



**DEWETRON GmbH**  
Parking 4  
8074 Grambach  
Austria



|                 |
|-----------------|
| AAT2030209      |
| <b>ÖKD 0632</b> |
| 15.04.2020      |

Kalibrierstelle für elektrische Messgrößen  
Calibration body for electrical measurands

akkreditiert durch / accredited by  
**AKKREDITIERUNG AUSTRIA**

Kalibrierzeichen  
Calibration Mark

Kalibrierschein nach ISO/IEC 17025  
Calibration certificate according to ISO/IEC 17025

Gegenstand  
Object Multi channel RTD module

Hersteller  
Manufacturer DEWETRON

Typ  
Type xPAD2-RTD8-LEMO

Herstellernummer  
Serial number 530472

Auftraggeber  
Customer

Kalibriernummer  
Order number AAT2030209

Anzahl der Seiten des Kalibrierscheines  
Number of pages of the certificate 8

Datum der Kalibrierung  
Date of calibration 15.04.2020

Dieser Kalibrierschein dokumentiert die Rückführbarkeit auf nationale Normale zur Darstellung der physikalischen Einheiten in Übereinstimmung mit dem Internationalen Einheitensystem (SI).

Akkreditierung Austria ist Unterzeichner der multilateralen Übereinkommen der European Co-operation for Accreditation (EA) und der International Laboratory Accreditation Cooperation (ILAC) zur gegenseitigen Anerkennung der Kalibrierscheine.

*This calibration certificate documents the traceability to national standards, which realize the physical units of measurements according to the International system of Units (SI).*

*Akkreditierung Austria is a signatory to the multilateral agreements of the European Co-operation for Accreditation (EA) and of the International Laboratory Accreditation Cooperation (ILAC) for the mutual recognition of calibration certificates.*

Dieser Kalibrierschein darf nur vollständig und unverändert weiterverbreitet werden. Auszüge oder Änderungen sind unzulässig. Kalibrierscheine ohne Unterschrift und Stempel haben keine Gültigkeit.

*This calibration certificate may not be reproduced other than in full. Calibration certificates without signature and seal are not valid.*

Stempel  
Seal

Datum  
Date

Zeichnungsberechtigter  
Authorised person

Bearbeiter  
Person responsible

15.04.2020

Daniel Kurzmann

Stefan Strohmaier

### **1. Kalibriergegenstand / Calibration object**

Multi channel RTD module DEWETRON xPAD2-RTD8-LEMO, S/N: 530472

### **2. Kalibrierverfahren / Calibration procedure**

Die Kalibrierung erfolgt durch Vergleich der durch die Kalibrierstelle / Normale dargestellten Werte mit den Ausgangsgrößen am Kalibriergegenstand beziehungsweise den am Kalibriergegenstand angezeigten Werten.  
*The calibration is made by comparing the readings from the laboratory / standards to the output of the calibration object respectively the values displayed on the calibration object.*

Prüfroutine / *Calibration procedure*: xPAD2-RTD\_Akkred, Rev. 1.00

### **3. Messergebnisse / Measurement results**

Die Kalibrierung im Rahmen der Akkreditierung umfasst die Messgrößen Gleichspannung, Wechselspannung, Gleichstrom, Wechselstrom und Gleichstromwiderstand.

Die Messergebnisse beziehen sich ausschließlich auf diesen Kalibriergegenstand zum Zeitpunkt der Kalibrierung.  
*The calibration scope of the accreditation contains the quantities direct voltage, alternating voltage, direct current, alternating current and direct current resistance.*

*The measurement results are exclusively linked to this calibration object at the time of calibration.*

### **4. Messunsicherheit / Measurement uncertainty**

Angegeben ist die erweiterte Messunsicherheit, die sich aus der Standardmessunsicherheit durch Multiplikation mit dem Erweiterungsfaktor  $k=2$  ergibt. Sie wurde gemäß EA-4/02 ermittelt. Der Wert der Messgröße liegt im Regelfall mit einer Wahrscheinlichkeit von annähernd 95% im zugeordneten Werteintervall.

Ein Anteil für die Langzeitstabilität des Kalibriergegenstandes ist nicht enthalten.

*The stated extended measurement uncertainty is derived from the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ . It has been determined according to EA-4/02. The measured quantity is inside the corresponding value interval with a probability of approximately 95%.*

*A factor for the long time stability of the calibration object is not taken into account.*

### **5. Umgebungsbedingungen / environmental conditions**

Temperatur / *Temperature*: 23,9 °C

Rel. Luftfeuchte / *Rel. humidity*: 41,5 % r.H.

Kalibrierort / *Place of calibration*: DEWETRON GmbH, Parkring 4, 8074 Grambach, Austria

### **6. Auftragsnummer / Reference Number**

### **7. Status / Status**

PASS ()

AS-FOUND: Eingangskalibration / *Incoming calibration*

AS-LEFT: Ausgangskalibration / *Outgoing calibration*

FOUND/LEFT: Eingangskalibration erfüllt Herstellerspezifikation / *Incoming calibration according to manufacturer specifications*

PASS: Messergebnis liegt innerhalb der Herstellerspezifikationen (ohne Berücksichtigung der Messunsicherheiten) / *Measurement result is within manufacturer's specifications (without taking into account the measurement uncertainties)*

FAIL: Das Messergebnis liegt nicht innerhalb der Herstellerspezifikationen (ohne Berücksichtigung der Messunsicherheiten) / *Measurement result is out of manufacturer's specifications (without taking into account the measurement uncertainties)*

### **8. Verwendete Fußnoten / Used foot notes:**

(1) Zusätzliche Messwerte außerhalb des akkreditierten Bereiches, es kann keine Konformitätsaussage getroffen werden.

*(1) Additional measured values outside the accredited scope, a conformity statement cannot be made.*

### **9. Kommentare / Comments**

testrun akkred

Für die Festlegung und Einhaltung einer angemessenen Frist zur Wiederholung der Kalibrierung ist der Benutzer verantwortlich.

*The user is responsible for the definition and the compliance to a reasonable period for repeating the calibration.*



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**10. Verwendete Normale / Standards used**

| <u>Asset</u>      | <u>Description</u> | <u>Serial Number</u> | <u>Certificate No.</u> | <u>Cal Date</u> | <u>Due Date</u> |
|-------------------|--------------------|----------------------|------------------------|-----------------|-----------------|
| 5520A             | 5520A CALIBRATOR   | 8479009              | 2297681                | 3-Mai-2019      | 2-Mai-2020      |
| Keysight 3458A 03 | 3458A Multimeter   | MY45052880           | C4082019               | 28-Aug-2019     | 28-Aug-2020     |



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**11. Testergebnisse / Test results**

| Test Description                          | True Value | Test Result | Lower limit | Upper limit    | Exp Uncert | Error | % of Tol | Status |
|---|------------|-------------|-------------|----------------|------------|-------|----------|--------|
| Current Temperature of DMM and Calibrator |            |             |             |                |            |       |          |        |
| DMM:                                      | 41.4 °C    |             |             |                |            |       |          |        |
| Calibrator:                               | 29.7 °C    |             |             |                |            |       |          |        |
| EPAD2-TH8 Ver. 7.60<br>530472             |            |             |             |                |            |       |          |        |
| Channel 1 Pt100 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.01 °C | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,01 °C   | 5.33% | Pass     |        |
| 0.00 °C                                   | -0.10 °C   | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,10 °C   | 41.3% | Pass     |        |
| 100.00 °C                                 | 99.89 °C   | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,11 °C   | 4%    | Pass     |        |
| 300.00 °C                                 | 299.89 °C  | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,11 °C   | 26.7% | Pass     |        |
| 600.00 °C                                 | 599.83 °C  | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,17 °C   | 21.2% | Pass     |        |
| 790.00 °C                                 | 789.90 °C  | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,10 °C   | 12.5% | Pass (1) |        |
| Channel 1 Pt100 (3916)                    |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.04 °C | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,04 °C   | 16%   | Pass     |        |
| 0.00 °C                                   | -0.12 °C   | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,12 °C   | 46.7% | Pass     |        |
| 100.00 °C                                 | 99.88 °C   | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,12 °C   | 46.7% | Pass     |        |
| 300.00 °C                                 | 299.89 °C  | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,11 °C   | 27.5% | Pass     |        |
| 600.00 °C                                 | 599.83 °C  | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,17 °C   | 20.8% | Pass     |        |
| Channel 1 Pt200 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.00 °C | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | 0,00 °C    | 0%    | Pass     |        |
| 0.00 °C                                   | -0.06 °C   | -0.25 °C    | 0.25 °C     | 160.00 e-03 °C | -0,06 °C   | 24%   | Pass     |        |
| 100.00 °C                                 | 99.92 °C   | 99.75 °C    | 100.25 °C   | 160.00 e-03 °C | -0,08 °C   | 32%   | Pass     |        |
| 300.00 °C                                 | 299.97 °C  | 299.60 °C   | 300.40 °C   | 160.00 e-03 °C | -0,03 °C   | 7.5%  | Pass     |        |
| 600.00 °C                                 | 599.92 °C  | 599.50 °C   | 600.50 °C   | 160.00 e-03 °C | -0,08 °C   | 16%   | Pass     |        |
| Channel 1 Pt500 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -189.97 °C | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,03 °C    | 12%   | Pass     |        |
| 0.00 °C                                   | -0.02 °C   | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,02 °C   | 8%    | Pass     |        |
| 100.00 °C                                 | 99.97 °C   | 99.75 °C    | 100.25 °C   | 90.00 e-03 °C  | -0,03 °C   | 12%   | Pass     |        |
| 240.00 °C                                 | 239.97 °C  | 239.60 °C   | 240.40 °C   | 90.00 e-03 °C  | -0,03 °C   | 7.5%  | Pass     |        |
| Channel 1 Pt1000 (385)                    |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -189.97 °C | -190.25 °C  | -189.75 °C  | 70.00 e-03 °C  | 0,03 °C    | 13.3% | Pass     |        |
| 0.00 °C                                   | -0.01 °C   | -0.25 °C    | 0.25 °C     | 70.00 e-03 °C  | -0,01 °C   | 4%    | Pass     |        |
| 100.00 °C                                 | 99.99 °C   | 99.75 °C    | 100.25 °C   | 70.00 e-03 °C  | -0,01 °C   | 4%    | Pass     |        |
| 300.00 °C                                 | 300.01 °C  | 299.60 °C   | 300.40 °C   | 70.00 e-03 °C  | 0,01 °C    | 3.33% | Pass     |        |
| 590.00 °C                                 | 590.05 °C  | 589.20 °C   | 590.80 °C   | 70.00 e-03 °C  | 0,05 °C    | 6.25% | Pass     |        |
| Channel 1 Resistance 0 - 999.990hm        |            |             |             |                |            |       |          |        |
| 10.00 Ω                                   | 9.97 Ω     | 9.90 Ω      | 10.10 Ω     | 1.00 e-03 Ω    | -0,03 Ω    | 32.4% | Pass     |        |
| 100.00 Ω                                  | 99.94 Ω    | 99.87 Ω     | 100.13 Ω    | 9.00 e-03 Ω    | -0,06 Ω    | 46.2% | Pass     |        |
| 500.00 Ω                                  | 499.90 Ω   | 499.75 Ω    | 500.25 Ω    | 120.00 e-03 Ω  | -0,10 Ω    | 40%   | Pass     |        |
| 990.00 Ω                                  | 989.85 Ω   | 989.60 Ω    | 990.40 Ω    | 180.00 e-03 Ω  | -0,15 Ω    | 38.6% | Pass     |        |
| Channel 2 Pt100 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.04 °C | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,04 °C   | 14.7% | Pass     |        |
| 0.00 °C                                   | -0.11 °C   | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,11 °C   | 44%   | Pass     |        |
| 100.00 °C                                 | 99.89 °C   | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,11 °C   | 45.3% | Pass     |        |
| 300.00 °C                                 | 299.90 °C  | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,10 °C   | 24.2% | Pass     |        |
| 600.00 °C                                 | 599.86 °C  | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,14 °C   | 17.9% | Pass     |        |
| 790.00 °C                                 | 789.94 °C  | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,06 °C   | 7.08% | Pass (1) |        |
| Channel 2 Pt100 (3916)                    |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.05 °C | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,05 °C   | 18.7% | Pass     |        |
| 0.00 °C                                   | -0.12 °C   | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,12 °C   | 48%   | Pass     |        |
| 100.00 °C                                 | 99.88 °C   | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,12 °C   | 48%   | Pass     |        |
| 300.00 °C                                 | 299.89 °C  | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,11 °C   | 26.7% | Pass     |        |
| 600.00 °C                                 | 599.86 °C  | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,14 °C   | 17.5% | Pass     |        |
| Channel 2 Pt200 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -190.01 °C | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | -0,01 °C   | 4%    | Pass     |        |
| 0.00 °C                                   | -0.05 °C   | -0.25 °C    | 0.25 °C     | 160.00 e-03 °C | -0,05 °C   | 20%   | Pass     |        |
| 100.00 °C                                 | 99.93 °C   | 99.75 °C    | 100.25 °C   | 160.00 e-03 °C | -0,07 °C   | 28%   | Pass     |        |
| 300.00 °C                                 | 299.98 °C  | 299.60 °C   | 300.40 °C   | 160.00 e-03 °C | -0,02 °C   | 4.17% | Pass     |        |
| 600.00 °C                                 | 599.96 °C  | 599.50 °C   | 600.50 °C   | 160.00 e-03 °C | -0,04 °C   | 8%    | Pass     |        |
| Channel 2 Pt500 (385)                     |            |             |             |                |            |       |          |        |
| -190.00 °C                                | -189.97 °C | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,03 °C    | 12%   | Pass     |        |
| 0.00 °C                                   | -0.01 °C   | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,01 °C   | 4%    | Pass     |        |
| 100.00 °C                                 | 99.99 °C   | 99.75 °C    | 100.25 °C   | 90.00 e-03 °C  | -0,01 °C   | 4%    | Pass     |        |
| 240.00 °C                                 | 239.99 °C  | 239.60 °C   | 240.40 °C   | 90.00 e-03 °C  | -0,01 °C   | 2.5%  | Pass     |        |
| Channel 2 Pt1000 (385)                    |            |             |             |                |            |       |          |        |



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**11. Testergebnisse / Test results**

| Test Description                   | True Value | Test Result | Lower limit | Upper limit | Exp Uncert     | Error    | % of Tol | Status   |
|------------------------------------|------------|-------------|-------------|-------------|----------------|----------|----------|----------|
|                                    | -190.00 °C | -189.96 °C  | -190.25 °C  | -189.75 °C  | 70.00 e-03 °C  | 0,04 °C  | 16%      | Pass     |
|                                    | 0.00 °C    | 0.00 °C     | -0.25 °C    | 0.25 °C     | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 100.00 °C  | 100.00 °C   | 99.75 °C    | 100.25 °C   | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 300.00 °C  | 300.04 °C   | 299.60 °C   | 300.40 °C   | 70.00 e-03 °C  | 0,04 °C  | 10%      | Pass     |
|                                    | 590.00 °C  | 590.10 °C   | 589.20 °C   | 590.80 °C   | 70.00 e-03 °C  | 0,10 °C  | 12.5%    | Pass     |
| Channel 2 Resistance 0 - 999.99Ohm |            |             |             |             |                |          |          |          |
|                                    | 10.00 Ω    | 9.96 Ω      | 9.90 Ω      | 10.10 Ω     | 1.00 e-03 Ω    | -0,04 Ω  | 35.6%    | Pass     |
|                                    | 100.00 Ω   | 99.94 Ω     | 99.87 Ω     | 100.13 Ω    | 9.00 e-03 Ω    | -0,06 Ω  | 46.2%    | Pass     |
|                                    | 500.00 Ω   | 499.92 Ω    | 499.75 Ω    | 500.25 Ω    | 120.00 e-03 Ω  | -0,08 Ω  | 32%      | Pass     |
|                                    | 990.00 Ω   | 989.89 Ω    | 989.60 Ω    | 990.40 Ω    | 180.00 e-03 Ω  | -0,11 Ω  | 28.5%    | Pass     |
| Channel 3 Pt100 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.06 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,06 °C | 24%      | Pass     |
|                                    | 0.00 °C    | -0.14 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,14 °C | 54.7%    | Pass     |
|                                    | 100.00 °C  | 99.85 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,15 °C | 60%      | Pass     |
|                                    | 300.00 °C  | 299.85 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,15 °C | 36.7%    | Pass     |
|                                    | 600.00 °C  | 599.80 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,20 °C | 25.4%    | Pass     |
|                                    | 790.00 °C  | 789.87 °C   | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,13 °C | 16.2%    | Pass (1) |
| Channel 3 Pt100 (3916)             |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.09 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,09 °C | 36%      | Pass     |
|                                    | 0.00 °C    | -0.15 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,15 °C | 61.3%    | Pass     |
|                                    | 100.00 °C  | 99.83 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,17 °C | 68%      | Pass     |
|                                    | 300.00 °C  | 299.85 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,15 °C | 38.3%    | Pass     |
|                                    | 600.00 °C  | 599.79 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,21 °C | 25.8%    | Pass     |
| Channel 3 Pt200 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.03 °C  | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | -0,03 °C | 10.7%    | Pass     |
|                                    | 0.00 °C    | -0.08 °C    | -0.25 °C    | 0.25 °C     | 160.00 e-03 °C | -0,08 °C | 32%      | Pass     |
|                                    | 100.00 °C  | 99.91 °C    | 99.75 °C    | 100.25 °C   | 160.00 e-03 °C | -0,09 °C | 37.3%    | Pass     |
|                                    | 300.00 °C  | 299.95 °C   | 299.60 °C   | 300.40 °C   | 160.00 e-03 °C | -0,05 °C | 11.7%    | Pass     |
|                                    | 600.00 °C  | 599.92 °C   | 599.50 °C   | 600.50 °C   | 160.00 e-03 °C | -0,08 °C | 16%      | Pass     |
| Channel 3 Pt500 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -189.98 °C  | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,02 °C  | 8%       | Pass     |
|                                    | 0.00 °C    | -0.02 °C    | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,02 °C | 8%       | Pass     |
|                                    | 100.00 °C  | 99.97 °C    | 99.75 °C    | 100.25 °C   | 90.00 e-03 °C  | -0,03 °C | 12%      | Pass     |
|                                    | 240.00 °C  | 239.98 °C   | 239.60 °C   | 240.40 °C   | 90.00 e-03 °C  | -0,02 °C | 5%       | Pass     |
| Channel 3 Pt1000 (385)             |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -189.97 °C  | -190.25 °C  | -189.75 °C  | 70.00 e-03 °C  | 0,03 °C  | 12%      | Pass     |
|                                    | 0.00 °C    | 0.00 °C     | -0.25 °C    | 0.25 °C     | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 100.00 °C  | 99.99 °C    | 99.75 °C    | 100.25 °C   | 70.00 e-03 °C  | -0,01 °C | 2.67%    | Pass     |
|                                    | 300.00 °C  | 300.03 °C   | 299.60 °C   | 300.40 °C   | 70.00 e-03 °C  | 0,03 °C  | 7.5%     | Pass     |
|                                    | 590.00 °C  | 590.09 °C   | 589.20 °C   | 590.80 °C   | 70.00 e-03 °C  | 0,09 °C  | 11.3%    | Pass     |
| Channel 3 Resistance 0 - 999.99Ohm |            |             |             |             |                |          |          |          |
|                                    | 10.00 Ω    | 9.95 Ω      | 9.90 Ω      | 10.10 Ω     | 1.00 e-03 Ω    | -0,05 Ω  | 51.8%    | Pass     |
|                                    | 100.00 Ω   | 99.92 Ω     | 99.87 Ω     | 100.13 Ω    | 9.00 e-03 Ω    | -0,08 Ω  | 61.5%    | Pass     |
|                                    | 500.00 Ω   | 499.90 Ω    | 499.75 Ω    | 500.25 Ω    | 120.00 e-03 Ω  | -0,10 Ω  | 40%      | Pass     |
|                                    | 990.00 Ω   | 989.86 Ω    | 989.60 Ω    | 990.40 Ω    | 180.00 e-03 Ω  | -0,14 Ω  | 35.3%    | Pass     |
| Channel 4 Pt100 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.06 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,06 °C | 22.7%    | Pass     |
|                                    | 0.00 °C    | -0.15 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,15 °C | 61.3%    | Pass     |
|                                    | 100.00 °C  | 99.85 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,15 °C | 60%      | Pass     |
|                                    | 300.00 °C  | 299.86 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,14 °C | 35.8%    | Pass     |
|                                    | 600.00 °C  | 599.81 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,19 °C | 24.2%    | Pass     |
|                                    | 790.00 °C  | 789.90 °C   | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,10 °C | 12.5%    | Pass (1) |
| Channel 4 Pt100 (3916)             |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.08 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,08 °C | 33.3%    | Pass     |
|                                    | 0.00 °C    | -0.16 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,16 °C | 64%      | Pass     |
|                                    | 100.00 °C  | 99.84 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,16 °C | 64%      | Pass     |
|                                    | 300.00 °C  | 299.86 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,14 °C | 35%      | Pass     |
|                                    | 600.00 °C  | 599.82 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,18 °C | 22.9%    | Pass     |
| Channel 4 Pt200 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -190.02 °C  | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | -0,02 °C | 9.33%    | Pass     |
|                                    | 0.00 °C    | -0.07 °C    | -0.25 °C    | 0.25 °C     | 160.00 e-03 °C | -0,07 °C | 28%      | Pass     |
|                                    | 100.00 °C  | 99.91 °C    | 99.75 °C    | 100.25 °C   | 160.00 e-03 °C | -0,09 °C | 36%      | Pass     |
|                                    | 300.00 °C  | 299.96 °C   | 299.60 °C   | 300.40 °C   | 160.00 e-03 °C | -0,04 °C | 10%      | Pass     |
|                                    | 600.00 °C  | 599.93 °C   | 599.50 °C   | 600.50 °C   | 160.00 e-03 °C | -0,07 °C | 14%      | Pass     |
| Channel 4 Pt500 (385)              |            |             |             |             |                |          |          |          |
|                                    | -190.00 °C | -189.98 °C  | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,02 °C  | 8%       | Pass     |
|                                    | 0.00 °C    | -0.02 °C    | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,02 °C | 6.67%    | Pass     |



**DEWETRON GmbH**  
 Parkring 4  
 8074 Grambach  
 AUSTRIA

Kalibrierschein nach ISO/IEC 17025  
 Calibration Certificate according to ISO/IEC 17025

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| AAT2030209      |
| <b>ÖKD 0632</b> |
| 15.04.2020      |

**11. Testergebnisse / Test results**

| <u>Test Description</u>            | <u>True Value</u> | <u>Test Result</u> | <u>Lower limit</u> | <u>Upper limit</u> | <u>Exp Uncert</u> | <u>Error</u> | <u>% of Tol</u> | <u>Status</u> |
|------------------------------------|-------------------|--------------------|--------------------|--------------------|-------------------|--------------|-----------------|---------------|
|                                    | 100.00 °C         | 99.97 °C           | 99.75 °C           | 100.25 °C          | 90.00 e-03 °C     | -0,03 °C     | 12%             | Pass          |
|                                    | 240.00 °C         | 239.98 °C          | 239.60 °C          | 240.40 °C          | 90.00 e-03 °C     | -0,02 °C     | 5%              | Pass          |
| Channel 4 Pt1000 (385)             |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -189.97 °C         | -190.25 °C         | -189.75 °C         | 70.00 e-03 °C     | 0,03 °C      | 12%             | Pass          |
|                                    | 0.00 °C           | 0.00 °C            | -0.25 °C           | 0.25 °C            | 70.00 e-03 °C     | 0,00 °C      | 0%              | Pass          |
|                                    | 100.00 °C         | 100.00 °C          | 99.75 °C           | 100.25 °C          | 70.00 e-03 °C     | 0,00 °C      | 0%              | Pass          |
|                                    | 300.00 °C         | 300.04 °C          | 299.60 °C          | 300.40 °C          | 70.00 e-03 °C     | 0,04 °C      | 10%             | Pass          |
|                                    | 590.00 °C         | 590.09 °C          | 589.20 °C          | 590.80 °C          | 70.00 e-03 °C     | 0,09 °C      | 11.7%           | Pass          |
| Channel 4 Resistance 0 - 999.99Ohm |                   |                    |                    |                    |                   |              |                 |               |
|                                    | 10.00 Ω           | 9.95 Ω             | 9.90 Ω             | 10.10 Ω            | 1.00 e-03 Ω       | -0,05 Ω      | 45.3%           | Pass          |
|                                    | 100.00 Ω          | 99.93 Ω            | 99.87 Ω            | 100.13 Ω           | 9.00 e-03 Ω       | -0,07 Ω      | 56.4%           | Pass          |
|                                    | 500.00 Ω          | 499.90 Ω           | 499.75 Ω           | 500.25 Ω           | 120.00 e-03 Ω     | -0,10 Ω      | 40%             | Pass          |
|                                    | 990.00 Ω          | 989.87 Ω           | 989.60 Ω           | 990.40 Ω           | 180.00 e-03 Ω     | -0,13 Ω      | 32.7%           | Pass          |
| Channel 5 Pt100 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.06 °C         | -190.25 °C         | -189.75 °C         | 120.00 e-03 °C    | -0,06 °C     | 24%             | Pass          |
|                                    | 0.00 °C           | -0.15 °C           | -0.25 °C           | 0.25 °C            | 120.00 e-03 °C    | -0,15 °C     | 60%             | Pass          |
|                                    | 100.00 °C         | 99.84 °C           | 99.75 °C           | 100.25 °C          | 120.00 e-03 °C    | -0,16 °C     | 64%             | Pass          |
|                                    | 300.00 °C         | 299.86 °C          | 299.60 °C          | 300.40 °C          | 120.00 e-03 °C    | -0,14 °C     | 35.8%           | Pass          |
|                                    | 600.00 °C         | 599.79 °C          | 599.20 °C          | 600.80 °C          | 120.00 e-03 °C    | -0,21 °C     | 25.8%           | Pass          |
|                                    | 790.00 °C         | 789.87 °C          | 789.20 °C          | 790.80 °C          | 230.00 e-03 °C    | -0,13 °C     | 15.8%           | Pass          |
| Channel 5 Pt100 (3916)             |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.10 °C         | -190.25 °C         | -189.75 °C         | 120.00 e-03 °C    | -0,10 °C     | 38.7%           | Pass          |
|                                    | 0.00 °C           | -0.16 °C           | -0.25 °C           | 0.25 °C            | 120.00 e-03 °C    | -0,16 °C     | 65.3%           | Pass          |
|                                    | 100.00 °C         | 99.84 °C           | 99.75 °C           | 100.25 °C          | 120.00 e-03 °C    | -0,16 °C     | 64%             | Pass          |
|                                    | 300.00 °C         | 299.84 °C          | 299.60 °C          | 300.40 °C          | 120.00 e-03 °C    | -0,16 °C     | 40.8%           | Pass          |
|                                    | 600.00 °C         | 599.80 °C          | 599.20 °C          | 600.80 °C          | 120.00 e-03 °C    | -0,20 °C     | 25.4%           | Pass          |
| Channel 5 Pt200 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.03 °C         | -190.25 °C         | -189.75 °C         | 160.00 e-03 °C    | -0,03 °C     | 10.7%           | Pass          |
|                                    | 0.00 °C           | -0.08 °C           | -0.25 °C           | 0.25 °C            | 160.00 e-03 °C    | -0,08 °C     | 30.7%           | Pass          |
|                                    | 100.00 °C         | 99.91 °C           | 99.75 °C           | 100.25 °C          | 160.00 e-03 °C    | -0,09 °C     | 36%             | Pass          |
|                                    | 300.00 °C         | 299.95 °C          | 299.60 °C          | 300.40 °C          | 160.00 e-03 °C    | -0,05 °C     | 11.7%           | Pass          |
|                                    | 600.00 °C         | 599.92 °C          | 599.50 °C          | 600.50 °C          | 160.00 e-03 °C    | -0,08 °C     | 16%             | Pass          |
| Channel 5 Pt500 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -189.98 °C         | -190.25 °C         | -189.75 °C         | 90.00 e-03 °C     | 0,02 °C      | 8%              | Pass          |
|                                    | 0.00 °C           | -0.02 °C           | -0.25 °C           | 0.25 °C            | 90.00 e-03 °C     | -0,02 °C     | 8%              | Pass          |
|                                    | 100.00 °C         | 99.97 °C           | 99.75 °C           | 100.25 °C          | 90.00 e-03 °C     | -0,03 °C     | 12%             | Pass          |
|                                    | 240.00 °C         | 239.98 °C          | 239.60 °C          | 240.40 °C          | 90.00 e-03 °C     | -0,02 °C     | 5.83%           | Pass          |
| Channel 5 Pt1000 (385)             |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -189.97 °C         | -190.25 °C         | -189.75 °C         | 70.00 e-03 °C     | 0,03 °C      | 12%             | Pass          |
|                                    | 0.00 °C           | 0.00 °C            | -0.25 °C           | 0.25 °C            | 70.00 e-03 °C     | 0,00 °C      | 0%              | Pass          |
|                                    | 100.00 °C         | 99.99 °C           | 99.75 °C           | 100.25 °C          | 70.00 e-03 °C     | -0,01 °C     | 2.67%           | Pass          |
|                                    | 300.00 °C         | 300.03 °C          | 299.60 °C          | 300.40 °C          | 70.00 e-03 °C     | 0,03 °C      | 7.5%            | Pass          |
|                                    | 590.00 °C         | 590.09 °C          | 589.20 °C          | 590.80 °C          | 70.00 e-03 °C     | 0,09 °C      | 10.8%           | Pass          |
| Channel 5 Resistance 0 - 999.99Ohm |                   |                    |                    |                    |                   |              |                 |               |
|                                    | 10.00 Ω           | 9.95 Ω             | 9.90 Ω             | 10.10 Ω            | 1.00 e-03 Ω       | -0,05 Ω      | 45.3%           | Pass          |
|                                    | 100.00 Ω          | 99.92 Ω            | 99.87 Ω            | 100.13 Ω           | 9.00 e-03 Ω       | -0,08 Ω      | 61.5%           | Pass          |
|                                    | 500.00 Ω          | 499.90 Ω           | 499.75 Ω           | 500.25 Ω           | 120.00 e-03 Ω     | -0,10 Ω      | 40%             | Pass          |
|                                    | 990.00 Ω          | 989.86 Ω           | 989.60 Ω           | 990.40 Ω           | 180.00 e-03 Ω     | -0,14 Ω      | 34.4%           | Pass          |
| Channel 6 Pt100 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.08 °C         | -190.25 °C         | -189.75 °C         | 120.00 e-03 °C    | -0,08 °C     | 33.3%           | Pass          |
|                                    | 0.00 °C           | -0.16 °C           | -0.25 °C           | 0.25 °C            | 120.00 e-03 °C    | -0,16 °C     | 62.7%           | Pass          |
|                                    | 100.00 °C         | 99.85 °C           | 99.75 °C           | 100.25 °C          | 120.00 e-03 °C    | -0,15 °C     | 61.3%           | Pass          |
|                                    | 300.00 °C         | 299.85 °C          | 299.60 °C          | 300.40 °C          | 120.00 e-03 °C    | -0,15 °C     | 37.5%           | Pass          |
|                                    | 600.00 °C         | 599.81 °C          | 599.20 °C          | 600.80 °C          | 120.00 e-03 °C    | -0,19 °C     | 23.8%           | Pass          |
|                                    | 790.00 °C         | 789.92 °C          | 789.20 °C          | 790.80 °C          | 230.00 e-03 °C    | -0,08 °C     | 10.4%           | Pass          |
| Channel 6 Pt100 (3916)             |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.09 °C         | -190.25 °C         | -189.75 °C         | 120.00 e-03 °C    | -0,09 °C     | 34.7%           | Pass          |
|                                    | 0.00 °C           | -0.16 °C           | -0.25 °C           | 0.25 °C            | 120.00 e-03 °C    | -0,16 °C     | 64%             | Pass          |
|                                    | 100.00 °C         | 99.84 °C           | 99.75 °C           | 100.25 °C          | 120.00 e-03 °C    | -0,16 °C     | 64%             | Pass          |
|                                    | 300.00 °C         | 299.85 °C          | 299.60 °C          | 300.40 °C          | 120.00 e-03 °C    | -0,15 °C     | 36.7%           | Pass          |
|                                    | 600.00 °C         | 599.82 °C          | 599.20 °C          | 600.80 °C          | 120.00 e-03 °C    | -0,18 °C     | 22.5%           | Pass          |
| Channel 6 Pt200 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -190.03 °C         | -190.25 °C         | -189.75 °C         | 160.00 e-03 °C    | -0,03 °C     | 12%             | Pass          |
|                                    | 0.00 °C           | -0.07 °C           | -0.25 °C           | 0.25 °C            | 160.00 e-03 °C    | -0,07 °C     | 29.3%           | Pass          |
|                                    | 100.00 °C         | 99.91 °C           | 99.75 °C           | 100.25 °C          | 160.00 e-03 °C    | -0,09 °C     | 34.7%           | Pass          |
|                                    | 300.00 °C         | 299.97 °C          | 299.60 °C          | 300.40 °C          | 160.00 e-03 °C    | -0,03 °C     | 7.5%            | Pass          |
|                                    | 600.00 °C         | 599.94 °C          | 599.50 °C          | 600.50 °C          | 160.00 e-03 °C    | -0,06 °C     | 12%             | Pass          |



**DEWETRON GmbH**  
 Parking 4  
 8074 Grambach  
 AUSTRIA

Kalibrierschein nach ISO/IEC 17025  
 Calibration Certificate according to ISO/IEC 17025

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| AAT2030209      |
| <b>ÖKD 0632</b> |
| 15.04.2020      |

**11. Testergebnisse / Test results**

| Test Description                   | True Value | Test Result | Lower limit | Upper limit | Exp Uncert     | Error    | % of Tol | Status   |
|------------------------------------|------------|-------------|-------------|-------------|----------------|----------|----------|----------|
| Channel 6 Pt500 (385)              | -190.00 °C | -189.98 °C  | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,02 °C  | 8%       | Pass     |
|                                    | 0.00 °C    | -0.02 °C    | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,02 °C | 6.67%    | Pass     |
|                                    | 100.00 °C  | 99.98 °C    | 99.75 °C    | 100.25 °C   | 90.00 e-03 °C  | -0,02 °C | 8%       | Pass     |
|                                    | 240.00 °C  | 239.99 °C   | 239.60 °C   | 240.40 °C   | 90.00 e-03 °C  | -0,01 °C | 2.5%     | Pass     |
| Channel 6 Pt1000 (385)             | -190.00 °C | -189.97 °C  | -190.25 °C  | -189.75 °C  | 70.00 e-03 °C  | 0,03 °C  | 12%      | Pass     |
|                                    | 0.00 °C    | 0.00 °C     | -0.25 °C    | 0.25 °C     | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 100.00 °C  | 100.00 °C   | 99.75 °C    | 100.25 °C   | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 300.00 °C  | 300.05 °C   | 299.60 °C   | 300.40 °C   | 70.00 e-03 °C  | 0,05 °C  | 12.5%    | Pass     |
|                                    | 590.00 °C  | 590.11 °C   | 589.20 °C   | 590.80 °C   | 70.00 e-03 °C  | 0,11 °C  | 13.8%    | Pass     |
| Channel 6 Resistance 0 - 999.99Ohm | 10.00 Ω    | 9.94 Ω      | 9.90 Ω      | 10.10 Ω     | 1.00 e-03 Ω    | -0,06 Ω  | 55%      | Pass     |
|                                    | 100.00 Ω   | 99.92 Ω     | 99.87 Ω     | 100.13 Ω    | 9.00 e-03 Ω    | -0,08 Ω  | 61.5%    | Pass     |
|                                    | 500.00 Ω   | 499.91 Ω    | 499.75 Ω    | 500.25 Ω    | 120.00 e-03 Ω  | -0,09 Ω  | 36%      | Pass     |
|                                    | 990.00 Ω   | 989.88 Ω    | 989.60 Ω    | 990.40 Ω    | 180.00 e-03 Ω  | -0,12 Ω  | 29.4%    | Pass     |
| Channel 7 Pt100 (385)              | -190.00 °C | -190.05 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,05 °C | 18.7%    | Pass     |
|                                    | 0.00 °C    | -0.14 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,14 °C | 56%      | Pass     |
|                                    | 100.00 °C  | 99.86 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,14 °C | 56%      | Pass     |
|                                    | 300.00 °C  | 299.87 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,13 °C | 33.3%    | Pass     |
|                                    | 600.00 °C  | 599.84 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,16 °C | 20.4%    | Pass     |
|                                    | 790.00 °C  | 789.91 °C   | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,09 °C | 10.8%    | Pass (1) |
| Channel 7 Pt100 (3916)             | -190.00 °C | -190.09 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,09 °C | 34.7%    | Pass     |
|                                    | 0.00 °C    | -0.15 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,15 °C | 60%      | Pass     |
|                                    | 100.00 °C  | 99.84 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,16 °C | 62.7%    | Pass     |
|                                    | 300.00 °C  | 299.86 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,14 °C | 34.2%    | Pass     |
|                                    | 600.00 °C  | 599.82 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,18 °C | 22.5%    | Pass     |
| Channel 7 Pt200 (385)              | -190.00 °C | -190.03 °C  | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | -0,03 °C | 10.7%    | Pass     |
|                                    | 0.00 °C    | -0.07 °C    | -0.25 °C    | 0.25 °C     | 160.00 e-03 °C | -0,07 °C | 28%      | Pass     |
|                                    | 100.00 °C  | 99.92 °C    | 99.75 °C    | 100.25 °C   | 160.00 e-03 °C | -0,08 °C | 32%      | Pass     |
|                                    | 300.00 °C  | 299.97 °C   | 299.60 °C   | 300.40 °C   | 160.00 e-03 °C | -0,03 °C | 7.5%     | Pass     |
|                                    | 600.00 °C  | 599.94 °C   | 599.50 °C   | 600.50 °C   | 160.00 e-03 °C | -0,06 °C | 12.7%    | Pass     |
| Channel 7 Pt500 (385)              | -190.00 °C | -189.98 °C  | -190.25 °C  | -189.75 °C  | 90.00 e-03 °C  | 0,02 °C  | 8%       | Pass     |
|                                    | 0.00 °C    | -0.02 °C    | -0.25 °C    | 0.25 °C     | 90.00 e-03 °C  | -0,02 °C | 8%       | Pass     |
|                                    | 100.00 °C  | 99.98 °C    | 99.75 °C    | 100.25 °C   | 90.00 e-03 °C  | -0,02 °C | 8%       | Pass     |
|                                    | 240.00 °C  | 239.98 °C   | 239.60 °C   | 240.40 °C   | 90.00 e-03 °C  | -0,02 °C | 5%       | Pass     |
| Channel 7 Pt1000 (385)             | -190.00 °C | -189.97 °C  | -190.25 °C  | -189.75 °C  | 70.00 e-03 °C  | 0,03 °C  | 12%      | Pass     |
|                                    | 0.00 °C    | 0.00 °C     | -0.25 °C    | 0.25 °C     | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 100.00 °C  | 100.00 °C   | 99.75 °C    | 100.25 °C   | 70.00 e-03 °C  | 0,00 °C  | 0%       | Pass     |
|                                    | 300.00 °C  | 300.04 °C   | 299.60 °C   | 300.40 °C   | 70.00 e-03 °C  | 0,04 °C  | 10%      | Pass     |
|                                    | 590.00 °C  | 590.10 °C   | 589.20 °C   | 590.80 °C   | 70.00 e-03 °C  | 0,10 °C  | 12.5%    | Pass     |
| Channel 7 Resistance 0 - 999.99Ohm | 10.00 Ω    | 9.95 Ω      | 9.90 Ω      | 10.10 Ω     | 1.00 e-03 Ω    | -0,05 Ω  | 45.3%    | Pass     |
|                                    | 100.00 Ω   | 99.92 Ω     | 99.87 Ω     | 100.13 Ω    | 9.00 e-03 Ω    | -0,08 Ω  | 59%      | Pass     |
|                                    | 500.00 Ω   | 499.91 Ω    | 499.75 Ω    | 500.25 Ω    | 120.00 e-03 Ω  | -0,09 Ω  | 36%      | Pass     |
|                                    | 990.00 Ω   | 989.88 Ω    | 989.60 Ω    | 990.40 Ω    | 180.00 e-03 Ω  | -0,12 Ω  | 30.2%    | Pass     |
| Channel 8 Pt100 (385)              | -190.00 °C | -190.09 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,09 °C | 37.3%    | Pass     |
|                                    | 0.00 °C    | -0.18 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,18 °C | 72%      | Pass     |
|                                    | 100.00 °C  | 99.82 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,18 °C | 73.3%    | Pass     |
|                                    | 300.00 °C  | 299.81 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,19 °C | 46.7%    | Pass     |
|                                    | 600.00 °C  | 599.76 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,24 °C | 30.4%    | Pass     |
|                                    | 790.00 °C  | 789.84 °C   | 789.20 °C   | 790.80 °C   | 230.00 e-03 °C | -0,16 °C | 20.4%    | Pass (1) |
| Channel 8 Pt100 (3916)             | -190.00 °C | -190.12 °C  | -190.25 °C  | -189.75 °C  | 120.00 e-03 °C | -0,12 °C | 48%      | Pass     |
|                                    | 0.00 °C    | -0.20 °C    | -0.25 °C    | 0.25 °C     | 120.00 e-03 °C | -0,20 °C | 78.7%    | Pass     |
|                                    | 100.00 °C  | 99.80 °C    | 99.75 °C    | 100.25 °C   | 120.00 e-03 °C | -0,20 °C | 80%      | Pass     |
|                                    | 300.00 °C  | 299.80 °C   | 299.60 °C   | 300.40 °C   | 120.00 e-03 °C | -0,20 °C | 50%      | Pass     |
|                                    | 600.00 °C  | 599.76 °C   | 599.20 °C   | 600.80 °C   | 120.00 e-03 °C | -0,24 °C | 30.4%    | Pass     |
| Channel 8 Pt200 (385)              | -190.00 °C | -190.04 °C  | -190.25 °C  | -189.75 °C  | 160.00 e-03 °C | -0,04 °C | 17.3%    | Pass     |



**DEWETRON GmbH**  
 Parking 4  
 8074 Grambach  
 AUSTRIA

Kalibrierschein nach ISO/IEC 17025  
 Calibration Certificate according to ISO/IEC 17025

AAT2030209

**ÖKD 0632**

15.04.2020

**11. Testergebnisse / Test results**

| <u>Test Description</u>            | <u>True Value</u> | <u>Test Result</u> | <u>Lower limit</u> | <u>Upper limit</u> | <u>Exp Uncert</u> | <u>Error</u> | <u>% of Tol</u> | <u>Status</u> |
|------------------------------------|-------------------|--------------------|--------------------|--------------------|-------------------|--------------|-----------------|---------------|
|                                    | 0.00 °C           | -0.10 °C           | -0.25 °C           | 0.25 °C            | 160.00 e-03 °C    | -0,10 °C     | 38.7%           | Pass          |
|                                    | 100.00 °C         | 99.89 °C           | 99.75 °C           | 100.25 °C          | 160.00 e-03 °C    | -0,11 °C     | 44%             | Pass          |
|                                    | 300.00 °C         | 299.94 °C          | 299.60 °C          | 300.40 °C          | 160.00 e-03 °C    | -0,06 °C     | 15%             | Pass          |
|                                    | 600.00 °C         | 599.90 °C          | 599.50 °C          | 600.50 °C          | 160.00 e-03 °C    | -0,10 °C     | 20%             | Pass          |
| Channel 8 Pt500 (385)              |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -189.99 °C         | -190.25 °C         | -189.75 °C         | 90.00 e-03 °C     | 0,01 °C      | 4%              | Pass          |
|                                    | 0.00 °C           | -0.03 °C           | -0.25 °C           | 0.25 °C            | 90.00 e-03 °C     | -0,03 °C     | 12%             | Pass          |
|                                    | 100.00 °C         | 99.96 °C           | 99.75 °C           | 100.25 °C          | 90.00 e-03 °C     | -0,04 °C     | 16%             | Pass          |
|                                    | 240.00 °C         | 239.97 °C          | 239.60 °C          | 240.40 °C          | 90.00 e-03 °C     | -0,03 °C     | 7.5%            | Pass          |
| Channel 8 Pt1000 (385)             |                   |                    |                    |                    |                   |              |                 |               |
|                                    | -190.00 °C        | -189.97 °C         | -190.25 °C         | -189.75 °C         | 70.00 e-03 °C     | 0,03 °C      | 12%             | Pass          |
|                                    | 0.00 °C           | -0.01 °C           | -0.25 °C           | 0.25 °C            | 70.00 e-03 °C     | -0,01 °C     | 4%              | Pass          |
|                                    | 100.00 °C         | 99.99 °C           | 99.75 °C           | 100.25 °C          | 70.00 e-03 °C     | -0,01 °C     | 4%              | Pass          |
|                                    | 300.00 °C         | 300.03 °C          | 299.60 °C          | 300.40 °C          | 70.00 e-03 °C     | 0,03 °C      | 7.5%            | Pass          |
|                                    | 590.00 °C         | 590.09 °C          | 589.20 °C          | 590.80 °C          | 70.00 e-03 °C     | 0,09 °C      | 11.3%           | Pass          |
| Channel 8 Resistance 0 - 999.990hm |                   |                    |                    |                    |                   |              |                 |               |
|                                    | 10.00 Ω           | 9.94 Ω             | 9.90 Ω             | 10.10 Ω            | 1.00 e-03 Ω       | -0,06 Ω      | 61.5%           | Pass          |
|                                    | 100.00 Ω          | 99.91 Ω            | 99.87 Ω            | 100.13 Ω           | 9.00 e-03 Ω       | -0,09 Ω      | 69.2%           | Pass          |
|                                    | 500.00 Ω          | 499.88 Ω           | 499.75 Ω           | 500.25 Ω           | 120.00 e-03 Ω     | -0,12 Ω      | 48%             | Pass          |
|                                    | 990.00 Ω          | 989.85 Ω           | 989.60 Ω           | 990.40 Ω           | 180.00 e-03 Ω     | -0,15 Ω      | 37.8%           | Pass          |

Ende des Kalibrierscheines / End of Calibration Certificate

