

# Calibration Certificate Kalibrierzertifikat

working standard certificate no.  
Werkskalibrierschein Nr.

**imc\_0055222**

object under test  
zu testender Gegenstand

Current, voltage amplifier and temperature,  
resistor measurement unit "U-6"

type  
Typ

imc CANSASfit, CANFT/UTI-6-SUP

serial number  
Seriennummer

**4000663** (module s/n 591686)

customer's description  
Kundenbezeichnung

manufacturer  
Hersteller

imc Meßsysteme GmbH

customer  
Auftraggeber

imc Meßsysteme GmbH

customer order number  
Kundenauftragsnummer

INT. SALES

imc order number  
imc Auftragsnummer

KA17/35252

date of calibration  
Kalibrierdatum

2017-07-03

result of calibration  
Ergebnis

**pass**

Measured deviation within allowed deviation.  
Gemessene Abweichung innerhalb der zulässigen Abweichung.

All tests were performed in accordance with DIN EN ISO 9001 using modern technology. This calibration certificate documents the traceability to national standards, which realize the units of measurement according to the international system of units (SI). The user is obliged to have the object recalibrated at appropriate intervals. This certificate can only be reproduced in its entire form. No excerpts may be used nor may any changes be made without full express consent.

Die Tests wurden mit aller Sorgfalt und in Anwendung der DIN EN ISO 9001 durchgeführt. Dieser Kalibrierschein dokumentiert die Rückführung auf nationale Normale zur Darstellung der Einheiten in Übereinstimmung mit dem internationalen Einheitensystem (SI). Für die Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich. Dieses Zertifikat darf nur vollständig und unverändert verbreitet werden. Auszüge oder Änderungen bedürfen der Genehmigung von imc.

issue date  
Ausstellungsdatum

2017-07-11

stamp \*  
Stempel

Quality  
Assurance

inspected by  
geprüft durch

i.A. Dipl.-Ing. M. Scheibner-Aden \*

SSA \*

\* Electronically created documents are valid without signature and company's stamp.  
In elektronischer Form erstellte Dokumente sind ohne Unterschrift und Firmenstempel gültig.

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

calibration procedure  
Kalibrierverfahren

The calibration was performed by comparing the value indicated by the standard instrument with the value indicated by the calibrated object. All procedures have been developed by imc itself. The certificates and reports of measured values are archived electronically and can be ordered retroactively. The members of our quality assurance team are happy to assist you if you have any question about calibration.

See [www.imc-berlin.de/en](http://www.imc-berlin.de/en) => Customer Support or call +49-30-467090-26, e-mail [hotline@imc-berlin.de](mailto:hotline@imc-berlin.de).

Die Kalibrierung erfolgte durch Vergleich der Anzeige der verwendeten Normale mit der Anzeige des Kalibriergegenstandes. Sämtliche Verfahren sind von imc selbst entwickelte Verfahren. Die Zertifikate und Messwert-protokolle werden elektronisch archiviert und sind nachlieferbar. Bei Fragen zur Kalibrierung stehen Ihnen die Mitarbeiter unserer Qualitätssicherung gerne zur Verfügung.

Siehe [www.imc-berlin.de](http://www.imc-berlin.de) => Kundendienst oder Telefon +49-30-467090-26, e-Mail [hotline@imc-berlin.de](mailto:hotline@imc-berlin.de).

calibration software

4.1.2

Kalibriersoftware

calibration procedure

ID #1.855: imc CANSASfit-UTI-6-SUP imc, Rev. 1 (released 2016-10-07)

Kalibrieranweisung

ambient conditions

temperature

relative humidity

Umgebungsbedingungen

Temperatur

relative Feuchte

27,7 °C

36.2%

uncertainty of measurement

The maximum tolerance of the used measurement standards is stated within a confidence interval of 95 %.

Messunsicherheit

Angegeben ist die maximale Toleranz der verwendeten Prüfmittel mit einem Vertrauensintervall von 95 %.

appraisal

The appraisal states the ratio of the measured deviation and the allowed deviation taking into account the uncertainty of measurement.

Toleranzausnutzung

Die Toleranzausnutzung bewertet das Verhältnis der gemessenen Abweichung zur zulässigen Abweichung unter Berücksichtigung der Messunsicherheit.

test station

**PKJ013**

Prüfplatz

measurement standards

**PM no.**

**description**

**calibration certificate**

**last calibration**

Messnormale

**PM-Nr.**

**Bezeichnung**

**Kalibrierzertifikat**

**letzte Kalibrierung**

808

FLUKE 5502E

NVLAP F6629021

2015-11-16

650

Multiplexer (0,005, R.10)

logfile\_20161223\_060848

2016-12-23

The measuring equipment used is subject to imc's internal measuring equipment monitoring; it can be identified by the respective PM number.

Die verwendeten Prüfmittel und Normale werden über die imc Prüfmittelnnummer (PM-Nr.) identifiziert.

device's software

imc DEVICEScore 3.1.1.14983 {FW=3.5.14983}

Gerätesoftware

device's serial number

4000663

Geräteseriennummer

module address

1 (hex)

Moduladresse

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode** Voltage (Spannung)

Messart

| channel                            | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <b>measurement range (nominal)</b> |                   | <b>±60,0 V</b>     |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -59,9976 V        | -60,0000 V         | ±24 mV               | 2,4 mV               | 3,8 mV                     | 26 %                   | pass     |             |
|                                    | 1,2303 mV         | 0 µV               | ±12 mV               | 1,2303 mV            | 3,0 µV                     | 10 %                   | pass     |             |
|                                    | 59,9989 V         | 60,0000 V          | ±24 mV               | -1,1 mV              | 3,8 mV                     | 20 %                   | pass     |             |
| 2                                  | -59,9982 V        | -60,0000 V         | ±24 mV               | 1,8 mV               | 3,8 mV                     | 23 %                   | pass     |             |
|                                    | 305,5 µV          | 0 µV               | ±12 mV               | 305,5 µV             | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 59,9974 V         | 60,0000 V          | ±24 mV               | -2,6 mV              | 3,8 mV                     | 26 %                   | pass     |             |
| 3                                  | -59,9982 V        | -60,0000 V         | ±24 mV               | 1,8 mV               | 3,8 mV                     | 23 %                   | pass     |             |
|                                    | 180,3 µV          | 0 µV               | ±12 mV               | 180,3 µV             | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 59,9976 V         | 60,0000 V          | ±24 mV               | -2,4 mV              | 3,8 mV                     | 26 %                   | pass     |             |
| 4                                  | -59,9967 V        | -60,0000 V         | ±24 mV               | 3,3 mV               | 3,8 mV                     | 30 %                   | pass     |             |
|                                    | 1,9605 mV         | 0 µV               | ±12 mV               | 1,9605 mV            | 3,0 µV                     | 16 %                   | pass     |             |
|                                    | 59,9997 V         | 60,0000 V          | ±24 mV               | -341 µV              | 3,8 mV                     | 17 %                   | pass     |             |
| 5                                  | -59,9979 V        | -60,0000 V         | ±24 mV               | 2,1 mV               | 3,8 mV                     | 25 %                   | pass     |             |
|                                    | 660,0 µV          | 0 µV               | ±12 mV               | 660,0 µV             | 3,0 µV                     | 6 %                    | pass     |             |
|                                    | 59,9982 V         | 60,0000 V          | ±24 mV               | -1,8 mV              | 3,8 mV                     | 23 %                   | pass     |             |
| 6                                  | -59,9969 V        | -60,0000 V         | ±24 mV               | 3,1 mV               | 3,8 mV                     | 29 %                   | pass     |             |
|                                    | 1,3225 mV         | 0 µV               | ±12 mV               | 1,3225 mV            | 3,0 µV                     | 11 %                   | pass     |             |
|                                    | 59,9984 V         | 60,0000 V          | ±24 mV               | -1,6 mV              | 3,8 mV                     | 23 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±50,0 V</b>     |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -49,9987 V        | -50,0000 V         | ±20 mV               | 1,3 mV               | 3,3 mV                     | 23 %                   | pass     |             |
|                                    | 388,9 µV          | 0 µV               | ±10 mV               | 388,9 µV             | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 49,9984 V         | 50,0000 V          | ±20 mV               | -1,6 mV              | 3,3 mV                     | 24 %                   | pass     |             |
| 2                                  | -49,9984 V        | -50,0000 V         | ±20 mV               | 1,6 mV               | 3,3 mV                     | 24 %                   | pass     |             |
|                                    | 360,9 µV          | 0 µV               | ±10 mV               | 360,9 µV             | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 49,9979 V         | 50,0000 V          | ±20 mV               | -2,1 mV              | 3,3 mV                     | 27 %                   | pass     |             |
| 3                                  | -49,9983 V        | -50,0000 V         | ±20 mV               | 1,7 mV               | 3,3 mV                     | 25 %                   | pass     |             |
|                                    | 388,5 µV          | 0 µV               | ±10 mV               | 388,5 µV             | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 49,9979 V         | 50,0000 V          | ±20 mV               | -2,1 mV              | 3,3 mV                     | 27 %                   | pass     |             |
| 4                                  | -49,9988 V        | -50,0000 V         | ±20 mV               | 1,2 mV               | 3,3 mV                     | 22 %                   | pass     |             |
|                                    | 260,0 µV          | 0 µV               | ±10 mV               | 260,0 µV             | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 49,9983 V         | 50,0000 V          | ±20 mV               | -1,7 mV              | 3,3 mV                     | 25 %                   | pass     |             |
| 5                                  | -49,9983 V        | -50,0000 V         | ±20 mV               | 1,7 mV               | 3,3 mV                     | 25 %                   | pass     |             |
|                                    | 347,9 µV          | 0 µV               | ±10 mV               | 347,9 µV             | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 49,9980 V         | 50,0000 V          | ±20 mV               | -2,0 mV              | 3,3 mV                     | 26 %                   | pass     |             |
| 6                                  | -49,9981 V        | -50,0000 V         | ±20 mV               | 1,9 mV               | 3,3 mV                     | 26 %                   | pass     |             |
|                                    | 374,0 µV          | 0 µV               | ±10 mV               | 374,0 µV             | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 49,9980 V         | 50,0000 V          | ±20 mV               | -2,0 mV              | 3,3 mV                     | 26 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±25,0 V</b>     |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -24,9994 V        | -25,0000 V         | ±10 mV               | 649 µV               | 1,3 mV                     | 19 %                   | pass     |             |
|                                    | 132,0 µV          | 0 µV               | ±5 mV                | 132,0 µV             | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 24,9992 V         | 25,0000 V          | ±10 mV               | -834 µV              | 1,3 mV                     | 21 %                   | pass     |             |
| 2                                  | -24,9992 V        | -25,0000 V         | ±10 mV               | 835 µV               | 1,3 mV                     | 21 %                   | pass     |             |
|                                    | 141,6 µV          | 0 µV               | ±5 mV                | 141,6 µV             | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 24,9990 V         | 25,0000 V          | ±10 mV               | -1,0 mV              | 1,3 mV                     | 23 %                   | pass     |             |
| 3                                  | -24,9990 V        | -25,0000 V         | ±10 mV               | 952 µV               | 1,3 mV                     | 23 %                   | pass     |             |
|                                    | 102,9 µV          | 0 µV               | ±5 mV                | 102,9 µV             | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 24,9991 V         | 25,0000 V          | ±10 mV               | -912 µV              | 1,3 mV                     | 22 %                   | pass     |             |
| 4                                  | -24,9994 V        | -25,0000 V         | ±10 mV               | 567 µV               | 1,3 mV                     | 19 %                   | pass     |             |
|                                    | -24,7 µV          | 0 µV               | ±5 mV                | -24,7 µV             | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 24,9995 V         | 25,0000 V          | ±10 mV               | -467 µV              | 1,3 mV                     | 18 %                   | pass     |             |
| 5                                  | -24,9990 V        | -25,0000 V         | ±10 mV               | 984 µV               | 1,3 mV                     | 23 %                   | pass     |             |
|                                    | 27,8 µV           | 0 µV               | ±5 mV                | 27,8 µV              | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 24,9989 V         | 25,0000 V          | ±10 mV               | -1,1 mV              | 1,3 mV                     | 24 %                   | pass     |             |
| 6                                  | -24,9991 V        | -25,0000 V         | ±10 mV               | 918 µV               | 1,3 mV                     | 22 %                   | pass     |             |
|                                    | 117,2 µV          | 0 µV               | ±5 mV                | 117,2 µV             | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 24,9990 V         | 25,0000 V          | ±10 mV               | -1,0 mV              | 1,3 mV                     | 23 %                   | pass     |             |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode** Voltage (Spannung)

Messart

| channel                            | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <b>measurement range (nominal)</b> |                   | <b>±10,0 V</b>     |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -9,99975 V        | -10,00000 V        | ±4 mV                | 254 µV               | 550 µV                     | 20 %                   | pass     |             |
|                                    | 86,4 µV           | 0 µV               | ±2 mV                | 86,4 µV              | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 9,99965 V         | 10,00000 V         | ±4 mV                | -347 µV              | 550 µV                     | 22 %                   | pass     |             |
| 2                                  | -9,99964 V        | -10,00000 V        | ±4 mV                | 357 µV               | 550 µV                     | 23 %                   | pass     |             |
|                                    | 106,5 µV          | 0 µV               | ±2 mV                | 106,5 µV             | 3,0 µV                     | 5 %                    | pass     |             |
|                                    | 9,99956 V         | 10,00000 V         | ±4 mV                | -442 µV              | 550 µV                     | 25 %                   | pass     |             |
| 3                                  | -9,99961 V        | -10,00000 V        | ±4 mV                | 389 µV               | 550 µV                     | 23 %                   | pass     |             |
|                                    | 29,1 µV           | 0 µV               | ±2 mV                | 29,1 µV              | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 9,99958 V         | 10,00000 V         | ±4 mV                | -423 µV              | 550 µV                     | 24 %                   | pass     |             |
| 4                                  | -9,99973 V        | -10,00000 V        | ±4 mV                | 267 µV               | 550 µV                     | 20 %                   | pass     |             |
|                                    | 164,2 µV          | 0 µV               | ±2 mV                | 164,2 µV             | 3,0 µV                     | 8 %                    | pass     |             |
|                                    | 9,99957 V         | 10,00000 V         | ±4 mV                | -430 µV              | 550 µV                     | 24 %                   | pass     |             |
| 5                                  | -9,99961 V        | -10,00000 V        | ±4 mV                | 392 µV               | 550 µV                     | 24 %                   | pass     |             |
|                                    | 31,2 µV           | 0 µV               | ±2 mV                | 31,2 µV              | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 9,99958 V         | 10,00000 V         | ±4 mV                | -423 µV              | 550 µV                     | 24 %                   | pass     |             |
| 6                                  | -9,99964 V        | -10,00000 V        | ±4 mV                | 358 µV               | 550 µV                     | 23 %                   | pass     |             |
|                                    | 85,6 µV           | 0 µV               | ±2 mV                | 85,6 µV              | 3,0 µV                     | 4 %                    | pass     |             |
|                                    | 9,99956 V         | 10,00000 V         | ±4 mV                | -443 µV              | 550 µV                     | 25 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±5,0 V</b>      |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -4,99989 V        | -5,00000 V         | ±2 mV                | 110 µV               | 300 µV                     | 20 %                   | pass     |             |
|                                    | 68,3 µV           | 0 µV               | ±1 mV                | 68,3 µV              | 3,0 µV                     | 7 %                    | pass     |             |
|                                    | 4,99980 V         | 5,00000 V          | ±2 mV                | -197 µV              | 300 µV                     | 25 %                   | pass     |             |
| 2                                  | -4,99987 V        | -5,00000 V         | ±2 mV                | 130 µV               | 300 µV                     | 21 %                   | pass     |             |
|                                    | 85,2 µV           | 0 µV               | ±1 mV                | 85,2 µV              | 3,0 µV                     | 9 %                    | pass     |             |
|                                    | 4,99974 V         | 5,00000 V          | ±2 mV                | -257 µV              | 300 µV                     | 28 %                   | pass     |             |
| 3                                  | -4,99981 V        | -5,00000 V         | ±2 mV                | 187 µV               | 300 µV                     | 24 %                   | pass     |             |
|                                    | 19,9 µV           | 0 µV               | ±1 mV                | 19,9 µV              | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 4,99980 V         | 5,00000 V          | ±2 mV                | -195 µV              | 300 µV                     | 25 %                   | pass     |             |
| 4                                  | -4,99991 V        | -5,00000 V         | ±2 mV                | 91 µV                | 300 µV                     | 20 %                   | pass     |             |
|                                    | 139,0 µV          | 0 µV               | ±1 mV                | 139,0 µV             | 3,0 µV                     | 14 %                   | pass     |             |
|                                    | 4,99978 V         | 5,00000 V          | ±2 mV                | -222 µV              | 300 µV                     | 26 %                   | pass     |             |
| 5                                  | -4,99979 V        | -5,00000 V         | ±2 mV                | 211 µV               | 300 µV                     | 26 %                   | pass     |             |
|                                    | 27,9 µV           | 0 µV               | ±1 mV                | 27,9 µV              | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 4,99977 V         | 5,00000 V          | ±2 mV                | -225 µV              | 300 µV                     | 26 %                   | pass     |             |
| 6                                  | -4,99985 V        | -5,00000 V         | ±2 mV                | 155 µV               | 300 µV                     | 23 %                   | pass     |             |
|                                    | 78,3 µV           | 0 µV               | ±1 mV                | 78,3 µV              | 3,0 µV                     | 8 %                    | pass     |             |
|                                    | 4,99976 V         | 5,00000 V          | ±2 mV                | -242 µV              | 300 µV                     | 27 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±2,5 V</b>      |                      |                      |                            |                        |          |             |
| <b>Messbereich (nominell)</b>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -2,49993 V        | -2,50000 V         | ±1 mV                | 74 µV                | 130 µV                     | 20 %                   | pass     |             |
|                                    | 3,3 µV            | 0 µV               | ±500 µV              | 3,3 µV               | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 2,49992 V         | 2,50000 V          | ±1 mV                | -84 µV               | 130 µV                     | 21 %                   | pass     |             |
| 2                                  | -2,49992 V        | -2,50000 V         | ±1 mV                | 85 µV                | 130 µV                     | 21 %                   | pass     |             |
|                                    | 4,2 µV            | 0 µV               | ±500 µV              | 4,2 µV               | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 2,49991 V         | 2,50000 V          | ±1 mV                | -92 µV               | 130 µV                     | 22 %                   | pass     |             |
| 3                                  | -2,49991 V        | -2,50000 V         | ±1 mV                | 90 µV                | 130 µV                     | 22 %                   | pass     |             |
|                                    | -772 nV           | 0 µV               | ±500 µV              | -773 nV              | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 2,49989 V         | 2,50000 V          | ±1 mV                | -108 µV              | 130 µV                     | 24 %                   | pass     |             |
| 4                                  | -2,49996 V        | -2,50000 V         | ±1 mV                | 45 µV                | 130 µV                     | 17 %                   | pass     |             |
|                                    | -5,3 µV           | 0 µV               | ±500 µV              | -5,3 µV              | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 2,49994 V         | 2,50000 V          | ±1 mV                | -58 µV               | 130 µV                     | 19 %                   | pass     |             |
| 5                                  | -2,49989 V        | -2,50000 V         | ±1 mV                | 108 µV               | 130 µV                     | 24 %                   | pass     |             |
|                                    | 1,3 µV            | 0 µV               | ±500 µV              | 1,3 µV               | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 2,49989 V         | 2,50000 V          | ±1 mV                | -112 µV              | 130 µV                     | 24 %                   | pass     |             |
| 6                                  | -2,49990 V        | -2,50000 V         | ±1 mV                | 96 µV                | 130 µV                     | 23 %                   | pass     |             |
|                                    | 3,2 µV            | 0 µV               | ±500 µV              | 3,2 µV               | 3,0 µV                     | 1 %                    | pass     |             |
|                                    | 2,49990 V         | 2,50000 V          | ±1 mV                | -98 µV               | 130 µV                     | 23 %                   | pass     |             |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode**

*Voltage (Spannung)*

*Messart*

| channel                            | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <b>measurement range (nominal)</b> |                   | <b>±1,0 V</b>      |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -999,968 mV       | -1,000000 V        | ±400 µV              | 32 µV                | 55 µV                      | 22 %                   | pass     |             |
|                                    | 2,2 µV            | 0 µV               | ±200 µV              | 2,2 µV               | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 999,966 mV        | 1,000000 V         | ±400 µV              | -34 µV               | 55 µV                      | 22 %                   | pass     |             |
| 2                                  | -999,964 mV       | -1,000000 V        | ±400 µV              | 36 µV                | 55 µV                      | 23 %                   | pass     |             |
|                                    | 2,3 µV            | 0 µV               | ±200 µV              | 2,3 µV               | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 999,962 mV        | 1,000000 V         | ±400 µV              | -38 µV               | 55 µV                      | 23 %                   | pass     |             |
| 3                                  | -999,957 mV       | -1,000000 V        | ±400 µV              | 43 µV                | 55 µV                      | 25 %                   | pass     |             |
|                                    | 2,0 µV            | 0 µV               | ±200 µV              | 2,0 µV               | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 999,958 mV        | 1,000000 V         | ±400 µV              | -42 µV               | 55 µV                      | 24 %                   | pass     |             |
| 4                                  | -999,968 mV       | -1,000000 V        | ±400 µV              | 32 µV                | 55 µV                      | 22 %                   | pass     |             |
|                                    | 2,2 µV            | 0 µV               | ±200 µV              | 2,2 µV               | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 999,966 mV        | 1,000000 V         | ±400 µV              | -34 µV               | 55 µV                      | 22 %                   | pass     |             |
| 5                                  | -999,954 mV       | -1,000000 V        | ±400 µV              | 46 µV                | 55 µV                      | 25 %                   | pass     |             |
|                                    | 3,2 µV            | 0 µV               | ±200 µV              | 3,2 µV               | 3,0 µV                     | 3 %                    | pass     |             |
|                                    | 999,955 mV        | 1,000000 V         | ±400 µV              | -45 µV               | 55 µV                      | 25 %                   | pass     |             |
| 6                                  | -999,962 mV       | -1,000000 V        | ±400 µV              | 38 µV                | 55 µV                      | 23 %                   | pass     |             |
|                                    | 1,6 µV            | 0 µV               | ±200 µV              | 1,6 µV               | 3,0 µV                     | 2 %                    | pass     |             |
|                                    | 999,961 mV        | 1,000000 V         | ±400 µV              | -39 µV               | 55 µV                      | 24 %                   | pass     |             |

**measurement range (nominal)** ±500,0 mV

*Messbereich (nominell)*

|   |             |             |         |        |        |      |      |  |
|---|-------------|-------------|---------|--------|--------|------|------|--|
| 1 | -499,985 mV | -500,000 mV | ±200 µV | 15 µV  | 30 µV  | 22 % | pass |  |
|   | 835 nV      | 0 µV        | ±100 µV | 835 nV | 3,0 µV | 4 %  | pass |  |
|   | 499,983 mV  | 500,000 mV  | ±200 µV | -17 µV | 30 µV  | 23 % | pass |  |
| 2 | -499,982 mV | -500,000 mV | ±200 µV | 18 µV  | 30 µV  | 24 % | pass |  |
|   | 1,2 µV      | 0 µV        | ±100 µV | 1,2 µV | 3,0 µV | 4 %  | pass |  |
|   | 499,980 mV  | 500,000 mV  | ±200 µV | -20 µV | 30 µV  | 25 % | pass |  |
| 3 | -499,980 mV | -500,000 mV | ±200 µV | 20 µV  | 30 µV  | 25 % | pass |  |
|   | 1,1 µV      | 0 µV        | ±100 µV | 1,1 µV | 3,0 µV | 4 %  | pass |  |
|   | 499,979 mV  | 500,000 mV  | ±200 µV | -21 µV | 30 µV  | 26 % | pass |  |
| 4 | -499,980 mV | -500,000 mV | ±200 µV | 20 µV  | 30 µV  | 25 % | pass |  |
|   | 1,8 µV      | 0 µV        | ±100 µV | 1,8 µV | 3,0 µV | 5 %  | pass |  |
|   | 499,981 mV  | 500,000 mV  | ±200 µV | -19 µV | 30 µV  | 24 % | pass |  |
| 5 | -499,978 mV | -500,000 mV | ±200 µV | 22 µV  | 30 µV  | 26 % | pass |  |
|   | 1,7 µV      | 0 µV        | ±100 µV | 1,7 µV | 3,0 µV | 5 %  | pass |  |
|   | 499,978 mV  | 500,000 mV  | ±200 µV | -22 µV | 30 µV  | 26 % | pass |  |
| 6 | -499,981 mV | -500,000 mV | ±200 µV | 19 µV  | 30 µV  | 24 % | pass |  |
|   | 399 nV      | 0 µV        | ±100 µV | 399 nV | 3,0 µV | 3 %  | pass |  |
|   | 499,980 mV  | 500,000 mV  | ±200 µV | -20 µV | 30 µV  | 25 % | pass |  |

**measurement range (nominal)** ±250,0 mV

*Messbereich (nominell)*

|   |             |             |         |         |        |      |      |  |
|---|-------------|-------------|---------|---------|--------|------|------|--|
| 1 | -249,991 mV | -250,000 mV | ±100 µV | 9 µV    | 18 µV  | 27 % | pass |  |
|   | -817 nV     | 0 µV        | ±50 µV  | -818 nV | 3,0 µV | 8 %  | pass |  |
|   | 249,993 mV  | 250,000 mV  | ±100 µV | -7 µV   | 18 µV  | 25 % | pass |  |
| 2 | -249,990 mV | -250,000 mV | ±100 µV | 10 µV   | 18 µV  | 28 % | pass |  |
|   | -806 nV     | 0 µV        | ±50 µV  | -807 nV | 3,0 µV | 8 %  | pass |  |
|   | 249,992 mV  | 250,000 mV  | ±100 µV | -8 µV   | 18 µV  | 26 % | pass |  |
| 3 | -249,989 mV | -250,000 mV | ±100 µV | 11 µV   | 18 µV  | 29 % | pass |  |
|   | -1,6 µV     | 0 µV        | ±50 µV  | -1,6 µV | 3,0 µV | 9 %  | pass |  |
|   | 249,990 mV  | 250,000 mV  | ±100 µV | -10 µV  | 18 µV  | 28 % | pass |  |
| 4 | -249,992 mV | -250,000 mV | ±100 µV | 8 µV    | 18 µV  | 26 % | pass |  |
|   | -166 nV     | 0 µV        | ±50 µV  | -166 nV | 3,0 µV | 6 %  | pass |  |
|   | 249,991 mV  | 250,000 mV  | ±100 µV | -9 µV   | 18 µV  | 27 % | pass |  |
| 5 | -249,989 mV | -250,000 mV | ±100 µV | 11 µV   | 18 µV  | 29 % | pass |  |
|   | -527 nV     | 0 µV        | ±50 µV  | -527 nV | 3,0 µV | 7 %  | pass |  |
|   | 249,990 mV  | 250,000 mV  | ±100 µV | -10 µV  | 18 µV  | 28 % | pass |  |
| 6 | -249,989 mV | -250,000 mV | ±100 µV | 11 µV   | 18 µV  | 29 % | pass |  |
|   | -849 nV     | 0 µV        | ±50 µV  | -850 nV | 3,0 µV | 8 %  | pass |  |
|   | 249,991 mV  | 250,000 mV  | ±100 µV | -9 µV   | 18 µV  | 27 % | pass |  |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode**

*Voltage (Spannung)*

*Messart*

| channel                            | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <b>measurement range (nominal)</b> |                   | <b>±100,0 mV</b>   |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -99,9965 mV       | -100,0000 mV       | ±40 µV               | 3,5 µV               | 9,0 µV                     | 31 %                   | pass     |             |
|                                    | -377 nV           | 0 µV               | ±20 µV               | -377 nV              | 3,0 µV                     | 17 %                   | pass     |             |
|                                    | 99,9969 mV        | 100,0000 mV        | ±40 µV               | -3,1 µV              | 9,0 µV                     | 30 %                   | pass     |             |
| 2                                  | -99,9961 mV       | -100,0000 mV       | ±40 µV               | 3,9 µV               | 9,0 µV                     | 32 %                   | pass     |             |
|                                    | -417 nV           | 0 µV               | ±20 µV               | -418 nV              | 3,0 µV                     | 17 %                   | pass     |             |
|                                    | 99,9967 mV        | 100,0000 mV        | ±40 µV               | -3,3 µV              | 9,0 µV                     | 31 %                   | pass     |             |
| 3                                  | -99,9952 mV       | -100,0000 mV       | ±40 µV               | 4,8 µV               | 9,0 µV                     | 34 %                   | pass     |             |
|                                    | -1,2 µV           | 0 µV               | ±20 µV               | -1,2 µV              | 3,0 µV                     | 21 %                   | pass     |             |
|                                    | 99,9966 mV        | 100,0000 mV        | ±40 µV               | -3,4 µV              | 9,0 µV                     | 31 %                   | pass     |             |
| 4                                  | -99,9964 mV       | -100,0000 mV       | ±40 µV               | 3,6 µV               | 9,0 µV                     | 32 %                   | pass     |             |
|                                    | 150 nV            | 0 µV               | ±20 µV               | 151 nV               | 3,0 µV                     | 16 %                   | pass     |             |
|                                    | 99,9963 mV        | 100,0000 mV        | ±40 µV               | -3,7 µV              | 9,0 µV                     | 32 %                   | pass     |             |
| 5                                  | -99,9955 mV       | -100,0000 mV       | ±40 µV               | 4,5 µV               | 9,0 µV                     | 34 %                   | pass     |             |
|                                    | -358 nV           | 0 µV               | ±20 µV               | -358 nV              | 3,0 µV                     | 17 %                   | pass     |             |
|                                    | 99,9965 mV        | 100,0000 mV        | ±40 µV               | -3,5 µV              | 9,0 µV                     | 31 %                   | pass     |             |
| 6                                  | -99,9959 mV       | -100,0000 mV       | ±40 µV               | 4,1 µV               | 9,0 µV                     | 33 %                   | pass     |             |
|                                    | -644 nV           | 0 µV               | ±20 µV               | -644 nV              | 3,0 µV                     | 18 %                   | pass     |             |
|                                    | 99,9963 mV        | 100,0000 mV        | ±40 µV               | -3,7 µV              | 9,0 µV                     | 32 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±50,0 mV</b>    |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -49,9984 mV       | -50,0000 mV        | ±20 µV               | 1,6 µV               | 6,0 µV                     | 38 %                   | pass     |             |
|                                    | -275 nV           | 0 µV               | ±10 µV               | -275 nV              | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 49,9986 mV        | 50,0000 mV         | ±20 µV               | -1,4 µV              | 6,0 µV                     | 37 %                   | pass     |             |
| 2                                  | -49,9982 mV       | -50,0000 mV        | ±20 µV               | 1,8 µV               | 6,0 µV                     | 39 %                   | pass     |             |
|                                    | -265 nV           | 0 µV               | ±10 µV               | -266 nV              | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 49,9984 mV        | 50,0000 mV         | ±20 µV               | -1,6 µV              | 6,0 µV                     | 38 %                   | pass     |             |
| 3                                  | -49,9973 mV       | -50,0000 mV        | ±20 µV               | 2,7 µV               | 6,0 µV                     | 44 %                   | pass     |             |
|                                    | -960 nV           | 0 µV               | ±10 µV               | -961 nV              | 3,0 µV                     | 40 %                   | pass     |             |
|                                    | 49,9985 mV        | 50,0000 mV         | ±20 µV               | -1,5 µV              | 6,0 µV                     | 38 %                   | pass     |             |
| 4                                  | -49,9985 mV       | -50,0000 mV        | ±20 µV               | 1,5 µV               | 6,0 µV                     | 37 %                   | pass     |             |
|                                    | 272 nV            | 0 µV               | ±10 µV               | 273 nV               | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 49,9984 mV        | 50,0000 mV         | ±20 µV               | -1,6 µV              | 6,0 µV                     | 38 %                   | pass     |             |
| 5                                  | -49,9978 mV       | -50,0000 mV        | ±20 µV               | 2,2 µV               | 6,0 µV                     | 41 %                   | pass     |             |
|                                    | -349 nV           | 0 µV               | ±10 µV               | -349 nV              | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 49,9982 mV        | 50,0000 mV         | ±20 µV               | -1,8 µV              | 6,0 µV                     | 39 %                   | pass     |             |
| 6                                  | -49,9979 mV       | -50,0000 mV        | ±20 µV               | 2,1 µV               | 6,0 µV                     | 41 %                   | pass     |             |
|                                    | -415 nV           | 0 µV               | ±10 µV               | -416 nV              | 3,0 µV                     | 34 %                   | pass     |             |
|                                    | 49,9985 mV        | 50,0000 mV         | ±20 µV               | -1,5 µV              | 6,0 µV                     | 37 %                   | pass     |             |
| <b>measurement range (nominal)</b> |                   | <b>±25,0 mV</b>    |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -24,9992 mV       | -25,0000 mV        | ±15 µV               | 790 nV               | 4,5 µV                     | 35 %                   | pass     |             |
|                                    | -123 nV           | 0 µV               | ±10 µV               | -124 nV              | 3,0 µV                     | 31 %                   | pass     |             |
|                                    | 24,9992 mV        | 25,0000 mV         | ±15 µV               | -759 nV              | 4,5 µV                     | 35 %                   | pass     |             |
| 2                                  | -24,9991 mV       | -25,0000 mV        | ±15 µV               | 875 nV               | 4,5 µV                     | 36 %                   | pass     |             |
|                                    | -293 nV           | 0 µV               | ±10 µV               | -294 nV              | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 24,9992 mV        | 25,0000 mV         | ±15 µV               | -757 nV              | 4,5 µV                     | 35 %                   | pass     |             |
| 3                                  | -24,9985 mV       | -25,0000 mV        | ±15 µV               | 1,5 µV               | 4,5 µV                     | 40 %                   | pass     |             |
|                                    | -1,0 µV           | 0 µV               | ±10 µV               | -1,0 µV              | 3,0 µV                     | 40 %                   | pass     |             |
|                                    | 24,9995 mV        | 25,0000 mV         | ±15 µV               | -517 nV              | 4,5 µV                     | 33 %                   | pass     |             |
| 4                                  | -24,9993 mV       | -25,0000 mV        | ±15 µV               | 717 nV               | 4,5 µV                     | 35 %                   | pass     |             |
|                                    | 320 nV            | 0 µV               | ±10 µV               | 320 nV               | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 24,9990 mV        | 25,0000 mV         | ±15 µV               | -1,0 µV              | 4,5 µV                     | 37 %                   | pass     |             |
| 5                                  | -24,9989 mV       | -25,0000 mV        | ±15 µV               | 1,1 µV               | 4,5 µV                     | 37 %                   | pass     |             |
|                                    | -305 nV           | 0 µV               | ±10 µV               | -305 nV              | 3,0 µV                     | 33 %                   | pass     |             |
|                                    | 24,9992 mV        | 25,0000 mV         | ±15 µV               | -835 nV              | 4,5 µV                     | 36 %                   | pass     |             |
| 6                                  | -24,9989 mV       | -25,0000 mV        | ±15 µV               | 1,1 µV               | 4,5 µV                     | 37 %                   | pass     |             |
|                                    | -376 nV           | 0 µV               | ±10 µV               | -376 nV              | 3,0 µV                     | 34 %                   | pass     |             |
|                                    | 24,9992 mV        | 25,0000 mV         | ±15 µV               | -751 nV              | 4,5 µV                     | 35 %                   | pass     |             |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode**

*Current (Strom)*

*Messart*

| channel                            | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <b>measurement range (nominal)</b> |                   | <b>±20 mA</b>      |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                    |                      |                      |                            |                        |          |             |
| 1                                  | -19,9993 mA       | -20,0000 mA        | ±6 µA                | 672 nA               | 2,3 µA                     | 49 %                   | pass     |             |
|                                    | 13 nA             | 0 nA               | ±2 µA                | 14 nA                | 20 nA                      | 2 %                    | pass     |             |
|                                    | 19,9994 mA        | 20,0000 mA         | ±6 µA                | -640 nA              | 2,3 µA                     | 48 %                   | pass     |             |
| 2                                  | -19,9993 mA       | -20,0000 mA        | ±6 µA                | 674 nA               | 2,3 µA                     | 49 %                   | pass     |             |
|                                    | 9 nA              | 0 nA               | ±2 µA                | 9 nA                 | 20 nA                      | 1 %                    | pass     |             |
|                                    | 19,9993 mA        | 20,0000 mA         | ±6 µA                | -698 nA              | 2,3 µA                     | 49 %                   | pass     |             |
| 3                                  | -19,9991 mA       | -20,0000 mA        | ±6 µA                | 861 nA               | 2,3 µA                     | 52 %                   | pass     |             |
|                                    | -35 nA            | 0 nA               | ±2 µA                | -36 nA               | 20 nA                      | 3 %                    | pass     |             |
|                                    | 19,9992 mA        | 20,0000 mA         | ±6 µA                | -781 nA              | 2,3 µA                     | 51 %                   | pass     |             |
| 4                                  | -19,9994 mA       | -20,0000 mA        | ±6 µA                | 609 nA               | 2,3 µA                     | 48 %                   | pass     |             |
|                                    | 51 nA             | 0 nA               | ±2 µA                | 51 nA                | 20 nA                      | 4 %                    | pass     |             |
|                                    | 19,9994 mA        | 20,0000 mA         | ±6 µA                | -574 nA              | 2,3 µA                     | 47 %                   | pass     |             |
| 5                                  | -19,9991 mA       | -20,0000 mA        | ±6 µA                | 854 nA               | 2,3 µA                     | 52 %                   | pass     |             |
|                                    | 21 nA             | 0 nA               | ±2 µA                | 22 nA                | 20 nA                      | 2 %                    | pass     |             |
|                                    | 19,9991 mA        | 20,0000 mA         | ±6 µA                | -874 nA              | 2,3 µA                     | 52 %                   | pass     |             |
| 6                                  | -19,9992 mA       | -20,0000 mA        | ±6 µA                | 760 nA               | 2,3 µA                     | 50 %                   | pass     |             |
|                                    | -2 nA             | 0 nA               | ±2 µA                | -2 nA                | 20 nA                      | 1 %                    | pass     |             |
|                                    | 19,9993 mA        | 20,0000 mA         | ±6 µA                | -735 nA              | 2,3 µA                     | 50 %                   | pass     |             |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

*measurement mode*

*Temperature PT100 4-Wire*

*Messart*

| channel                            | measurement value | reference value        | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|------------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert     | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <i>measurement range (nominal)</i> |                   | <i>-200 ... 850 °C</i> |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                        |                      |                      |                            |                        |          |             |
| 1                                  | -149,991 °C       | -150,000 °C            | ±0,05K               | 10 mK                | 0,011 K                    | 41 %                   | pass     |             |
|                                    | -0,012 °C         | 0,000 °C               | ±0,10K               | -12 mK               | 0,022 K                    | 34 %                   | pass     |             |
|                                    | 800,026 °C        | 800,020 °C             | ±0,40K               | 6 mK                 | 0,073 K                    | 20 %                   | pass     |             |
| 2                                  | -149,993 °C       | -150,000 °C            | ±0,05K               | 8 mK                 | 0,011 K                    | 37 %                   | pass     |             |
|                                    | -0,015 °C         | 0,000 °C               | ±0,10K               | -15 mK               | 0,022 K                    | 37 %                   | pass     |             |
|                                    | 800,024 °C        | 800,020 °C             | ±0,40K               | 4 mK                 | 0,073 K                    | 19 %                   | pass     |             |
| 3                                  | -149,989 °C       | -150,000 °C            | ±0,05K               | 11 mK                | 0,011 K                    | 44 %                   | pass     |             |
|                                    | -0,015 °C         | 0,000 °C               | ±0,10K               | -15 mK               | 0,022 K                    | 37 %                   | pass     |             |
|                                    | 800,026 °C        | 800,020 °C             | ±0,40K               | 6 mK                 | 0,073 K                    | 20 %                   | pass     |             |
| 4                                  | -150,005 °C       | -150,000 °C            | ±0,05K               | -5 mK                | 0,011 K                    | 31 %                   | pass     |             |
|                                    | 0,007 °C          | 0,000 °C               | ±0,10K               | 7 mK                 | 0,022 K                    | 29 %                   | pass     |             |
|                                    | 800,021 °C        | 800,020 °C             | ±0,40K               | 962 µK               | 0,073 K                    | 19 %                   | pass     |             |
| 5                                  | -149,993 °C       | -150,000 °C            | ±0,05K               | 8 mK                 | 0,011 K                    | 38 %                   | pass     |             |
|                                    | -0,013 °C         | 0,000 °C               | ±0,10K               | -13 mK               | 0,022 K                    | 35 %                   | pass     |             |
|                                    | 800,027 °C        | 800,020 °C             | ±0,40K               | 7 mK                 | 0,073 K                    | 20 %                   | pass     |             |
| 6                                  | -149,993 °C       | -150,000 °C            | ±0,05K               | 7 mK                 | 0,011 K                    | 36 %                   | pass     |             |
|                                    | -0,009 °C         | 0,000 °C               | ±0,10K               | -9 mK                | 0,022 K                    | 31 %                   | pass     |             |
|                                    | 800,025 °C        | 800,020 °C             | ±0,40K               | 5 mK                 | 0,073 K                    | 20 %                   | pass     |             |



# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode** *Widerstand (Resistance)*

*Messart*

| channel | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|---------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal   | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |

**measurement range (nominal)** *0 ... 100 kOhm*

*Messbereich (nominell)*

|   |               |               |         |          |          |      |      |  |
|---|---------------|---------------|---------|----------|----------|------|------|--|
| 1 | -13,5 mOhm    | 0 mOhm        | ±10 Ohm | -13,5 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 99,9992 kOhm  | 100,0000 kOhm | ±30 Ohm | -844 mΩ  | 8,2 Ohm  | 30 % | pass |  |
| 2 | 18,9 mOhm     | 0 mOhm        | ±10 Ohm | 18,9 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 99,9981 kOhm  | 100,0000 kOhm | ±30 Ohm | -1,9 Ω   | 8,2 Ohm  | 34 % | pass |  |
| 3 | -4,1 mOhm     | 0 mOhm        | ±10 Ohm | -4,1 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 100,0009 kOhm | 100,0000 kOhm | ±30 Ohm | 884 mΩ   | 8,2 Ohm  | 30 % | pass |  |
| 4 | 9,3 mOhm      | 0 mOhm        | ±10 Ohm | 9,3 mΩ   | 1,0 mOhm | 0 %  | pass |  |
|   | 100,0035 kOhm | 100,0000 kOhm | ±30 Ohm | 3,5 Ω    | 8,2 Ohm  | 39 % | pass |  |
| 5 | 21,3 mOhm     | 0 mOhm        | ±10 Ohm | 21,3 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 99,9989 kOhm  | 100,0000 kOhm | ±30 Ohm | -1,1 Ω   | 8,2 Ohm  | 31 % | pass |  |
| 6 | 9,7 mOhm      | 0 mOhm        | ±10 Ohm | 9,7 mΩ   | 1,0 mOhm | 0 %  | pass |  |
|   | 100,0013 kOhm | 100,0000 kOhm | ±30 Ohm | 1,3 Ω    | 8,2 Ohm  | 32 % | pass |  |

**measurement range (nominal)** *0 ... 50 kOhm*

*Messbereich (nominell)*

|   |              |              |         |         |          |      |      |  |
|---|--------------|--------------|---------|---------|----------|------|------|--|
| 1 | 12,6 mOhm    | 0 mOhm       | ±5 Ohm  | 12,6 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 49,9995 kOhm | 50,0000 kOhm | ±15 Ohm | -472 mΩ | 4,2 Ohm  | 31 % | pass |  |
| 2 | -6,9 mOhm    | 0 mOhm       | ±5 Ohm  | -6,9 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 50,0002 kOhm | 50,0000 kOhm | ±15 Ohm | 164 mΩ  | 4,2 Ohm  | 29 % | pass |  |
| 3 | -7,2 mOhm    | 0 mOhm       | ±5 Ohm  | -7,2 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 50,0005 kOhm | 50,0000 kOhm | ±15 Ohm | 522 mΩ  | 4,2 Ohm  | 31 % | pass |  |
| 4 | -7,3 mOhm    | 0 mOhm       | ±5 Ohm  | -7,3 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 49,9998 kOhm | 50,0000 kOhm | ±15 Ohm | -249 mΩ | 4,2 Ohm  | 30 % | pass |  |
| 5 | 6,1 mOhm     | 0 mOhm       | ±5 Ohm  | 6,1 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 49,9993 kOhm | 50,0000 kOhm | ±15 Ohm | -653 mΩ | 4,2 Ohm  | 32 % | pass |  |
| 6 | 6,4 mOhm     | 0 mOhm       | ±5 Ohm  | 6,4 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 49,9999 kOhm | 50,0000 kOhm | ±15 Ohm | -51 mΩ  | 4,2 Ohm  | 28 % | pass |  |

**measurement range (nominal)** *0 ... 25 kOhm*

*Messbereich (nominell)*

|   |              |              |          |          |          |      |      |  |
|---|--------------|--------------|----------|----------|----------|------|------|--|
| 1 | 6,6 mOhm     | 0 mOhm       | ±2,5 Ohm | 6,6 mΩ   | 1,0 mOhm | 0 %  | pass |  |
|   | 25,0000 kOhm | 25,0000 kOhm | ±7,5 Ohm | 45 mΩ    | 2,0 Ohm  | 27 % | pass |  |
| 2 | -10,0 mOhm   | 0 mOhm       | ±2,5 Ohm | -10,0 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 24,9997 kOhm | 25,0000 kOhm | ±7,5 Ohm | -319 mΩ  | 2,0 Ohm  | 30 % | pass |  |
| 3 | 7,2 mOhm     | 0 mOhm       | ±2,5 Ohm | 7,2 mΩ   | 1,0 mOhm | 0 %  | pass |  |
|   | 25,0000 kOhm | 25,0000 kOhm | ±7,5 Ohm | -24 mΩ   | 2,0 Ohm  | 26 % | pass |  |
| 4 | -5,2 mOhm    | 0 mOhm       | ±2,5 Ohm | -5,2 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 25,0000 kOhm | 25,0000 kOhm | ±7,5 Ohm | -11 mΩ   | 2,0 Ohm  | 26 % | pass |  |
| 5 | -566 μOhm    | 0 mOhm       | ±2,5 Ohm | -566 μΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 25,0001 kOhm | 25,0000 kOhm | ±7,5 Ohm | 143 mΩ   | 2,0 Ohm  | 28 % | pass |  |
| 6 | -2,4 mOhm    | 0 mOhm       | ±2,5 Ohm | -2,4 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 25,0000 kOhm | 25,0000 kOhm | ±7,5 Ohm | -2 mΩ    | 2,0 Ohm  | 26 % | pass |  |

**measurement range (nominal)** *0 ... 10 kOhm*

*Messbereich (nominell)*

|   |               |               |        |        |          |      |      |  |
|---|---------------|---------------|--------|--------|----------|------|------|--|
| 1 | 1,8 mOhm      | 0 mOhm        | ±1 Ohm | 1,8 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 10,00002 kOhm | 10,00000 kOhm | ±3 Ohm | 19 mΩ  | 720 mOhm | 25 % | pass |  |
| 2 | 3,1 mOhm      | 0 mOhm        | ±1 Ohm | 3,1 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 10,00000 kOhm | 10,00000 kOhm | ±3 Ohm | 2 mΩ   | 720 mOhm | 24 % | pass |  |
| 3 | 1,6 mOhm      | 0 mOhm        | ±1 Ohm | 1,6 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 9,99999 kOhm  | 10,00000 kOhm | ±3 Ohm | -9 mΩ  | 720 mOhm | 24 % | pass |  |
| 4 | 385 μOhm      | 0 mOhm        | ±1 Ohm | 386 μΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 10,00005 kOhm | 10,00000 kOhm | ±3 Ohm | 51 mΩ  | 720 mOhm | 26 % | pass |  |
| 5 | 1,1 mOhm      | 0 mOhm        | ±1 Ohm | 1,1 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 10,00000 kOhm | 10,00000 kOhm | ±3 Ohm | 3 mΩ   | 720 mOhm | 24 % | pass |  |
| 6 | 2,1 mOhm      | 0 mOhm        | ±1 Ohm | 2,1 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 9,99998 kOhm  | 10,00000 kOhm | ±3 Ohm | -16 mΩ | 720 mOhm | 25 % | pass |  |

**measurement range (nominal)** *0 ... 5 kOhm*

*Messbereich (nominell)*

|   |              |              |           |        |          |      |      |  |
|---|--------------|--------------|-----------|--------|----------|------|------|--|
| 1 | 1,2 mOhm     | 0 mOhm       | ±500 mOhm | 1,2 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 5,00002 kOhm | 5,00000 kOhm | ±1,5 Ohm  | 22 mΩ  | 370 mOhm | 26 % | pass |  |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode** *Widerstand (Resistance)*

*Messart*

| channel | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|---------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal   | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |

**measurement range (nominal)** *0 ... 5 kOhm*

*Messbereich (nominell)*

|   |              |              |           |         |          |      |      |  |
|---|--------------|--------------|-----------|---------|----------|------|------|--|
| 2 | 1,2 mOhm     | 0 mOhm       | ±500 mOhm | 1,2 mΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 4,99999 kOhm | 5,00000 kOhm | ±1,5 Ohm  | -10 mΩ  | 370 mOhm | 25 % | pass |  |
| 3 | 834 μOhm     | 0 mOhm       | ±500 mOhm | 834 μΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 5,00000 kOhm | 5,00000 kOhm | ±1,5 Ohm  | 3 mΩ    | 370 mOhm | 25 % | pass |  |
| 4 | -1,4 mOhm    | 0 mOhm       | ±500 mOhm | -1,4 mΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 5,00002 kOhm | 5,00000 kOhm | ±1,5 Ohm  | 17 mΩ   | 370 mOhm | 26 % | pass |  |
| 5 | -744 μOhm    | 0 mOhm       | ±500 mOhm | -745 μΩ | 1,0 mOhm | 0 %  | pass |  |
|   | 5,00000 kOhm | 5,00000 kOhm | ±1,5 Ohm  | 4 mΩ    | 370 mOhm | 25 % | pass |  |
| 6 | 772 μOhm     | 0 mOhm       | ±500 mOhm | 773 μΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 5,00001 kOhm | 5,00000 kOhm | ±1,5 Ohm  | 10 mΩ   | 370 mOhm | 25 % | pass |  |

**measurement range (nominal)** *0 ... 2 kOhm*

*Messbereich (nominell)*

|   |              |              |           |         |          |      |      |  |
|---|--------------|--------------|-----------|---------|----------|------|------|--|
| 1 | 421 μOhm     | 0 mOhm       | ±250 mOhm | 422 μΩ  | 1,0 mOhm | 1 %  | pass |  |
|   | 2,50001 kOhm | 2,50000 kOhm | ±750 mOhm | 8 mΩ    | 200 mOhm | 27 % | pass |  |
| 2 | 218 μOhm     | 0 mOhm       | ±250 mOhm | 219 μΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 2,50000 kOhm | 2,50000 kOhm | ±750 mOhm | -1 mΩ   | 200 mOhm | 26 % | pass |  |
| 3 | 730 μOhm     | 0 mOhm       | ±250 mOhm | 730 μΩ  | 1,0 mOhm | 1 %  | pass |  |
|   | 2,50000 kOhm | 2,50000 kOhm | ±750 mOhm | 662 μΩ  | 200 mOhm | 26 % | pass |  |
| 4 | 262 μOhm     | 0 mOhm       | ±250 mOhm | 262 μΩ  | 1,0 mOhm | 1 %  | pass |  |
|   | 2,50000 kOhm | 2,50000 kOhm | ±750 mOhm | -4 mΩ   | 200 mOhm | 27 % | pass |  |
| 5 | 198 μOhm     | 0 mOhm       | ±250 mOhm | 199 μΩ  | 1,0 mOhm | 0 %  | pass |  |
|   | 2,50000 kOhm | 2,50000 kOhm | ±750 mOhm | 704 μΩ  | 200 mOhm | 26 % | pass |  |
| 6 | -363 μOhm    | 0 mOhm       | ±250 mOhm | -364 μΩ | 1,0 mOhm | 1 %  | pass |  |
|   | 2,50000 kOhm | 2,50000 kOhm | ±750 mOhm | 175 μΩ  | 200 mOhm | 26 % | pass |  |

**measurement range (nominal)** *0 ... 1 kOhm*

*Messbereich (nominell)*

|   |               |               |           |         |          |      |      |  |
|---|---------------|---------------|-----------|---------|----------|------|------|--|
| 1 | -462 μOhm     | 0 mOhm        | ±100 mOhm | -462 μΩ | 1,0 mOhm | 1 %  | pass |  |
|   | 1,000002 kOhm | 1,000000 kOhm | ±300 mOhm | 2 mΩ    | 72 mOhm  | 25 % | pass |  |
| 2 | -157 μOhm     | 0 mOhm        | ±100 mOhm | -158 μΩ | 1,0 mOhm | 1 %  | pass |  |
|   | 1,000000 kOhm | 1,000000 kOhm | ±300 mOhm | 27 μΩ   | 72 mOhm  | 24 % | pass |  |
| 3 | 244 μOhm      | 0 mOhm        | ±100 mOhm | 244 μΩ  | 1,0 mOhm | 1 %  | pass |  |
|   | 1,000003 kOhm | 1,000000 kOhm | ±300 mOhm | 3 mΩ    | 72 mOhm  | 25 % | pass |  |
| 4 | -155 μOhm     | 0 mOhm        | ±100 mOhm | -155 μΩ | 1,0 mOhm | 1 %  | pass |  |
|   | 999,999 Ohm   | 1,000000 kOhm | ±300 mOhm | -1 mΩ   | 72 mOhm  | 24 % | pass |  |
| 5 | 501 μOhm      | 0 mOhm        | ±100 mOhm | 502 μΩ  | 1,0 mOhm | 2 %  | pass |  |
|   | 1,000000 kOhm | 1,000000 kOhm | ±300 mOhm | 22 μΩ   | 72 mOhm  | 24 % | pass |  |
| 6 | -235 μOhm     | 0 mOhm        | ±100 mOhm | -236 μΩ | 1,0 mOhm | 1 %  | pass |  |
|   | 1,000001 kOhm | 1,000000 kOhm | ±300 mOhm | 943 μΩ  | 72 mOhm  | 24 % | pass |  |

**measurement range (nominal)** *0 ... 500 Ohm*

*Messbereich (nominell)*

|   |             |             |           |         |          |      |      |  |
|---|-------------|-------------|-----------|---------|----------|------|------|--|
| 1 | 54 μOhm     | 0 mOhm      | ±50 mOhm  | 54 μΩ   | 1,0 mOhm | 2 %  | pass |  |
|   | 500,002 Ohm | 500,000 Ohm | ±150 mOhm | 2 mΩ    | 37 mOhm  | 26 % | pass |  |
| 2 | -318 μOhm   | 0 mOhm      | ±50 mOhm  | -318 μΩ | 1,0 mOhm | 3 %  | pass |  |
|   | 500,000 Ohm | 500,000 Ohm | ±150 mOhm | 77 μΩ   | 37 mOhm  | 25 % | pass |  |
| 3 | -9 μOhm     | 0 mOhm      | ±50 mOhm  | -9 μΩ   | 1,0 mOhm | 2 %  | pass |  |
|   | 500,000 Ohm | 500,000 Ohm | ±150 mOhm | 251 μΩ  | 37 mOhm  | 25 % | pass |  |
| 4 | -329 μOhm   | 0 mOhm      | ±50 mOhm  | -330 μΩ | 1,0 mOhm | 3 %  | pass |  |
|   | 500,001 Ohm | 500,000 Ohm | ±150 mOhm | 1 mΩ    | 37 mOhm  | 26 % | pass |  |
| 5 | -280 μOhm   | 0 mOhm      | ±50 mOhm  | -280 μΩ | 1,0 mOhm | 3 %  | pass |  |
|   | 500,001 Ohm | 500,000 Ohm | ±150 mOhm | 1 mΩ    | 37 mOhm  | 25 % | pass |  |
| 6 | 363 μOhm    | 0 mOhm      | ±50 mOhm  | 363 μΩ  | 1,0 mOhm | 3 %  | pass |  |
|   | 500,001 Ohm | 500,000 Ohm | ±150 mOhm | 629 μΩ  | 37 mOhm  | 25 % | pass |  |

**measurement range (nominal)** *0 ... 250 Ohm*

*Messbereich (nominell)*

|   |             |             |          |         |          |      |      |  |
|---|-------------|-------------|----------|---------|----------|------|------|--|
| 1 | -224 μOhm   | 0 mOhm      | ±25 mOhm | -225 μΩ | 1,0 mOhm | 5 %  | pass |  |
|   | 250,000 Ohm | 250,000 Ohm | ±75 mOhm | 336 μΩ  | 20 mOhm  | 26 % | pass |  |
| 2 | -114 μOhm   | 0 mOhm      | ±25 mOhm | -115 μΩ | 1,0 mOhm | 4 %  | pass |  |
|   | 249,999 Ohm | 250,000 Ohm | ±75 mOhm | -1 mΩ   | 20 mOhm  | 28 % | pass |  |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

**measurement mode**

*Widerstand (Resistance)*

*Messart*

| channel | measurement value | reference value    | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|---------|-------------------|--------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal   | Messwert          | eingestellter Wert | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |

**measurement range (nominal) 0 ... 250 Ohm**

*Messbereich (nominell)*

|   |             |             |          |         |          |      |      |  |
|---|-------------|-------------|----------|---------|----------|------|------|--|
| 3 | 216 µOhm    | 0 mOhm      | ±25 mOhm | 217 µΩ  | 1,0 mOhm | 5 %  | pass |  |
|   | 250,000 Ohm | 250,000 Ohm | ±75 mOhm | 173 µΩ  | 20 mOhm  | 26 % | pass |  |
| 4 | -132 µOhm   | 0 mOhm      | ±25 mOhm | -132 µΩ | 1,0 mOhm | 5 %  | pass |  |
|   | 250,000 Ohm | 250,000 Ohm | ±75 mOhm | 84 µΩ   | 20 mOhm  | 26 % | pass |  |
| 5 | 330 µOhm    | 0 mOhm      | ±25 mOhm | 331 µΩ  | 1,0 mOhm | 5 %  | pass |  |
|   | 250,000 Ohm | 250,000 Ohm | ±75 mOhm | -14 µΩ  | 20 mOhm  | 26 % | pass |  |
| 6 | 35 µOhm     | 0 mOhm      | ±25 mOhm | 35 µΩ   | 1,0 mOhm | 4 %  | pass |  |
|   | 250,000 Ohm | 250,000 Ohm | ±75 mOhm | -27 µΩ  | 20 mOhm  | 26 % | pass |  |

**measurement range (nominal) 0 ... 100 Ohm**

*Messbereich (nominell)*

|   |              |              |          |         |          |      |      |  |
|---|--------------|--------------|----------|---------|----------|------|------|--|
| 1 | 178 µOhm     | 0 mOhm       | ±10 mOhm | 178 µΩ  | 1,0 mOhm | 12 % | pass |  |
|   | 100,0002 Ohm | 100,0000 Ohm | ±30 mOhm | 171 µΩ  | 8,4 mOhm | 29 % | pass |  |
| 2 | -300 µOhm    | 0 mOhm       | ±10 mOhm | -301 µΩ | 1,0 mOhm | 13 % | pass |  |
|   | 100,0000 Ohm | 100,0000 Ohm | ±30 mOhm | 7 µΩ    | 8,4 mOhm | 28 % | pass |  |
| 3 | 293 µOhm     | 0 mOhm       | ±10 mOhm | 293 µΩ  | 1,0 mOhm | 13 % | pass |  |
|   | 99,9996 Ohm  | 100,0000 Ohm | ±30 mOhm | -354 µΩ | 8,4 mOhm | 29 % | pass |  |
| 4 | 491 µOhm     | 0 mOhm       | ±10 mOhm | 491 µΩ  | 1,0 mOhm | 15 % | pass |  |
|   | 99,9997 Ohm  | 100,0000 Ohm | ±30 mOhm | -343 µΩ | 8,4 mOhm | 29 % | pass |  |
| 5 | -308 µOhm    | 0 mOhm       | ±10 mOhm | -308 µΩ | 1,0 mOhm | 13 % | pass |  |
|   | 99,9997 Ohm  | 100,0000 Ohm | ±30 mOhm | -291 µΩ | 8,4 mOhm | 29 % | pass |  |
| 6 | -24 µOhm     | 0 mOhm       | ±10 mOhm | -24 µΩ  | 1,0 mOhm | 10 % | pass |  |
|   | 100,0002 Ohm | 100,0000 Ohm | ±30 mOhm | 180 µΩ  | 8,4 mOhm | 29 % | pass |  |

# Calibration Certificate Kalibrierzertifikat

imc\_0055222

*measurement mode*

*Temperature PT1000 4-Wire*

*Messart*

| channel                            | measurement value | reference value        | allowed deviation    | measured deviation   | uncertainty of measurement | % of allowed deviation | result   | Remarks     |
|------------------------------------|-------------------|------------------------|----------------------|----------------------|----------------------------|------------------------|----------|-------------|
| Kanal                              | Messwert          | eingestellter Wert     | zulässige Abweichung | gemessene Abweichung | Messunsicherheit           | Toleranzausnutzung     | Ergebnis | Bemerkungen |
| <i>measurement range (nominal)</i> |                   | <i>-200 ... 850 °C</i> |                      |                      |                            |                        |          |             |
| <i>Messbereich (nominell)</i>      |                   |                        |                      |                      |                            |                        |          |             |
| 1                                  | -149,9907 °C      | -150,0004 °C           | ±0,05K               | 9,8 mK               | 0,0077 K                   | 35 %                   | pass     |             |
|                                    | -0,012 °C         | 0,000 °C               | ±0,10K               | -12 mK               | 0,019 K                    | 31 %                   | pass     |             |
|                                    | 800,024 °C        | 800,020 °C             | ±0,40K               | 4 mK                 | 0,073 K                    | 19 %                   | pass     |             |
| 2                                  | -149,9913 °C      | -150,0004 °C           | ±0,05K               | 9,1 mK               | 0,0077 K                   | 34 %                   | pass     |             |
|                                    | -0,011 °C         | 0,000 °C               | ±0,10K               | -11 mK               | 0,019 K                    | 30 %                   | pass     |             |
|                                    | 800,022 °C        | 800,020 °C             | ±0,40K               | 2 mK                 | 0,073 K                    | 19 %                   | pass     |             |
| 3                                  | -149,9882 °C      | -150,0004 °C           | ±0,05K               | 12,3 mK              | 0,0077 K                   | 40 %                   | pass     |             |
|                                    | -0,016 °C         | 0,000 °C               | ±0,10K               | -16 mK               | 0,019 K                    | 35 %                   | pass     |             |
|                                    | 800,025 °C        | 800,020 °C             | ±0,40K               | 5 mK                 | 0,073 K                    | 20 %                   | pass     |             |
| 4                                  | -150,0078 °C      | -150,0004 °C           | ±0,05K               | -7,4 mK              | 0,0077 K                   | 30 %                   | pass     |             |
|                                    | 0,009 °C          | 0,000 °C               | ±0,10K               | 9 mK                 | 0,019 K                    | 28 %                   | pass     |             |
|                                    | 800,018 °C        | 800,020 °C             | ±0,40K               | -2 mK                | 0,073 K                    | 19 %                   | pass     |             |
| 5                                  | -149,9919 °C      | -150,0004 °C           | ±0,05K               | 8,5 mK               | 0,0077 K                   | 33 %                   | pass     |             |
|                                    | -0,010 °C         | 0,000 °C               | ±0,10K               | -10 mK               | 0,019 K                    | 29 %                   | pass     |             |
|                                    | 800,026 °C        | 800,020 °C             | ±0,40K               | 6 mK                 | 0,073 K                    | 20 %                   | pass     |             |
| 6                                  | -149,9925 °C      | -150,0004 °C           | ±0,05K               | 8,0 mK               | 0,0077 K                   | 31 %                   | pass     |             |
|                                    | -0,008 °C         | 0,000 °C               | ±0,10K               | -8 mK                | 0,019 K                    | 27 %                   | pass     |             |
|                                    | 800,028 °C        | 800,020 °C             | ±0,40K               | 8 mK                 | 0,073 K                    | 20 %                   | pass     |             |

Summary

Zusammenfassung

Max. % of allowed deviation is 52 %