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Certificate of Calibration No

K026-26P5912

MC6

S/N: 611880

Calibration

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Certificate of Calibration No K026-26P5912

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Customer No 123396

Item Advanced Field Calibrator and Communicator

Model MC6

Manufactured by Beamex Oy Ab

Serial Number 611880

Date Aug 14, 2026

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Signatures

Timo Suvanto
Calibration Technician

Duyanh Luong
Calibration Engineer

Documents Attached Assessment of compliance with manufacturer's specification



K026-26P5912



14.08.2026

MC6, S/N: 611880. Measurement Section (IN), S/N: 37682.
Voltage Measurement

Range: -1 ... 60 V, 1 Year Uncertainty: $-1 \dots 1 \text{ V} \pm (5 \mu\text{V} + 0.006\% \text{ RDG})$ and $1 \dots 60 \text{ V} \pm (0.25 \text{ mV} + 0.006\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[V]	[V]	[V]	[V]	[V]	[V]	
-0.9999866	-0.999986	0.0000006	± 0.000011	-1.0000516	-0.9999216	PASS
-0.4999937	-0.499993	0.0000007	± 0.0000062	-0.5000287	-0.4999587	PASS
-0.2499964	-0.249997	-0.0000006	± 0.0000039	-0.2500164	-0.2499764	PASS
-0.0000006	0.000000	0.0000006	± 0.0000019	-0.0000056	0.0000044	PASS
0.2499961	0.249996	-0.0000001	± 0.0000039	0.2499761	0.2500161	PASS
0.4999931	0.499994	0.0000009	± 0.0000062	0.4999581	0.5000281	PASS
0.9999855	0.999986	0.0000005	± 0.000011	0.9999205	1.0000505	PASS
4.999939	4.99996	0.000021	± 0.000055	4.999389	5.000489	PASS
9.999875	9.99988	0.000005	± 0.00011	9.999025	10.000725	PASS
19.99979	19.9999	0.00011	± 0.00032	19.99834	20.00124	PASS
39.99952	39.9996	0.00008	± 0.00054	39.99687	40.00217	PASS
59.99932	59.9994	0.00008	± 0.00077	59.99547	60.00317	PASS

Current Measurement

Range: $\pm 100 \text{ mA}$, 1 Year Uncertainty: $\pm (1 \mu\text{A} + 0.01\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mA]	[mA]	[mA]	[mA]	[mA]	[mA]	
-100.0028	-100.003	-0.0002	± 0.0058	-100.0138	-99.9918	PASS
-50.0013	-50.001	0.0003	± 0.0034	-50.0073	-49.9953	PASS
-20.00056	-20.0004	0.00016	± 0.0015	-20.00356	-19.99756	PASS
0.00000	0.0000	0.00000	± 0.00017	-0.00100	0.00100	PASS
4.00005	4.0000	-0.00005	± 0.00024	3.99865	4.00145	PASS
12.00020	12.0001	-0.00010	± 0.0011	11.99800	12.00240	PASS
20.00042	20.0003	-0.00012	± 0.0015	19.99742	20.00342	PASS
50.0010	50.001	0.0000	± 0.0033	49.9950	50.0070	PASS
100.0028	100.002	-0.0008	± 0.0057	99.9918	100.0138	PASS

Frequency Measurement

Range: 0.0027 ... 50000 Hz, 1 Year Uncertainty: $0.0027 \dots 0.5 \text{ Hz} \pm (0.000002 \text{ Hz} + 0.002\% \text{ RDG})$, $0.5 \dots 5 \text{ Hz} \pm (0.00002 \text{ Hz} + 0.002\% \text{ RDG})$, $5 \dots 50 \text{ Hz} \pm (0.0002 \text{ Hz} + 0.002\% \text{ RDG})$, $50 \dots 500 \text{ Hz} \pm (0.002 \text{ Hz} + 0.002\% \text{ RDG})$, $500 \dots 5000 \text{ Hz} \pm (0.02 \text{ Hz} + 0.002\% \text{ RDG})$ and $5000 \dots 50000 \text{ Hz} \pm (0.2 \text{ Hz} + 0.002\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Hz]	[Hz]	[Hz]	[Hz]	[Hz]	[Hz]	
1.099988	1.09999	0.000002	± 0.000017	1.099946	1.100030	PASS
9.99989	9.9999	0.00001	± 0.00017	9.99949	10.00029	PASS
99.9989	99.999	0.0001	± 0.0017	99.9949	100.0029	PASS
999.989	999.99	0.001	± 0.017	999.949	1000.029	PASS
9999.89	9999.9	0.01	± 0.17	9999.49	10000.29	PASS
49999.44	49999.6	0.16	± 0.30	49998.24	50000.64	PASS

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.

Low Voltage Measurement TC1

Range: -1000 ... 1000 mV, 1 Year Uncertainty: $\pm(4 \mu\text{V} + 0.007\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mV]	[mV]	[mV]	[mV]	[mV]	[mV]	
-999.9894	-999.989	0.0004	± 0.011	-1000.0634	-999.9154	PASS
-499.9953	-499.995	0.0003	± 0.0062	-500.0343	-499.9563	PASS
-249.9974	-249.998	-0.0006	± 0.0039	-250.0189	-249.9759	PASS
-0.0010	-0.001	0.0000	± 0.0019	-0.0050	0.0030	PASS
99.9979	99.997	-0.0009	± 0.0026	99.9869	100.0089	PASS
249.9963	249.996	-0.0003	± 0.0039	249.9748	250.0178	PASS
499.9939	499.994	0.0001	± 0.0062	499.9549	500.0329	PASS
749.9901	749.991	0.0009	± 0.0087	749.9336	750.0466	PASS
999.9876	999.988	0.0004	± 0.011	999.9136	1000.0616	PASS

Low Voltage Measurement TC2

Range: -1000 ... 1000 mV, 1 Year Uncertainty: $\pm(4 \mu\text{V} + 0.007\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mV]	[mV]	[mV]	[mV]	[mV]	[mV]	
-999.9901	-999.990	0.0001	± 0.011	-1000.0641	-999.9161	PASS
-499.9956	-499.995	0.0006	± 0.0062	-500.0346	-499.9566	PASS
-249.9976	-249.998	-0.0004	± 0.0039	-250.0191	-249.9761	PASS
-0.0011	-0.001	0.0001	± 0.0019	-0.0051	0.0029	PASS
99.9978	99.998	0.0002	± 0.0026	99.9868	100.0088	PASS
249.9962	249.996	-0.0002	± 0.0039	249.9747	250.0177	PASS
499.9938	499.994	0.0002	± 0.0062	499.9548	500.0328	PASS
749.9901	749.991	0.0009	± 0.0087	749.9336	750.0466	PASS
999.9876	999.988	0.0004	± 0.011	999.9136	1000.0616	PASS

Low Voltage Generation TC1

Range: -1000 ... 1000 mV, 1 Year Uncertainty: $\pm(4 \mu\text{V} + 0.007\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Generated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mV]	[mV]	[mV]	[mV]	[mV]	[mV]	
-1000.000	-1000.0011	-0.0011	± 0.011	-1000.0740	-999.9260	PASS
-500.000	-500.0002	-0.0002	± 0.0061	-500.0390	-499.9610	PASS
-250.000	-249.9996	0.0004	± 0.0037	-250.0215	-249.9785	PASS
0.000	0.0005	0.0005	± 0.0016	-0.0040	0.0040	PASS
100.000	100.0010	0.0010	± 0.0023	99.9890	100.0110	PASS
250.000	250.0008	0.0008	± 0.0037	249.9785	250.0215	PASS
500.000	499.9999	-0.0001	± 0.0061	499.9610	500.0390	PASS
750.000	749.9993	-0.0007	± 0.0086	749.9435	750.0565	PASS
1000.000	1000.0003	0.0003	± 0.011	999.9260	1000.0740	PASS

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.
Voltage Generation

Range: -3 ... 24 V, 1 Year Uncertainty: $\pm(0.1 \text{ mV} + 0.007\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Generated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[V]	[V]	[V]	[V]	[V]	[V]	
-3.00000	-3.000008	-0.000008	± 0.000034	-3.000310	-2.999690	PASS
-1.00000	-0.999996	0.000004	± 0.000016	-1.000170	-0.999830	PASS
0.00000	0.000010	0.000010	± 0.000012	-0.000100	0.000100	PASS
1.00000	0.999983	-0.000017	± 0.000016	0.999830	1.000170	PASS
2.50000	2.499990	-0.000010	± 0.000030	2.499725	2.500275	PASS
5.00000	5.000017	0.000017	± 0.000053	4.999550	5.000450	PASS
10.0000	10.00002	0.00002	± 0.00011	9.99920	10.00080	PASS
15.0000	15.00001	0.00001	± 0.00022	14.99885	15.00115	PASS
20.0000	19.99998	-0.00002	± 0.00028	19.99850	20.00150	PASS
24.0000	23.99997	-0.00003	± 0.00032	23.99822	24.00178	PASS

Current Generation, Internal Supply (Source)

Range: 0 ... 55 mA, 1 Year Uncertainty: 0 ... 25 mA $\pm(1 \mu\text{A} + 0.01\% \text{ RDG})$ and

25 ... 55 mA $\pm(2 \mu\text{A} + 0.01\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Generated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mA]	[mA]	[mA]	[mA]	[mA]	[mA]	
0.0000	0.00000	0.00000	± 0.000048	-0.00100	0.00100	PASS
4.0000	3.99996	-0.00004	± 0.00018	3.99860	4.00140	PASS
12.0000	12.00004	0.00004	± 0.0011	11.99780	12.00220	PASS
20.0000	20.00015	0.00015	± 0.0015	19.99700	20.00300	PASS
30.000	30.0001	0.0001	± 0.0020	29.9950	30.0050	PASS
40.000	40.0002	0.0002	± 0.0025	39.9940	40.0060	PASS
55.000	55.0004	0.0004	± 0.0033	54.9925	55.0075	PASS

Current Generation, External Supply (Sink)

Range: 0 ... 55 mA, 1 Year Uncertainty: 0 ... 25 mA $\pm(1 \mu\text{A} + 0.01\% \text{ RDG})$ and

25 ... 55 mA $\pm(2 \mu\text{A} + 0.01\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Generated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[mA]	[mA]	[mA]	[mA]	[mA]	[mA]	
0.0000	0.00002	0.00002	± 0.000048	-0.00100	0.00100	PASS
4.0000	4.00007	0.00007	± 0.00018	3.99860	4.00140	PASS
12.0000	12.00018	0.00018	± 0.0011	11.99780	12.00220	PASS
20.0000	20.00024	0.00024	± 0.0015	19.99700	20.00300	PASS
30.000	30.0001	0.0001	± 0.0020	29.9950	30.0050	PASS
40.000	40.0002	0.0002	± 0.0025	39.9940	40.0060	PASS
55.000	55.0002	0.0002	± 0.0033	54.9925	55.0075	PASS

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.
Resistance Measurement R1

Range: 0 ... 4000 Ω , 1 Year Uncertainty: 0 ... 100 $\Omega \pm(6 \text{ m}\Omega)$, 100 ... 110 $\Omega \pm(0.006\% \text{ RDG})$, 110 ... 150 $\Omega \pm(0.007\% \text{ RDG})$, 150 ... 300 $\Omega \pm(0.008\% \text{ RDG})$, 300 ... 400 $\Omega \pm(0.009\% \text{ RDG})$ and 400 ... 4000 $\Omega \pm(12 \text{ m}\Omega + 0.015\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	
5.0000	5.000	0.0000	± 0.0017	4.9940	5.0060	PASS
100.0004	100.001	0.0006	± 0.0028	99.9944	100.0064	PASS
200.0000	200.000	0.0000	± 0.0041	199.9840	200.0160	PASS
400.0003	400.001	0.0007	± 0.0071	399.9643	400.0363	PASS
600.000	600.00	0.000	± 0.019	599.898	600.102	PASS
999.993	999.99	-0.003	± 0.023	999.831	1000.155	PASS
1500.002	1500.00	-0.002	± 0.033	1499.765	1500.239	PASS
2499.981	2499.94	-0.041	± 0.048	2499.594	2500.368	PASS
3999.980	3999.98	0.000	± 0.071	3999.368	4000.592	PASS

Resistance Measurement R2

Range: 0 ... 4000 Ω , 1 Year Uncertainty: 0 ... 100 $\Omega \pm(6 \text{ m}\Omega)$, 100 ... 110 $\Omega \pm(0.006\% \text{ RDG})$, 110 ... 150 $\Omega \pm(0.007\% \text{ RDG})$, 150 ... 300 $\Omega \pm(0.008\% \text{ RDG})$, 300 ... 400 $\Omega \pm(0.009\% \text{ RDG})$ and 400 ... 4000 $\Omega \pm(12 \text{ m}\Omega + 0.015\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	
5.0001	5.000	-0.0001	± 0.0017	4.9941	5.0061	PASS
100.0008	100.000	-0.0008	± 0.0028	99.9948	100.0068	PASS
199.9997	199.999	-0.0007	± 0.0041	199.9837	200.0157	PASS
400.0050	400.004	-0.0010	± 0.0071	399.9690	400.0410	PASS
600.000	600.00	0.000	± 0.019	599.898	600.102	PASS
999.993	999.99	-0.003	± 0.023	999.831	1000.155	PASS
1500.000	1500.00	0.000	± 0.033	1499.763	1500.237	PASS
2499.977	2499.95	-0.027	± 0.048	2499.590	2500.364	PASS
3999.975	3999.98	0.005	± 0.071	3999.363	4000.587	PASS

Resistance Simulation R1

Range: 0 ... 4000 Ω , 1 Year Uncertainty: 0 ... 100 $\Omega \pm(20 \text{ m}\Omega)$, 100 ... 400 $\Omega \pm(10 \text{ m}\Omega + 0.01\% \text{ RDG})$ and 400 ... 4000 $\Omega \pm(20 \text{ m}\Omega + 0.015\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Simulated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	[Ω]	
1.000	0.9994	-0.0006	± 0.0025	0.9800	1.0200	PASS
100.000	100.0003	0.0003	± 0.0035	99.9800	100.0200	PASS
200.000	200.0004	0.0004	± 0.0046	199.9700	200.0300	PASS
300.000	300.0012	0.0012	± 0.0061	299.9600	300.0400	PASS
400.000	399.9999	-0.0001	± 0.0075	399.9500	400.0500	PASS
500.00	499.982	-0.018	± 0.0091	499.905	500.095	PASS
1000.00	999.996	-0.004	± 0.018	999.830	1000.170	PASS
2000.00	2000.007	0.007	± 0.039	1999.680	2000.320	PASS
2500.00	2500.002	0.002	± 0.047	2499.605	2500.395	PASS
4000.00	4000.004	0.004	± 0.073	3999.380	4000.620	PASS

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.

Frequency Generation

Range: 0.0005... 50000 Hz, 1 Year Uncertainty: 0.0005 ... 0.5 Hz $\pm(0.000002 \text{ Hz} + 0.002\% \text{ RDG})$,
0.5 ... 5 Hz $\pm(0.00002 \text{ Hz} + 0.002\% \text{ RDG})$, 5 ... 50 Hz $\pm(0.0002 \text{ Hz} + 0.002\% \text{ RDG})$,
50 ... 500 Hz $\pm(0.002 \text{ Hz} + 0.002\% \text{ RDG})$, 500 ... 5000 Hz $\pm(0.02 \text{ Hz} + 0.002\% \text{ RDG})$ and
5000 ... 50000 Hz $\pm(0.2 \text{ Hz} + 0.002\% \text{ RDG})$

Calibrated By: Timo Suvanto
Calibration Date: Aug 14, 2026

Generated Value	Measured Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Hz]	[Hz]	[Hz]	[Hz]	[Hz]	[Hz]	
1.10000	1.099999	-0.000001	± 0.000017	1.099958	1.100042	PASS
10.0000	9.99999	-0.00001	± 0.00017	9.99960	10.00040	PASS
100.000	99.9999	-0.0001	± 0.0017	99.9960	100.0040	PASS
1000.00	999.999	-0.001	± 0.017	999.960	1000.040	PASS
10000.0	9999.99	-0.01	± 0.17	9999.60	10000.40	PASS
50000.0	49999.99	-0.01	± 0.30	49998.80	50001.20	PASS

Pt100 Measurement R1

Range: -200 ... 850°C ITS90, 1 Year Uncertainty: -200 ... 0°C $\pm 0.015^\circ\text{C}$,
0°C ... 850°C $\pm(0.015^\circ\text{C} + 0.012\% \text{ RDG})$

Calibrated By: Timo Suvanto
Calibration Date: Aug 14, 2026

Input	Corresponding Temperature	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Ω]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	
18.9525	-198.9994	-199.000	-0.0006	± 0.0026	-199.0144	-198.9844	PASS
100.0008	0.0020	0.001	-0.0010	± 0.0062	-0.0130	0.0170	PASS
138.5054	99.9997	99.996	-0.0037	± 0.0074	99.9727	100.0267	PASS
280.9764	499.9965	499.997	0.0005	± 0.015	499.9215	500.0715	PASS
390.1880	848.9984	849.000	0.0016	± 0.023	848.8815	849.1153	PASS

Temperature/resistance conversions are based on standard IEC 60751 ed3.0. The expanded uncertainties of the temperature measurements are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60751 ed3.0.

Pt100 Measurement R2

Range: -200 ... 850°C ITS90, 1 Year Uncertainty: -200 ... 0°C $\pm 0.015^\circ\text{C}$,
0°C ... 850°C $\pm(0.015^\circ\text{C} + 0.012\% \text{ RDG})$

Calibrated By: Timo Suvanto
Calibration Date: Aug 14, 2026

Input	Corresponding Temperature	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[Ω]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	[$^\circ\text{C}$]	
18.9523	-198.9999	-199.000	-0.0001	± 0.0026	-199.0149	-198.9849	PASS
100.0007	0.0019	0.002	0.0001	± 0.0062	-0.0131	0.0169	PASS
138.5055	100.0001	99.997	-0.0031	± 0.0074	99.9731	100.0271	PASS
280.9772	499.9990	499.999	0.0000	± 0.015	499.9240	500.0740	PASS
390.1881	848.9990	849.001	0.0020	± 0.023	848.8821	849.1159	PASS

Temperature/resistance conversions are based on standard IEC 60751 ed3.0. The expanded uncertainties of the temperature measurements are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60751 ed3.0.

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.
Pt100 Simulation R1

Range: -200 ... 850°C ITS90, 1 Year Uncertainty: -200 ... 0°C $\pm 0.05^\circ\text{C}$,
0°C ... 850°C $\pm (0.05^\circ\text{C} + 0.014\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Simulated Value [°C]	Corresp. Resistance [Ω]	Measured Value [Ω]	Corresp. Temperature [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
-199.000	18.9522	18.9519	-199.001	-0.001	± 0.0062	-199.050	-198.950	PASS
0.000	100.0000	100.0003	0.001	0.001	± 0.0093	-0.050	0.050	PASS
100.000	138.5055	138.5049	99.998	-0.002	± 0.010	99.936	100.064	PASS
500.000	280.9775	280.9776	500.000	0.000	± 0.017	499.880	500.120	PASS
849.000	390.1884	390.1887	849.001	0.001	± 0.025	848.831	849.169	PASS

Temperature/resistance conversions are based on standard IEC 60751 ed3.0. The expanded uncertainties of the temperature simulations are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60751 ed3.0.

Thermocouple Measurement TC1, Type K (without cold junction comp. RJ=0°C)

Range: -270°C ... 1372°C ITS90, 1 Year Uncertainty: -270°C ... -200°C $\pm (0.007\% \text{ of thermovoltage} + 4 \mu\text{V})$,
-200°C ... 0°C $\pm (0.1^\circ\text{C} + 0.1\% \text{ RDG})$, 0°C ... 1000°C $\pm (0.1^\circ\text{C} + 0.007\% \text{ RDG})$, 1000 ... 1372°C $\pm 0.017\% \text{ RDG}$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input [mV]	Corresponding Temperature [°C]	Indicated Value [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
-5.892	-200.045	-200.09	-0.045	± 0.071	-200.345	-199.745	PASS
-0.001	-0.019	-0.04	-0.021	± 0.030	-0.119	0.081	PASS
20.643	499.979	499.96	-0.019	± 0.033	499.844	500.114	PASS
41.274	999.967	999.95	-0.017	± 0.040	999.797	1000.137	PASS
54.851	1370.961	1370.93	-0.031	± 0.049	1370.728	1371.194	PASS

Temperature/voltage conversions are based on the IEC 60584-1 ed3.0 standard. The expanded uncertainties of the temperature measurements are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60584-1 ed3.0.

Thermocouple Measurement TC2, Type K (without cold junction comp. RJ=0°C)

Range: -270°C ... 1372°C ITS90, 1 Year Uncertainty: -270°C ... -200°C $\pm (0.007\% \text{ of thermovoltage} + 4 \mu\text{V})$,
-200°C ... 0°C $\pm (0.1^\circ\text{C} + 0.1\% \text{ RDG})$, 0°C ... 1000°C $\pm (0.1^\circ\text{C} + 0.007\% \text{ RDG})$, 1000 ... 1372°C $\pm 0.017\% \text{ RDG}$

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Input [mV]	Corresponding Temperature [°C]	Indicated Value [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
-5.892	-200.061	-200.07	-0.009	± 0.071	-200.361	-199.761	PASS
-0.001	-0.026	-0.02	0.006	± 0.030	-0.126	0.074	PASS
20.643	499.971	499.97	-0.001	± 0.033	499.836	500.106	PASS
41.274	999.959	999.96	0.001	± 0.040	999.789	1000.129	PASS
54.851	1370.951	1370.95	-0.001	± 0.049	1370.718	1371.184	PASS

Temperature/voltage conversions are based on the IEC 60584-1 ed3.0 standard. The expanded uncertainties of the temperature measurements are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60584-1 ed3.0.

MC6, S/N: 611880. Temperature Section (TC-R-OUT), S/N: 75689.
Thermocouple Simulation TC1, Type K (without cold junction comp. RJ=0°C)

Range: -270°C ... 1372°C ITS90, 1 Year Uncertainty: -270°C ... -200°C $\pm(0.007\%$ of thermovoltage + 4 μV),
-200°C ... 0°C $\pm(0.1^\circ\text{C} + 0.1\%$ RDG), 0°C ... 1000°C $\pm(0.1^\circ\text{C} + 0.007\%$ RDG), 1000 ... 1372°C $\pm 0.017\%$ RDG

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Simulated Value [°C]	Corresp. Voltage [mV]	Measured Value [mV]	Corresp. Temperature [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
-200.00	-5.891	-5.891	-199.96	0.04	± 0.11	-200.30	-199.70	PASS
0.00	0.000	0.001	0.02	0.02	± 0.039	-0.10	0.10	PASS
500.00	20.644	20.645	500.02	0.02	± 0.040	499.86	500.14	PASS
1000.00	41.276	41.276	1000.02	0.02	± 0.047	999.83	1000.17	PASS
1371.00	54.852	54.853	1371.03	0.03	± 0.057	1370.77	1371.23	PASS

Temperature/voltage conversions are based on the IEC 60584-1 ed3.0 standard. The expanded uncertainties of the temperature simulations are based on electrical measurements. The expanded uncertainty of the electrical measurements is converted to the temperature in measurement points according to the standard IEC 60584-1 ed3.0.

Internal Reference Junction TC1

Thermocouple, Type K

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Compensated Type K in ice bath [°C]	Ambient Temperature [°C]	Indicated Value [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
0.00	23	0.00	0.00	± 0.075	-0.18	0.18	PASS

Temperature / voltage conversion is based on the IEC 60584-1 ed3.0 standard. Calibration of the internal reference junction compensation has been made by measuring an ice bath (0°C) with the K type thermocouple specified in the calibration procedures.

Internal Reference Junction TC2

Thermocouple, Type K

Calibrated By: Timo Suvanto

Calibration Date: Aug 14, 2026

Compensated Type K in ice bath [°C]	Ambient Temperature [°C]	Indicated Value [°C]	Difference [°C]	Expanded Uncertainty (k=2) [°C]	Specification Low Limit [°C]	Specification High Limit [°C]	Status
0.00	23	0.00	0.00	± 0.075	-0.18	0.18	PASS

Temperature / voltage conversion is based on the IEC 60584-1 ed3.0 standard. Calibration of the internal reference junction compensation has been made by measuring an ice bath (0°C) with the K type thermocouple specified in the calibration procedures.

MC6, S/N: 611880. Pressure Module, S/N: 99455.
P20C Pressure Measurement

Range: -100 ... 2000 kPa gauge, 1 Year Uncertainty: $\pm(0.01\% \text{ FS} + 0.025\% \text{ RDG})$

Calibrated By: Timo Suvanto

Calibration Date: Aug 13, 2026

Input	Indicated Value	Difference	Expanded Uncertainty (k=2)	Specification Low Limit	Specification High Limit	Status
[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	[kPa]	
0.000	0.00	0.000	± 0.013	-0.200	0.200	PASS
399.988	399.96	-0.028	± 0.057	399.688	400.288	PASS
800.000	800.00	0.000	± 0.099	799.600	800.400	PASS
1199.997	1199.99	-0.007	± 0.14	1199.497	1200.497	PASS
1599.997	1599.99	-0.007	± 0.19	1599.397	1600.597	PASS
2000.005	1999.98	-0.025	± 0.23	1999.305	2000.705	PASS
1600.004	1599.99	-0.014	± 0.19	1599.404	1600.604	PASS
1200.002	1199.99	-0.012	± 0.14	1199.502	1200.502	PASS
800.000	800.01	0.010	± 0.099	799.600	800.400	PASS
399.999	400.00	0.001	± 0.057	399.699	400.299	PASS
0.000	0.01	0.010	± 0.013	-0.200	0.200	PASS
-20.000	-20.00	0.000	± 0.013	-20.205	-19.795	PASS
-40.000	-40.01	-0.010	± 0.014	-40.210	-39.790	PASS
-60.000	-60.01	-0.010	± 0.015	-60.215	-59.785	PASS
-80.000	-80.00	0.000	± 0.016	-80.220	-79.780	PASS
-93.000	-93.00	0.000	± 0.019	-93.223	-92.777	PASS

The pressure sensor has been zeroed before calibration of negative gauge.

Advanced Field Calibrator and Communicator MC6

Serial No: 611880

Calibration Procedure

Calibration was carried out according to the internal instruction no. 7.1.4.1.49

Before starting the calibration of the unit, the unit was allowed to stabilise to the constant laboratory conditions for 2 hours.

Condition of the calibrated device

The device is new and no issues were detected.

Calibration Equipment Used

Equipment and Model	Serial No.	Cert. No.	Calibrated	Due Date
Pressure Controller Ruska 7250xi	70440	K026-25P5752	Aug 19, 2025	Aug 19, 2026
Pressure Controller Ruska 7250xi	65147	K026-25P7176	Oct 22, 2025	Oct 22, 2026
Digital Multimeter Hewlett-Packard 3458A	2823A13814	K026-26E5886	Aug 10, 2026	Aug 10, 2027
Frequency Counter Agilent 53220A	MY50005316	K026-26F5883	Aug 10, 2026	Aug 10, 2027
Thermocouple Beamex Type K	89	K026-26T2062	Mar 12, 2026	Sep 03, 2027
Thermocouple Beamex Type K	90	K026-26T2062	Mar 12, 2026	Sep 03, 2027

Calibrations are traceable to national or international measurement standards.

Calibration Uncertainty

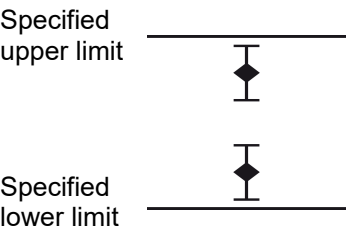
The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k = 2$, which for a normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA Publication EA-4/02.

Calibration Conditions

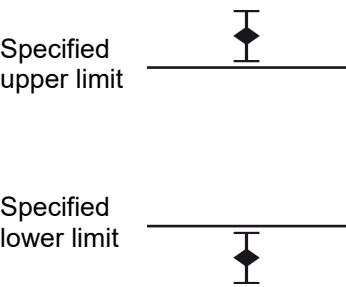
The calibrations were made in controlled conditions where the temperature was $23^{\circ}\text{C} \pm 1^{\circ}\text{C}$ / $73^{\circ}\text{F} \pm 2^{\circ}\text{F}$ and the relative humidity was $50\% \text{RH} \pm 10\% \text{RH}$.

ASSESSMENT OF COMPLIANCE WITH MANUFACTURER'S SPECIFICATION

PASS = The measurement result is within the specification limit (the specification limits are not breached by the measurement result, extended by half of the expanded uncertainty interval at a level confidence of 95%).



FAIL = The measurement result is outside the specification limit even though it is extended downwards/upwards by half of the expanded uncertainty interval at a level confidence of 95%.



UD = The measurement result is above/below/equal to the specification limit by a margin less than the half of the expanded uncertainty interval; it is therefore not possible to state PASS/FAIL based on 95% level of confidence (UD=UNDEFINED=CONDITIONAL PASS/CONDITIONAL FAIL).

