

**The appendix is am integral part of
Certificate of accreditation No. 387/2021 of 16/07/2021**

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

ABEGU, a.s.
TESTING LABORATORY
Krkonošská 358, Desná III, 468 61 Desná

The Laboratory has a flexible scope of accreditation permitted as detailed in the Annex.

Updated list of activities provided within the flexible scope of accreditation is available at www.abegu.cz, "Test room" section.

The laboratory provides expert opinions and interpretations of test results.

Tests:

Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested object
1 - 100	Reserved		
101*	Short voltage dips and short voltage interruptions immunity tests (internal designation A1-1)	ČSN EN 61000-4-11 ed.3 ČSN EN 50130-4 ed.2, cl. 8	Electrical equipment ESS / EFS equipment
102*	Electrostatic discharge immunity test (internal designation A1-2)	ČSN EN 61000-4-2 ed.2 ČSN EN 50130-4 ed.2, cl. 9	Electrical equipment ESS / EFS equipment
103*	Radiated, radio-frequency, electromagnetic field immunity test (internal designation A1-3)	ČSN EN 61000-4-3 ed.3 ČSN EN 50130-4 ed.2, cl. 10	Electrical equipment ESS / EFS equipment
104*	Electrical fast transient / burst immunity test (internal designation A1-4)	ČSN EN 61000-4-4 ed.3 ČSN EN 50130-4 ed.2, cl. 12	Electrical equipment ESS / EFS equipment
105*	Surge immunity test (internal designation A1-5)	ČSN EN 61000-4-5 ed.3 ČSN EN 50130-4 ed.2, cl. 13	Electrical equipment ESS / EFS equipment
106*	Damped oscillatory wave immunity test (internal designation A1-6)	ČSN EN IEC 61000-4-18 ed.2	Electrical equipment
107*	Testing of immunity to conducted disturbances, induced by radio-frequency fields (internal designation A1-7)	ČSN EN 61000-4-6 ed.4 ČSN EN 50130-4 ed.2, cl. 11	Electrical equipment ESS / EFS equipment
108*	Magnetic field immunity test DC, 15 Hz to 150 kHz (internal designation A1-8)	ČSN EN 61000-4-8 ed.2 ISO 11452-8	Electrical equipment

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested object
109*	Pulse magnetic field immunity test (internal designation A1-9)	ČSN EN 61000-4-9 ed.2	Electrical equipment
110*	Damped oscillatory magnetic field immunity test (internal designation A1-10)	ČSN EN 61000-4-10 ed.2	Electrical equipment
111*	Ring wave immunity test (internal designation A1-12)	ČSN EN 61000-4-12 ed.3	Electrical equipment
112*	Harmonics and interharmonics immunity test (internal designation A1-13)	ČSN EN 61000-4-13	Electrical equipment
113*	Voltage fluctuation immunity test (internal designation A1-14)	ČSN EN 61000-4-14 ČSN EN 50130-4 ed.2, cl. 7	Electrical equipment ESS / EFS equipment
114*	Test for immunity to conducted, common mode disturbances 15 Hz to 150 kHz (internal designation A1-16)	ČSN EN 61000-4-16 ed.2 ČSN EN 50130-4 ed.2, cl. 14	Electrical equipment ESS / EFS equipment
115*	Test for immunity to disturbance by low frequencies including signals in distribution networks (conducted differential mode disturbing) (internal designation A1-19)	ČSN EN 61000-4-19	Electrical equipment
116*	Power frequency variation immunity test (internal designation A1-28)	ČSN EN 61000-4-28	Electrical equipment
117*	Voltage dips, short interruptions and voltage variations on d.c. input power port immunity test (ELV) (internal designation A1-29)	ČSN EN 61000-4-29	Electrical equipment

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested object
118-200	Reserved		
201*	Measurement of internal and surface resistance of floor coverings (internal designation B1-1)	ČSN 34 1382, cl. 6.11, 6.12 ČSN EN 61340-4-1 ČSN EN 1081	Floor covering
202*	Reflectometric measurement of cable routes (TDR) (internal designation B1-2)	ČSN EN 3475-804	Electric cable / metallic pipe
203*	Measurement of coupling/transfer impedance of cables (internal designation B1-3, B1-4)	ČSN 34 7010-82, cl. 3.7	Electric cable
204*	Measurement of attenuation of cables and filters (internal designation B1-5)	ČSN EN 55017, cl. 5.3 ČSN EN 50289-1-8 ed.2 ČSN EN 50289-1-10	Electric cable / metallic pipe Passive / Active filter
205*	Measurement of electrical characteristics of cables: resistance, capacity, inductance, electric strength, insulation resistance (internal designation B1-6)	ČSN EN 50289-1-2 ČSN EN 50289-1-3 ČSN EN 50289-1-4 ČSN EN 50289-1-5 ČSN EN 50289-1-12	Electric cable / metallic pipe
206	Tensile test of cables (internal designation B2-1)	ČSN EN 60811-201 ČSN EN 60811-202 ČSN EN 60811-501 ČSN 34 7010-82, cl. 2.3.1.3	Electric cable
207 - 300	Reserved		
301*	Measurement of low frequency magnetic field (internal designation C1-1)	ČSN 33 2040	Electrical equipment Electrical installation (environment)

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Ordinal number ¹	Test procedure / method name	Test procedure / method identification ²	Tested object
302*	Measurement of high frequency electromagnetic field (internal designation C1-2)	ČSN EN 55011 ed.4, cl. 8.3 ČSN EN 55032 ed.2, cl. 6 ČSN EN 50121-3-1 ed.4, cl. 6.3 ČSN EN 55016-2-3 ed.4, cl. 7.3	Electrical equipment Electrical installation (environment)
303*	Measurement of terminal voltage disturbance (internal designation C1-3)	ČSN EN 55011 ed.4, cl. 8.2 ČSN EN 55016-2-1 ed.3, cl. 7 ČSN EN 55032 ed.2, cl. 6	Electrical equipment Electrical environment
304*	Measurement of high frequency and pulse voltage and current (internal designation C1-4, C1-5)	ČSN IEC 816, cl. 5.5.1.2, 6.1	Electrical equipment Electrical environment
305*	Measurement of harmonics voltage and current (internal designation C1-6)	ČSN EN 61000-4-7 ed.2	Electrical equipment Electrical environment
306 - 400	Reserved		
401*	Measurement and testing of electrical characteristics of equipment: voltage, current, power, frequency, electric strength, insulation resistance (internal designation D2-1)	ČSN EN IEC 62368-1 ed.2, cl. 5, 6.2, B, V ČSN EN 61010-1 ed.2, cl. 6.2, 6.3, 6.6, 6.8	Electrical equipment
402*	Measurement of insulation distances of equipment (internal designation D2-2)	ČSN EN IEC 62368-1 ed.2, cl. 5.4 ČSN EN 61010-1 ed.2, cl. 6.7	Electrical equipment
403*	Testing of mechanical resistance of equipment enclosures (internal designation D2-3)	ČSN EN IEC 62368-1 ed.2, cl. 4.4, 8, F, T ČSN EN 61010-1 ed.2, cl. 5.3, 8	Electrical equipment
404*	Measurement of thermal ratios of equipment (internal designation D2-4)	ČSN EN IEC 62368-1 ed.2, cl. 5.4, 6.2, 9 ČSN EN 61010-1 ed.2, cl. 10	Electrical equipment

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405 - 500	Reserved		
501	Environmental testing - Cold (internal designation E2-1)	ČSN EN 60068-2-1 ed.2	Electrical / Non-electrical equipment Electric cable
502	Environmental testing - Dry heat (internal designation E2-2)	ČSN EN 60068-2-2	Electrical / Non-electrical equipment Electric cable
503	Environmental testing - Damp heat, Cyclic (internal designation E2-3)	ČSN EN 60068-2-30 ed.2	Electrical / Non-electrical equipment Electric cable
504	Environmental testing - Damp heat, Constant (internal designation E2-4)	ČSN EN 60068-2-78 ed.2	Electrical / Non-electrical equipment Electric cable

¹ asterisk at the ordinal number identifies the tests, which the Laboratory is qualified to carry out outside the permanent laboratory premises

² if the document identifying the test procedure is dated, only these specific procedures are used. If the document identifying the test procedure is not dated, the latest edition of the specified procedure is used (including any changes)

Explanatory notes:

ESS - electrical security systems

EFS - electrical firealarm systems

Annex:

Flexible scope of accreditation

Ordinal numbers of tests
103, 107, 108, 302, 112, 115, 205, 401, 402, 403, 404

The Laboratory is allowed to modify the test methods listed in the Annex within the specified scope of accreditation provided the measuring principle is observed. The flexible approach to the scope of accreditation cannot be applied to the tests not included in the Annex.