EA MLA Signatory
Český institut pro akreditaci, o.p.s.
Olšanská 54/3, 130 00 Praha 3

issues

according to section 16 of Act No. 22/1997 Coll., on technical requirements for products, as amended

CERTIFICATE OF ACCREDITATION

No. **689/2023**

PG electronic s.r.o.
with registered office Růžová 5363, 430 04 Chomutov,
Company Registration No. 61534404

for the Calibration Laboratory No. **2417**
Calibration Laboratory

Scope of accreditation:

Calibration in the field of electrical quantities to the extent as specified in the appendix to this Certificate.

This Certificate of Accreditation is a proof of Accreditation issued on the basis of assessment of fulfillment of the accreditation criteria in accordance with

ČSN EN ISO/IEC 17025:2018

In its activities performed within the scope and for the period of validity of this Certificate, the Conformity Assessment Body is entitled to refer to this Certificate, provided that the accreditation is not suspended and the Accredited Body meets the specified accreditation requirements in accordance with the relevant regulations applicable to the activity of an accredited Conformity Assessment Body.

This Certificate of Accreditation replaces, to the full extent, Certificate No.: 137/2023 of 27. 3. 2023, or any administrative acts building upon it.

The Certificate of Accreditation is valid until: **17. 10. 2025**

Prague: 20. 12. 2023

Český institut pro akreditaci, o.p.s.
NÁRODNÍ AKREDITAČNÍ ORGÁN
-3-

Jan Velíšek
Director of the Department
of Testing and Calibration Laboratories
Czech Accreditation Institute

The Appendix is an integral part of
Certificate of Accreditation No. 689/2023 of 20/12/2023

Accredited entity according to ČSN EN ISO/IEC 17025:2018:

PG electronic s.r.o.
CAB number 2417, Calibration Laboratory
Růžová 5363, 430 04 Chomutov

CMC for the field of measured quantity: Electrical quantities

Ord. number [1]	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty[2]	Calibration principle	Calibration procedure identification[3]	Work-place
		min	unit	max	unit					
1	DC voltage / DC voltage sources, multifunction testers	0 mV	to	100 mV			0.003 % + 3 µV	Direct measurement by a standard multimeter	KA-01	
		100 mV	to	1 V			0.002 % + 6 µV			
		1 V	to	10 V			0.002 % + 40 µV			
		10 V	to	100 V			0.003 % + 0.5 mV			
		100 V	to	1 kV			0.004 % + 8 mV			
		1 kV	to	6 kV			0.2 % + 70 mV			
2	AC voltage / AC voltage sources, multifunction testers	5 mV	to	100 mV		20 Hz to 1 kHz	0.05 % + 40 µV	Direct measurement by a standard multimeter	KA-02	
		100 mV	to	1 V			0.05 % + 0.3 mV			
		1 V	to	10 V			0.05 % + 3 mV			
		10 V	to	100 V			0.05 % + 30 mV			
		100 V	to	1 kV			0.05 % + 0.2 V			
		1 kV	to	5 kV			0.3 % + 4 V			
3	DC current / DC current sources, multifunction testers	1 µA	to	100 µA			0.04 % + 0.03 µA	Direct measurement by a standard multimeter	KA-03	
		100 µA	to	1 mA			0.04 % + 0.04 µA			
		1 mA	to	10 mA			0.04 % + 2 µA			
		10 mA	to	100 mA			0.04 % + 4 µA			
		100 mA	to	400 mA			0.04 % + 20 µA			
		400 mA	to	1 A			0.04 % + 0.2 mA			
		1 A	to	3 A			0.09 % + 0.6 mA			
		3 A	to	10 A			0.2 % + 0.7 mA			

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CAB number 2417, Calibration Laboratory
Růžová 5363, 430 04 Chomutov

Ord. number [1]	Calibrated quantity / Subject of calibration	Nominal range min	unit		max	unit	Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty[2]	Calibration principle	Calibration procedure identification[3]	Work-place
		10 A		to	30 A			0.35 %	Measurement by a reference multimeter with a shunt		
4	AC current / AC current sources, multifunction testers	10 µA		to	100 µA		20 Hz to 1 kHz	0.2 µA	Direct measurement by a standard multimeter	KA-04	
		100 µA		to	1 mA			0.08 % + 0.4 µA			
		1 mA		to	10 mA			0.2 % + 5 µA			
		10 mA		to	100 mA			0.07 % + 40 µA			
		100 mA		to	400 mA			0.2 % + 0.4 mA			
		400 mA		to	1 A			0.07 % + 0.7 mA			
		1 A		to	3 A			0.09 % + 3 mA			
		3 A		to	10 A			0.2 % + 7 mA			
		10 A		to	30 A		50 Hz to 60 Hz	0.31 % + 18 mA	Measurement by a reference multimeter with current clamps		
		30 A		to	100 A			1.3 % + 24 mA			
5	DC resistance / resistors	1 mΩ		to	50 mΩ			0.2 % + 20 µΩ	Direct measurement by a reference milliohmmeter	KA-05	
		50 mΩ		to	500 mΩ			0.06 % + 0.2 mΩ			
		500 mΩ		to	3 Ω			0.06 % + 2 mΩ			
		3 Ω		to	10 Ω			0.008 % + 3 mΩ	Direct measurement by a standard multimeter		
		10 Ω		to	100 Ω			0.008 % + 4 mΩ			
		100 Ω		to	1 kΩ			0.008 % + 8 mΩ			
		1 kΩ		to	10 kΩ			0.008 % + 0.08 Ω			

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Ord. number [1]	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty[2]	Calibration principle	Calibration procedure identification[3]	Work-place
		min	unit	max	unit					
		10 kΩ	to	100 kΩ			0.008 % + 0.8 Ω			
		100 kΩ	to	1 MΩ			0.008 % + 8 Ω			
		1 MΩ	to	10 MΩ			0.04 % + 80 Ω			
		10 MΩ	to	100 MΩ			0.6 % + 7 kΩ			
		100 MΩ	to	1 GΩ			2 % + 80 kΩ			
6	Protective conductor resistance / multifunction testers			50 mΩ			1.2 mΩ	Direct measurement of resistance standards	KA-07	
				100 mΩ			1.2 mΩ			
				200 mΩ			1.5 mΩ			
				300 mΩ			2 mΩ			
				400 mΩ			2 mΩ			
7	Insulation resistance / insulation resistance meters, multifunction testers			0.5 MΩ			6 kΩ	Direct measurement of reference resistors	KA-06	
				1 MΩ			12 kΩ			
				2 MΩ			24 kΩ			
				3 MΩ			36 kΩ			
				5 MΩ			59 kΩ			
				9 MΩ			110 kΩ			
				10 MΩ			120 kΩ			
				20 MΩ			240 kΩ			
				30 MΩ			360 kΩ			
				45 MΩ			0.53 MΩ			
				50 MΩ			0.63 MΩ			
				90 MΩ			1.1 MΩ			

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Ord. number [1]	Calibrated quantity / Subject of calibration	Nominal range				Parameter(s) of the measurand	Lowest stated expanded measurement uncertainty[2]	Calibration principle	Calibration procedure identification[3]	Work-place
		min	unit	max	unit					
				220 MΩ			3.8 MΩ			
				450 MΩ			8.4 MΩ			
				900 MΩ			11 MΩ			
8	DC resistance / multifunction testers			1 Ω			55 mΩ	Direct measurement of reference resistors	KA-06	
				5 Ω			75 mΩ			
				10 Ω			150 mΩ			
				50 Ω			0.75 Ω			
				100 Ω			1.5 Ω			
				450 Ω			6.8 Ω			
				900 Ω			13.5 Ω			

[1] Asterisk at the ordinal number identifies the calibrations, which the Laboratory is qualified to carry out outside the permanent laboratory premises.

[2] The expanded measurement uncertainty is in accordance with ILAC-P14 and EA-4/02 M a part of CMC and it is the lowest value of the respective uncertainty. If not stated otherwise, its coverage probability is approx. 95 %. If not stated otherwise, the uncertainty values stated without a unit are relative to the measured value. The uncertainty value stated herein is based on the best conditions achievable by the laboratory; the uncertainty value of a specific calibration may be higher depending on the conditions of such a calibration. For identical extreme values of adjacent ranges, the lower uncertainty value always applies.

[3] If the document identifying the calibration procedure is dated, only these specific procedures are used. If the document identifying the calibration procedure is not dated, the latest edition of the specified procedure is used (including any changes).