

1. Kalibriergegenstand / Calibration object

8 Channel Data Acquisition DEWETRON TRION-1820-POWER-4, S/N: A1244711

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*: TRION-Active-Power-1-Phase_20A_Akkred, Rev. 2.00

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 Wertintervall.

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*: 22,0 °C

Rel. Luftfeuchte / *Rel. humidity*: 35,8 % r.H.

Kalibrierort / *Place of calibration*: DEWETRON GmbH, Parking 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

Sub-cur 20A test

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.



DEWETRON GmbH
Parking 4
8074 Grambach
AUSTRIA

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

AAT2550008
Akkreditierung Austria 0632
07.02.2025

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>
5522A 01	5522A CALIBRATOR	3904901	16082024	2-Aug-2024	2-Aug-2025
6105A	6105A Electrical Power Standard	514177505	099967	25-Nov-2024	25-Nov-2025



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11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status
Kalibrierverfahren / calibration method: CAL-KV-01_Gleichspannung_v1.0_2024-07-04.xlsx-02 CAL-KV-02_Wechselspannung_v1.0_2024-07-04.xlsx-02C CAL-KV-03_Gleichstromstärke_v1.0_2024-07-04.xlsx-02C CAL-KV-04_Wechselstromstärke_v1.0_2024-07-04.xlsx-02C CAL-KV-08_Gleichstromleistung_v1.0_2024-07-04.xlsx-01C CAL-KV-09_Wechselstromwirkleistung_v1.0_2024-07-04.xlsx-01C								
Current Temperature Calibrator: 26.08°C								
DEWE3 device S/N: CB210022								
Oxygen Version: 7.3.2 TRION API: 7.3.2.6198" TRION Board Type: TRION-1820-POWER-4 TRION Board S/N: A1244711 TRION Board FW: 0078								
TRION-SUB-CUR Type: TRION-POWER-SUB-CUR-20A-1 @I1: SN: 1304172								
All Tests done with appropriate Range SampleRate for all Tests: 2000000S/s Filter Type/Frequency for U: Butterworth/8th order/600kHz Filter Type/Frequency for I: Butterworth/8th order/300kHz Update Rate of power group: 3s								
Frequency Accuracy: DEWE3 : ±0.005% of reading ± 1 mHz								
Voltage Accuracy: DC : ±0.02% of reading ±0.02% of range >0.5Hz to 1kHz : ±0.03% of reading >1kHz to 5kHz : ±0.15% of reading >5kHz to 10kHz : ±0.35% of reading >10kHz to 50kHz : ±0.6% of reading >50kHz to 300kHz : ±(0.02% * f[kHz]) of reading								
Current Accuracy: DC and AC below 1 % of range add : 10 ppm of range DC and AC add : ±(I[A]^2 * 0.00015%) of reading ±(I[A]^2 * 20uA) DC with no zero level add : ±0.03% of range DC : ±0.02% of reading ±0.02% of range >0.5Hz to 1kHz : ±0.03% of reading >1kHz to 5kHz : ±0.15% of reading >5kHz to 10kHz : ±0.35% of reading >10kHz to 50kHz : ±(0.3% + 0.05% * f[kHz]) of reading >50kHz to 300kHz : ±(0.1% * f[kHz]) of reading								
Power Accuracy with PF=1: DC and AC add : ±(I[A]^2 * 0.00015%) of reading DC add : ±(I[A]^2 * 0.0001%) of range DC with no zero level add : ±0.03% of range DC : ±0.03% of reading ±0.03% of range >0.5Hz to 1kHz : ±0.04% of reading >1kHz to 5kHz : ±0.2% of reading >5kHz to 10kHz : ±0.5% of reading >10kHz to 50kHz : ±(0.5% + 0.05% * f[kHz]) of reading								
Influence of PF : add 0.01 % * f[Hz]/50 * sqrt(1/PF^2-1)								
#####								
AC Power Calibration								
Range U: 1000V Range I: 20A Following tests @ 20Hz								
Frequency	20.00000 Hz	19.99990 Hz	19.99800 Hz	20.00200 Hz		-0,00010 Hz	4.95%	Pass (1)

Phase 1								
Test @ 10% U 10% I								
Voltage U1	100.00000 V	99.99762 V	99.97000 V	100.03000 V	13.00 e-03 V	-0,00238 V	7.94%	Pass
Current I1	2.000000 A	2.000469 A	1.999308 A	2.000692 A	220.00 e-06 A	0,000469 A	67.8%	Pass



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Power @ PF 1	200.00000 W	200.04188 W	199.91880 W	200.08120 W	40.00 e-03 W	0,04188 W	51.6%	Pass
Test @ 50% U 2% I								
Voltage U1	500.00000 V	500.00024 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00024 V	0.162%	Pass
Current I1	0.4000000 A	0.400100 A	0.399877 A	0.400123 A	64.00 e-06 A	0,000100 A	80.9%	Pass
Power @ PF 1	200.00000 W	200.04625 W	199.91995 W	200.08005 W	40.00 e-03 W	0,04625 W	57.8%	Pass
Test @ 50% U 20% I								
Voltage U1	500.00000 V	500.00185 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00185 V	1.23%	Pass
Current I1	4.0000000 A	4.000839 A	3.998384 A	4.001616 A	490.00 e-06 A	0,000839 A	51.9%	Pass
Power @ PF 1	2000.00000 W	2000.42600 W	1999.15200 W	2000.84800 W	400.00 e-03 W	0,42600 W	50.2%	Pass
Test @ 50% U 50% I								
Voltage U1	500.00000 V	500.00290 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00290 V	1.93%	Pass
Current I1	10.000000 A	10.00123 A	9.99350 A	10.00650 A	1.20 e-03 A	0,00123 A	18.9%	Pass
Power @ PF 1	5000.00000 W	5000.64193 W	4997.25000 W	5002.75000 W	1.00 e+00 W	0,64193 W	23.3%	Pass
Test @ 50% U 100% I								
Voltage U1	500.00000 V	500.00274 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00274 V	1.83%	Pass
Current I1	20.000000 A	19.99444 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,00556 A	21.4%	Pass
Power @ PF 1	10000.00000 W	9997.27217 W	9990.00000 W	10010.00000 W	2.00 e+00 W	-2,72783 W	27.3%	Pass
Test @ 90% U 90% I								
Voltage U1	900.00000 V	900.03145 V	899.73000 V	900.27000 V	89.00 e-03 V	0,03145 V	11.6%	Pass
Current I1	18.000000 A	17.99410 A	17.97937 A	18.02063 A	2.30 e-03 A	-0,00590 A	28.6%	Pass
Power @ PF 1	16200.00000 W	16195.25333 W	16185.64680 W	16214.35320 W	3.20 e+00 W	-4,74667 W	33.1%	Pass
Test @ 100% U 100% I								
Voltage U1	1000.00000 V	1000.04323 V	999.70000 V	1000.30000 V	97.00 e-03 V	0,04323 V	14.4%	Pass
Current I1	20.000000 A	19.99095 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,00905 A	34.8%	Pass
Power @ PF 1	20000.00000 W	19991.80867 W	19980.00000 W	20020.00000 W	4.00 e+00 W	-8,19133 W	41%	Pass

Following tests @ 53Hz								
Frequency	53.00000 Hz	52.99973 Hz	52.99635 Hz	53.00365 Hz		-0,00027 Hz	7.42%	Pass (1)

Phase 1								
Test @ 10% U 10% I								
Voltage U1	100.00000 V	99.99897 V	99.97000 V	100.03000 V	13.00 e-03 V	-0,00103 V	3.42%	Pass
Current I1	2.0000000 A	1.999657 A	1.999308 A	2.000692 A	220.00 e-06 A	-0,000343 A	49.6%	Pass
Power @ PF 1	200.00000 W	199.96354 W	199.91880 W	200.08120 W	40.00 e-03 W	-0,03646 W	44.9%	Pass
Test @ 50% U 2% I								
Voltage U1	500.00000 V	500.00634 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00634 V	4.22%	Pass
Current I1	0.4000000 A	0.399958 A	0.399877 A	0.400123 A	55.00 e-06 A	-0,000042 A	34.3%	Pass
Power @ PF 1	200.00000 W	199.98056 W	199.91995 W	200.08005 W	40.00 e-03 W	-0,01944 W	24.3%	Pass
Test @ 50% U 20% I								
Voltage U1	500.00000 V	500.00518 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00518 V	3.45%	Pass
Current I1	4.0000000 A	3.999740 A	3.998384 A	4.001616 A	490.00 e-06 A	-0,000260 A	16.1%	Pass
Power @ PF 1	2000.00000 W	1999.89023 W	1999.15200 W	2000.84800 W	400.00 e-03 W	-0,10977 W	12.9%	Pass
Test @ 50% U 50% I								
Voltage U1	500.00000 V	500.00518 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00518 V	3.45%	Pass
Current I1	10.000000 A	9.99904 A	9.99350 A	10.00650 A	1.20 e-03 A	-0,00096 A	14.7%	Pass
Power @ PF 1	5000.00000 W	4999.57127 W	4997.25000 W	5002.75000 W	1.00 e+00 W	-0,42873 W	15.6%	Pass
Power @ PF 0.9 cap	4500.00000 W	4499.55323 W	4497.29398 W	4502.70602 W	900.00 e-03 W	-0,44677 W	16.5%	Pass
Power @ PF 0.9 ind	4500.00000 W	4499.48080 W	4497.29398 W	4502.70602 W	900.00 e-03 W	-0,51920 W	19.2%	Pass
Power @ PF 0.5 cap	2500.00000 W	2499.74793 W	2498.16601 W	2501.83399 W	580.00 e-03 W	-0,25207 W	13.7%	Pass
Power @ PF 0.5 ind	2500.00000 W	2499.66300 W	2498.16601 W	2501.83399 W	580.00 e-03 W	-0,33700 W	18.4%	Pass
Power @ PF 0.1 cap	500.00000 W	499.98652 W	499.19766 W	500.80234 W	310.00 e-03 W	-0,01348 W	1.68%	Pass
Power @ PF 0.1 ind	500.00000 W	499.89335 W	499.19766 W	500.80234 W	310.00 e-03 W	-0,10665 W	13.3%	Pass
Test @ 50% U 100% I								
Voltage U1	500.00000 V	500.00706 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00706 V	4.71%	Pass
Current I1	20.000000 A	19.99020 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,00980 A	37.7%	Pass
Power @ PF 1	10000.00000 W	9995.24153 W	9990.00000 W	10010.00000 W	2.00 e+00 W	-4,75847 W	47.6%	Pass
Test @ 90% U 90% I								
Voltage U1	900.00000 V	900.03737 V	899.73000 V	900.27000 V	89.00 e-03 V	0,03737 V	13.8%	Pass
Current I1	18.000000 A	17.99112 A	17.97937 A	18.02063 A	2.30 e-03 A	-0,00888 A	43%	Pass
Power @ PF 1	16200.00000 W	16192.67867 W	16185.64680 W	16214.35320 W	3.20 e+00 W	-7,32133 W	51%	Pass
Test @ 100% U 100% I								
Voltage U1	1000.00000 V	1000.05003 V	999.70000 V	1000.30000 V	97.00 e-03 V	0,05003 V	16.7%	Pass
Current I1	20.000000 A	19.98821 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,01179 A	45.3%	Pass
Power @ PF 1	20000.00000 W	19989.20900 W	19980.00000 W	20020.00000 W	4.00 e+00 W	-10,79100 W	54%	Pass

Following tests @ 180Hz								
Frequency	180.00000 Hz	179.99901 Hz	179.99000 Hz	180.01000 Hz		-0,00099 Hz	9.9%	Pass (1)

Phase 1								
Test @ 50% U 50% I								
Voltage U1	500.00000 V	500.00902 V	499.85000 V	500.15000 V	56.00 e-03 V	0,00902 V	6.02%	Pass
Current I1	10.000000 A	9.99749 A	9.99350 A	10.00650 A	1.20 e-03 A	-0,00251 A	38.7%	Pass
Power @ PF 1	5000.00000 W	4998.83267 W	4997.25000 W	5002.75000 W	1.00 e+00 W	-1,16733 W	42.4%	Pass
Power @ PF 0.9 cap	4500.00000 W	4499.07113 W	4496.74040 W	4503.25960 W	1.20 e+00 W	-0,92887 W	28.5%	Pass
Power @ PF 0.9 ind	4500.00000 W	4499.07260 W	4496.74040 W	4503.25960 W	1.20 e+00 W	-0,92740 W	28.5%	Pass
Power @ PF 0.5 cap	2500.00000 W	2499.58993 W	2497.06615 W	2502.93385 W	820.00 e-03 W	-0,41007 W	14%	Pass
Power @ PF 0.5 ind	2500.00000 W	2499.48047 W	2497.06615 W	2502.93385 W	820.00 e-03 W	-0,51953 W	17.7%	Pass

Following tests @ 400Hz								
Frequency	400.00000 Hz	399.99774 Hz	399.97900 Hz	400.02100 Hz		-0,00226 Hz	10.8%	Pass (1)



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11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status

Phase 1								
Test @ 10% U 10% I								
Voltage U1	100.00000 V	100.00024 V	99.97000 V	100.03000 V	13.00 e-03 V	0,00024 V	0.811%	Pass
Current I1	2.000000 A	1.999613 A	1.999308 A	2.000692 A	220.00 e-06 A	-0,000387 A	56%	Pass
Power @ PF 1	200.00000 W	199.96163 W	199.91880 W	200.08120 W	40.00 e-03 W	-0,03837 W	47.3%	Pass
Test @ 50% U 2% I								
Voltage U1	500.00000 V	500.01246 V	499.85000 V	500.15000 V	56.00 e-03 V	0,01246 V	8.31%	Pass
Current I1	0.400000 A	0.399944 A	0.399877 A	0.400123 A	64.00 e-06 A	-0,000056 A	45.8%	Pass
Power @ PF 1	200.00000 W	199.97595 W	199.91995 W	200.08005 W	40.00 e-03 W	-0,02405 W	30%	Pass
Test @ 50% U 20% I								
Voltage U1	500.00000 V	500.01325 V	499.85000 V	500.15000 V	56.00 e-03 V	0,01325 V	8.84%	Pass
Current I1	4.000000 A	3.999483 A	3.998384 A	4.001616 A	490.00 e-06 A	-0,000517 A	32%	Pass
Power @ PF 1	2000.00000 W	1999.79413 W	1999.15200 W	2000.84800 W	400.00 e-03 W	-0,20587 W	24.3%	Pass
Test @ 50% U 50% I								
Voltage U1	500.00000 V	500.01220 V	499.85000 V	500.15000 V	56.00 e-03 V	0,01220 V	8.13%	Pass
Current I1	10.00000 A	9.99820 A	9.99350 A	10.00650 A	1.20 e-03 A	-0,00180 A	27.8%	Pass
Power @ PF 1	5000.00000 W	4999.21860 W	4997.25000 W	5002.75000 W	1.00 e+00 W	-0,78140 W	28.4%	Pass
Power @ PF 0.9 cap	4500.00000 W	4499.01510 W	4495.78144 W	4504.21856 W	1.20 e+00 W	-0,98490 W	23.3%	Pass
Power @ PF 0.9 ind	4500.00000 W	4499.39030 W	4495.78144 W	4504.21856 W	1.20 e+00 W	-0,60970 W	14.5%	Pass
Power @ PF 0.5 cap	2500.00000 W	2499.09683 W	2495.16090 W	2504.83910 W		-0,90317 W	18.7%	Pass (1)
Power @ PF 0.5 ind	2500.00000 W	2499.91137 W	2495.16090 W	2504.83910 W		-0,08863 W	1.83%	Pass (1)
Test @ 50% U 100% I								
Voltage U1	500.00000 V	500.01320 V	499.85000 V	500.15000 V	56.00 e-03 V	0,01320 V	8.8%	Pass
Current I1	20.00000 A	19.98839 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,01161 A	44.7%	Pass
Power @ PF 1	10000.00000 W	9994.45770 W	9990.00000 W	10010.00000 W	2.00 e+00 W	-5,54230 W	55.4%	Pass
Test @ 90% U 90% I								
Voltage U1	900.00000 V	900.05158 V	899.73000 V	900.27000 V	89.00 e-03 V	0,05158 V	19.1%	Pass
Current I1	18.00000 A	17.98960 A	17.97937 A	18.02063 A	2.30 e-03 A	-0,01040 A	50.4%	Pass
Power @ PF 1	16200.00000 W	16191.56267 W	16185.64680 W	16214.35320 W	3.20 e+00 W	-8,43733 W	58.8%	Pass
Test @ 100% U 100% I								
Voltage U1	1000.00000 V	1000.06210 V	999.70000 V	1000.30000 V	97.00 e-03 V	0,06210 V	20.7%	Pass
Current I1	20.00000 A	19.98654 A	19.97400 A	20.02600 A	2.50 e-03 A	-0,01346 A	51.8%	Pass
Power @ PF 1	20000.00000 W	19987.77967 W	19980.00000 W	20020.00000 W	4.00 e+00 W	-12,22033 W	61.1%	Pass

AC Voltage Calibration								
Test @ 100V_RMS @ 1000Hz								
Channel U1	100.00000 V	100.01054 V	99.97000 V	100.03000 V	29.00 e-03 V	0,01054 V	35.1%	Pass
Test @ 100V RMS @ 10000Hz								
Channel U1	100.00000 V	100.09290 V	99.65000 V	100.35000 V	32.00 e-03 V	0,09290 V	26.5%	Pass
Test @ 100V_RMS @ 30000Hz								
Channel U1	100.00000 V	100.10804 V	99.40000 V	100.60000 V	160.00 e-03 V	0,10804 V	18%	Pass
AC Current Calibration								
Test @ 2A_RMS @ 1000Hz								
Channel I1	2.000000 A	1.999826 A	1.999308 A	2.000692 A	1.60 e-03 A	-0,000174 A	25.1%	Pass
DC Power Calibration								
Range U: 1000V Range I: 20A								

Phase 1								
Test @ 0% U 0% I								
Voltage U1	0.00000 V	-0.00003 V	-0.20000 V	0.20000 V	140.00 e-06 V	-0,00003 V	0.0169%	Pass
Current I1	0.000000 A	0.000416 A	-0.010200 A	0.010200 A	44.00 e-06 A	0,000416 A	4.07%	Pass
Power	0.000000 W	0.000000 W	-12.000000 W	12.000000 W		0,000000 W	2.98e-007%	Pass (1)
Test @ 10% U 10% I								
Voltage U1	100.00000 V	99.99907 V	99.78000 V	100.22000 V	2.70 e-03 V	-0,00093 V	0.421%	Pass
Current I1	2.000000 A	2.000280 A	1.989508 A	2.010492 A	1.10 e-03 A	0,000280 A	2.67%	Pass
Power	200.00000 W	200.02619 W	187.85880 W	212.14120 W	110.00 e-03 W	0,02619 W	0.216%	Pass
Test @ 50% U 2% I								
Voltage U1	500.00000 V	499.99761 V	499.70000 V	500.30000 V	13.00 e-03 V	-0,00239 V	0.797%	Pass
Current I1	0.400000 A	0.400054 A	0.389917 A	0.410083 A	160.00 e-06 A	0,000054 A	0.534%	Pass
Power	200.00000 W	200.02598 W	187.93675 W	212.06325 W		0,02598 W	0.215%	Pass (1)
Test @ 50% U 20% I								
Voltage U1	500.00000 V	499.99952 V	499.70000 V	500.30000 V	13.00 e-03 V	-0,00048 V	0.159%	Pass
Current I1	4.000000 A	4.000343 A	3.988784 A	4.011216 A	3.10 e-03 A	0,000343 A	3.06%	Pass
Power	2000.00000 W	2000.16943 W	1987.03200 W	2012.96800 W	1.50 e+00 W	0,16943 W	1.31%	Pass
Test @ 30% U 30% I								
Voltage U1	300.00000 V	299.99893 V	299.74000 V	300.26000 V	7.80 e-03 V	-0,00107 V	0.412%	Pass
Current I1	6.000000 A	6.000265 A	5.987756 A	6.012244 A	4.30 e-03 A	0,000265 A	2.16%	Pass
Power	1800.00000 W	1800.07307 W	1786.64280 W	1813.35720 W	1.30 e+00 W	0,07307 W	0.547%	Pass
Test @ 50% U 50% I								
Voltage U1	500.00000 V	500.00098 V	499.70000 V	500.30000 V	13.00 e-03 V	0,00098 V	0.326%	Pass

11. Testergebnisse / Test results

Test Description	True Value	Test Result	Lower limit	Upper limit	Exp Uncert	Error	% of Tol	Status
Current I1	10.00000 A	10.00034 A	9.98450 A	10.01550 A	6.80 e-03 A	0,00034 A	2.22%	Pass
Power	5000.00000 W	5000.18130 W	4983.75000 W	5016.25000 W	3.40 e+00 W	0,18130 W	1.12%	Pass
Test @ -50% U -50% I								
Voltage U1	-500.00000 V	-500.00494 V	-500.30000 V	-499.70000 V	13.00 e-03 V	-0,00494 V	1.65%	Pass
Current I1	-10.00000 A	-10.00011 A	-10.01550 A	-9.98450 A	6.80 e-03 A	-0,00011 A	0.702%	Pass
Power	5000.00000 W	5000.10387 W	4983.75000 W	5016.25000 W	3.40 e+00 W	0,10387 W	0.639%	Pass
Test @ 50% U 100% I								
Voltage U1	500.00000 V	500.00309 V	499.70000 V	500.30000 V	13.00 e-03 V	0,00309 V	1.03%	Pass
Current I1	20.00000 A	19.99669 A	19.96600 A	20.03400 A	25.00 e-03 A	-0,00331 A	9.74%	Pass
Power	10000.00000 W	9998.40527 W	9971.00000 W	10029.00000 W	12.00 e+00 W	-1,59473 W	5.5%	Pass
Test @ 70% U 70% I								
Voltage U1	700.00000 V	700.00738 V	699.66000 V	700.34000 V	18.00 e-03 V	0,00738 V	2.17%	Pass
Current I1	14.000000 A	13.998661 A	13.979164 A	14.020836 A	18.00 e-03 A	-0,001339 A	6.42%	Pass
Power	9800.00000 W	9799.16633 W	9778.25880 W	9821.74120 W	12.00 e+00 W	-0,83367 W	3.83%	Pass
Test @ 100% U 100% I								
Voltage U1	1000.00000 V	1000.02840 V	999.60000 V	1000.40000 V	26.00 e-03 V	0,02840 V	7.1%	Pass
Current I1	20.00000 A	19.99577 A	19.96600 A	20.03400 A	25.00 e-03 A	-0,00423 A	12.4%	Pass
Power	20000.00000 W	19996.33667 W	19962.00000 W	20038.00000 W	25.00 e+00 W	-3,66333 W	9.64%	Pass

Ende des Kalibrierscheines / End of Calibration Certificate

