

Deutsche Akkreditierungsstelle

Annex to the Partial Accreditation Certificate D-K-15007-01-02 according to DIN EN ISO/IEC 17025:2018

Valid from: 09.11.2022

Date of issue: 09.11.2022

This annex is a part of the accreditation certificate D-15007-01-00.

Holder of partial accreditation certificate:

Carl Zeiss Industrielle Messtechnik GmbH
Carl-Zeiss-Straße 22, 73447 Oberkochen

The calibration laboratory meets the minimal requirements of DIN EN ISO/IEC 17025:2018 and, if applicable, additional legal and normative requirements, including those in relevant sectoral schemes, in order to carry out the conformity assessment activities listed below.

The management system requirements of DIN EN ISO/IEC 17025 are written in the language relevant to the operations of calibration laboratories and confirm generally with the principles of DIN EN ISO 9001.

Thermodynamic quantities

Temperature quantities

- **Resistance thermometers**
- **Thermocouples**
- **Direct reading thermometers**

This certificate annex is only valid together with the written accreditation certificate and reflects the status as indicated by the date of issue. The current status of any given scope of accreditation can be found in the directory of accredited bodies maintained by Deutsche Akkreditierungsstelle GmbH at <https://www.dakks.de>.

Abbreviations used: see last page

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This document is a translation. The definitive version is the original German annex to the accreditation certificate.

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Permanent Laboratory

Calibration and Measurement Capabilities (CMC)

Measurement quantity / Calibration item	Range	Measurement conditions / procedure	Expanded uncertainty of measurement	Remarks
Temperature quantities Resistance thermometers, Direct reading thermometers with resistance sensor	0 °C to 29,7646 °C	I_DI_S_ALM_01_01_A_31: 2021/03 Fixed Points: TPW, Ga	3 mK 6 mK	Calibration at temperature fixed points, characteristic curve approximation according to ITS-90. The measurement uncertainty refers to the characteristic curve approximation in the specified range.
SPRT				
Pt-100				
Resistance thermometers, direct reading thermometers with resistance sensor (Pt-100 and SPRT only)	0 °C to 45 °C	I_DI_S_ALM_01_01_A_17: 2017/06 in thermostatic bathes	10 mK	Comparison with standard platinum resistance thermometers
Direct reading thermometers with resistance sensor	3 °C to 45 °C	I_DI_S_ALM_01_01_A_16: 2017/06 in thermostatic bathes	0.1 K	Comparison with resistance thermometers
Direct reading thermometers with thermocouple sensor	3 °C to 45 °C	I_DI_S_ALM_01_01_A_16: 2017/06 in thermostatic bathes	0.3 K	

Abbreviations used:

DIN	Deutsches Institut für Normung e.V. – German institute for standardization
DKD-R	Guideline of the Deutscher Kalibrierdienst (DKD), published by the Physikalisch-Technische Bundesanstalt (PTB)
I_DI_S	Calibration instruction of the Carl Zeiss Industrielle Messtechnik GmbH

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