to	1 kΩ	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	4.8 % 5.7 % 6.7 % 7.6 %		
		1 kΩ	to	2 kΩ	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz 5 MHz to 6 MHz	3.7 % 4.4 % 5.1 % 5.8 % 8.7 %		
		2 kΩ	to	3 kΩ	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	4.4 % 5.2 % 6.1 % 7.0 %		
		3 kΩ	to	4 kΩ	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz 4 MHz to 5 MHz	5.1 % 6.1 % 7.1 % 8.1 %		
		4 kΩ	to	5 kΩ	1 MHz to 2 MHz 2 MHz to 3 MHz 3 MHz to 4 MHz	5.8 % 7.0 % 8.1 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
AC resistance / AC resistance meters				4 MHz to 5 MHz	9.3 %			
		5 kΩ	to	7 kΩ	1 MHz to 2 MHz	7.3 %		
					2 MHz to 3 MHz	8.7 %		
		7 kΩ	to	9 kΩ	1 MHz to 2 MHz	8.7 %		
	AC resistance / AC resistance meters	9 kΩ	to	10 kΩ	1 MHz to 2 MHz	9.4 %	Direct measurement of a resistance standard, real impedance component	TP6, TP24
		0.1 Ω		10 Hz to 10 kHz	0.14 %			
				10 kHz to 100 kHz	0.18 %			
				100 kHz to 300 kHz	0.34 %			
				300 kHz to 500 kHz	0.47 %			
		1 Ω		500 kHz to 1 MHz	0.54 %			
				10 Hz to 10 kHz	0.038 %			
				10 kHz to 100 kHz	0.065 %			
				100 kHz to 300 kHz	0.074 %			
				300 kHz to 500 kHz	0.076 %			
				500 kHz to 1 MHz	0.098 %			
				1 MHz to 5 MHz	0.24 %			
		10 Ω		5 MHz to 10 MHz	0.47 %			
				10 Hz to 10 kHz	0.043 %			
				10 kHz to 100 kHz	0.055 %			
				100 kHz to 300 kHz	0.050 %			
				300 kHz to 500 kHz	0.045 %			
				500 kHz to 1 MHz	0.063 %			

**The Appendix is an integral part of
Certificate of Accreditation No. 71/2022 of 14/02/2022**

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

HES, s.r.o.
Calibration Laboratory
U Dráhy 411/11, 664 49 Ostopovice

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				1 MHz to 5 MHz	0.21 %			
				5 MHz to 10 MHz	0.38 %			
		100 Ω		10 Hz to 10 kHz	0.005 %			
				10 kHz to 300 kHz	0.021 %			
				300 kHz to 1 MHz	0.022 %			
				1 MHz to 5 MHz	0.20 %			
				5 MHz to 10 MHz	0.21 %			
		1 kΩ		10 Hz to 10 kHz	0.005 %			
				10 kHz to 1 MHz	0.025 %			
				1 MHz to 5 MHz	0.21 %			
				5 MHz to 10 MHz	0.22 %			
		10 kΩ		10 Hz to 1 MHz	0.025 %			
		100 kΩ		10 Hz to 10 kHz	0.010 %			
				10 kHz to 500 kHz	0.11 %			
				500 kHz to 1 MHz	0.12 %			
		1 MΩ		10 Hz to 1 kHz	0.010 %			
				1 kHz to 1 MHz	0.11 %			
		10 MΩ		10 Hz to 10 kHz	0.016 %			
				10 kHz to 100 kHz	0.38 %			
				100 kHz to 300 kHz	0.52 %			
				300 kHz to 1 MHz	0.58 %			
7*	Capacity / Capacity standards	1 pF	to	5 pF		Direct measurement by a RLC meter	TP7, TP24	
				10 kHz to 15 kHz	2.2 %			
				15 kHz to 20 kHz	1.5 %			
				20 kHz to 25 kHz	1.2 %			
				25 kHz to 30 kHz	0.94 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				30 kHz to 40 kHz 40 kHz to 50 kHz 50 kHz to 60 kHz 60 kHz to 70 kHz 70 kHz to 80 kHz 80 kHz to 100 kHz 100 kHz to 110 kHz 110 kHz to 120 kHz 120 kHz to 130 kHz 130 kHz to 140 kHz 140 kHz to 150 kHz 150 kHz to 170 kHz 170 kHz to 200 kHz 200 kHz to 250 kHz 250 kHz to 300 kHz 300 kHz to 350 kHz 350 kHz to 400 kHz 400 kHz to 450 kHz 450 kHz to 500 kHz 500 kHz to 600 kHz 600 kHz to 700 kHz 700 kHz to 800 kHz 800 kHz to 1 MHz	0.81 % 0.65 % 0.55 % 0.49 % 0.44 % 0.40 % 0.75 % 0.69 % 0.65 % 0.61 % 0.58 % 0.55 % 0.50 % 0.45 % 0.39 % 0.81 % 0.72 % 0.65 % 0.59 % 0.55 % 0.49 % 0.44 % 0.40 %			
		5 pF	to	10 pF	1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 4 kHz	4.1 % 2.2 % 1.5 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				4 kHz to 5 kHz	1.2 %			
				5 kHz to 6 kHz	0.94 %			
				6 kHz to 7 kHz	0.81 %			
				7 kHz to 8 kHz	0.72 %			
				8 kHz to 9 kHz	0.65 %			
				9 kHz to 10 kHz	0.59 %			
				10 kHz to 15 kHz	0.55 %			
				15 kHz to 20 kHz	0.42 %			
				20 kHz to 25 kHz	0.36 %			
				25 kHz to 30 kHz	0.32 %			
				30 kHz to 1 MHz	0.29 %			
				500 Hz to 600 Hz	4.3 %			
				600 Hz to 700 Hz	3.7 %			
				700 Hz to 800 Hz	3.2 %			
				800 Hz to 900 Hz	2.8 %			
				900 Hz to 1 kHz	2.6 %			
				1 kHz to 2 kHz	2.2 %			
				2 kHz to 3 kHz	1.2 %			
				3 kHz to 4 kHz	0.81 %			
				4 kHz to 5 kHz	0.65 %			
				5 kHz to 6 kHz	0.55 %			
				6 kHz to 7 kHz	0.49 %			
				7 kHz to 8 kHz	0.44 %			
				8 kHz to 9 kHz	0.40 %			
				9 kHz to 10 kHz	0.38 %			
				10 kHz to 15 kHz	0.36 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				15 kHz to 20 kHz	0.29 %			
				20 kHz to 1 MHz	0.26 %			
		50 pF	to	100 pF	100 Hz to 200 Hz	4.3 %		
					200 Hz to 300 Hz	2.3 %		
					300 Hz to 400 Hz	1.7 %		
					400 Hz to 500 Hz	1.4 %		
					500 Hz to 600 Hz	1.2 %		
					600 Hz to 700 Hz	0.99 %		
					700 Hz to 800 Hz	0.89 %		
					800 Hz to 900 Hz	0.82 %		
					900 Hz to 1 kHz	0.77 %		
					1 kHz to 2 kHz	0.55 %		
					2 kHz to 3 kHz	0.36 %		
					3 kHz to 4 kHz	0.29 %		
					4 kHz to 5 kHz	0.26 %		
					5 kHz to 1 MHz	0.24 %		
		100 pF	to	500 pF	50 Hz to 60 Hz	9.9 %		
					60 Hz to 70 Hz	7.9 %		
					70 Hz to 80 Hz	6.5 %		
					80 Hz to 90 Hz	5.6 %		
					90 Hz to 100 Hz	4.9 %		
					100 Hz to 160 Hz	2.3 %		
					160 Hz to 200 Hz	1.4 %		
					200 Hz to 300 Hz	1.2 %		
					300 Hz to 400 Hz	0.81 %		
					400 Hz to 500 Hz	0.65 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				500 Hz to 600 Hz 600 Hz to 700 Hz 700 Hz to 800 Hz 800 Hz to 900 Hz 900 Hz to 1 kHz 1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 4 kHz 4 kHz to 5 kHz 5 kHz to 1 MHz	0.55 % 0.49 % 0.44 % 0.40 % 0.38 % 0.36 % 0.26 % 0.23 % 0.21 % 0.17 %				
		500 pF	to	1 nF	50 Hz to 60 Hz 60 Hz to 70 Hz 70 Hz to 80 Hz 80 Hz to 100 Hz 100 Hz to 160 Hz 160 Hz to 200 Hz 200 Hz to 300 Hz 300 Hz to 400 Hz 400 Hz to 500 Hz 500 Hz to 700 Hz 700 Hz to 1 kHz 1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 4 kHz 4 kHz to 5 kHz 5 kHz to 1 MHz	2.3 % 1.9 % 1.6 % 1.4 % 0.72 % 0.40 % 0.36 % 0.29 % 0.26 % 0.24 % 0.22 % 0.36 % 0.26 % 0.23 % 0.21 % 0.17 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		1 nF	to	5 nF	20 Hz to 30 Hz 30 Hz to 40 Hz 40 Hz to 50 Hz 50 Hz to 60 Hz 60 Hz to 70 Hz 70 Hz to 80 Hz 80 Hz to 90 Hz 90 Hz to 100 Hz 100 Hz to 200 Hz 200 Hz to 300 Hz 300 Hz to 500 Hz 500 Hz to 1 MHz	3.6 % 2.2 % 1.6 % 1.2 % 0.91 % 0.77 % 0.68 % 0.61 % 0.36 % 0.26 % 0.23 % 0.15 %		
		5 nF	to	10 nF	20 Hz to 30 Hz 30 Hz to 40 Hz 40 Hz to 50 Hz 50 Hz to 60 Hz 60 Hz to 70 Hz 70 Hz to 100 Hz 100 Hz to 400 Hz 400 Hz to 500 Hz 500 Hz to 1 MHz	0.97 % 0.70 % 0.58 % 0.35 % 0.31 % 0.28 % 0.20 % 0.17 % 0.13 %		
		10 nF	to	50 nF	20 Hz to 30 Hz 30 Hz to 40 Hz 40 Hz to 50 Hz 50 Hz to 70 Hz 70 Hz to 100 Hz	0.65 % 0.52 % 0.46 % 0.26 % 0.22 %		

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		min	unit					
				100 Hz to 103 kHz	0.13 %			
				103 kHz to 150 kHz	0.19 %			
				150 kHz to 300 kHz	0.21 %			
				300 kHz to 500 kHz	0.28 %			
				500 kHz to 1 MHz	0.39 %			
		50 nF	to	100 nF	20 Hz to 40 Hz	0.40 %		
					40 Hz to 50 Hz	0.36 %		
					50 Hz to 70 Hz	0.26 %		
					70 Hz to 100 Hz	0.22 %		
					100 Hz to 103 kHz	0.13 %		
					103 kHz to 150 kHz	0.19 %		
					150 kHz to 300 kHz	0.21 %		
					300 kHz to 500 kHz	0.28 %		
					500 kHz to 1 MHz	0.39 %		
		100 nF	to	500 nF	20 Hz to 50 Hz	0.36 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 10 kHz	0.12 %		
					10 kHz to 70 kHz	0.22 %		
					70 kHz to 100 kHz	0.25 %		
					100 kHz to 140 kHz	0.27 %		
					140 kHz to 230 kHz	0.34 %		
					230 kHz to 280 kHz	0.38 %		
					280 kHz to 300 kHz	0.40 %		
					300 kHz to 350 kHz	0.56 %		
					350 kHz to 400 kHz	0.62 %		
					400 kHz to 450 kHz	0.68 %		

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		min	unit					
				450 kHz to 500 kHz	0.74 %			
				500 kHz to 600 kHz	0.86 %			
				600 kHz to 700 kHz	0.97 %			
				700 kHz to 800 kHz	1.1 %			
				800 kHz to 1 MHz	1.4 %			
		500 nF	to	1 µF	20 Hz to 50 Hz	0.36 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 10 kHz	0.12 %		
					10 kHz to 70 kHz	0.22 %		
					70 kHz to 100 kHz	0.25 %		
					100 kHz to 120 kHz	0.35 %		
					120 kHz to 150 kHz	0.40 %		
					150 kHz to 180 kHz	0.45 %		
					180 kHz to 220 kHz	0.51 %		
					220 kHz to 250 kHz	0.56 %		
					250 kHz to 300 kHz	0.64 %		
					300 kHz to 350 kHz	0.97 %		
					350 kHz to 400 kHz	1.1 %		
					400 kHz to 500 kHz	1.4 %		
					500 kHz to 600 kHz	1.6 %		
					600 kHz to 700 kHz	1.8 %		
					700 kHz to 1 MHz	2.5 %		
		1 µF	to	5 µF	20 Hz to 50 Hz	0.34 %		
					50 Hz to 5 kHz	0.20 %		
					5 kHz to 10 kHz	0.25 %		
					10 kHz to 15 kHz	0.29 %		

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		min	unit					
				15 kHz to 20 kHz	0.33 %			
				20 kHz to 25 kHz	0.38 %			
				25 kHz to 30 kHz	0.42 %			
				30 kHz to 40 kHz	0.33 %			
				40 kHz to 50 kHz	0.38 %			
				50 kHz to 60 kHz	0.42 %			
				60 kHz to 70 kHz	0.46 %			
				70 kHz to 80 kHz	0.51 %			
				80 kHz to 90 kHz	0.55 %			
				90 kHz to 100 kHz	0.59 %			
				100 kHz to 110 kHz	1.1 %			
				110 kHz to 140 kHz	1.3 %			
				140 kHz to 160 kHz	1.5 %			
				160 kHz to 190 kHz	1.7 %			
				190 kHz to 210 kHz	1.9 %			
				210 kHz to 250 kHz	2.2 %			
				250 kHz to 300 kHz	2.6 %			
				300 kHz to 350 kHz	4.3 %			
				350 kHz to 400 kHz	4.9 %			
				400 kHz to 450 kHz	5.4 %			
				450 kHz to 500 kHz	6.0 %			
	5 µF to 10 µF			20 Hz to 50 Hz	0.34 %			
				50 Hz to 5 kHz	0.20 %			
				5 kHz to 10 kHz	0.25 %			
				10 kHz to 15 kHz	0.29 %			
				15 kHz to 20 kHz	0.33 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				20 kHz to 25 kHz	0.38 %			
				25 kHz to 30 kHz	0.42 %			
				30 kHz to 40 kHz	0.51 %			
				40 kHz to 50 kHz	0.59 %			
				50 kHz to 60 kHz	0.68 %			
				60 kHz to 70 kHz	0.77 %			
				70 kHz to 80 kHz	0.85 %			
				80 kHz to 90 kHz	0.94 %			
				90 kHz to 100 kHz	1.1 %			
				100 kHz to 110 kHz	2.0 %			
				110 kHz to 140 kHz	2.4 %			
				140 kHz to 160 kHz	2.8 %			
				160 kHz to 190 kHz	3.2 %			
				190 kHz to 210 kHz	3.6 %			
				210 kHz to 250 kHz	4.2 %			
				250 kHz to 300 kHz	5.0 %			
		10 µF to 20 µF		20 Hz to 50 Hz	0.34 %			
				50 Hz to 500 Hz	0.20 %			
				500 Hz to 700 Hz	0.22 %			
				700 Hz to 1 kHz	0.25 %			
				1 kHz to 2 kHz	0.33 %			
				2 kHz to 3 kHz	0.42 %			
				3 kHz to 4 kHz	0.51 %			
				4 kHz to 5 kHz	0.59 %			
				5 kHz to 6 kHz	0.68 %			
				6 kHz to 7 kHz	0.77 %			

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		min	unit					
				7 kHz to 8 kHz 8 kHz to 9 kHz 9 kHz to 10 kHz 10 kHz to 15 kHz 15 kHz to 20 kHz 20 kHz to 25 kHz 25 kHz to 30 kHz 30 kHz to 40 kHz 40 kHz to 50 kHz 50 kHz to 60 kHz 60 kHz to 70 kHz 70 kHz to 80 kHz 80 kHz to 90 kHz 90 kHz to 100 kHz	0.85 % 0.94 % 1.1 % 1.5 % 1.9 % 2.4 % 2.8 % 1.9 % 2.4 % 2.8 % 3.2 % 3.7 % 4.1 % 4.6 %			
		20 µF	to	50 µF	20 Hz to 50 Hz 50 Hz to 500 Hz 500 Hz to 700 Hz 700 Hz to 1 kHz 1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 4 kHz 4 kHz to 5 kHz 5 kHz to 6 kHz 6 kHz to 7 kHz 7 kHz to 8 kHz 8 kHz to 9 kHz	0.34 % 0.20 % 0.22 % 0.25 % 0.33 % 0.42 % 0.51 % 0.59 % 0.68 % 0.77 % 0.85 % 0.94 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				9 kHz to 10 kHz	1.1 %			
				10 kHz to 15 kHz	1.5 %			
				15 kHz to 20 kHz	1.9 %			
	50 µF to 100 µF			20 kHz to 25 kHz	2.4 %			
				25 kHz to 30 kHz	2.8 %			
				30 kHz to 40 kHz	1.9 %			
				40 kHz to 50 kHz	2.4 %			
				20 Hz to 50 Hz	0.34 %			
				50 Hz to 500 Hz	0.20 %			
				500 Hz to 700 Hz	0.22 %			
				700 Hz to 1 kHz	0.25 %			
				1 kHz to 2 kHz	0.33 %			
				2 kHz to 3 kHz	0.42 %			
				3 kHz to 4 kHz	0.51 %			
				4 kHz to 5 kHz	0.59 %			
				5 kHz to 6 kHz	0.68 %			
				6 kHz to 7 kHz	0.77 %			
				7 kHz to 8 kHz	0.85 %			
				8 kHz to 9 kHz	0.94 %			
	100 µF to 500 µF			9 kHz to 10 kHz	1.1 %			
				10 kHz to 15 kHz	1.5 %			
				15 kHz to 20 kHz	1.9 %			
				20 Hz to 50 Hz	0.44 %			
	100 µF to 500 µF			50 Hz to 70 Hz	0.29 %			
				70 Hz to 200 Hz	0.33 %			
				200 Hz to 300 Hz	0.42 %			

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		min	unit							
				300 Hz to 400 Hz	0.51 %					
				400 Hz to 500 Hz	0.59 %					
				500 Hz to 600 Hz	0.68 %					
				600 Hz to 700 Hz	0.77 %					
				700 Hz to 800 Hz	0.85 %					
				800 Hz to 900 Hz	0.94 %					
				900 Hz to 2 kHz	1.1 %					
				2 kHz to 3 kHz	1.5 %					
				3 kHz to 4 kHz	1.9 %					
				4 kHz to 5 kHz	2.4 %					
		500 µF to 1 mF		20 Hz to 50 Hz	0.44 %					
				50 Hz to 70 Hz	0.29 %					
				70 Hz to 200 Hz	0.33 %					
				200 Hz to 300 Hz	0.42 %					
				300 Hz to 400 Hz	0.51 %					
				400 Hz to 500 Hz	0.59 %					
				500 Hz to 600 Hz	0.68 %					
				600 Hz to 700 Hz	0.77 %					
				700 Hz to 800 Hz	0.85 %					
				800 Hz to 900 Hz	0.94 %					
				900 Hz to 1 kHz	1.1 %					
				1 kHz to 2 kHz	1.9 %					
		1 mF to 5 mF		20 Hz to 30 Hz	0.70 %					
				30 Hz to 40 Hz	0.78 %					
				40 Hz to 80 Hz	0.89 %					
				80 Hz to 90 Hz	0.96 %					

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				90 Hz to 160 Hz	1.1 %			
				160 Hz to 300 Hz	1.7 %			
				300 Hz to 400 Hz	2.1 %			
				400 Hz to 500 Hz	2.6 %			
				500 Hz to 600 Hz	3.0 %			
				600 Hz to 700 Hz	3.4 %			
				700 Hz to 800 Hz	3.9 %			
				800 Hz to 900 Hz	4.3 %			
				900 Hz to 1 kHz	4.7 %			
		5 mF to 10 mF		50 Hz to 60 Hz	1.4 %			
				60 Hz to 160 Hz	1.9 %			
				160 Hz to 220 Hz	2.3 %			
				220 Hz to 300 Hz	3.0 %			
	Capacity / Electrical capacity meters			1 pF	1 kHz	0.010 %	Direct measurement of a capacity standard	TP7, TP21, TP24
				10 pF	1 kHz	0.004 %		
				100 pF	1 kHz	0.009 %		
				1 nF	1 kHz	0.003 %		
				10 nF	1 kHz	0.003 %		
				100 nF	1 kHz	0.006 %		
				1 µF	1 kHz	0.019 %		
				10 µF	1 kHz	0.053 %		
				100 µF	1 kHz	0.081 %		
		1 pF		100 Hz to 1 kHz		0.019 %		
				1 kHz to 100 kHz		0.022 %		

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		min	unit					
				100 kHz to 1 MHz	0.023 %			
				1 MHz to 10 MHz	0.10 %			
		10 pF		100 Hz to 1 kHz	0.006 %			
				1 kHz to 100 kHz	0.012 %			
				100 kHz to 1 MHz	0.050 %			
				1 MHz to 10 MHz	0.025 %			
		100 pF		100 Hz to 1 kHz	0.011 %			
				1 kHz to 100 kHz	0.011 %			
				100 kHz to 1 MHz	0.021 %			
				1 MHz to 10 MHz	0.31 %			
		1 nF		100 Hz to 1 kHz	0.006 %			
				1 kHz to 100 kHz	0.010 %			
				100 kHz to 1 MHz	0.011 %			
				1 MHz to 10 MHz	0.64 %			
		10 nF		100 Hz to 1 kHz	0.005 %			
				1 kHz to 10 kHz	0.006 %			
				10 kHz to 100 kHz	0.010 %			
		100 nF		100 Hz to 1 kHz	0.015 %			
				1 kHz to 100 kHz	0.013 %			
		1 µF		100 Hz to 1 kHz	0.024 %			
				1 kHz to 10 kHz	0.025 %			
				10 kHz to 100 kHz	0.042 %			
		10 µF		100 Hz to 1 kHz	0.054 %			
				1 kHz to 10 kHz	0.060 %			
				10 kHz to 100 kHz	0.26 %			

**The Appendix is an integral part of
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		min	unit						
		100 µF		100 Hz to 1 kHz	0.25 %				
				1 kHz to 10 kHz	0.24 %				
		220 pF	to	1.1 nF	10 Hz to 10 kHz				
		1.1 nF	to	3.3 nF	10 Hz to 3 kHz				
		3.3 nF	to	11 nF	10 Hz to 1 kHz				
		11 nF	to	110 nF	10 Hz to 1 kHz				
		110 nF	to	330 nF	10 Hz to 1 kHz				
		0.33 µF	to	1.1 µF	10 Hz to 600 Hz				
		1.1 µF	to	3.3 µF	10 Hz to 300 kHz				
		3.3 µF	to	11 µF	10 Hz to 150 Hz				
		11 µF	to	33 µF	10 Hz to 120 Hz				
		33 µF	to	110 µF	10 Hz to 80 Hz				
		110 µF		0 Hz to 50 Hz	0.45 % + 300 nF				
		0.33 mF		0 Hz to 20 Hz	0.45 % + 1 µF				
		1.1 mF		0 Hz to 6 Hz	0.45 % + 3 µF				
8*	Loss factor D / Loss factor meters	3.3 mF		0 Hz to 2 Hz	0.45 % + 10 µF	Direct measurement of reference loss factor at f = 1 kHz	TP30, TP24		
		11 mF		0 Hz to 0.6 Hz	0.75 % + 30 µF				
		33 mF		0 Hz to 0.2 Hz	1 % + 100 µF				
		-0.001		10 pF, 100 pF, 1 nF	0.00001 (abs.)				
		to 0.001		10 nF	0.000011 (abs.)				
				100 nF	0.00006 (abs.)				
		0.001		10 pF, 100 pF, 1 nF	0.00002 (abs.)				
		to 0.01		100 nF	0.00006 (abs.)				
				1 µF	0.0003 (abs.)				

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		0.01	to	0.1		10 pF, 100 pF, 10 nF 1 nF 1 µF	0.00006 (abs.) 0.0011 (abs.) 0.0003 (abs.)			
		0.1	to	1		10 pF, 100 pF, 1 nF, 10 nF 100 nF	0.0006 (abs.) 0.0003 (abs.)			
9*	Inductance / Inductance standards	1 µH	to	5 µH		10 kHz to 15 kHz 15 kHz to 20 kHz 20 kHz to 25 kHz 25 kHz to 30 kHz 30 kHz to 40 kHz 40 kHz to 50 kHz 50 kHz to 60 kHz 60 kHz to 70 kHz 70 kHz to 80 kHz 80 kHz to 90 kHz 90 kHz to 100 kHz 100 kHz to 150 kHz 150 kHz to 200 kHz 200 kHz to 250 kHz 250 kHz to 300 kHz 300 kHz to 400 kHz 400 kHz to 500 kHz 500 kHz to 700 kHz 700 kHz to 1 MHz	2.4 % 1.7 % 1.3 % 1.1 % 0.89 % 0.71 % 0.60 % 0.53 % 0.47 % 0.43 % 0.40 % 0.56 % 0.45 % 0.36 % 0.32 % 0.36 % 0.31 % 0.28 % 0.24 %	Direct measurement by a RLC meter	TP8, TP24	

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
		5 µH	to	10 µH	2 kHz to 3 kHz 3 kHz to 5 kHz 5 kHz to 7 kHz 7 kHz to 10 kHz 10 kHz to 15 kHz 15 kHz to 20 kHz 20 kHz to 25 kHz 25 kHz to 30 kHz 30 kHz to 40 kHz 40 kHz to 50 kHz 50 kHz to 60 kHz 60 kHz to 100 kHz 100 kHz to 150 kHz 150 kHz to 200 kHz 200 kHz to 500 kHz 500 kHz to 1 MHz	2.4 % 1.7 % 1.1 % 0.79 % 0.60 % 0.45 % 0.38 % 0.34 % 0.31 % 0.27 % 0.25 % 0.23 % 0.24 % 0.22 % 0.20 % 0.13 %		
		10 µH	to	50 µH	1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 5 kHz 5 kHz to 7 kHz 7 kHz to 10 kHz 10 kHz to 15 kHz 15 kHz to 20 kHz 20 kHz to 25 kHz 25 kHz to 30 kHz 30 kHz to 50 kHz	2.4 % 1.3 % 0.89 % 0.60 % 0.47 % 0.38 % 0.31 % 0.27 % 0.25 % 0.23 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				50 kHz to 70 kHz	0.21 %			
				70 kHz to 100 kHz	0.19 %			
				100 kHz to 250 kHz	0.20 %			
				250 kHz to 300 kHz	0.12 %			
				300 kHz to 1 MHz	0.13 %			
		50 µH	to	100 µH	200 Hz to 300 Hz	2.6 %		
					300 Hz to 400 Hz	1.8 %		
					400 Hz to 500 Hz	1.3 %		
					500 Hz to 600 Hz	1.1 %		
					600 Hz to 700 Hz	0.89 %		
					700 Hz to 800 Hz	0.79 %		
					800 Hz to 900 Hz	0.71 %		
					900 Hz to 1 kHz	0.65 %		
					1 kHz to 2 kHz	0.60 %		
					2 kHz to 3 kHz	0.38 %		
					3 kHz to 5 kHz	0.31 %		
					5 kHz to 10 kHz	0.25 %		
					10 kHz to 15 kHz	0.21 %		
					15 kHz to 30 kHz	0.19 %		
					30 kHz to 50 kHz	0.18 %		
					50 kHz to 100 kHz	0.12 %		
					100 kHz to 250 kHz	0.20 %		
					250 kHz to 300 kHz	0.12 %		
					300 kHz to 1 MHz	0.13 %		
		100 µH	to	500 µH	80 Hz to 90 Hz	6.2 %		
					90 Hz to 100 Hz	5.4 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				100 Hz to 200 Hz	2.6 %			
				200 Hz to 300 Hz	1.3 %			
				300 Hz to 400 Hz	0.89 %			
				400 Hz to 500 Hz	0.71 %			
				500 Hz to 600 Hz	0.60 %			
				600 Hz to 700 Hz	0.53 %			
				700 Hz to 800 Hz	0.47 %			
				800 Hz to 900 Hz	0.43 %			
				900 Hz to 1 kHz	0.40 %			
				1 kHz to 2 kHz	0.38 %			
				2 kHz to 3 kHz	0.27 %			
				3 kHz to 5 kHz	0.23 %			
				5 kHz to 10 kHz	0.21 %			
				10 kHz to 25 kHz	0.18 %			
				25 kHz to 30 kHz	0.12 %			
				30 kHz to 100 kHz	0.12 %			
				100 kHz to 300 kHz	0.11 %			
				300 kHz to 1 MHz	0.17 %			
		500 µH to 1 mH		50 Hz to 60 Hz	2.3 %			
				60 Hz to 70 Hz	1.9 %			
				70 Hz to 80 Hz	1.6 %			
				80 Hz to 100 Hz	1.4 %			
				100 Hz to 200 Hz	0.60 %			
				200 Hz to 300 Hz	0.38 %			
				300 Hz to 400 Hz	0.31 %			
				400 Hz to 500 Hz	0.27 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				500 Hz to 600 Hz 600 Hz to 900 Hz 900 Hz to 1 kHz 1 kHz to 2 kHz 2 kHz to 3 kHz 3 kHz to 5 kHz 5 kHz to 10 kHz 10 kHz to 25 kHz 25 kHz to 100 kHz 100 kHz to 300 kHz 300 kHz to 1 MHz	0.25 % 0.23 % 0.21 % 0.38 % 0.27 % 0.23 % 0.21 % 0.18 % 0.12 % 0.11 % 0.17 %				
		1 mH	to	5 mH	20 Hz to 30 Hz 30 Hz to 40 Hz 40 Hz to 50 Hz 50 Hz to 60 Hz 60 Hz to 80 Hz 80 Hz to 90 Hz 90 Hz to 100 Hz 100 Hz to 200 Hz 200 Hz to 300 Hz 300 Hz to 500 Hz 500 Hz to 700 Hz 700 Hz to 1 kHz 1 kHz to 3 kHz 3 kHz to 100 kHz 100 kHz to 300 kHz	3.9 % 2.5 % 1.8 % 1.3 % 1.0 % 0.74 % 0.66 % 0.38 % 0.27 % 0.23 % 0.21 % 0.19 % 0.18 % 0.12 % 0.17 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				300 kHz to 600 kHz	0.21 %			
				600 kHz to 1 MHz	0.24 %			
		5 mH	to	10 mH	20 Hz to 30 Hz	1.1 %		
					30 Hz to 40 Hz	0.75 %		
					40 Hz to 50 Hz	0.61 %		
					50 Hz to 60 Hz	0.37 %		
					60 Hz to 70 Hz	0.33 %		
					70 Hz to 80 Hz	0.30 %		
					80 Hz to 90 Hz	0.28 %		
					90 Hz to 100 Hz	0.26 %		
					100 Hz to 200 Hz	0.38 %		
					200 Hz to 300 Hz	0.27 %		
					300 Hz to 500 Hz	0.23 %		
					500 Hz to 700 Hz	0.21 %		
					700 Hz to 1 kHz	0.19 %		
					1 kHz to 3 kHz	0.18 %		
					3 kHz to 100 kHz	0.12 %		
					100 kHz to 300 kHz	0.17 %		
					300 kHz to 600 kHz	0.21 %		
					600 kHz to 1 MHz	0.24 %		
		10 mH	to	50 mH	20 Hz to 30 Hz	0.69 %		
					30 Hz to 40 Hz	0.54 %		
					40 Hz to 50 Hz	0.47 %		
					50 Hz to 60 Hz	0.27 %		
					60 Hz to 80 Hz	0.24 %		
					80 Hz to 100 Hz	0.22 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				100 Hz to 250 Hz 250 Hz to 1 kHz 1 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 200 kHz 200 kHz to 300 kHz 300 kHz to 400 kHz 400 kHz to 500 kHz 500 kHz to 700 kHz 700 kHz to 1 MHz	0.18 % 0.12 % 0.11 % 0.17 % 0.21 % 0.23 % 0.31 % 0.35 % 0.43 % 0.55 %				
		50 mH	to	100 mH	20 Hz to 30 Hz 30 Hz to 50 Hz 50 Hz to 60 Hz 60 Hz to 80 Hz 80 Hz to 100 Hz 100 Hz to 250 Hz 250 Hz to 1 kHz 1 kHz to 30 kHz 30 kHz to 100 kHz 100 kHz to 200 kHz 200 kHz to 300 kHz 300 kHz to 400 kHz 400 kHz to 500 kHz 500 kHz to 600 kHz 600 kHz to 700 kHz 700 kHz to 800 kHz	0.40 % 0.37 % 0.27 % 0.24 % 0.22 % 0.18 % 0.12 % 0.11 % 0.17 % 0.21 % 0.23 % 0.47 % 0.55 % 0.62 % 0.70 % 0.78 %			

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		min	unit					
				800 kHz to 1 MHz	0.93 %			
		100 mH	to	500 mH	20 Hz to 30 Hz	0.27 %		
					30 Hz to 50 Hz	0.35 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 1 kHz	0.12 %		
					1 kHz to 30 kHz	0.13 %		
					30 kHz to 60 kHz	0.21 %		
					60 kHz to 100 kHz	0.24 %		
					100 kHz to 150 kHz	0.33 %		
					150 kHz to 200 kHz	0.39 %		
					200 kHz to 250 kHz	0.45 %		
					250 kHz to 300 kHz	0.51 %		
					300 kHz to 400 kHz	1.8 %		
					400 kHz to 500 kHz	2.1 %		
					500 kHz to 600 kHz	2.5 %		
					600 kHz to 700 kHz	2.9 %		
					700 kHz to 800 kHz	3.3 %		
					800 kHz to 900 kHz	3.7 %		
					900 kHz to 1 MHz	4.1 %		
		500 mH	to	1 H	20 Hz to 30 Hz	0.27 %		
					30 Hz to 50 Hz	0.35 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 1 kHz	0.12 %		
					1 kHz to 30 kHz	0.13 %		
					30 kHz to 60 kHz	0.21 %		
					60 kHz to 100 kHz	0.24 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				100 kHz to 150 kHz	0.51 %				
				150 kHz to 200 kHz	0.62 %				
				200 kHz to 250 kHz	0.74 %				
				250 kHz to 300 kHz	0.86 %				
				300 kHz to 400 kHz	3.3 %				
				400 kHz to 500 kHz	4.1 %				
				500 kHz to 600 kHz	4.9 %				
				600 kHz to 700 kHz	5.6 %				
				700 kHz to 800 kHz	6.4 %				
				800 kHz to 900 kHz	7.2 %				
			1 H to 2 H	900 kHz to 1 MHz	8.0 %				
				20 Hz to 50 Hz	0.34 %				
				50 Hz to 100 Hz	0.18 %				
				100 Hz to 1 kHz	0.12 %				
				1 kHz to 5 kHz	0.15 %				
				5 kHz to 10 kHz	0.24 %				
				10 kHz to 15 kHz	0.28 %				
				15 kHz to 20 kHz	0.31 %				
				20 kHz to 25 kHz	0.35 %				
				25 kHz to 30 kHz	0.38 %				
				30 kHz to 50 kHz	0.35 %				
				50 kHz to 70 kHz	0.43 %				
				70 kHz to 100 kHz	0.55 %				
				100 kHz to 150 kHz	1.9 %				
				150 kHz to 200 kHz	2.5 %				
				200 kHz to 250 kHz	3.1 %				

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				250 kHz to 300 kHz	3.7 %			
				300 kHz to 400 kHz	6.4 %			
				400 kHz to 500 kHz	8.0 %			
		2 H	to	5 H	20 Hz to 50 Hz	0.34 %		
					50 Hz to 100 Hz	0.18 %		
					100 Hz to 1 kHz	0.12 %		
					1 kHz to 5 kHz	0.15 %		
					5 kHz to 10 kHz	0.24 %		
					10 kHz to 15 kHz	0.28 %		
					15 kHz to 20 kHz	0.31 %		
					20 kHz to 25 kHz	0.35 %		
					25 kHz to 30 kHz	0.38 %		
					30 kHz to 50 kHz	0.35 %		
					50 kHz to 70 kHz	0.43 %		
					70 kHz to 100 kHz	0.55 %		
					100 kHz to 150 kHz	1.9 %		
					150 kHz to 200 kHz	2.5 %		
					200 kHz to 250 kHz	3.1 %		
					250 kHz to 300 kHz	3.7 %		
		5 H	to	10 H	50 Hz to 100 Hz	0.18 %		
					100 Hz to 1 kHz	0.12 %		
					1 kHz to 5 kHz	0.15 %		
					5 kHz to 10 kHz	0.24 %		
					10 kHz to 15 kHz	0.28 %		
					15 kHz to 20 kHz	0.31 %		
					20 kHz to 25 kHz	0.35 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				25 kHz to 30 kHz 30 kHz to 40 kHz 40 kHz to 50 kHz 50 kHz to 60 kHz 60 kHz to 70 kHz 70 kHz to 80 kHz 80 kHz to 90 kHz 90 kHz to 100 kHz 100 kHz to 150 kHz 150 kHz to 200 kHz 200 kHz to 250 kHz 250 kHz to 300 kHz	0.38 % 0.47 % 0.55 % 0.62 % 0.70 % 0.78 % 0.86 % 0.93 % 3.7 % 4.9 % 6.0 % 7.2 %				
		10 H	to	50 H	50 Hz to 100 Hz 100 Hz to 500 Hz 500 Hz to 800 Hz 800 Hz to 2 kHz 2 kHz to 3 kHz 3 kHz to 5 kHz 5 kHz to 7 kHz 7 kHz to 10 kHz 10 kHz to 15 kHz 15 kHz to 20 kHz 20 kHz to 25 kHz 25 kHz to 30 kHz 30 kHz to 40 kHz 40 kHz to 50 kHz	0.18 % 0.15 % 0.22 % 0.24 % 0.28 % 0.35 % 0.43 % 0.55 % 0.74 % 0.93 % 1.2 % 1.4 % 1.8 % 2.1 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				50 kHz to 60 kHz	2.5 %			
				60 kHz to 70 kHz	2.9 %			
				70 kHz to 80 kHz	3.3 %			
				80 kHz to 90 kHz	3.7 %			
				90 kHz to 100 kHz	4.1 %			
		50 H	to	100 H	50 Hz to 100 Hz	0.18 %		
					100 Hz to 500 Hz	0.15 %		
					500 Hz to 800 Hz	0.22 %		
					800 Hz to 1 kHz	0.24 %		
					1 kHz to 2 kHz	0.31 %		
					2 kHz to 3 kHz	0.39 %		
					3 kHz to 5 kHz	0.55 %		
					5 kHz to 7 kHz	0.70 %		
					7 kHz to 10 kHz	0.93 %		
					10 kHz to 15 kHz	1.4 %		
					15 kHz to 20 kHz	1.8 %		
					20 kHz to 25 kHz	2.1 %		
					25 kHz to 30 kHz	2.5 %		
		100 H	to	500 H	20 Hz to 35 Hz	0.38 %		
					35 Hz to 50 Hz	0.40 %		
					50 Hz to 70 Hz	0.28 %		
					70 Hz to 200 Hz	0.31 %		
					200 Hz to 300 Hz	0.39 %		
					300 Hz to 400 Hz	0.47 %		
					400 Hz to 500 Hz	0.55 %		
					500 Hz to 600 Hz	0.62 %		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place	
		min	unit						
				600 Hz to 700 Hz 700 Hz to 800 Hz 800 Hz to 900 Hz 900 Hz to 2 kHz 2 kHz to 3 kHz 3 kHz to 5 kHz 5 kHz to 7 kHz 7 kHz to 8 kHz 8 kHz to 9 kHz 9 kHz to 10 kHz	0.70 % 0.78 % 0.86 % 0.93 % 1.4 % 2.1 % 2.9 % 3.3 % 3.7 % 4.1 %				
		500 H	to	1 kH	20 Hz to 35 Hz 35 Hz to 50 Hz 50 Hz to 70 Hz 70 Hz to 100 Hz 100 Hz to 200 Hz 200 Hz to 300 Hz 300 Hz to 400 Hz 400 Hz to 500 Hz 500 Hz to 600 Hz 600 Hz to 700 Hz 700 Hz to 800 Hz 800 Hz to 900 Hz 900 Hz to 1 kHz	0.38 % 0.40 % 0.28 % 0.31 % 0.31 % 0.39 % 0.47 % 0.55 % 0.62 % 0.70 % 0.78 % 0.86 % 0.93 %			
	Inductance / Inductance meters			1 μH	1 kHz	0.20 %	Direct measurement of an inductance standard	TP8, TP24	

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		min	unit					
		10 µH		1 kHz	0.14 %			
		100 µH		1 kHz	0.03 %			
		1 mH		100 Hz, 1 kHz, 10 kHz	0.02 %			
		10 mH		100 Hz, 1 kHz, 10 kHz	0.03 %			
		100 mH		100 Hz, 1 kHz, 10 kHz	0.03 %			
		1 H		100 Hz, 1 kHz	0.02 %			
		10 H		100 Hz, 1 kHz	0.05 %			
		100 H		1 kHz	0.2 %			
		1,000 H		1 kHz	1.5 %			
10*	Non-linear distortion / Non-linear distortion meters	0.01 %	to	100 %	20 Hz to 20 kHz 20 kHz to 50 kHz 50 kHz to 100 kHz	0.003 % 0.03 % 0.05 %	Comparison with a distortion analyzer	TP10
	Nonlinear distortion / sine signal generators	0.01 %	to	100 %	20 Hz to 20 kHz (BW 80 kHz) 20 kHz to 50 kHz (BW 500 kHz) 50 kHz to 100 kHz (BW 500 kHz)	1 dB + 0.01 % (abs.) 2 dB + 0.04 % (abs.) 2 dB + 0.06 % (abs.)	Measurement by a distortion analyzer	TP10
11*	HF power / HF power meters and sources and spectrum analyzers, radio communication testers (COM, CMS, CTS,...) and radio navigation testers, simulators and imitators (ATC, DMF, TACAN,	-50 dBm	to	-20 dBm	10 MHz to 30 MHz	7.8 %	Measurement by a wattmeter, 50 Ω	TP11, TP23

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		min	unit					
	VOR – ILS, TCAS), testing and inspection equipment and their parts			30 MHz to 18 GHz	5.4 %			
		-20 dBm	to	+17 dBm	10 MHz to 30 MHz	6.5 %		
				30 MHz to 18 GHz	4.4 %			
		+17 dBm	to	+40 dBm	10 MHz to 18 GHz	5.7 %		
12*	HF voltage, peak-to-peak value / HF voltage meters, oscilloscopes	5 mV to 3 V		50 kHz to 1 MHz	4.7 %	Direct generation by a calibrator, 50 Ω	TP12, TP23	
				1 MHz to 10 MHz	6.6 %			
				10 MHz to 30 MHz	9.0 %			
				30 MHz to 250 MHz	6.8 %			
		3 V to 5.5 V		50 kHz to 1 MHz	4.7 %			
	HF voltage, peak-to-peak value / HF voltage sources			1 MHz to 10 MHz	6.6 %	Measurement by a wattmeter, 50 Ω	TP12	
				10 MHz to 30 MHz	9.0 %			
				30 MHz to 250 MHz	6.8 %			
				250 MHz to 300 MHz	6.8 %			
		20 mV to 1.5 V		20 MHz to 30 MHz	6.9 %			
				30 MHz to 100 MHz	4.7 %	Measurement by a HF voltmeter, 50 Ω	TP12	
				100 MHz to 1 GHz	4.3 %			
		40 mV to 100 mV		1 MHz to 10 MHz	3.2 %			
		100 mV to 250 mV		10 MHz to 20 MHz	3.5 %			
				1 MHz to 10 MHz	3.7 %			
				10 MHz to 20 MHz	4.9 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
		250 mV	to	1 V		1 MHz to 10 MHz 10 MHz to 20 MHz	2.5 % 3.6 %			
		1 V	to	1.5 V		1 MHz to 10 MHz	3.9 %			
		1.5 V	to	3 V		1 MHz to 10 MHz	3.3 %			
13	HF attenuation / HF attenuator	0 dB	to	60 dB		1.2 GHz to 3.8 GHz 3.8 GHz to 8.2 GHz 8.2 GHz to 18 GHz	0.30 dB 0.40 dB 0.70 dB	Direct measurement with attenuation meter, comparison method	TP13	
		60 dB	to	80 dB		1.2 GHz to 3.8 GHz 3.8 GHz to 8.2 GHz 8.2 GHz to 18 GHz	0.80 dB 1.2 dB 1.5 dB			
13*	HF attenuation / HF attenuators and attenuation meters, radio communication testers (COM, CMS, CTS,...) and radio navigation testers, simulators and imitators (ATC, DMF, TACAN, VOR – ILS, TCAS), testing and inspection equipment and their parts	0 dB	to	30 dB		10 MHz to 30 MHz 30 MHz to 2 GHz 2 GHz to 18 GHz	0.50 dB 0.15 dB 0.35 dB	Wattmeter measurement, power method	TP13	
		30 dB	to	50 dB		10 MHz to 30 MHz 30 MHz to 2 GHz	0.70 dB 0.35 dB			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
						2 GHz to 18 GHz	0.50 dB			
14*	Depth of AM / amplitude modulated signal generators, amplitude modulation meters, radio communication testers (COM, CMS, CTS,...) and radio navigation testers, simulators and imitators (ATC, DMF, TACAN, VOR – ILS, TCAS), testing and inspection equipment and their parts	5 %	to	99 %		f _c f _{mod} 150 kHz to 10 MHz 20 Hz to 50 Hz 50 Hz to 10 kHz	3.2 % rel. 3.2 % rel. 2.2 % rel.	Direct measurement by AM depth meter	TP14	
15*	FM frequency deviation / frequency modulated signal generators, frequency modulation meters, radio communication testers (COM, CMS, CTS,...) and radio navigation testers,					f _c f _{mod}		Direct measurement with a FM frequency deviation meter		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
	simulators and imitators (ATC, DMF, TACAN, VOR – ILS, TCAS), testing and inspection equipment and their parts	90 Hz	to	40 kHz	150 kHz to 10 MHz	20 Hz to 10 kHz	2.1 % + 1 Hz			
		90 Hz	to	400 kHz	10 MHz to 1.3 GHz	20 Hz to 50 Hz	5.1 % + 1 Hz			
					50 Hz to 100 kHz		1.1 % + 1 Hz			
					100 kHz to 200 kHz		5.1 % + 1 Hz			
16*	DC power / DC wattmeters	0.1 mW	to	11 kW	33 mV to 25 V	3.3 mA to 9 mA	0.04 %	Direct generation with a calibrator	TP16	
					9 mA to 33 mA		0.03 %			
					33 mA to 90 mA		0.04 %			
					90 mA to 330 mA		0.03 %			
					0.33 A to 0.9 A		0.08 %			
					0.9 A to 2.2 A		0.06 %			
					2.2 A to 4.5 A		0.12 %			
					4.5 A to 11 A		0.09 %			
					25 V to 100 V	3.3 mA to 9 mA	0.04 %			
						9 mA to 33 mA	0.03 %			
						33 mA to 50 mA	0.04 %			
						50 mA to 100 mA	0.013 %			
						100 mA to 330 mA	0.03 %			
						0.33 A to 0.9 A	0.08 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				0.9 A to 2.2 A	0.06 %			
				2.2 A to 4.5 A	0.12 %			
				4.5 A to 11 A	0.09 %			
				100 V to 1,000 V	3.3 mA to 9 mA			
				9 mA to 33 mA	0.03 %			
				33 mA to 90 mA	0.04 %			
				90 mA to 330 mA	0.03 %			
				0.33 A to 0.9 A	0.08 %			
				0.9 A to 2.2 A	0.06 %			
				2.2 A to 4.5 A	0.12 %			
	DC power / Sources	363 mW to 550 kW	33 mV to 1,000 V	11 A to 550 A	0.50 %	Indirect generation with a current coil calibrator	TP16	
	AC power / AC wattmeters (f: 45 Hz to 65 Hz, PF = 1)	1 mW to 200 kW	1 V to 1,000 V	1 mA to 200 mA 200 mA to 200 A	0.009 % 0.045 %	Direct measurement with multimeters or indirect measurement with a current shunt	TP16	
17*	AC power / AC wattmeters (f: 45 Hz to 65 Hz, PF = 1)	0.1 mW to 11 kW	33 mV to 330 mV	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A	0.40 % 0.25 % 0.35 % 0.25 % 0.35 % 0.25 %	Direct generation with a calibrator	TP16	

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		min	unit					
				2.2 A to 4.5 A	0.35 %			
				4.5 A to 11 A	0.25 %			
				330 mV to 1,000 V	0.25 %			
				3.3 mA to 9 mA	0.15 %			
				9 mA to 33 mA	0.25 %			
				33 mA to 90 mA	0.25 %			
				90 mA to 330 mA	0.15 %			
				0.33 A to 0.9 A	0.25 %			
				0.9 A to 2.2 A	0.15 %			
				2.2 A to 4.5 A	0.20 %			
		11 kW to 550 kW	33 mV to 1,000 V	11 A to 550 A	0.60 %	Indirect generation with a current coil calibrator	TP16	
	AC power / AC wattmeters (f: 65 Hz to 500 Hz, PF = 1)	1.089 mW to 11 kW	330 mV to 1,000 V	3.3 mA to 9 mA	0.26 %	Direct generation with a calibrator	TP16	
	AC power / AC wattmeters (330 mV to 1,000 V, PF = 0.5 inductive and capacitive)	0.545 mW to 5.5 kW	45 Hz to 65 Hz	3.3 mA to 9 mA	0.55 %	Direct generation with a calibrator	TP16	

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit					
				9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A 65 Hz to 500 Hz 3.3 mA to 11 A	0.50 % 0.55 % 0.50 % 0.55 % 0.50 % 0.55 % 0.50 % 2.8 %			
18*	DC electrical work / DC electrical work meters (t: 600 s to 24 h)	66 mWs to 950.4 MWs		33 mV to 25 V 25 V to 100 V	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A 3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 50 mA 50 mA to 100 mA 100 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A	0.055 % 0.050 % 0.055 % 0.050 % 0.090 % 0.070 % 0.13 % 0.10 % 0.055 % 0.050 % 0.055 % 0.040 % 0.050 % 0.090 % 0.070 % 0.13 %	Direct generation with a calibrator	TP16

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place		
		min	unit							
DC electrical work / Special electrical work meters with current inputs (t: 600 s to 24 h)		4.5 A to 11 A 100 V to 1,000 V	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A	4.5 A to 11 A	0.10 %					
				100 V to 1,000 V	0.055 %					
				9 mA to 33 mA	0.050 %					
19*	AC electrical work / AC electrical work meters (f: 45 Hz to 65 Hz, PF = 1, t: 600 s to 24 h)	217.8 Ws to 47.52 GWs	33 mV to 1,000 V 11 A to 550 A	33 mA to 90 mA	0.055 %					
				90 mA to 330 mA	0.050 %					
				0.33 A to 0.9 A	0.090 %					
0 Ws to 2.4 GWh				0.9 A to 2.2 A	0.070 %					
				2.2 A to 4.5 A	0.13 %					
				4.5 A to 11 A	0.10 %					
0 Ws to 2.4 GWh		I ₁ : 0 μA to 2 A I ₂ : 10 μA to 2 A	33 mV to 1,000 V 11 A to 550 A	Indirect generation with a current coil calibrator	TP16					
				Direct generation with calibrators	TP16					
				0.1 % + 1 Ws						
0.66 Ws to 950.4 MWs		330 mV to 1,000 V	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A	3.3 mA to 9 mA	0.28 %					
				9 mA to 33 mA	0.18 %					
				33 mA to 90 mA	0.28 %					
				90 mA to 330 mA	0.18 %					
				0.33 A to 0.9 A	0.28 %					
				0.9 A to 2.2 A	0.18 %					
				2.2 A to 4.5 A	0.23 %					
				4.5 A to 11 A	0.18 %					

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit			
		2.178 kWs	to	47.52 GWs	330 mV to 1,000 V	11 A to 550 A	0.63 %	Indirect generation with a current coil calibrator
	AC electrical work / AC electrical work meters (f: 65 Hz to 500 Hz, PF = 1, t: 600 s to 24 h)	0.66 Ws	to	950.4 MWs	330 mV to 1,000 V	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A	0.29 % 0.19 % 0.29 % 0.19 % 0.29 % 0.19 % 0.24 % 0.19 %	Direct generation with a calibrator
	AC electrical work / AC electrical work meters (f: 45 Hz to 65 Hz, PF = 0.5 inductive and capacitive t: 600 s to 24 h)	0.33 Ws	to	475.2 MWs	330 mV to 1,000 V	3.3 mA to 9 mA 9 mA to 33 mA 33 mA to 90 mA 90 mA to 330 mA 0.33 A to 0.9 A 0.9 A to 2.2 A 2.2 A to 4.5 A 4.5 A to 11 A	0.58 % 0.53 % 0.58 % 0.53 % 0.58 % 0.53 % 0.58 % 0.53 %	

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place
		min	unit	max	unit					
	AC electrical work / AC electrical work meters (f: 65 Hz to 500 Hz, PF = 0.5 inductive and capacitive t: 600 s to 24 h)	0.33	Ws	to	475.2	MWs	330 mV to 1,000 V	3.3 mA to 11 A	2.9 %	
20*	Reflection coefficient / Measurement of impedance matching at 50 Ω impedance	0.00	to	0.10			10 MHz to 2 GHz	0.020	Measurement with a directional bridge, N connector, 50 Ω	TP17
		0.10	to	0.20			10 MHz to 2 GHz	0.030		
		0.20	to	0.30			10 MHz to 2 GHz	0.045		
		0.00	to	0.15			2 GHz to 18 GHz	0.070	Measurement with a directional coupling, N connector, 50 Ω	TP17
		0.15	to	0.20			2 GHz to 18 GHz	0.080		
		0.20	to	0.30			2 GHz to 18 GHz	0.10		
21*	Voltages above 1,000 V / DC and AC high voltage sources and surge generators - peak value	1 kV	to	3 kV			0 Hz	0.21 %	Measurement with a multimeter with a resistance divider	TP18
		3 kV	to	90 kV			0 Hz	0.20 %		
		90 kV	to	100 kV			0 Hz	0.25 %	High voltage probe measurement	TP18
		1 kV	to	1.5 kV			up to 75 MHz	3 dB		
		1 kV	to	3 kV			up to 10 MHz	3 dB		
		1 kV	to	8 kV			up to 1 MHz	3 dB		

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ₃	Work- place
		min	unit	max	unit					
1	Voltages above 1,000 V / DC and AC high voltage meters, HV voltage/current transducers	1 kV	to	10 kV		up to 500 kHz rise time >10 ns	3 dB			TP18
		1 kV	to	14 kV			3 dB			
		1 kV	to	25 kV		50 Hz	0.3 %	Measurement using a measuring transformer	TP18	
		1 kV	to	4 kV		50 Hz	0.5 %	Generation using generator and measuring transformer	TP18	
		1 kV	to	30 kV		0 Hz	0.25 %	Generation using a generator and resistor divider	TP18	
22	Mains impedance / Instruments for the inspection of electrical installations and resistance-based impedance standards	0.17 Ω	to	1 Ω	0.16 Ω	50 Hz	0.006 Ω		Generation using a reference socket	TP6, TP27
		1 Ω	to	10 Ω		50 Hz	0.5 % + 0.006 Ω			
		10 Ω	to	2 kΩ		50 Hz	0.3 % + 0.006 Ω			
						50 Hz	0.1 % + 0.006 Ω			
23*	Phase shift / Phase shifted voltage signal sources	0 °	to	360 °	2 Hz to 200 kHz	U ₁ = U ₂ , where U ₁ : 10 mV to 50 V U ₂ : 10 mV to 50 V or U ₁ : 10 mV to 30 V U ₂ : 1 V to 250 V	1°	Measurement by a phase shift meter	TP32	

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		min	unit	max	unit					
	Phase shift / Phase shifted voltage signal meters	0 °	to	360 °		U ₁ : 10 mV to 3 V U ₂ : 10 mV to 3 V	1°	Direct generation with a calibrator		
24*	Oscilloscope vertical deflection coefficient	12 mV to 55 V				1 kHz	0.05 % + 20 µV	Direct measurement of commutated voltage with a multimeter	TP2, TP23	
		-300 V	to	300 V		0 Hz	0.005 % + 10 µV	Direct generation with a calibrator	TP2, TP23	
		12 mV	to	55 V		1 kHz	0.30 % + 100 µV			

¹ Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

² 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 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.

³ 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).

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

Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place
		min	unit					
1*	Frequency / LF and HF counters, LF and HF generators, variable speed drives, frequency standards, frequency comparators and pulse generators	0.005 Hz to 400 kHz			$3.3 \times 10^{-4} / f$ (note 4)		TP9, TP22	
		400 kHz	to	1.5 GHz	1.2×10^{-9}			
		1.5 GHz	to	18 GHz	3×10^{-9}			
		1 MHz		τ: 1 s to 2,000 s	3×10^{-10}			
		τ: 2,000 s to 15,000 s		τ: over 15,000 s	1×10^{-11}			
		5 MHz		τ: 1 s to 2,000 s	3×10^{-10}			
		τ: 2,000 s to 15,000 s		τ: over 15,000 s	1×10^{-11}			
		10 MHz		τ: 1 s to 2,000 s	3×10^{-10}			
		τ: 2,000 s to 15,000 s		τ: over 15,000 s	1×10^{-11}			
		10 MHz			5×10^{-12}	Generation of reference signal	TP9, TP22	
		1 Hz	to	18 GHz	1×10^{-11}			
					1×10^{-9}			
2*	Time stamps / Oscilloscopes, transient recorders	1.8 ns	to	2.2 ns	0.005 %	Direct generation by a calibrator, generator	TP23	
		4.5 ns	to	11 ns	0.005 %			
		18 ns	to	22 ns	0.005 %			

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Ord. num- ber ¹	Calibrated quantity / Subject of calibration	Nominal range		Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work- place
		min	unit					
		45 ns	to	60 s		0.005 %		
3*	Rise time / Oscilloscopes, transient recorders			1 s		1×10^{-9}		
				0.1 ns	50 mV, 500 mV, 1 V	0.1 ns	Direct generation by a calibrator, generator	TP23
		0.70 ns	to	0.80 ns	4.5 mV to 5.5 mV 9 mV to 11 mV 45 mV to 55 mV 90 mV to 110 mV 450 mV to 550 mV 0.9 V to 1.1 V	0.3 ns 0.2 ns 0.2 ns 0.2 ns 0.2 ns 0.2 ns		
		0.80 ns	to	0.90 ns	22.5 mV to 27.5 mV 225 mV to 275 mV 2.25 V to 2.75 V	0.2 ns 0.2 ns 0.2 ns		
4*	Time Interval / Stopwatches, timers, time meters and time interval sources	0.1 s	to	10^5 s	Electronically switched	0.004 %	Direct measurement of time by a counter, stopwatch	TP33
		1 s	to	90,000 s	Manually switched	0.20 s	Direct measurement of time intervals with an oscilloscope	TP33
		100 ps	to	60 s		0.2 % + 50 ps		

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³ 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).

⁴ Measured frequency in Hz

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CMC for the field of measured quantity: Physicochemical quantities

Ord. number ¹	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the meas. quantity	Lowest expanded measurement uncertainty specified ²	Calibration principle	Calibration procedure identification ³	Work place
		min	unit	max	unit					
1*	Humidity / Analog and digital hygrometers, humidity transducers and humidity measuring chains, including humidity probes	5 % RH	to	10 % RH			2.2 %	Comparison with a standard hygrometer in a conditioning chamber	TP45	
		10 % RH	to	50 % RH			1.4 %			
		50 % RH	to	70 % RH			1.6 %			
		70 % RH	to	90 % RH			1.8 %			
2*	pH / Electrical parts of pH meters and pH simulators	0 pH	to	14 pH			0.01 pH	Direct generation with a calibrator	TP1, TP21	

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³ 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).