Scope of Accreditation for the Testing Laboratory (Center)

Testing Center of High-voltage Equipment

Joint Stock Company «Research and Development Center at Federal Grid Company of Unified Energy System»

Testing Laboratory (Testing Center) Name

127566, Moscow, Vysokovoltny proezd, 13, buildings 1, 2, 3, 5

127566, Moscow, Vysokovoltny proezd, 13, building 9 (archive of Testing Center)

Business Address

on conformity to requirements of GOST ISO/IEC 17025-2019

Title and requisites of interstate or national standard, which specifies general requirements to competence of testing and calibration laboratories

No.	Documents establishing rules and techniques of research (testing) and measurements	Equipment	OKPD 2 code	TN VED EAEU code	Defined parameter	Range
1	2	3	4	5	6	7
1	GOST 11677 Section 7 (table 23 §8, 17)	Power transformers, transformers and transforming power electro-oven units	27.11.4	8504 21 8504 22 8504 23	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
2	GOST 11677 Section 7 (table 23. §13)	Power transformers; transformers and transforming power electro-oven units	27.11.4	8504 21 8504 22 8504 23	Short-time withstand tests and current striking shocks. 0,1 to 208 kV	Irms 0,1 to 70 kA Idyn 0,1 to 180 kA 0,1 to 4 s Compliant/ noncompliant
3	GOST 11677 §7.1	Power transformers	27.11.4	8504 21 8504 22 8504 23	Perform of inspections: - checking of requirements to grounding (during checking of safety requirements)	1 to 500 mm compliant/ noncompliant
					- presence of device for slinging and horisontal movement (during checking of safety requirements)	compliant/ noncompliant
					- presence of devices for tank protection against internal pressure increasing (during checking of safety requirements)	compliant/ noncompliant

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					- presence of oil level marker and valve for selection of oil sample (during checking of safety requirements)	compliant/ noncompliant
					- marking and presence of nameplate (during checking of safety requirements)	compliant/ noncompliant
					- for way of protection (during checking of safety requirements)	compliant/ noncompliant
4	GOST 17544 § 6.1; 6.3	Power transformers	27.11.4	8504 21 8504 22 8504 23	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
5	GOST R 52719 Section 10 (table 11 §8, 17)	Power transformers	27.11.4	8504 21 8504 22 8504 23	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
6	GOST R 52719 Section 10 (table 11 §13)				Short-time withstand tests and current striking shocks. 0,1 to 208 kV	Irms 0,1 to 70 kA Idyn 0,1 to 180 kA Compliant/noncompliant
7	GOST R 52719 Section10 (table 11 §14)				Checking of sound power level (during checking of safety requirements)	0 to 130 dBA compliant/ noncompliant
8	GOST R 52719 §10.1				Perform of inspections: - checking of requirements to grounding (during checking of safety requirements)	1 to 500 mm compliant/ noncompliant
					- presence of device for slinging and horisontal movement (during checking of safety requirements)	compliant/ noncompliant
					- presence of devices for tank protection against internal pressure increasing (during checking of safety requirements)	compliant/ noncompliant
					- presence of oil level marker and valve for selection of oil sample (during checking of safety requirements)	compliant/ noncompliant

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					- marking and presence of nameplate (during checking of safety requirements)	compliant/noncompliant
					- for way of protection (during checking of safety requirements)	compliant/ noncompliant
9	GOST R 52719 Section 10 (table 11 §19)				- for fire safety requirements (during checking of safety requirements) Statistic analisys	compliant/ noncompliant
10	GOST 12.2.024 Section 2	Power transformers; transformers and transforming reactors	27.11.4 27.11.5	8504 210000 8504 220000 8504 230000	Checking of sound power level (during checking of safety requirements)	0 to 130 dBA compliant/ noncompliant
11	GOST 12.1.004 Annex 3	Power transformers; transformers and transforming reactors; transformers and transforming power electro-oven units	27.11.4 27.11.5	8504 210000 8504 220000 8504 230000	Checking for fire safety requirements (during checking of safety requirements) Statistic analisys	compliant/ noncompliant
12	GOST 12.2.007.0 § 3.3.7	Power transformers; transformers and transforming reactors	27.11.4 27.11.5	8504 210000 8504 220000 8504 230000	Checking of resistance between grounding bolt and each accessible for touch metal non-currentcarrying part (during checking of safety requirements)	0,001 to 200 Ω compliant/ noncompliant
13	GOST R 55016 § 11.1; 11.3	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^0C 1 μΩ to 2000 Ω
14	GOST R 51559 § 7.1	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^0C 1 μΩ to 2000 Ω
15	GOST 30830 §10.1	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^0C 1 μΩ to 2000 Ω

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16	GOST 12965 §6.1.2	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
17	GOST 16555 § 4.1	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
18	GOST R 54827 §23	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
19	IEC 60076-11§10	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
20	GOST 3484.2 Section 2-6	Power transformers, transformers and transforming reactors, transformers and transforming power electro-oven units; reactors, including current-limiting.	27.11.4 27.11.5	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
21	GOST 3484.1 Section 2	Power transformers, transformers and transforming reactors, transformers and transforming power electro-oven units.	27.11.4	8504 21 8504 22 8504 23	Checking of transformer factor	1 to 100 compliant/ noncompliant
22	GOST 3484.1 Section 4				Measurement of resistanceof coils to DC current	1 nΩ to 10 κΩ Passed / failed
23	GOST 3484.1 Section 5				Measurement of losses and short-circuit voltage	0 to 12 kW 0 to 100 % Passed / failed
24	GOST 3484.1 Section 6				Measurement of losses and no-load current	0 to 12 kW 0 to 100 % Passed / failed
25	GOST 20243	Power transformers, trans-	27.11.4	8504	Short-time withstand tests and current striking	Irms 0,1 to 70 kA

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		formers and transforming reactors, transformers and transforming power electro-oven units.	27.11.5		shocks. 0,1 to 208 kV	Idyn 0,1 to 180 kA compliant/ noncompliant
26	GOST 16772 § 5.15; 5.20;	Transformers and transforming reactors	27.11.4	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
27	GOST 16772 § 5.1, 5.19, 5.21				Checking for compliance with safety require-ments	1 to 500 mm 0 to 130 dBA compliant/ noncompliant
28	IEC 61378-1§7.6	Transforming transformers	27.11.4	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
29	IEC /IEEE 60076-57-129 §9.13	Transforming transformers	27.11.4	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
30	GOST 20247 §6.1	Transformers and transform-ing power electro-oven units	27.11.4	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
31	GOST 14794 §§6.6; 6.11	Reactors, including current-limiting reactors	27.11.4	8504	Temperature rise tests with rated current: 0 to 20000 A 0,1 to 35 kV - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
32	GOST 14794 §6.12.				Tests for withstand during short-circuits 0,1 to 12 kV	Irms 0,1 to 40 kA Idyn 0,1 to 102 kA

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						0,1 to 0,22 Ω 0,1 to 3 s compliant/ noncompliant
33	GOST 20248 Section 2	Prefabricated substations (KTP)	27.11.4	8537 200000	Temperature rise tests with rated current: 10 to 20 000 A - temperature rise - measurement of resistance	Passed / failed 1 to 300^{0}C 1 μΩ to 2000 Ω
34	GOST 20248 Section 3				Short-time withstand tests, including for Tests for safety requirements: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA
35	GOST 20248 Section 4				Checking of external view, correctness of fulfil operating circuits, marking	Compliant/ noncompliant
36	GOST 20248 Section 7				Tests of mechanical strengthof elements of construction during multiple operations,including during Tests for safety requirements: - control of mechanicalcharacteristics and serviceabilityof operation mechanisms - checking of forces during operation - checking of blockings operation - checking of operatingequipment	 Compliant/ noncompliant Compliant/ noncompliant 1 to 10 000 N Compliant/ noncompliant compliant/ noncompliant
37	GOST 20248 Section 13				Control assembly and mutual replacement of one-type withdrawable of apparatuses, including for Tests for safety requirements: - geometrical dimensions - mass - checking of blockings operation	Compliant/ noncompliant 1 mmto 5 000 mm 1 to 10 000 kg
38	GOST 20248 Section 12				Tests for strength during transporting External, checking of serviceability	Passed / failed

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					ofelements and package	Compliant/ noncompliant
39	GOST 20248 Section 14	Prefabricated substations (KTP)	27.11.4	8537 200000	Tests for compliance with safety requirements	compliant/ noncompliant
40	GOST 19294 §5.10	Low power general purpose transformers for voltageto 1000 V*	27.11.4	8504	Temperature rise tests with rated current: - temperature rise - measurement of resistance	Passed / failed 1 to 300^0C 1 μΩ to 2000 Ω
41	GOST 19294 §5.12.1				Measurement of Insulation resistance.	$10^{-3}$to 10^6Ω. Compliant/ noncompliant
42	GOST 19294 §5.3				Test of insulation with increased voltage	0 to 5 kV compliant/ noncompliant
43	GOST 19294 §5.11				Tests for withstand during short-circuits 0,1 to 2 kV	0,1 to 0,5 kA compliant/ noncompliant
44	GOST 8024 Section 2	High-voltage circuit-breakers, disconnectors and earthing switches, fault interrupters and short-circuit makers, Switchgears type of KRU and KSO, switchgears with SF_6 insulation(GIS), current transformers, busducts, bushing insulators	27.12 27.11	8535 8537 8504 8046	Temperature rise tests with rated current: - current - temperature rise - measurement of resistance	Passed / failed 10 to 20 000 A 1 to 300^0C 1 μΩ to 2000 Ω
45	GOST 1516.3§ 4.14	AC current electrical installations of 3 to 750 kV	27.12.1 27.12.2 27.12.3 27.12.4	8504 8535 8536 8537 8544 8546	Tests of insulation of control circuits, of auxiliary circuits (0 to 5 kV)	0 to 5 kV Compliant / noncompliant
46	GOST 1516.3 § 13.6	Switchgears with SF_6 insulation (GIS) of 110 kV and higher	27.12.10.190	8537 200000	Tests of insulation of control circuits, of auxiliary circuits (0 to 5 kV)	0 to 5 kV Compliant / noncompliant
47	GOST R 52565 §9.1	AC current circuit-breakers for voltage 3 to 750 kV	27.12.10.110	8535 210000 8535 290000	Tests for compliance to requirements to construction and requirements to assembling drawing, completeness, including	

1	2	3	4	5	6	7
					during safety checking: - geometrical, mounting and connecting dimensions - mass - condition of protective surfaces - condition of surface of external insulating parts - correctness of filling of nameplate - correctness of marking and branding - compliance of mounted auxiliary equipment	 0 to 5000 mm Compliant / noncompliant 0 to 10000 kg Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
48	GOST R 52565 §9.2.1-9.2.3	AC current circuit-breakers for voltage 3 to 750 kV	27.12.10.110	8535 210000 8535 290000	Tests for mechanical capability, including during safety checking: - control of mechanical, electrical and time characteristics - correct operation of device mechanisms and blockings - forces	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant 0 to 10000 N Compliant / noncompliant
49	GOST R 52565 § 9.2.4				Tests for reliability of mechanical capability: - control of mechanical, electrical and time characteristics - control of serviceability of	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant /

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					operationmechanismes - control of electrical resistance	noncompliant (0 to 1000 Ω) Compliant / noncompliant
50	GOST R 52565 § 9.3.5				Control of electrical strength of insulation after switching tests and mechanical wearing tests	Compliant / noncompliant
51	GOST R 52565 §9.4				Temperature rise tests with rated current: - current - temperature rise - electricalresistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 1000 Ω 1 to 100 ms
52	GOST R 52565 §9.5	AC current circuit-breakers for voltage 3 to 750 kV	27.12.10.110	8535 210000 8535 290000	Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
53	GOST R 52565 §9.6 - 9.8				Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
54	GOST 17717 § 7.1	High-voltage load switches	27.12.10.110	8535 210000 8535 290000	Tests for compliance to requirements to construction and requirements to assem-	

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					bling drawing, completeness, including during safety checking: - geometrical, mounting and connecting dimensions - mass - condition of protection surfaces - condition of surface of external insulating parts - condition of surface areas for grounding bolts and presence of sign "Earth" - correctness of filling of nameplate - correctness of marking and branding	 (0 to 5000 mm) Compliant / noncompliant (0 to 10000 kg) Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
55	GOST 17717 §7.3	High-voltage load switches	27.12.10.110	8535 210000 8535 290000	Temperature rise tests with rated current: - current - temperature rise - own times	Passed/ failed 10 to 20 kA 1 to 300 ^{0}C 1 to 100 ms
56	GOST 17717 § 7.4				Tests for mechanical capability and wearing tests, including during safety checking: - control of mechanical, electrical and time characteristics - control of correct operation of device mechanisms and blockings - forces	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
57	GOST 17717 § 7.5				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times	Passed /failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms

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					- force - control of time characteristics	1 to 10 000 N 0 to 30 мин
58	GOST 17717 § 7.7				Tests for switching capability: - amplitude voltage - RMS voltage - RMS value of short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
59	GOST 17717 § 7.8.1				Type tests for reliability of mechanical capability	Passed / failed
60	GOST 18397 §7.3	AC current circuit-breakers for voltage 6 to 220 kV	27.12.10.110	8535 210000 8535 290000	Temperature rise tests with rated current: - current - temperature rise - electricalresistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
61	GOST 18397 §7.4				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
62	GOST 18397 §7.5-7.7				Tests for switching capability: - amplitude voltage - RMS voltage - RMS value of short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min);

1	2	3	4	5	6	7
						Compliant/ noncompliant
63	GOST 18397 §7.9				Tests for mechanical capability and reliability of mechanical capability: - control of mechanical, electrical and time characteristics - control of serviceabilityof operationmechanismes	Passed / failed (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant
64	GOST 18397§ 7.10				Tests for strength during transporting. External examination of circuit-breaker package	Compliant / noncompliant
65	IEC 62271–100 § 7.4	High-voltage AC current circuit-breakers	27.12.10	8535	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
66	IEC 62271–100 § 7.5				Temperature rise tests with rated current: - current - temperature rise - resistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
67	IEC 62271–100 § 7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
68	IEC 62271–100 § 7.101.1, 7.101.2				Tests for mechanical capability and wearing tests, including during safety checking: - - control of mechanical, electrical and time characteristics	(0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min);

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					- control of correct operation of device mechanisms and blockings - forces	Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
69	IEC 62271–100 § 7.102-7.112				Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
70	IEC 62271–101 Sections 4-7	High-voltage AC current circuit-breakers	27.12.10	8535	Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant

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71	IEC 62271–103§ 7.4	High-voltage AC current circuit-breakers for voltage above 1 kV up to 52 kV in-cluding	27.12.10	8535	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
72	IEC 62271–103 § 7.5				Temperature rise tests with rated current: - current - temperature rise - resistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
73	IEC 62271–103 § 7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
74	IEC 62271–103 § 7.101				Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
75	IEC 62271–103 § 7.102.1, 7.102.2				Tests for mechanical capability and wearing tests, including during safety checking: - control of mechanical, electrical and time characteristics	 (0 to 600 V); (0 to 300 A); (0 to 300 mm);

1	2	3	4	5	6	7
					- control of correct operation of device mechanisms and blockings - forces	(0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
76	IEC 62271–104 § 7.4	High-voltage AC current circuit-breakers for rated voltages 52 kV and higher	27.12.10	8535	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
77	IEC 62271–104 § 7.5				Temperature rise tests with rated current: - current - temperature rise - resistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
78	IEC 62271–104 § 7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
79	IEC 62271–104 § 7.101.1-7.101.3				Tests for mechanical capability and wearing tests, including during safety checking: - control of mechanical, electrical and time characteristics - control of correct operation of device mechanisms and blockings - forces	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
80	IEC 62271–104 § 7.102-7.109				Tests for switching capability: - amplitude voltage	Compliant / noncompliant (0 to 308 kV)

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					(0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	 (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
81	IEC TR 62271–310 section 4	High-voltage AC current circuit-breakers for rated voltage above 52 kV	27.12.10	8535	Tests for switching capability: - amplitude voltage - RMS voltage - RMS value of short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
82	GOST 14254 Section 12	Degrees of protection, provided by enclosures	27.12.1 27.12.2 27.12.3 27.12.4	8504 8535 8536 8537 8546	Degree of protectionfor access to dangerous parts	(0Xto 4X) Compliant / noncompliant
83	GOST 23216 §5.2.4.1	Electrical equipmentin package	27.12.1 27.12.2 27.12.3 27.12.4	8504 8535 8536 8537 8544 8546	Tests for transporting strength: - mass - completeness - external view	Passed / failed (0 to 10000 kg) Compliant / noncompliant Compliant / noncompliant Compliant /

1	2	3	4	5	6	7
						noncompliant
84	GOST 9920 Section 2	AC current electrical installations for voltage 3 to 750 kV	27.12.1 27.12.2 27.12.3 27.12.4	8504 8535 8536 8537 8544 8546	Relativecreepage distance (calculated). Creepage distanceof external insulation	- Compliant / noncompliant (0 to 5000 mm) Compliant / noncompliant
85	GOST R 52726 § 8.1	AC current disconnectors and earthing switches for voltage above 1 kV and their motors	27.12.10.120	8535 30	Tests for complianceto requirementsof construction and requirementsassembling drawing, completeness, including during safety checking: - geometrical, mounting and connecting dimensions - mass - condition of protective surfaces - condition of surface of external insulating parts - correctness of filling of nameplate - correctness of marking and branding - correctness of regulation - checking of contact pressure	 (1 to 5000 mm) Compliant / noncompliant (0 to 10000 kg) Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant (1 to 10000 N) Compliant / noncompliant
86	GOST R 52726 § 8.2				Tests for mechanical capability, including during safety checking: - control of mechanical, electrical and time characteristics - correct operation of device mechanisms	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant /

1	2	3	4	5	6	7
					and blockings - forces	noncompliant (0 to 10000 N) Compliant / Noncompliant
87	GOST R 52726 § 8.5.1-8.5.3, 8.5.5				Tests for reliability of mechanical capability: - control of mechanical, electrical and time characteristics - control of electrical strength of insulation - control of electrical resistance	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 1000 Ω) Compliant / noncompliant
88	GOST R 52726 §8.5.4, 8.5.7, 8.5.8				Tests for mechanical capability, including during safety checking: - control of mechanical, electrical and time characteristics - correct operation of device, mechanisms and blockings - forces	 (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
89	GOST R 52726 § 8.6.2				Checking of blockingdevices, including during safety checking	Compliant / noncompliant
90	GOST R 52726 § 8.8				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
91	GOST R 52726 § 8.9				Short-time withstand tests:	Passed / failed

1	2	3	4	5	6	7
					- electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
92	GOST R 52726 § 8.12				Tests for strength during transporting: - visualchecking of serviceability ofequipment and package	 Passed / failed
93	GOST R 52726 § 8.15- 8.17				Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
94	GOST R 52726 § 8.19				Checking of electrical resistanceof grounding circuit - resistance	Compliant / noncompliant 1 μΩ to 2000 Ω
95	GOST R 52726 § 8.20, 8.21				Tests of auxiliary contacts to short-circuit current: - rated (short-time) current of switchingcontacts (0 to 200 A)	 (0 to 200 A) Passed / failed
96	GOST R 55716 § 6.4	High-voltage switching equipment	27.12.1	8535	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
97	GOST R 55716 § 6.5				Temperature rise tests with rated current: - current	Passed/ failed 10 to 20 000 A

1	2	3	4	5	6	7
					- temperature rise - resistance - own times	1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
98	GOST R 55716 § 6.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N
99	IEC 62271–102 §7.4	High-voltage AC current disconnectors and earthing switches	27.12.1	8535	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
100	IEC 62271–102 §7.5				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
101	IEC 62271–102 §7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - force - control of time characteristics	Passed /failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 1 to 10 000 N 0 to 30 min
102	IEC 62271–102 §7.102				Tests for mechanical capability and reliability of mechanical capability: - control of mechanical, electrical and time characteristics - control of correct operation of device mechanisms and blockings - forces	(0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant Compliant / noncompliant (0 to 10000 N) Compliant /

1	2	3	4	5	6	7
					- control of insulation - control of electrical resistance	noncompliant Compliant / noncompliant (0 to 1000 Ω)
103	IEC 62271–102 §7.101; 7.106, Annex B1; §7.107, Annex B3; §7.108, Annex B2				Tests for switching capability: - amplitude voltage (0 to 308 kV) - RMS voltage (0 to 220 kV) - RMS value of short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
104	GOST R 52725 Section 8.18	Non-linear surge arresters	27.12.10.130	8535 400000	Pressure-releif tests	0,1 to 80 kA 0,1 to 2 s compliant/ noncompliant
105	GOST 16357 §6.2.13	Surge arresters with spark gaps	27.12.10.130	8535 400000	Pressure-releif tests	0,1 to 40 kA 0,1 to 2 s compliant/ noncompliant
106	GOST 7746 § 9.1	Current transformers	27.11.4	8504 310000 8504 320000 8504 330000	Checking of external view and Checking for complianceto drawings, including for Tests for safety requirements: - geometrical dimensions - mass - condition of protective surfaces - condition of surface of external insulat-ing parts - correctness of filling of nameplate	compliant/ noncompliant 1 mmto 5 000 mm 1 to 10 000 kg

1	2	3	4	5	6	7
					- correctness of marking and branding - completeness - checking of operating forces - electricalresistanceof grounding con-ductor	 1 to 10 000 N 1 μΩ to 2000 Ω
107	GOST 7746 § 9.2.2				Checking of creepage distance	Passed / failed 1 to 5 000 mm
108	GOST 7746 § 9.2.3				Test of inter-turn insulation	Passed / failed 0,5 to 3 kV
109	GOST 7746 § 9.2.4				Tests of electrical strength of insulation of secondarycoils to1 minpower-frequency voltage, including for Tests for safety requirements:	Passed / failed 0,5 to 5 kV
110	GOST 7746 § 9.2.6				Test of inter-turn insulation	Passed / failed
111	GOST 7746 § 9.3				Measurement of insulation resistanceof coils	1 κΩ to 70 GΩ Compliant/noncompliant
112	GOST 7746 § 9.6				Checking of limitmultiplicity (definitionof fulluncertainty) of secondarycoils for protection: - current - fulluncertainty	Compliant/ noncompliant 0,1 to 120 kA 1 to 100 %
					Checking ofsafetyfactor of devicesof secondarycoils for measurement: - current - fulluncertainty	Compliant/ noncompliant 0,1 to 120 kA 1 to 100 %
113	GOST 7746 § 9.8				Definitionof magnetizing current of secondarycoils	- 0,5 to 5 kV - 1 to 100 A Compliant/ noncompliant
114	GOST 7746 § 9.9				Temperature rise tests with rated current: - current - measurement of resistance - temperature rise	Passed / failed 10 to 20000 A 1 to 2000 Ω 0 to 300^0 C

1	2	3	4	5	6	7
115	GOST 7746 § 9.10				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA 0,1 to 120 kA
116	GOST 7746 § 9.11				Measurement of resistanceof secondarycoils toDC current	Passed / failed 1 μΩ to 2000 Ω
117	GOST 7746 § 9.17				Test of gas-filled transformers for internal arcing test	0,1 to 40 kA 0,1 to 0,5 s
118	GOST 1983 §9.1	Voltage transformers	27.11.4	8504 313100 8504 323000 8504 330000 8504 340000	Checking for complianceto requirementsassembling drawing, including for Tests for safety requirements: - geometrical dimensions - mass - condition of protective surfaces - condition of surface of external insulating parts - correctness of filling of nameplate, correctness of marking and branding,completeness, checkingcondition of grounding	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg compliant/ noncompliant compliant/ noncompliant
119	GOST 1983 § 9.3				Measurement of Insulation resistanceof coils	Passed / failed 1 κΩ to 70 GΩ
120	GOST 1983 § 9.5				Measurement of no-load current	1 to 100 A
121	GOST 1983 § 9.9				Temperature rise tests with rated current: - voltagesto 100 kV - temperature rise - measurement of resistance	Passed / failed 1 to 100 kV 1 to 300^{0}C 1 μΩ to 2000 Ω
122	GOST 1983 §9.10, 9.11				Test for withstandtoshort-circuit current: - voltagesto 100 kV - temperature rise	Passed / failed 1 to 100 kV 1 to 300^{0}C
123	GOST 1983 §9.19				Checking of creepage distance	Compliant/ noncompliant 1 to 5 000 mm
124	GOST 1983 §9.20				Measurement of resistanceof coils toDC current	Compliant/ noncompliant 1 μΩ to 2000 Ω

1	2	3	4	5	6	7
125	GOST 1983 § 9.21				Test of gas-filled transformers for internal arcing test	0,1 to 40 kA 0,1 to 0,5 s compliant/ noncompliant
126	GOST 1282 § 5.5, 5.6, 5.9	Power capacitors and capacitive installations, for increasing of power factor	27.90.51; 27.90.52	8532	Test of electrical strength of insulationpower-frequency Not above 104 kV	Passed / failed
127	GOST 12.2.007.5		27.90.51; 27.90.52	8532	Checking of external view of construction: - presence of grounding bolts; -external view - checking of Insulation resistance. Above 250 V	compliant/ noncompliant
128	GOST 14694 section 3	Switchgears type of KRU, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Temperature rise tests with rated current: - current - temperature rise - Measurement of electrical resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
129	GOST 14694 section 4	Switchgears type of KRU, GIS, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Tests for mechanicalstrength and withstand, electromechanicaltests, including during safety checking: - checking of installations of accessories equipment and way of their bracing - measurement of travel value and alignment of detachable contacts of main and auxiliary circuits - checking of operating mechanismes of cubicle and withdrawable element - checking of switching equipment of main circuit - determination of characteristics of switching equipment and motors - test of mechanical strength of elements of construction - test of devices, equipment and schemes of auxiliary circuits - test of blockings - test of fixing devices - test of earthing devices	 Compliant / noncompliant (0 to 300 mm); Compliant / noncompliant Passed/ failed Compliant / noncompliant (0 to 30 min) Compliant / noncompliant (0 to 10000 N) Passed/ failed Compliant / noncompliant Passed/ failed Passed/ failed Compliant /

1	2	3	4	5	6	7
					- electricalInsulation resistance ofmain and auxiliary circuits	noncompliant (0 to 50000MΩ)
130	GOST 14694 §6.3				Degree of protection for access to dangerous parts, including during safety checking	(0X to 4X) Compliant / noncompliant
131	GOST 14694 section 7	Switchgears type of KRU, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - control of mechanical and time characteristics	Passed /failed 0,1 to 320 kA 0,1 to 120 kA (0 to 30 min); Compliant / noncompliant
132	GOST 14694 section 8	Switchgears type of KRU, GIS, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Tests for strength during transporting: - mass - checking of construction and operating mechanismes - checking of completeness - checking of package	Passed / failed (0 to 10000 kg) Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
133	GOST 14694 section 9	Switchgears type of KRU, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Tests for switching capability: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
134	GOST 14694 section 10	Switchgears type of KRU, GIS, KSO for voltage 3 to	27.12.10.190	8537 200000	Control of assembly, Tests for mutual replacement ofone-	

1	2	3	4	5	6	7
		35 kV			typewithdrawableelements and external view, including during safety checking: - external examination and compliance to assembling drawings; - checking of operating mechanismes of cubicle and withdrawable element - test of blockings - forces for handling of moving mecha-nism - checking of electrical strength of insu-lation of maincircuits toshort-timeACvoltage	(0 to 5000 mm) Compliant / noncompliant Compliant / noncompliant Passed / failed (0 to 10000 N) Compliant / noncompliant Passed / failed
135	GOST 14694 section 12	Switchgears type of KRU, GIS, KSO, KTPfor voltage 3 to 35 kV	27.11.4 27.12.10	8537	Tests for localizationcapability: - highest servicevoltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
136	GOST 14694 section 13	Switchgears type of KRU, GIS, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	Tests for switching capability during no-load current of transformer for own needs: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
137	GOST 14693 § 5.4	Switchgears type of KRU, GIS, KSO for voltage 3 to 35 kV	27.12.10.190	8537 200000	During Test of electrical strength of insu-lation of auxiliary circuits, including during safety checking	(0 to 5 kV) Passed/ failed
138	GOST R 55190 § 5.2, 5.3.2-5.3.4,	Switchgears type of KRU,	27.12.10.190	8537 200000	Checking for compliance of construction	

1	2	3	4	5	6	7
	5.10, 5.12, 5.21-5.23	GIS for voltage 3 to 35 kV			and assembling drawing, including for Tests for safety requirements - presence of grounding - geometrical dimensions, mounting and connecting - correctness of filling of nameplate and correctness of marking - external view - mass	 Compliant / noncompliant (0 to 5000 mm) Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant (0 to 10000 kg) Compliant / noncompliant
139	GOST R 55190 § 5.11				Checkingblockings devices, including for Tests for safety requirements	Compliant / noncompliant
140	GOST R 55190 § 6.3				Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
141	GOST R 55190 § 6.4				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
142	GOST R 55190 § 6.5				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - own times - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 to 100 ms 0 to 30 min
143	GOST R 55190 § 6.6				Degree of protection for access to dangerous parts, including during safety checking.	(0Xto 4X) Compliant / noncompliant
144	GOST R 55190 § 6.11				Tests for switching capability: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of mechanical, electrical and	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V);

1	2	3	4	5	6	7
					time characteristics	(0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
145	GOST R 55190 § 6.12				Mechanicaltests (electromechanical tests), including during safety checking: - checking of operating mechanismes of cubicle and withdrawable element - checking of switching equipment of main circuit - test of blockings	 Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
146	GOST R 55190 § 6.17, Annex A				Tests for exposure of electric arc (localization capability): - highest service voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
147	IEC 62271–200 § 7.4	AC current metal-enclosed switchgears for rated voltage 1 to 52 kV	27.12.10.190	8537 200000	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
148	IEC 62271–200 § 7.5				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
149	IEC 62271–200 § 7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - control of mechanical and time charac-teristics	Passed /failed 0,1 to 320 kA 0,1 to 120 kA (0 to 30 min); Compliant / noncompliant
150	IEC 62271–200 § 7.101				Tests for switching capability:	Compliant / noncompliant

1	2	3	4	5	6	7
					- amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	(0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
151	IEC 62271–200 § 7.102				Mechanicaltests (electromechanicaltests): - checking of operating of cubicle mechanismes and withdrawable element - checking of switching of main circuit equipment - test of blockings	 Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
152	IEC 62271–200 § 7.106, Annex A				Tests for exposure of electric arc (localizationcapability): - highest service voltage (0 to 40,5 kV) - short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
153	IEC 62271–201 § 6.4	AC current switchgears with solid insulation for rated voltage 1 to 52 kV	27.12.10.190	8537 200000	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
154	IEC 62271–201§ 6.5				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
155	IEC 62271–201 § 6.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA 0,1 to 120 kA

1	2	3	4	5	6	7
					- control of mechanical and time characteristics	(0 to 30 min); Compliant / noncompliant
156	IEC 62271–201 § 6.101				Tests for switching capability: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
157	IEC 62271–201 § 6.102				Mechanicaltests (electromechanicaltests): - checking of operating mechanismes cubicle and withdrawable element - checking of switching of main circuit equipment - test of blockings	 Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
158	IEC 62271–201 § 6.105, Annex AA				Tests for exposure of electric arc (localizationcapability): - highest service voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
159	GOST R 54828 §5.1-5.3, 5.9-5.11, 5.12.1, 6.1.2	Metal-enclosed switchgears with SF_6 insulation (GIS) for rated voltages 110 kV and higher	27.12.10.190	8537 200000	Checking for compliance of construction and assembling drawing, including for Tests for safety requirements: - presence of grounding - geometrical dimensions, mounting and connecting - correctness of filling of nameplate	 Compliant / noncompliant (0 to 5000 mm) Compliant / noncompliant Compliant /

1	2	3	4	5	6	7
					иcorrectness of marking - external view - mass	noncompliant Compliant / noncompliant (0 to 10000 kg) Compliant / noncompliant
160	GOST R 54828 §6.4				Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
161	GOST R 54828 §6.5				Temperature rise tests with rated current: - current - temperature rise - resistance - own times	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 to 100 ms
162	GOST R 54828 §6.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - control of time characteristics	Passed /failed 0,1 to 320 kA 0,1 to 120 kA 0 to 30 min
163	GOST R 54828 §6.12				Tests for switching capability: - amplitude voltage - RMS voltage - RMS value of short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
164	GOST R 54828 §6.13.1				Mechanicaltests (electromechanicaltests), including dur-ing safety checking: - checking of operating mechanismes cubicle and withdrawable element - checking of switching of main circuit	 Compliant / noncompliant Compliant / noncompliant

1	2	3	4	5	6	7
					equipment - test of blockings	Compliant / noncompliant
165	GOST R 54828 §6.16, AnnexG				Tests for exposure of electric arc (localizationcapability): - highest service voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 50 kA) (0 to 135 kA) (0 to 30 min)
166	IEC 62271–203 §7.4	Metal-enclosed switchgears with SF_6 insulation (GIS) for rated voltagesabove 52 kV	27.12.10.190	8537 200000	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
167	IEC 62271–203 §7.5				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
168	IEC 62271–203 §7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - control of time characteristics	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 0 to 30 min
169	IEC 62271–203 §7.101				Tests for switching capability: - amplitude voltage - RMS voltage - RMS value of short-circuit current - peak value of short-circuit current - control of mechanical, electrical and time characteristics	Compliant / noncompliant (0 to 308 kV) (0 to 220 kV) (0 to 63 kA) (0 to 170 kA) (0 to 600 V); (0 to 300 A); (0 to 300 mm); (0 to 30 min); Compliant / noncompliant
170	IEC 62271–203 §7.102.2				Mechanicaltests (electromechanicaltests): - checking of operating mechanismes cubicle and withdrawable element - checking of switching of main circuit equipment	 Compliant / noncompliant Compliant / noncompliant

1	2	3	4	5	6	7
					- test of blockings	Compliant / noncompliant
171	IEC 62271–203 §7.105, Annex B				Tests for exposure of electric arc (localizationcapability): - highest service voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 40,5 kV) (0 to 50 kA) (0 to 135 kA) (0 to 30 min)
172	IEC 62271–205 §6.4	Compact switchgears for calculatedvoltage above 52 kV	27.12.10.190	8537 200000	Measurement of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
173	IEC 62271–205 §6.5				Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
174	IEC 62271–205 §6.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - control of time characteristics	Passed /failed 0,1 to 320 kA 0,1 to 120 kA 0 to 30 min
175	IEC 62271–205 §6.101.1-6.101.2				Mechanicaltests (electromechanicaltests): - checking of operating mechanismes cubicle and withdrawable element - checking of switching of main circuit equipment - test of blockings	 Compliant / noncompliant Compliant / noncompliant Compliant / noncompliant
176	GOST 2213 §7.1	AC current fuses for voltage 3 kV and higher	27.12.10.140	8535 100000	Tests for compliance to requirements to of construction and requirementsassembling drawing, completeness, including during safety checking: - geometrical, mounting and connecting dimensions	 (0 to 5000 mm) Compliant / noncompliant (0 to 10000 kg)

1	2	3	4	5	6	7
					- mass	Compliant / noncompliant
					- condition of protective surfaces	Compliant / noncompliant
					- condition of surface of external insulating parts	Compliant / noncompliant
					- correctness of filling of nameplate	Compliant / noncompliant
					- correctness of marking and branding	Compliant / noncompliant
					- presence of trigger indicator and (or) striking devices and (or) devices for remote signalling, blocking and control	Compliant / noncompliant
177	GOST 2213 §7.5				Temperature rise tests with rated current: - current - temperature rise - resistance - time	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 ms to 30 min
178	GOST 2213 §7.6-1-7.6.4				Tests for mechanical capability and for mechanical wearing tests, including during safety checking: - control of mechanicalcharacteristics, correct operation of device mechanisms and blockings - checking of forces	 (0 to 300 mm); (0 to 30 min); Compliant / noncompliant (0 to 10000 N) Compliant / noncompliant
179	GOST 2213 §7.7				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - time	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 ms to 30 min
180	GOST 2213 §7.8-7.11				Tests for switching capability:	Compliant /

1	2	3	4	5	6	7
					- amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
181	IEC 62271–105 §7.4	Switch-fuse combination for AC current	27.12.10	8535	Checking of electrical resistance	(0 to 1000 Ω) Compliant / noncompliant
182	IEC 62271–105 §7.5				Temperature rise tests with rated current: - current - temperature rise - resistance - time	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 ms to 30 min
183	IEC 62271–105 §7.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - times	Passed / failed 0,1 to 320 kA 0,1 to 120 kA 1 ms to 30 min
184	IEC 62271–105 §7.101				Tests for switching capability: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
185	IEC 60282-1 §7.5	High voltage fuses. Current-limiting fuses	27.12.10.140	8535 100000	Temperature rise tests with rated current: - current - temperature rise - resistance - time	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 ms to 30 min
186	IEC 60282-1 §7.6-7.7				Tests for switching capability: - amplitude voltage - RMS voltage - short-circuit current - peak value of short-circuit current - control of time characteristics	Compliant/noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
187	IEC 60282-1 § 8.3				Control of mechanical characteristics, trigger indicator and (or) striking devices and (or) devices for remote signalling	(0 to 300 mm); (0 to 30 min); Compliant /

1	2	3	4	5	6	7
						Noncompliant
188	IEC 60282-2 § 8.5	High voltage fuses. Striking fuses	27.12.10.140	8535 100000	Temperature rise tests with rated current: - current - temperature rise - resistance - time	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω 1 msto 30 min
189	IEC 60282-2 § 8.6-8.7				Tests for switching capability: - amplitude voltage (0 to 80 kV) - RMS voltage (0 to 40,5 kV) - short-circuit current (0 to 63 kA) - peak value of short-circuit current (0 to 170 kA) - control of time characteristics	Compliant / noncompliant (0 to 80 kV) (0 to 40,5 kV) (0 to 63 kA) (0 to 170 kA) (0 to 30 min)
190	IEC 60282-2 § 8.8.2				Tests for mechanical capability and for mechanical wearing tests: - control of mechanicalcharacteristics, correct operation of device mechanisms and blockings - checking of forces	 (0 to 300 mm); (0 to 30 min); Compliant / noncompliant (0 to 10000 N) Compliant / Noncompliant
191	GOST 20493 § 8.1, 8.2	Voltage Indicators	27.12.10.190	8535 90	Visual control, checking of completeness, of marking. Checking for compliance to working drawings. - checking of serviceability - checking of completeness - checking of package - checking of marking - checking of traces of corrosion - condition of insulating surfaces	Compliant/ noncompliant

1	2	3	4	5	6	7
					- checking of documentation	
192	GOST 20493 § 8.9.2, 8.9.3, 8.10.4,				Checking of valueof indication voltage. Checking ofvoltage indicator for absenceof indication frominfluence ofadjacentcircuitswith samevoltage	Compliant/ noncompliant
193	GOST 20493 § 8.9.4, 8.9.2				Checking of valueof current, flowing through voltage indicatorduring highestvalue ofservicevoltage. Checking of serviceabilityof scheme	Compliant/ noncompliant
194	GOST 20493 § 8.10.8, 8.7				Tests for bending. Mechanicaltests.	Passed / failed 0 to 10%
195	GOST 20494 §§8.1-8.2	Insulating operating rods and portable grounding rods	27.12.10.190	8535 90	Visual control, checking of complete-ness, of marking. Checking for compli-ance to working drawings. - checking of serviceability - checking of completeness - checking of package - checking of marking - checking of traces of corrosion - condition of insulating surfaces - checking of documentation	Compliant/ noncompliant
196	GOST 20494 § 8.5.2				Tests for bending. Mechanicaltests.	Passed / failed 0 to 10%
197	GOST R 51853 §9.1	Portable grounding for elec-trical installations	27.12.10.190	8535 90	Visual control, checking of complete-ness, of marking. Checking for compli-ance to working drawings. - checking of serviceability - checking of completeness - checking of package - checking of marking - checking of traces of corrosion - condition of insulating surfaces - checking of documentation	Compliant/ noncompliant
198	GOST R 51853 §§9.4, 9.6				Checking of conductor section.	Passed / failed
199	GOST R 51853 §9.5				Short-time withstand tests: - electrodynamic withstand current	Passed / failed 0,1 to 320 kA;

1	2	3	4	5	6	7
					- thermal withstand current - measurement of resistance	0,1 to 120 kA; 1 μΩ to 2000 Ω
200	GOST R 51853 §9.3				Tests for bending	Passed / failed 0 to 20%
201	GOST 8008 sections 7; 8	Devices for voltage control under load of power trans-formers	27.12.10.190	8504 900000	Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
202	GOST R 55194 § 7.5	AC current Electrical equipment and Electrical installations for voltage 1 to 750 kV	27.12.1 27.12.2 27.12.3 27.12.4	8504 8535 8536 8537 8544 8546	Tests of electrical strength of insulationACvoltage of control circuits, auxiliary circuits (0 to 5 kV)	Passed / failed
203	STO 56947007-29.060.10.117-2012 §6	Rigid bus system (High-voltage busducts)	27.12.10.190	8535 90 0000	Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
204	STO 56947007-29.060.10.117-2012 §7,8				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - measurement of resistance	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 μΩ to 2000 Ω
205	IEC 60353 §19.1	High-frequency line traps	27.12.10.190	8535 900000	Temperature rise tests with rated current: - current - temperature rise - resistance	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
206	IEC 60353 § 19.4				Tests for withstand during short-circuits 0,1 to 12 kV	0,1 to 40 kA 0,2 to 0,5 mH 0,1 to 2 s compliant/ noncompliant
207	STO 96502166-123-2018	Betelen resistors, resistor installations	27.12.10.190	8533	Measurement of resistance to 1000 Ω	compliant/ noncompliant
208	STO 96502166-123-2018				Checking of rated maximum permissible voltages to 85 kV	Passed/ failed

1	2	3	4	5	6	7
209	GOST 9098 §§6.2.1-6.2.3	Low voltage switches for household and industrial purpose	27.12.22	8536	Visual control: - geometrical dimensions - mass	Passed / failed 1 to 1000 mm 1 to 1000 kg
210	GOST 9098 §6.2.5, 6.2.7, 6.7				Control of forces of operating, joint (partition), marking. Trial montage and checking of mutual replacement	Compliant/ noncompliant
211	GOST 9098 §§6.3.2-6.3.5; 6.3.14				Tests for mechanical wearing tests and switching capability: - current - number of CO sequences - times - resistance	Passed / failed 0,1 to 120 kA 1 to 10 000 1 ms to 60 min 1 μΩ to 2000 Ω
212	GOST 9098 § 6.3.11; 6.3.13				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 ms to 60 min 1 to 400 V
213	GOST 9098 § 6.3.7				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^{0}C
214	GOST 9098 § 6.3.9				Insulation resistance.	Passed / failed 1 κΩ to 70 GΩ
215	GOST IEC 60947-2 §8.2	Low voltage switches for household and industrial purpose	27.12.22	8536	Visual control: - geometrical dimensions - mass	Passed / failed 1 to 1000 mm 1 to 1000 kg
216	GOST IEC 60947-2 §5.2, 5.3, 8.3.3.4				Control of forces of operating, joint (partition), marking. Trial montage and checking of mutual replacement	Compliant/ noncompliant
217	GOST IEC 60947-2 §8.3.4.2, 8.3.5.3				Tests for mechanical wearing tests and switching capability: - current - number of CO sequences	Passed / failed 0,1 to 120 kA 1 to 10 000

1	2	3	4	5	6	7
					- times - resistance	1 msto 60 min 1 μΩ to 2000 Ω
218	GOST IEC 60947-2 §8.3.3.2, 8.3.3.8, 8.3.4.6, 8.3.5.2, 8.3.5.5, 8.3.6.2, 8.3.6.7, 8.3.7.5, 8.3.7.9, 8.3.8.2, 8.3.8.8				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 ms to 60 min 1 to 400 V
219	GOST IEC 60947-2 § 8.3.2.5, 8.3.3.7, 8.3.4.4, 8.3.6.4, 8.3.7.3, 8.3.8.7				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^{0}C
220	GOST R 50030.2 §8.2	Low voltage switches for household and industrial purpose	27.12.22	8536	Visual control: - geometrical dimensions - mass	Passed / failed 1 to 1000 mm 1 to 1000 kg
221	GOST R 50030.2 §8.3.3				Control of forces of operating, joint (partition), marking.Trial montage and checking of mutual replacement	Compliant/ noncompliant
222	GOST R 50030.2 §8.3.2.6.1, 8.3.2.6.2, 8.3.5.3, 8.3.4.1, 8.3.8.3				Tests for mechanical wearing tests and switching capability: - current - number of CO sequences - times - resistance	Passed / failed 0,1 to 120 kA 1 to 10 000 1 ms to 60 min 1 μΩ to 2000 Ω
223	GOST R 50030.2§8.3.3.18.3.3.7, 8.3.4.5, 8.3.5.1, 8.3.5.4, 8.3.6.1, 8.3.6.6, 8.3.7.4, 8.3.7.4, 8.3.7.8, 8.3.8.1, 8.3.8.7				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 ms to 60 min 1 to 400 B
224	GOST R 50030.2 §8.3.2.5, 8.3.3.6, 8.3.4.4, 8.3.6.3, 8.3.7.2, 8.3.8.6				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^{0}C

1	2	3	4	5	6	7
225	GOST R 50030.2 §8.3.3.2				Insulation resistance.	Passed / failed 1 κΩ to 70 GΩ
226	GOST IEC 60947-6-2 § 9.2	Low voltage switches for household and industrial purpose	27.12.22	8536	Visual control: - geometrical dimensions - mass	Passed / failed 1 to 1000 mm 1 to 1000 kg
227	GOST IEC 60947-6-2 § 8.1.7.4, Annex C				Control of forces of operating, joint (partition), marking. Trial montage and Checking of mutual replacement	Compliant/ noncompliant
228	GOST IEC 60947-6-2 § 8.2.4.3, 9.4.3.1, Annex A				Tests for mechanical wearing tests and switching capability: - current - number of sequencesBO - times - resistance	Passed / failed 0,1 to 120 kA 1 to 10 000 1 ms to 60 min 1 μΩ to 2000 Ω
229	GOST IEC 60947-6-2 § 9.4.1.2, 9.4.1.3, 9.4.3.5, 9.4.4.1, 9.4.4.6				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^0C 1 ms to 60 min 1 to 400 V
230	GOST IEC 60947-6-2 § 9.3.3.3, 9.4.1.1, 9.4.4.5				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0C
231	GOST IEC 60947-6-2 § 9.4.1.4, 9.4.2.3, 9.4.3.4, 9.4.4.4, 9.4.5.3, 9.4.6.3, 9.4.7.3				Insulation resistance.	Passed / failed 1 κΩ to 70 GΩ
232	GOST IEC 60947-6-1 § 9.2	Low voltage switches for household and industrial purpose	27.12.22	8536	Visual control: - geometrical dimensions - mass	Passed / failed 1 to 1000 mm 1 to 1000 kg
233	GOST IEC 60947-6-1 § 8.1.2				Control of forces of operating, joint (partition), marking. Trial montage and Checking of mutual replacement	Compliant/ noncompliant
234	GOST IEC 60947-6-1 § 9.3.3.5, 9.3.3.6.2				Tests for mechanical wearing tests and switching capability: - current - number of CO sequences - times	Passed / failed 0,1 to 120 kA 1 to 10 000 1 ms to 60 min

1	2	3	4	5	6	7
					- resistance	1 μΩ to 2000 Ω
235	GOST IEC 60947-6-1 § 9.3.3.1, 9.3.3.2				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 ms to 60 min 1 to 400 V
236	GOST IEC 60947-6-1 § 8.3.3				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^{0}C
237	GOST IEC 60947-6-1 § 8.3.3.4.1				Insulation resistance.	Passed / failed 1 κΩ to 70 GΩ
238	GOST IEC 60898-1 § 9.3-9.4	Low voltage switches for household and industrial purpose	27.12.22	8536	Control of marking. Checking of reliability of screws, terminals	Compliant/ noncompliant
239	GOST IEC 60898-1 § 9.11				Tests for mechanical wearing tests and switching capability: - current - number of CO sequences - times - resistance	Passed / failed 0,1 to 120 kA 1 to 10 000 1 ms to 60 min 1 μΩ to 2000 Ω
240	GOST IEC 60898-1 § 9.10				Control of return factor. Control of working of interruptors and motor: - current - temperature rise - times - voltage	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 ms to 60 min 1 to 400 V
241	GOST IEC 60898-1 § 9.8; 9.9				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^{0}C
242	GOST IEC 60898-1 § 9.7				Insulation resistance.	Passed / failed 1 κΩ to 70 GΩ
243	GOST 17242 §§7.2; 8.1	Fuses voltage to 1000 V for household and industrial purpose	27.12.21	8536	Requirements to construction. - geometrical dimensions - mass Checking of mutual replacement. - Checking of marking	Passed / failed 1 to 1000 mm 0,1 to 1000 kg

1	2	3	4	5	6	7
					- torque moment	2 to 30 N·m
244	GOST 17242 § 7.3.5; 7.3.6; 7.3.10; 7.3.1				Requirements to temperature rise: - current - temperature rise Over-load capability: - current - resistance - checking of power losses, - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 10 to 20000 A 1 μΩ to 2000 Ω 1 to 2000 W 1 μΩ to 2000 Ω
245	GOST 17242 §§7.3.7-7.3.9				Short-time withstand tests: - thermal withstand current	Passed / failed 0,1 to 120 kA
246	GOST 17242 §7.2.4				Requirements to mechanical capability and wearing: - number of sequences - current	Passed / failed 1 to 1000 sequences 1 to 35 000 A
247	GOST 17242 §7.1.2; 7.1.3; 7.3.9; 7.3.11				Requirements to switching capability and wearing: - number of sequences - current	Passed / failed 1 to 1000 sequences 0,1 to 120 000 A
248	GOST 2933 §2	Automatical and non-automatical switches, disconnectors, contactors, magnetic starters, relays, controllers, fuses, resistors, rheostats and other apparat-uses	27.12.21 27.33.11 27.33.13.140 27.33.13.1505	8536	Visual control - completeness - marking - absence ofpollutions - absenceof loosening the fastenings - presence of protectionagainst corrosion and quality offulfilof protective surfaces - correctness of fulfilof contact connec-tions - compliance with safety requirements - control of electrical resistance	Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant

1	2	3	4	5	6	7
					- checking of mass - checking of geometrical dimensions - checking of mutual replacement - Trial montage	0 to 100 kg Compliant/ noncompliant 1 to 5 000 mm Compliant/ noncompliant Compliant/ noncompliant
249	GOST 2933 §5, 6				Requirements totemperature rise: - current - temperature rise Over-loadcapability: - current - resistance - Checking of power losses, - electricalresistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 10 to 20000 A 1 μΩ to 2000 Ω 1to 2000 W 1 μΩ to 2000 Ω
250	GOST 2933 §8				Requirements to switching capability: - number of sequences - current	Passed / failed 1 to 1000 sequences 10 to 35 000 A
251	GOST 2933 §10				Test for mechanical and switching wear-ing tests: - number of sequences - resistance	Passed / failed 1 to 10 000 sequences 1 μΩ to 2000 Ω
252	GOST 2933 Section 9				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA
253	GOST 2327 §6.2	Low-voltage thrust-in switches, disconnectors, switches-disconnectors, se-lectors and selectors-disconnectors for voltage to 1000 V	27.33.11	8536	Requirements to of construction, Mark-ing, Montage - geometrical dimensions - mass - Checking of forces for handling - Checking of contact pressure	Compliant/ noncompliant 1 to 1000 mm 0,1 to 1000 kg 0,1 to 1000 N 0,1 to 1000 N
254	GOST 2327 §6.3.1-6.3.2				Control of apparatuses for compliance to requirements to electrical parameters and duties:	Compliant/ noncompliant

1	2	3	4	5	6	7
					- Power-frequency test voltage - Insulation resistance.	0,1 to 5 kV 1 κΩ to 70 GΩ
255	GOST 2327 §6.3.7				Requirements to temperature rise: - current - temperature rise - resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
256	GOST 2327 §6.3.3				Switching capability and wearing tests: - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 0,1 to 120 kA
257	GOST 2327 §6.3.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA;
258	GOST 2327-89 §6.3.4				Requirements to mechanical withstand and wearing: - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 0 to 2000 Ω 0 to 20 000 A
259	GOST R 50030.3 §8.2, 8.3.3.7	Automatic thrust-in low-voltage switches, disconnectors, switches-disconnectors, selectors and selectors-disconnectors for voltage to 1000 V	27.33.11	8536	Requirements to construction, Marking, Montage - geometrical dimensions - mass - Checking of forces for handling - Checking of contact pressure	Compliant/ noncompliant 1 to 1000 mm 0,1 to 1000 kg 0,1 to 1000 N 0,1 to 1000 N
260	GOST R 50030.3 §8.1.3.3, 8.3.3.2, 8.3.3.4, 8.3.7.2, 8.3.6.3, 8.3.5.3, 8.3.4.2				Control of apparatuses for compliance to requirements to electrical parameters and duties: - Power-frequency test voltage - Insulation resistance.	Compliant/ noncompliant 0,1 to 5 kV 1 to 70 GΩ
261	GOST R 50030.3 §8.3.3.1, 8.3.3.6, 8.3.4.4, 8.3.5.5, 8.3.6.5, 8.3.7.1, 8.3.7.4				Requirements to temperature rise: - current - temperature rise - resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω

1	2	3	4	5	6	7
262	GOST R 50030.3 §8.3.3.3, 8.3.4.1, 8.3.5.2, 8.3.6.2.1				Switching capability and wearing tests: - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 0,1 to 120 kA
263	GOST R 50030.3 §8.3.5.1, 8.3.6.2.1				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA;
264	GOST 19132 §§6.4; 6,5	Type setting contact terminals Contact connections - separable - non-separable	27.33.11	8535 8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - Checking of marking	Compliant/ noncompliant 1to 1000 mm 0,1 to 100 kg
265	GOST 19132 §§6.10-6.13				Temperature rise tests with rated current: - current - temperature rise - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
266	GOST 19132 §§6.11; 6.14				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA;
267	GOST R 51155 § 5.1.4-5.1.6	Line fittings Contact connections - separable - non-separable	27.33.11	8535 8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - Checking of marking	Compliant/ noncompliant 1 to 1000 mm 0,1 to 100 kg
268	GOST R 51155 §5.3, 5.12				Temperature rise tests with rated current: - current - temperature rise - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω

1	2	3	4	5	6	7
269	GOST R 51155 §5.3.8				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA;
270	GOST 23981 §§5.1; 5.2; 5.7	Cable tips Contact connections - separable - non-separable	27.33.11	8535 8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - Checking of marking	Compliant/ noncompliant 1 to 1000 mm 0,1 to 100 kg
271	GOST 23981 §5.6				Temperature rise tests with rated current: - current - temperature rise - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^0C 1 μΩ to 2000 Ω
272	GOST 23981 §5.6				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - electrical resistance	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0 C 1 μΩ to 2000 Ω
273	GOST 2744 § 2.14, 2.16	Line fittings Contact connections - separable - non-separable	27.33.11	8535 8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - Checking of marking	Compliant/ noncompliant 1 to 1000 mm 0,1 to 100 kg
274	GOST 2744 §§2.20				Temperature rise tests with rated current: - current - temperature rise - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^0C 1 μΩ to 2000 Ω
275	GOST 2744 §2.20				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - electrical resistance	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0 C 1 μΩ to 2000 Ω
276	GOST 17441-84 §§2.2.1-2.2.6;	Contact electrical connections	27.33.11	8535 8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - Checking of marking	Compliant/ noncompliant 1 to 1000 mm 0,1 to 100 kg

1	2	3	4	5	6	7
277	GOST 17441 §§ 2.6; 2.7; 2.8; 2.10				Temperature rise tests with rated current: - current - temperature rise - electrical resistance	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
278	GOST 17441 §§ 2.9				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - electrical resistance	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0 C 1 μΩ to 2000 Ω
279	GOST 2491 §§6.1	Electromagnetic low-voltage starters	27.33.13.140 27.33.13.150	8536	Checking of construction. Marking. Montage - geometrical dimensions - mass - checking of marking	Compliant/ noncompliant 1 mm to 1000 mm 0,1 to 100 kg
280	GOST 2491 §§6.1; 6.2				Power-frequency test voltage	Passed / failed - 0,5 to 5 kV
281	GOST 2491 §6.1				Temperature rise tests with rated current, Checking of actuation and return, resistance and electrical strength of insulation at heated condition: - current - resistance - electrical strength of insulation	Passed / failed 1 to 20 000 A 1 μΩ to 2000 Ω 1 κΩ to 70 GΩ
282	GOST 2491 §§6.1; 6.4; 6.8-6.10				Switching capability and switching wearing tests - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 0,1 to 120 kA
283	GOST 2491 §6.11				Requirements to mechanical wearing: - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 10 to 20 000 A
284	GOST IEC 60947-4-1 § 8.2.3, 9.3.3.4	Electromechanical contactors and starters	27.33.13.140 27.33.13.150	8536	Power-frequency test voltage	Passed / failed 0,5 to 5 kV
285	GOST IEC 60947-4-1 § 8.2.1, 8.2.2, 9.3.3.1-9.3.3.3				Temperature rise tests with rated current, Checking of actuation and return, re-	Passed / failed

1	2	3	4	5	6	7
					sistance and electrical strength of insulation at heated condition: - current - resistance - electrical strength of insulation	 1 to 20 000 A 1 μΩ to 2000 Ω 1 κΩ to 70 GΩ
286	GOST IEC 60947-4-1 § 8.2.4, 9.3.3.5				Switching capability and switching wearing tests - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 0,1 to 120 kA
287	GOST IEC 60947-4-1 § 8.2.4, 9.3.3.5				Requirements to mechanical wearing: - number of sequences - resistance - current	Passed / failed 0 to 100 000 sequences 1 μΩ to 2000 Ω 10 to 20 000 A
288	GOST IEC 60947-4-1 § 8.2.5, 9.3.4				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - electrical resistance	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0 C 1 μΩ to 2000 Ω
289	GOST IEC 61439-1 §§ 10.4; 10.9; 11.3; 11.9; Annex F, G, L	Low-voltage switchgears and controlgears (NKU)	27.12.31	8537	Power-frequency test voltage Air gaps and creepage distance Insulation resistance.	Passed / failed 0,5 to 5 kV 1 to 1000 mm 1 κΩ to 70GΩ
290	GOST IEC 61439-1 §§10.8; 10.10; Annex A, E, H, M, N, O				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0
291	GOST IEC 61439-1 §§10.5.3; 10.11; Annex B, P				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA
292	GOST IEC 61439-1 §10.13				Mechanical capability	Passed / failed

1	2	3	4	5	6	7
					- number of operating sequences - Checking of operating characteristics	1 to 50 sequences
293	GOST 32396 §§9.17; 9.31-9.33	Input–distributive devices for living and public buildings (NKU)	27.12.31	8537	Power-frequency test voltage Air gaps and creepage distance Insulation resistance.	Passed / failed 0,5 to 5 kV 1 to 1000 mm 1 κΩ to 70GΩ
294	GOST 32396 §§9.29				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0
295	GOST 32396 §§9.24; 9.30				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA
296	GOST 32396 §§9.9; 9.10; 9.25				Mechanical capability: - number of operating sequences - Checking of operating characteristics	Passed / failed 1 to 50 sequences
297	GOST IEC 60439-3 §§8.2.1; 8.2.3.1	Low-voltage switchgears and controlgears (NKU)	27.12.31	8537	Temperature rise tests with rated current: - current - Insulation resistance. - temperature rise	Passed / failed 10 to 20 000 A 1 κΩ to 70 GΩ 1 to 300^0
298	GOST IEC 60439-3 §§8.2.3; 8.2.4; 8.2.4.1; 8.2.4.2; 8.3.3				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - resistance with protective bus	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0 1 μΩ to 2000 Ω
299	GOST IEC 60439-3 §§8.2.6; 8.2.15				Mechanical capability: - number of operating sequences - Checking of operating characteristics	Passed / failed 1 to 50 sequences
300	GOST R IEC 61439-2 §11.8	Low-voltage switchgears and controlgears. Power switchgears	27.12.31	8537	Mechanical capability: - number of operating sequences - checking of operating characteristics	Passed / failed 1 to 50 sequences
301	GOST 32395 §§10.26-10.28	Distributive shields, input-distributive devices for industrial, living and public buildings	27.12.31	8537	Power-frequency test voltage Air gaps and creepage distance Insulation resistance.	Passed / failed - 0,5 to 5 kV - 1 to 1000 mm 1 κΩ to 70GΩ

1	2	3	4	5	6	7
302	GOST 32395 §10.25				Temperature rise tests with rated current: - current - Insulation resistance. - temperature rise	Passed / failed 1 to 20 000 A 1 κΩ to 70 GΩ 1 to 300^0
303	GOST 32395 §10.7				Mechanical capability: - number of operating sequences - Checking of operating characteristics	Passed / failed 1 to 50 sequences
304	GOST 32397 §§10.24; 10.25	Distributive shields for industrial and public buildings	27.12.31	8537	Power-frequency test voltage Air gaps and creepage distance Insulation resistance.	Passed / failed - 0,5 to 5 kV - 1 to 1000 mm 1 κΩ to 70GΩ
305	GOST 32397 § 10.23				Temperature rise tests with rated current: - current - Insulation resistance. - temperature rise	Passed / failed 1 to 20 000 A 1 κΩ to 70 GΩ 1 to 300^0
306	GOST 32397 §§10.12; 10.27				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise - resistance with protective bus	Passed / failed 0,5 to 320 kA; 0,5 to 120 kA; 1 to 300^0C 1 μΩ to 2000 Ω
307	GOST 32397 §10.7				Mechanical capability: - number of operating sequences - Checking of operating characteristics	Passed / failed 1 to 50 sequences
308	GOST 6815 §§6.1; 6.1a; 6.15; 6.16	Magistral and distributive busducts for AC voltage to 1000 V	-	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass	Compliant/noncompliant 1 to 5000 mm 1 to 10 000 kg
309	GOST 6815 §§6.6; 6.14				Power-frequency test voltage Insulation resistance.	Passed / failed - 0,5 to 5 kV 1 κΩ to 70 GΩ
310	GOST 6815 §§6.3; 6.10				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 1 to 20 000 A 1 to 300^0
311	GOST 6815 §6.12				Short-time withstand tests: - electrodynamic withstand current	Passed / failed

1	2	3	4	5	6	7
					- thermal withstand current - resistance of safety conductor	0,5 to 320 kA; 0,5 to 120 kA; 1 μΩ to 2000 Ω
312	GOST 6815 §6.2, 6.2a				Mechanical capability: - number of sequences - load	Passed / failed 1 to 50 sequences 1 to 10 000 kg
313	GOST 24752 §§5.1; 5.12; 5.14	Trolley busducts for voltage to 1000 V	-	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - resistance of safety conductor	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 μΩ to 2000 Ω
314	GOST 24752 §§5.7; 5.12				Power-frequency test voltage Insulation resistance. - resistance of safety conductor	Passed / failed - 0,5 to 5 kV 1 κΩ to 70GΩ 1 μΩ to 2000 Ω
315	GOST 24752 §§5.4; 5.6				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0
316	GOST 24752 §5.5				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - resistance of safety conductor	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 μΩ to 2000 Ω
317	GOST 26346 §§6.1; 6.18	Lighting busducts for AC voltage to 660 V	-	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - resistance of safety conductor	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 μΩ to 2000 Ω
318	GOST 26346 §6.5				Power-frequency test voltage Insulation resistance. - resistance of safety conductor	Passed / failed - 0,5 to 5 kV 1 κΩ to 70GΩ 1 μΩ to 2000 Ω
319	GOST 26346 §§6.3; 6.13				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0

1	2	3	4	5	6	7
320	GOST 26346 §6.4				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - resistance of safety conductor	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 μΩ to 2000 Ω
321	GOST R 51321.2 §§ 7.1.2.3.4; 7.1.2.3.5	Busducts. Low-voltage switchgears and controlgears	-	8544	Power-frequency test voltage Insulation resistance. - resistance of safety conductor	Passed / failed - 0,5 to 5 kV 1 κΩ to 70GΩ 1 μΩ to 2000 Ω
322	GOST R 51321.2 §§ 8.2.1; 8.2.11; 8.2.13; Annex J; N				Temperature rise tests with rated current: - current - temperature rise	Passed / failed 10 to 20 000 A 1 to 300^0
323	GOST R 51321.2 §§8.2.3; 8.2.13				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - resistance of safety conductor	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 μΩ to 2000 Ω
324	GOST R 51321.2 §8.2.10				Test for mechanical strength	Passed / failed - 1 to 10 000 kg
325	GOST 10693 §6.2	Capacitive sealed bushings for rated voltage 110 kV and higher	27.90.12.120	8546 900000	Tests for compliance to requirements assembling drawing, including during safety checking: - geometrical, mounting and connecting dimensions - absence of visible defects	 (0 to 5000 mm) Compliant / noncompliant Compliant / noncompliant
326	GOST 10693 §6.6				Tests for withstand: During short-circuit current: - electrodynamic withstand current - thermal withstand current During switching: - amplitude voltage - RMS voltage	 (0 to 320 kA) Passed / failed (0 to 120 kA) Passed / failed (0 to 308 kV) Passed / failed (0 to 220 kV)

1	2	3	4	5	6	7
					- RMS value of short-circuit current - peak value of short-circuit current - control mechanical and time character-istics	Passed / failed (0 to 63 kA) Passed / failed (0 to 170 kA) Passed / failed (0 to 30 min); Compliant / noncompliant
327	GOST 10693 §6.7				Temperature rise tests with rated current: - current - temperature rise	Passed/ failed 10 to 20 000 A 1 to 300 ^{0}C
328	GOST 10693 §6.8				Checking of electrical resistance	0 to 1000 Ω Compliant / noncompliant
329	GOST 10693 §6.9				Measurement of Insulation resistance of measuring or special terminals	1000 to 2500 V 0 to 50 000 MΩ Compliant / Noncompliant
330	GOST 10693 §6.13				Test for mechanical wearing tests to 50 000 sequences	Passed/ failed
331	GOST R 55187 §9.1	Insulated bushings for rated voltage above 1000 V AC current	27.90.12.120	8546 900000	Tests for compliance to requirements assembling drawing, including during safety checking: - geometrical, mounting and connecting dimensions - absence of visible defects	 0 to 5000 mm Compliant / noncompliant Compliant / noncompliant
332	GOST R 55187 §9.4				Measurement of Insulation resistance of measuring or special terminals	1000 to 2500 V 0 to 50 000 MΩ Compliant / noncompliant
333	GOST R 55187 §9.6				Checking of electrical resistance	0 to 1000 Ω Compliant / noncompliant
334	GOST R 55187 §9.14				Measurement of creepage distance on	Compliant /

1	2	3	4	5	6	7
					surface of external insulation performs according to GOST 9920	noncompliant
335	GOST R 55187 §9.17				Temperature rise tests with rated current: - current - temperature rise	Passed/ failed (0 to 20 kA): (0 to 300 ^{0}C)
336	GOST R 55187 §9.18				Short-time withstand tests of bushings: - electrodynamic withstand current - thermal withstand current	Passed / failed (0,1 to 320 kA) (0,1 to 120 kA)
337	GOST R 52034 §7.5.1	Insulators ceramic support for voltage above 1000 V	23.43.10.110	8546 209900	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg
338	GOST R 52082 §§8.8.1; 8.8.4; 8.8.5; 8.9.2; 8.9.3	Insulators polymer support for outdoor installations for voltage 6-220 kV	23.43.10.110	8546 209900	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg
339	GOST R 52082 §8.4				Test for дugowithstand - current	Passed / failed 1 to 50 kA
340	GOST 22229 § 1.15	Ceramic bushing insulators for voltage above 1000 V	23.43.10.110	8546 209900	Temperature rise tests with rated current: - current - temperature rise - measurement of resistance	Passed / failed 10 to 20 000 A 1 to 300 ^{0}C 1 μΩ to 2000 Ω
341	GOST 22229 §1.16				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - resistance of safety conductor	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 μΩ to 2000 Ω
342	GOST 1232 § 8.5	Line pin porcelain and glass insulators for voltage 1 to 35 kV	23.43.10.110 23.19.25.000	8546 209900	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
343	GOST 6490 §7.3.2	Line suspended plate	23.43.10.110	8546 209900	Checking of construction. Mass. Mark-	Compliant/

1	2	3	4	5	6	7
		insulators	23.19.25.000		ing. Montage. - geometrical dimensions - mass - creepage distance	noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
344	GOST 12670 §§6.16; 6.20	Porcelain plate insulators	23.43.10.110 23.19.25.000	8546 209900	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
345	GOST 28856 §5.4	Line suspended rod polymer insulators	23.43.10.110 23.19.25.000	8546 209900	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
346	GOST R 55189 §8.6.1-8.6.4	Line suspended rod polymer insulators			Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
347	GOST 433 §§4.2.1; 4.6	Power cables with rubber insulation	27.32.13.110	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
348	GOST R 53769 §§8.2.1;8.8; 8.8.1; 8.8.2	Power cables with plastic insulation for rated voltage 0,66; 1 and 3 kV	27.32.13.110	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
349	GOST R 53769 §§8.3.2.1; 8.3.4				Insulation resistance. Power-frequency voltage test	Compliant/ noncompliant 1 kΩ to 70 GΩ 0,5 to 5 kΩ
350	GOST 31947 §§8.2.1; 8.2.2; 8.3.4; 8.8.1; 8.8.2	Wires and cables for electrical installations for rated voltage to 450/750 V including	27.32.13.110	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm

1	2	3	4	5	6	7
351	GOST 31947 §§8.3.1; 8.3.2; 8.3.4				Insulation resistance. Power-frequency voltage test	Compliant/ noncompliant 1 κΩ to 70 GΩ 0,5 to 5 κΩ
352	GOST 18410 §§4.2.1; 4.9	Power cables with impregnated paper insulation	27.32.13.110	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
353	GOST 18410 §4.3.1				Measurement of electrical resistance to DC current	Compliant/ noncompliant 1 μΩ to 2000 Ω
354	GOST 18410 §§4.3.2; 4.3.3				Insulation resistance. Power-frequency voltage test	Compliant/ noncompliant 1 κΩ to 70 GΩ 0,5 to 5 κΩ
355	GOST 16442 §§5.2.1; 5.6; 5.9	Power cables with plastic insulation to 6 kV	27.32	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
356	GOST 16442 §§5.3.2; 5.3.3				Insulation resistance. Power-frequency voltage test	Compliant/ noncompliant 1 κΩ to 70 GΩ 0,5 to 5 κΩ
357	GOST 16442 §5.3.1, 5.3.2				Temperature rise tests with rated current: - current - temperature rise - measurement of resistance	Passed / failed 1 to 20 000 A 1 to 300^0 1 μΩ to 2000 Ω
358	GOST 16441 §5.3	Oil-filled cables for AC voltage 110-500 kV	27.32.13	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - mass - creepage distance	Compliant/ noncompliant 1 to 5000 mm 1 to 10 000 kg 1 to 5000 mm
359	GOST 31996 §10.10	Power cables with plastic insulation for rated voltage to 3 kV	27.32.13	8544	Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 to 300
360	GOST R 55025 §8.3.1;	Power cables with plastic	27.32.14	8544	Measurement of electrical resistance to	Compliant/

1	2	3	4	5	6	7
		insulation for rated voltage 6 to 35 kV including			DC current	noncompliant 1 μΩ to 2000 Ω
361	GOST R 53769 §8.3.1;	Power cables with plastic insulation for rated voltage 0,66; 1 and 3 kV	27.32.14	8544	Measurement of electrical resistance to DC current	Compliant/ noncompliant 1 μΩ to 2000 Ω
362	GOST R IEC 60840 §§ 8.5, 10.5, Annex A	Power cables with extruded insulation and fittings to them for rated voltage above 30 kV up to 150 kV	27.32.14	8544	Temperature rise tests with rated current: - current - temperature rise - measurement of resistance	Passed / failed 1 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
363	GOST R IEC 60840 Annex A				Short-time withstand tests: - electrodynamic withstand current to 320 kA; - thermal withstand current to 120 kA; - temperature rise	 Passed / failed Passed / failed 1 to 300^{0}C
364	GOST R IEC 62067 §10.5, Annex A	Power cables with extruded insulation and fittings to them for rated voltage above 150 kV up to 500 kV	27.32.14	8544	Temperature rise tests with rated current: - current - temperature rise - measurement of resistance	Compliant/ noncompliant 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
365	GOST R IEC 62067 Annex A				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 to 300^0 C
366	GOST 24334 §5.3.2	Power cables for non-stationary laying	27.32.13	8544	Requirements to temperature rise: - current - temperature rise Measurement of electrical resistance to DC current	Passed / failed 10 to 20 000 A 1 to 300^{0}C 1 μΩ to 2000 Ω
367	GOST 23981 §§5.1, 5.2	Cable tips	27.32.13	8544	Checking of construction. Mass. Marking. Montage. - geometrical dimensions - Checking of marking	Compliant/ noncompliant 1 to 5000 mm
368	GOST 23981 §§5.6				Temperature rise tests with rated current: - current - temperature rise	Compliant/ noncompliant 10 to 20 000 A 1 to 300^0 C

1	2	3	4	5	6	7
					- measurement of resistance	1 μΩ to 2000 Ω
369	STO 56947007-29.060.50.015-2008 §11.7	Lightning protection cable with built-in optical cable, lightning protection cable	27.31.12.120	8544 8544 70 000	Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 to 300^0 C
370	STO 56947007-29.060.50.015-2008 §11.8				Withstand to DC component of lightning current	Passed / failed 1 to 300 Q
371	GOST 13781.0 Section 6	Couplings for power cables for voltage to 35 kV including	27.90.33.110	8544	Requirements to temperature rise - temperature rise	Passed / failed 1 to 300^0 C
372	GOST 13781.0 §6.11				Short-time withstand tests: - electrodynamic withstand current - thermal withstand current - temperature rise	Passed / failed 0,1 to 320 kA; 0,1 to 120 kA; 1 to 300^{0}C
373	GOST R 52266 §7.6.1; 7.6.3, 7.6.2	Optical cables	27.31.12.120	8544 70 000	Checking of construction and consructive dimensions. Checking of geomethric dimensions Checking of serviceability of OF. Checking of absence of breakes conductors and contacts between them.	Compliant/ noncompliant Compliant/ noncompliant Compliant/ noncompliant
374	GOST R 52266 §7.3.				Measurement of damping factor	Compliant/ noncompliant 0,05 dB/dB
375	GOST R 52266 §7.8.1; §7.8.3; §7.8.4				Electrical resistance of protective hose. Electrical Insulation resistance of current-carrying conductors. Measurement of electrical resistance of conductors to DC current	Compliant/ noncompliant 1 μΩ to 2000 Ω
376	GOST R 12.4.234 §6.18	Materials and special clothing for protection against thermal risks of electric arc	13.10 13.20 13.91	5208, 5209, 5210, 5211, 551513,	Withstand to thermal exposure of electric arc	1 to 100 cal/sm^2 Passed / failed

1	2	3	4	5	6	7
377	GOST 3811		13.92 13.95 13.96 13.99 14.12 14.13 14.14 14.39	551522, 55162400, 5512, 5513, 5514, 5515, 5516, 6201, 62011390, 62021390, 62032911, 62032210, 62032280, 62032310, 62042310, 621149, 621139	Definition of surface density of materials (calculated)	-
378	GOST R 54827 Section 25	Power transformers	27.11.4	8504 210000 8504 220000 8504 230000	Short-time withstand tests and current striking shocks. 0,1 to 208 kV	Irms 0,1 to 70 kA Idyn 0,1 to 180 kA 0,1 to 4 s Compliant/ noncompliant
379	GOST R 52565 § 9.2.6	AC current circuit-breakers for voltage 3 to 750 kV; Sealed bushings	27.12.10.110	8535 210000 8535 290000	Mechanical performance tests with the combined action of wire tension and wind load: 0 to 10000 N	Compliant/ noncompliant
380	GOST R 52726 § 8.5.6	AC current disconnectors and earthing switches for voltage above 1 kV	27.12.10.120	8535 300000	Operation with application of rated static mechanical load to terminals: 0 to 10000 N	Compliant/ noncompliant
381	GOST R 52725 § 8.2	Surge arresters with spark gaps; Non-linear surge arresters	27.12.10.130	8535 400000	Tests of compliance to safety require-ments: 0 to 1 Ω; 0 to 300 mm	Compliant/ noncompliant
382	GOST IEC 61439-6 § 10.2.3.1, 10.2.102, 10.10	Magistral and distributive busducts	27.32.13.199	8544	Requirements to temperature rise tests and overload currents: up to 12 kA up to 300 °C up to 1000 cycles	Passed / failed
383	GOST IEC 61439-6 § 10.5.2, 10.5.3, 10.11	Magistral and distributive busducts	27.32.13.199	8544	Requirements to short-time withstand tests: Irms = 125 kA Idyn = 320 kA	Passed / failed
384	GOST 10693-81 § 6.12	Sealed bushings	27.90.12.120	8546 900000	Tests for mechanical wearing and canti-	Compliant/

1	2	3	4	5	6	7
					lever loads: 0 to 10000 N	noncompliant
385	GOST R 55187-2012 § 9.19	Sealed bushings	27.90.12.120	8546 900000	Tests for mechanical wearing and cantilever loads: 0 to 10000 N	Compliant/ noncompliant
386	GOST R ISO 6330	Materials and special clothing for protection: - against thermal risks of electric arc; - against non-ionizing emissions; - against shock of electric current; - against exposures of static electricity; - against mechanical exposures; - against general industrial pollutions; - against heat and flame; - against high temperatures, low temperatures and heat emissions; - others.	13.2 13.9 14.12 14.13 14.14 14.19 14.3 14.31 14.39	5208; 5209 5210; 5211 5515130000 5515220000 5516240000 5512; 5513 5514; 5515 5516; 6201 6201139000 6202139000 6203291100 6203221000 6203228000 6203231000 6204231000 6211490000 6211390000	Performing of washing and drying: up to 1000 cycles up to 2 kg	Performed/ not performed

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