

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

TERMOSONDY Kladno, spol. s r.o.

Calibration Laboratory

Dělnická 81, 272 01 Kladno

CMC for the field of measured quantity: Temperature

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	Thermoelectric temperature sensors made of precious metals	0 °C	up to	200 °C		0.8°C	Direct comparison with the standard	PP-Th 7/1-5-1		
		200 °C	up to	400 °C		1.4°C				
		400 °C	up to	600 °C		1.9°C				
		600 °C	up to	800 °C		2.3°C				
		800 °C	up to	1,000 °C		2.8°C				
		1,000 °C	up to	1,200 °C		3.1°C				
		1,200 °C	up to	1,554 °C		4.9°C				
2	Thermoelectric temperature sensors made of common metals	-30 °C	up to	200 °C		0.5°C	Direct comparison with the standard	PP-Th 7/1-5-1		
		200 °C	up to	400 °C		1.6°C				
		400 °C	up to	600 °C		1.9°C				
		600 °C	up to	800 °C		2.3°C				
		800 °C	up to	1,000 °C		2.8°C				
		1,000 °C	up to	1,200 °C		3.1°C				
3	Resistance temperature sensors			0 °C		0.12°C	Direct comparison with the standard	PP-Th 7/1-5-2		
		-70 °C	up to	-40 °C		0.35°C				
		-40 °C	up to	50 °C		0.16°C				
		50 °C	up to	150 °C		0.18°C				
		150 °C	up to	300 °C		0.60°C				
		300 °C	up to	400 °C		0.71°C				
4	Glass thermometers			0 °C		0.18°C	Direct comparison with the standard	PP-Th 7/1-5-4		
		-30 °C	up to	50 °C		0.23°C				
		50 °C	up to	150 °C		0.25°C				

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

TERMOSONDY Kladno, spol. s r.o.

Calibration Laboratory

Dělnická 81, 272 01 Kladno

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					
5	Infrared thermometers	50 °C	up to	200 °C		4.0°C	Direct comparison with the standard	PP-Th 7/1-5-5		
		200 °C	up to	400 °C		5.0°C				
		400 °C	up to	600 °C		5.8°C				
		600 °C	up to	800 °C		7.9°C				
		800 °C	up to	1,000 °C		10°C				
		1,000 °C	up to	1,100 °C		11°C				
6	Contact thermometers	0 °C	up to	25 °C		1.5°C	Direct comparison with the standard	PP-Th 7/1-5-6		
		25 °C	up to	100 °C		2.0°C				
		100 °C	up to	200 °C		4.3°C				
		200 °C	up to	300 °C		4.9°C				
7	Bimetal and direct indicating thermometers			0 °C		0.28°C	Direct comparison with the standard	PP-Th 7/1-5-17		
		-30 °C	up to	50 °C		0.30°C				
		50 °C	up to	150 °C		0.47°C				
		150 °C	up to	300 °C		1.0°C				
		300 °C	up to	400 °C		2.2°C				
8*	Temperature measuring chains	-70 °C	up to	-40 °C		0.45°C	Direct comparison with the standard	PP-Th 7/1-5-7a PP-Th 7/1-5-7b		
		-40 °C	up to	150 °C		0.30°C				
		150 °C	up to	300 °C		0.70°C				
		300 °C	up to	400 °C		1.1°C				
		400 °C	up to	600 °C		2.9°C				
		600 °C	up to	800 °C		3.3°C				
		800 °C	up to	1,000 °C		3.6°C				
		1,000 °C	up to	1,200 °C		4.0°C				
		1,200 °C	up to	1,554 °C		5.9°C				

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

TERMOSONDY Kladno, spol. s r.o.

Calibration Laboratory

Dělnická 81, 272 01 Kladno

- 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).

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

TERMOSONDY Kladno, spol. s r.o.

Calibration Laboratory

Dělnická 81, 272 01 Kladno

CMC for the field of measured quantity: Electrical 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	Workplace	
		min.	unit	max.	unit						
1*	Direct-current voltage			0 mV			3.5 μV	Comparison with a standard multimeter 34401A	PP-Th 7/1-5-16		
		0 mV	up to	100 mV		0.005 % + 3.5 μV					
		0.1 V	up to	1 V		0.004 % + 7μV					
		1 V	up to	10 V		0.0035 % + 0.05mV					
		10 V	up to	100 V		0.0045 % + 0.6mV					
2*	Direct current			0 mA			2.0 μA	Comparison with a standard multimeter 34401A	PP-Th 7/1-5-16		
		0 mA	up to	10 mA		0.05 % + 2 μA					
		10 mA	up to	100 mA		0.05 % + 5 μA					
		0.1 A	up to	1 A		0.10 % + 1 mA					
		1 A	up to	3 A		0.12 % + 6 mA					
3*	Resistance			0 Ω			4mΩ	Comparison with a standard multimeter 34401A	PP-Th 7/1-5-16		
		0 Ω	up to	100 Ω		0.01 % + 4mΩ					
		0.1 kΩ	up to	1 kΩ		0.01 % + 10mΩ					
		1 kΩ	up to	10 kΩ		0.01 % + 100mΩ					
		10 kΩ	up to	100 kΩ		0.01 % + 1Ω					
4*	Temperature calibrators (electric method) thermocouples			0 °C	up to	1,760 °C	R	0.43°C	Comparison with a standard multimeter 34401A	PP-Th 7/1-5-16	
		0 °C	up to	1,760 °C			S	0.45°C			
		0 °C	up to	1,820 °C			B	0.57°C			
		-80 °C	up to	1,200 °C			J	0.14°C			
		0 °C	up to	400 °C			T	0.09°C			

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

TERMOSONDY Kladno, spol. s r.o.

Calibration Laboratory

Dělnická 81, 272 01 Kladno

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	Workplace
		min.	unit	max.	unit					
		0 °C	up to	1,000 °C	E	0.12°C				
		-80 °C	up to	1,300 °C	K	0.19°C				
		-80 °C	up to	1,300 °C	N	0.18°C				
5*	Temperature calibrators (electric method) resistance sensors	-80 °C	up to	850 °C		0.16°C	Comparison with a standard multimeter 34401A	PP-Th 7/1-5-16		

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).