Republic of Bulgaria
Executive Agency
Bulgarian Accreditation Service

Signatory to the EA Multilateral Agreement in this field

ORDER

№ A 218

Sofia, 04.06.2024

Pursuant to Art. 10, para. 1, item 2a of the Law on National Accreditation of Conformity Assessment Bodies, in connection with amendment of an element of the certificate content, according to item 4.3.8. f) of the BAS QR 2 Accreditation Procedure and EA BAS order reg. № A 217/04.06.2024, I hereby

AMEND

EA BAS order reg. № A 311/28.07.2023 to certificate of accreditation reg. № 156 ЛИ/28.07.2023, valid until 28.07.2027 as follows:

ELKABEL JSC, BURGAS

TEST LABORATORY

Management and laboratory address:
8000 Burgas, 15 Odrin Str.

To perform testing of:

Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
1.	Power cables and conductors with thermoplastic insulation of rated voltages up to and including 450/750 V	1. Measurement of radial thickness of insulation / sheath	БДС EN 60811-100 БДС EN 60811-201 БДС EN 60811-202 БДС EN 50396 cl. 4.1, cl. 4.2, cl. 4.3 ГОСТ 12177 cl. 3.4.7
		2. Measurement of constructive dimensions	БДС EN 60811-100 БДС EN 60811-203 БДС 6259 cl. 2.4, cl. 2.6, cl. 2.8; БДС EN 50396 cl. 4.4; BS 6004 cl. 15.2
		3. Mechanical properties of insulation / sheath before and after ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 a), b); ГОСТ 25018
		4. Loss of mass of insulation / sheath	БДС EN 60811-100 БДС EN 60811-409
		5. Pressure test at high temperature of insulation / sheaths	БДС EN 60811-100 БДС EN 60811-508

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Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
		6. Test at low temperature	БДС EN 60811-100 БДС EN 60811-504 БДС EN 60811-505 БДС EN 60811-506
		7. Test for resistance of insulations and sheaths to cracking (heat shock test)	БДС EN 60811-100 БДС EN 60811-509
		8. Thermal stability of insulation / sheath	БДС EN 60811-100 БДС EN 60811-405
		9. Electrical resistance of conductors, screens and armours	БДС 2374 БДС EN 60228, Annex A ГОСТ 7229
		10. Test of cable and/or cores under alternating voltage	БДС 2406 cl. 1; БДС EN 50395 cl. 6, cl. 7, cl. 10.3 ГОСТ 2990 cl. 4.1 BS 6004, Annex E
		11. Electrical resistance of insulation and/or sheath	БДС 1986 БДС EN 50395 cl. 8 ГОСТ 3345
		12. Compatibility of cable components in thermal ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 c)
		13. Water absorption of PVC insulation	БДС 2406 cl. 1, cl. 2 БДС EN 50395 cl. 9
		14. Surface resistance of sheath	БДС EN 50395, cl. 11
		15. Mineral oil immersion tests for sheaths at increased temperature	БДС EN 60811-100 БДС EN 60811-404
		16. Test of single insulated conductor or cable under fire conditions	БДС EN 60332-1-2
		17. Test of small single insulated conductor or cable under fire conditions	БДС EN 60332-2-2
2.	Power cables with cross-linked insulation of rated voltages up to and including 450/750 V	1. Measurement of radial thickness of insulation / sheath	БДС EN 60811-100 БДС EN 60811-201 БДС EN 60811-202 БДС EN 50396 cl. 4.1, cl. 4.2, cl. 4.3
		2. Measurement of constructive dimensions	БДС EN 60811-100 БДС EN 60811-203 БДС EN 50396 cl. 4.4
		3. Mechanical properties of insulation / sheath before and after ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 a), b)

Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
		4. Test at low temperature	БДС EN 60811-100 БДС EN 60811-504 БДС EN 60811-505 БДС EN 60811-506
		5. Electrical resistance of conductors, screens and armours	БДС EN 60228, Annex A
		6. Test of cable and/or cores under alternating voltage	БДС EN 50395 cl. 6, cl. 7, cl. 10.3 BS 7211, Annex E
		7. Electrical resistance of insulation and/or sheath	БДС EN 50395 cl. 8
		8. Compatibility of cable components in thermal ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 c)
		9. Hot set test of insulation / sheath	БДС EN 60811-100 БДС EN 60811-507
		10. Mineral oil immersion tests for sheaths at increased temperature	БДС EN 60811-100 БДС EN 60811-404
		11. Surface resistance of sheath	БДС EN 50395 cl. 11
		12. Test of single insulated conductor or cable under fire conditions	БДС EN 60332-1-2
		13. Test of small single insulated conductor or cable under fire conditions	БДС EN 60332-2-2
3.	Power cables with extruded insulation of rated voltages up to 20/36 kV	1. Measurement of radial thickness of insulation / sheath	БДС EN 60811-100 БДС EN 60811-201 БДС EN 60811-202 БДС HD 605 S3 cl. 2.1.1, cl. 2.1.11.1 ГОСТ 12177 cl. 3.4.7
		2. Measurement of constructive dimensions	БДС 6259 cl. 2.4, cl. 2.6, cl. 2.7.2.2, cl. 2.8 БДС EN 60811-100 БДС EN 60811-203 БДС HD 605 S3 cl. 2.1.11.1, cl. 2.1.11.2, cl. 2.1.4.2, cl. 2.1.13.2 IEC 60502-1 cl. 16.6, cl. 16.7 IEC 60502-2 cl. 17.6, cl. 17.7
		3. Mechanical properties of insulation / sheath before and after ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 a), b) ГОСТ 25018
		4. Loss of mass of insulation / sheath	БДС EN 60811-100 БДС EN 60811-409

Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
		5. Pressure test at high temperature for insulation / sheaths	БДС EN 60811-100 БДС EN 60811-508
		6. Test at low temperature	БДС EN 60811-100 БДС EN 60811-504 БДС EN 60811-505 БДС EN 60811-506
		7. Test for resistance of insulations and sheaths to cracking (heat shock test)	БДС EN 60811-100 БДС EN 60811-509
		8. Thermal stability of insulation / sheath	БДС EN 60811-100 БДС EN 60811-405
		9. Electrical resistance and resistivity of conductors, screens and armours	БДС 2374 БДС HD 605 S3 cl. 3.1.1, cl. 3.1.2, cl. 3.1.4 БДС EN 60228, Annex A IEC 60502-1 cl. 15.2 IEC 60502-2 cl. 16.2; BS 6724 Annex B.5 ГОСТ 7229
		10. Test of cable and/or cores under alternating voltage	БДС 2406 cl. 1 БДС HD 605 S3 cl. 3.2.1, cl. 3.2.2, cl. 3.2.5 IEC 60502-1 cl. 15.3.1, cl. 15.3.2 a); cl. 15.3.3; cl. 15.3.4; cl. 15.3.5; cl. 17.4 IEC 60502-2 cl. 17.9, cl. 18.2.9, cl. 18.3.4 BS 6485 Annex A1 BS 6622 cl. 17.8.2, cl. 18.16 БДС EN 50395 cl. 10.3 ГОСТ 2990 cl. 4.1 NF C 33-209 cl. 6.6
		11. Electrical resistance and resistivity of insulation and/or sheath	БДС 1986 БДС HD 605 S3 cl. 3.3.1 IEC 60502-1 cl. 17.2, cl. 17.3 IEC 60502-2 cl. 18.3.2, cl. 18.3.3; BS 6485, Annex A2 NF C 33-209 cl. 6.3; ГОСТ 3345
		12. Compatibility of cable components in thermal ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 c)
		13. Hot set test of insulation / sheath	БДС EN 60811-100 БДС EN 60811-507
		14. Shrinkage test of insulation / sheath	БДС EN 60811-100 БДС EN 60811-502 БДС EN 60811-503; БДС HD 605 S3 cl. 2.4.4.1; BS 6724, Annex H

Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
		15. Surface resistance of sheath	БДС HD 605 S3 cl. 3.4
		16. Water absorption of PVC insulation	БДС 2406 cl. 1, cl. 2 БДС EN 60811-100 БДС EN 60811-402 cl. 4.3;
		17. Water penetration test	БДС 2581 cl. 3.32; БДС HD 605 S3 cl. 2.4.9.3; IEC 60502-2 cl. 19.24, Annex F
		18. Resistivity of semiconducting screens	БДС HD 605 S3 cl. 3.9.1; IEC 60502-2 cl. 18.2.10, Annex D; BS 6622, Annex J
		19. Mineral oil immersion tests for sheaths at increased temperature	БДС EN 60811-100 БДС EN 60811-404
		20. Heating cycle test	БДС 2581:86 cl. 3.15; БДС HD 620 S3 10A cl. 3.3.1.4; БДС HD 620 S3 10C cl. 3.3.1.4; БДС HD 620 S3 10J cl. 3.3.4.2; БДС HD 632 S3 Part 1 cl. 12.4.6; БДС HD 605 S3 cl. 3.8.1; cl. 3.8.2; IEC 60502-2 cl. 18.2.7; BS 6622 cl. 20.6;
		21. Bending test	БДС 2581 cl. 3.12; БДС HD 605 S3 cl. 2.4.1.6; IEC 60502-2 cl. 18.2.4; BS 6622 cl. 20.3
		22. Measurement of Shore D hardness of PE sheath	БДС HD 605 S3 cl. 2.2.1
		23. Stress cracking resistance for PE sheath	БДС EN 60811-100 БДС EN 60811-406 БДС HD 605 S3 cl. 2.4.21
		24. Irregularities in the insulation and semiconducting screens	БДС HD 605 S3 cl. 2.1.10.2; cl. 2.1.10.5
		25. Measurement of dielectric losses	IEC 60502-2 cl. 18.2.6; БДС HD 605 S3 cl. 3.11; БДС 6927
		26. Measurement of partial discharges	БДС EN 60885-3; БДС 13382; БДС HD 605 S3 cl. 3.10
		27. Test of single insulated conductor or cable under fire conditions	БДС EN 60332-1-2
4.	Power cables with extruded insulation of	1. Measurement of radial thickness of insulation / sheath	БДС EN 60811-100 БДС EN 60811-201 БДС EN 60811-202

Type of the scope: *flexible*			
№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
	rated voltages up to 64/110 kV	2. Measurement of constructive dimensions	БДС 6259 cl. 2.7.2.2, cl. 2.8 БДС EN 60811-100 БДС EN 60811-203 IEC 60840 cl. 10.7
		3. Mechanical properties of insulation / sheath before and after ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 a), b)
		4. Loss of mass of insulation / sheath	БДС EN 60811-100 БДС EN 60811-409
		5. Pressure test at high temperature for insulation / sheaths	БДС EN 60811-100 БДС EN 60811-508
		6. Test at low temperature	БДС EN 60811-100 БДС EN 60811-505 БДС EN 60811-506
		7. Test for resistance of insulations and sheaths to cracking (heat shock test)	БДС EN 60811-100 БДС EN 60811-509
		8. Electrical resistance and resistivity of conductors, screens and armours	БДС 2374; БДС HD 605 S3 cl. 3.1.1, cl. 3.1.2, cl. 3.1.4 IEC 60840 cl. 10.5; БДС HD 632 S3 Part 1 cl. 10.5
		9. Test of cable and/or cores under alternating voltage	БДС HD 632 S3 Part 1 cl. 9.3, cl. 12.4.1; IEC 60840 cl. 9.3; cl. 12.4.1 BS 7912 cl. 9.3, cl. 12.11
		10. Compatibility of cable components in thermal ageing	БДС EN 60811-100 БДС EN 60811-501 БДС EN 60811-401 cl. 4.1 c)
		11. Hot set test of insulation / sheath	БДС EN 60811-100 БДС EN 60811-507
		12. Shrinkage test of insulation / sheath	БДС EN 60811-100 БДС EN 60811-502 БДС EN 60811-503
		13. Water penetration test	БДС HD 632 S3 Part 1, Annex E IEC 60840, Annex E BS 7912 cl. 14
		14. Resistivity of semiconducting screens	БДС HD 632 S3 Part 1 cl. 12.4.9; Annex D IEC 60840, Annex D
		15. Heating cycle test	БДС HD 632 S3 Part 1 cl. 12.4.6; IEC 60840 cl. 12.4.6; BS 7912 cl. 12.9
		16. Bending test	БДС HD 632 S3 Part 1 cl. 12.4.3; IEC 60840 cl. 12.4.3;

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№	**Tested products**	**Type of test / characteristic**	**Testing methods (standard/ validated method)**
1	**2**	**3**	**4**
			BS 7912 cl. 12.5
		17. Irregularities in the insulation and the semiconducting screens	БДС HD 605 S3 cl. 2.1.10.2, 2.1.10.5
		18. Measurement of dielectric losses	БДС 6927; IEC 60840 cl. 12.4.5; БДС HD 632 S3 Part 1 cl. 12.4.5
		19. Measurement of partial discharges	БДС EN 60885-3 БДС 13382 БДС HD 605 S3 cl. 3.10
5.	Bare conductors for overhead power lines	1. Measurement of constructive dimensions	БДС 6259 cl. 2.4; БДС 16651 cl. 4.6; БДС EN 50182 cl. 6.4.2, cl. 6.4.4; IEC 61089 cl. 6.6.1.3
		2. Electrical resistance and resistivity	БДС 2374 БДС 1133, Annex 2 IEC 60468, Routine Method BS 215-1, Annex A BS 215-2, Annex A
		3. Mechanical properties	БДС 1133 Annex 2 БДС 7454 БДС 17002 cl. 3.8 БДС EN 50189 cl. 11.3, cl. 11.4 БДС EN ISO 6892-1 BS 215-1, Annex A BS 215-2, Annex A
		4. Mass of the conductor	БДС 1133 cl. 4.7; БДС 17002 cl. 3.5; БДС EN 50182 cl. 6.4.6; IEC 61089 cl. 6.6.3 BS 215-1, Annex A BS 215-2, Annex A
6.	Cu and Al conductors for cables and wires	1. Measurement of constructive dimensions	БДС 6259 cl. 2.4; БДС HD 605 S3 cl. 2.1.4.2, cl. 2.1.13.2; БДС 16651 cl. 4.6
		2. Electrical resistance and resistivity	БДС 2374; БДС HD 605 S3 cl. 3.1.1; БДС EN 60228, Annex A; IEC 60468, Routine Method;
		3. Mechanical properties	БДС 7454; БДС EN ISO 6892-1

Flexible scope: *Implementing a new version of standards/documents or standards/ documents replacing them is allowed. An updated list of standards/documents and their dated versions is provided by laboratory.*

I ORDER

To issue the certificate of accreditation reg. № 156 ЛИ/04.06.2026, valid until 28.07.2027, and this order as an integral part of it.

The certificate of accreditation with the enclosure to be received by the Manager/ representative of Elkabel JSC, the head of Test Laboratory, or other authorized person in the office of EA BAS.

Upon receipt of the certificate and the enclosure issued, the accredited person is obliged to return to EA BAS the originals of accreditation certificate № 156 ЛИ/28.07.2023, valid until 28.07.2027 and its enclosure – EA BAS order reg. № А 311/28.07.2023.

This order shall be notified to Elkabel JSC, within 3 (three) days from its issuance.

Eng. Irena Borislavova

Executive Director of EA BAS