

## SCOPE OF ACCREDITATION

TESTING LABORATORY (GOST ISO/IEC 17025-2019)

Testing Center of All-Russia Electrotechnical Institute – the Branch of the Federal State Unitary Enterprise «Russian Federal Nuclear Center – Zababakhin All-Russia Research Institute of Technical Physics»

**Title of the Testing Laboratory** 

## **RA.RU.21HH33**

Number in in the Register of Accredited Conformity Assessment Bodies

1. 111250, Russia, Moscow, Krasnokazarmennaya Street 12, Bld. 3.

**Business address** 

2. 111250, Russia, Moscow, Krasnokazarmennaya Street 12, Bld. 8.

**Business address** 

3. 111250, Russia, Moscow, Krasnokazarmennaya Street 12, Bld. 7.

**Business address** 

For Compliance with GOST ISO/IEC 17025-2019 General requirements for the competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements to the quality and competence of testing and calibration laboratories / individual requirements (in the properties of the properties	əf
medical laboratories. GOST ISO/IEC 17025-2019	

Title and reference details of an international or national standard

## 111250, Russia, Moscow, Krasnokazarmennaya Street 12, Bld. 3.

**Business address** 

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1. Testin	GOST 3484.3, subclause 4.1, 5.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000; 8504340000	Absorbtion coefficient	Calculated rate: -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.1.					Insulation resistance	- 0 TΩ to 40,0 TΩ
1.2.	GOST 34839, subclause 9.2.1; Non-destructive testing; exterior inspection and measurements	Plastic electrically insulating accessories;	27.33.14	853590000	Completeness	Compliant/noncompliant -
					Mass	- 0 kg to 50 kg
1.3.	GOST 34839, subclause 9.2.2; Non-destructive testing; exterior inspection and measurements	Plastic electrically insulating accessories;	27.33.14	853590000	Overall dimensions	- 0 mm to 1000 mm
					Structural dimensions	- 0 mm to 1000 mm

RA.RU.21HH33 138 pages, page 3

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.4.	GOST 34839, subclause 9.2.4; Non-destructive testing; exterior inspection and measurements	Plastic electrically insulating accessories;	27.33.14	853590000	Mark permanency	Passed/failed -
1.5.	GOST 34839, subclause 9.1.2, 9.2.3., 9.2.5; Non- destructive testing; exterior inspection and measurements	Plastic electrically insulating accessories;	27.33.14	853590000	Exterior	Compliant/noncompliant -
1.6.	4221-001-75617971-2007 RE, clause 4; Electrophysical investigations (testings); electrophysical investigation (testing)	Electromotors, generators, and transformers; Switchgears and regulating electrical equipment; Electronic and electrical	27.11; 27.12; 27.32; 27.3 3; 27.90	8504; 8535; 8536; 8546	Dielectric loss angle tangent	- 0,01 % to 100 %
	methods without specification	leads and cables, etc.; Wiring products; Other electrical equipment;			Electric capacity	- 20 pF to 1*10 <sup>6</sup> pF
1.7.	GOST IEC 60898-1, subclause 9.7.1; Environmental effect testing; high air humidity testing	AC high-voltage circuit- breakers, contactors and reversers (high-voltage power circuit-breakers);	27.12.10.110	8535	Water proofness	Passed/failed - 91 % to 95 %

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.7.	Long-term and accelerated					
1.8.	GOST IEC 60898-1, subclause 9.7.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	AC high-voltage circuit- breakers, contactors and reversers (high-voltage power circuit-breakers);	27.12.10.110	8535	Main circuit insulation resistance	Passed/failed 0 TΩ to 40,0 TΩ
1.9.	GOST 1983, subclause 9.3; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42	850431; 8504320002	Winding insulation resistance	- 0 TΩ to 40,0 TΩ
1.10.	GOST 20248, clause 9; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection device packages;	27.12.3	853720	Insulation resistance	Sufficient/insufficient 0 TΩ to 40,0 TΩ

RA.RU.21HH33 138 pages, page 5

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.11.	GOST GOST R 55187, subclause 9.4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices; Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	23.43.10; 27.90.12.110; 22.19.73	8546200000; 8546901000	Insulation resistance	- 0 ΤΩ to 40,0 ΤΩ
1.12.	GOST 31996, subclause 8.3.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV; Other electrical conductors for voltages greater than 1 kV;	27.32.13; 27.32.14	854460	Power core electrical resistance	$^{-}$ $10^{-6}\Omega$ to $10*10^3\Omega$
1.13.	GOST 31996, subclause 8.3.2, 8.3.3; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV; Other electrical conductors for voltages greater than 1 kV;	27.32.13; 27.32.14	854460	Power core diameter	- 0.1 mm to 1000 mm

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.13.					Length	- 1 m to 100 m
					Outer diameter of insulated core	- 0.1 mm to 1000 mm
					Specific electrical resistance	Calculated rate: -
					Electrical insulation resistance	- 0 TΩ to 40.0 TΩ
1.14.	GOST 3345, clauses 2, 3, 4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic and electrical leads and cables, etc.;	27.32.1	854460	Electrical insulation resistance	- 0 TΩ to 40.0 TΩ

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.15.	GOST 20493, subclause 8.8; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electrical insulators; insulating accessories for electrical machines and equipment; electric pipes;	27.90.12	8535900008	Electrical insulation resistance	- 0 TΩ to 40.0 TΩ
1.16.	GOST R 55716, subclause 6.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	AC high-voltage circuit- breakers, contactors and reversers (high-voltage power circuit-breakers); AC high-voltage disconnecting switches, short-circuiting switches, isolating switches, earthing switches;	27.12.10.110; 27.12.10.120	-	Rated current  Temperature  Temperature rise	Passed/failed 0 kA to 12 kA - 0 °C to 300 °C - 0 °C to 300 °C
1.17.	GOST 9920-89 (CMEA STANDARD 6465-88, IEEC 815-86, IEEC 694-80), subclause 2.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods	Electromotors, generators, and transformers; Switchgears and regulating electrical equipment;	27.11; 27.12; 27.32; 27.9 0	8504; 8535; 8536; 8546	Leakage path length for external insulation	- 0 mm to 50000 mm

RA.RU.21HH33 138 pages, page 8

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<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.17.	without specification	Electronic and electrical leads and cables, etc.; Other electrical equipment;				
1.18.	GOST 2990, subclause 4.1, 4.4.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV;	27.32.13	854442; 854449	DC voltage  Insulation strength	- 1 kV to 70 kV Passed/failed -
1.19.	GOST R 70507.1-2024, subclause 9.1; Non- destructive testing; exterior inspection and measurements	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000; 8504340000; 8504320002	Dimensions  Completeness	- 0 mm to 15000 mm  Passed/failed

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.19.					Marking and branding	Compliant/noncompliant -
					Mass	- 0 kg to 5000 kg
					Nameplate data complience	Compliant/noncompliant -
					Protective coating condition	Compliant/noncompliant -
					Surface condition	Compliant/noncompliant -

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<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.20.	GOST R 70507.1, subclause 9.2.10, 9.2.11; Electrophysical investigations (testings); electrophysical investigation (testing) methods without	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	850431; 8504320002	Power-frequency voltage	- 1 kV to 230 kV Passed/failed
	specification				Insulation strength	-
1.21.	GOST R 70507.1, subclause 9.2.4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	850431; 8504320002	Winding insulation resistance	Passed/failed 0TΩ to 40 TΩ
1.22.	GOST R 70507.1, subclause 9.2.6; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	850431; 8504320002	Partial discharge factor	Passed/failed 1pC to 100000 pC
1.23.	GOST R 70507.1, subclause 9.4; Environmental effect testing; other investigation (testing) methods	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	850431; 8504320002	Gas leakage rate	Calculated rate: -

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<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.23.	environmental effect testing				Gas concentration	0 ppm to 1000 ppm
					Pressure	0 MPa to 0,9 MPa
					Dimensions	0 mm to 15000 mm
1.24.	GOST R 70507.1, subclause 9.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers; Other transformers of power not greater than 16 kVA;	27.11.4; 27.11.42	850431; 8504320002	DC winding resistance	10 <sup>-6</sup> Ω to 100*10 <sup>3</sup> Ω
1.25.	GOST R 70507.2, subclause 9.5.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431800	DC winding resistance	$10^{-6}\Omega$ to $100*10^3\Omega$

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.26.	GOST R 70507.2, subclause 9.15; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431800	Absolute angle error  Relative current error  AC current	
1.27.	GOST R 70507.2, subclause 9.16; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431800	AC current	Compliant/noncompliant 0 A to 50 A

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.27.					Error  Maximum multiplicity	Calculated rate: -  Compliant/noncomplian
					Maximum manipherty	t -
1.28.	GOST R 70507.2, subclause 9.17; Electrophysical investigations (testings); electrophysical investigation (testing)	Electronic transformers;	27.11.4	850431800	AC voltage	0 V to 2000 V
	methods without specification				AC current	0 A to 50 A
1.29.	GOST R 70507.2, subclause 9.18; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431800	AC current	0 A to 200 kA

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.29.					Short-circuit current withstand	Passed/failed -
1.30.	GOST 2933, subclause 2.1-2.7; Non-destructive testing; exterior inspection and measurements	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Compatibility of parts	Compliant/noncompliant -
					Exterior	Compliant/noncompliant -
					Dimensions	0 mm to 15000 mm
					Completeness	Compliant/noncompliant -

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.30.					Marking and branding	Confirmed/not confirmed -
					Mass	- 0 kg to 5000 kg
1.31.	GOST 2933, subclause 2.12; Electrophysical investigations (testings); electrophysical investigation (testing) methods without	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Actuation	Passed/failed -
	specification				Actuating voltage	0 V to 500 V
					Actuating current	- 0 A to 30 A

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.32.	GOST 2933, subclause 3.1-3.11; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Insulation strength  Power-frequency voltage	Passed/failed 0 to 10 kV
					Lightning impulse voltage	- 0 to 20 kV
1.33.	GOST 2933, subclause 3.12; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Electrical insulation resistance	Passed/failed 0 to 40 TΩ
1.34.	GOST 2933, subclause 4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	AC current	- 0.5 to 12000 A

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.34.					Temperature rise	Calculated rate: -
					Heating temperature	- 0 °C to 300 °C
					Ambient air temperature	- 0 °C to 300 °C
					Electrical resistance	- 10 <sup>-6</sup> Ω to 100*10 <sup>3</sup> Ω
1.35.	GOST 2933, subclause 5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Consumed power	- 0 kW to 100 kW

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.35.					Electrical resistance	$^{-}$ $10^{-6}$ $\Omega$ to $100*10^{3}$ $\Omega$
					Test current	- 0.1*10- <sup>3</sup> A to 600 A
					Voltage drop	0 V to 1000 V
					Circuital current	- 0.1*10- <sup>3</sup> A to 600 A
1.36.	GOST 2933, clause 7; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Test voltage	- 0 V to 1000 V

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.36.					Test current  Switching capacity	- 0 kA to 100 kA Passed/failed
1.37.	GOST 2933, subclause 8.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Short-circuit current withstand  Test current	Passed/failed -
1.38.	GOST 2933, subclause 8.1 - 8.4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages not greater than 1 kV	27.12.2	8536	Number of cycles	- 0 kA to 100 kA  - 1 cycles to 100000 cycles

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.38.					Switching wear- resistance	Passed/failed -
					Mechanical wear- resistance	Passed/failed -
					AC current	- 0 kA to 25 kA
1.39.	GOST R 52034, subclause 8.1.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without	Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices; Electrical insulators;	23.43.10; 27.90.12.110	8546200000	AC current	- 0 kA to 20 kA
	specification				Electrical arc resistance	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.40.	GOST R 52034, subclause 8.2.2; Physical and mechanical; other investigation (testing) methods to determine physical and mechanical characteristics	Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices; Electrical insulators;	23.43.10; 27.90.12.110	8546200000	resistance to single shocks  Shock energy	Passed/failed 0 J to 60 J
1.41.	GOST R 52034, subclause 8.6; Physical and mechanical; other investigation (testing)	Ceramic electrical insulators; insulating accessories for electric equipment and ceramic	23.43.10; 27.90.12.110	-	Reliability	Passed/failed -
	methods to determine physical and mechanical characteristics	devices; Electrical insulators;			Disruptive load under bending  Tensile disruptive force	- 0 kN to 500 kN
						0 kN to 500 kN

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.41.					Water temperature	- +20 °C to +98 °C
					Air temperature	-70 °C to +130 °C
					Torsional strength	Passed/failed -
1.10	GOST P. COOL		22.42.10	054(20000)	Torsion torque	0 kN*m to 50 kN*m
1.42.	GOST R 52034, subclause 8.7; Non- destructive testing; exterior inspection and measurements	Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices; Electrical insulators;	23.43.10; 27.90.12.110	8546200000	Displacement	Passed/failed 0.01 mm to 10 mm

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.42.					Radial displacement	Passed/failed 0.01 mm to 10 mm
					Mass	Passed/failed 0 kg to 5000 kg
					Dimensions	Passed/failed 0 mm to 20000 mm
1.43.	GOST R 52082, subclause 8.4, Appendix G; Electrophysical investigations (testings); electrophysical investigation (testing)	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized	27.90.12.110; 22.19.73	8546901000	AC current	- 0 kA to 20 kA
	methods without specification	rubber flooring and matting;			Electrical arc resistance	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.44.	GOST R 52082, subclause 8.5.1, 8.5.2, 8.5.4-8.5.13; physical and mechanical; other investigation (testing) methods to determine physical and mechanical	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and	27.90.12.110; 22.19.73	8546901000	Bending force  Torsion torque	0 kN to 500 kN  0 kN * m to 50 kN * m
		matting;			Mechanical strength	Passed/failed
					Bending deflection	- 0 mm to 250 mm
					Tensile mechanical force for 1 min	- 0 kN to 500 kN

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.44.					Temperature  Torsional angle	- -60 °C to +85 °C - 0 to 90 degree
1.45.	GOST R 52082, subclause 8.6.5; Environmental effect testing; other environmental effect investigation (testing) methods	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	27.90.12.110; 22.19.73	8546901000	Resistance to water penetration  Water temperature	Passed/failed - 20°C to 100 °C

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.46.						
1.47.	GOST R 52082, subclause 8.9.1, Appendix B.1; Environmental effect testing; other environmental effect investigation (testing) methods	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	27.90.12.110; 22.19.73	8546901000	Water repellence class	1 to 7
1.48.	GOST R 52082, subclause 8.9.2; Non-destructive testing; exterior inspection and measurements	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting	27.90.12.110; 22.19.73	8546901000	Integrity and correctness of marking	Passed/failed -

 §§	Documents establishing rules and methods of	Equipment	OKPD 2 CODE	TN VED EAEU	Defined parameter	Range
_	investigations (testings) and measurements			CODE		
1.48.					Protective enclosure structure	Passed/failed -
					Protective enclosure surface quality	Passed/failed -
					Corrosion-protective coating quality	Passed/failed -
1.49.	GOST R 52082, subclause 8.9.3; Non-destructive testing; exterior inspection and measurements	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	27.90.12.110; 22.19.73	8546901000	Quality of connection between accessories and insulation part	Compliant/noncompliant -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.50.	GOST R 52082, subclause 8.9.4; Non-destructive testing; exterior inspection and measurements	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	27.90.12.110; 22.19.73	8546901000	Protective coating thickness	Passed/failed 5 μm to 5000 μm
	GOST R 52082, subclause 8.9.5; Physical and mechanical; other investigation (testing) methods to determine physical and mechanical characteristics	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and matting;	27.90.12.110; 22.19.73	8546901000	Protective coating adhesion	Passed/failed -
					Dimensions	0 mm to 1000 mm
					Tearing force	- 0 kN to 2 kN

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.51.					Shear force	- 0 kN to 2 kN
1.52.	GOST R 52082-2023, subclause 8.9.7; Electrophysical investigations (testings); electrophysical investigation (testing) methods without	Electrical insulators; Other vulcanized rubber products, not elsewhere classified; hard rubber in all forms and products thereof; porous vulcanized rubber flooring and	27.90.12.110; 22.19.73		Water diffusion  Voltage	Passed/failed -
	specification	matting;			Voltage	0 to 50 kV
1.53.	GOST 8.217, subclause 10.1; Non-destructive testing; exterior inspection and measurements	Electronic transformers;	27.11.4	850431; 8504320002	Exterior	Compliant/noncompliant -
					Identification and marking	Compliant/noncompliant -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.54.	GOST 8.217, subclause 10.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40,0 TΩ
1.55.	GOST 8.217, subclause 10.3, 10.4, 10.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without	Electronic transformers;	27.11.4	850431; 8504320002	Marking  Absolute angle error	Compliant/noncompliant
	specification				Relative current error	-600 min to 600 min -20 % to 20 %
					AC current	- 0 A to 12000 A

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.56.	GOST 7746, subclause 9.3; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40,0 TΩ
1.57.	GOST 7746, subclause 9.5; Electrophysical investigations (testings); electrophysical investigation (testing)	Electronic transformers;	27.11.4	850431; 8504320002	Absolute angle error	-600 to 600 min
	methods without specification				Relative current error	-20 to 20 %
					AC current	- 0 A to 12000 A
					Marking	Compliant/noncompliant -

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.58.	GOST IEC 61439-1, subclause 10.5.2; Electrophysical investigations (testings); electrophysical	Switchgears and regulating electrical equipment	27.12	8536; 8537	Continuity of protective circuit	Passed/failed -
	investigation (testing) methods without specification				Protective circuit resistance	- 10 <sup>-6</sup> Ω to 100*10 <sup>3</sup> Ω
					Current	- 10 A to 100 A
1.59.	IEC 62271-103:2021 ed. 2.0, subclause 7.6; Electrophysical investigations (testings); electrophysical investigation (testing)	Switchgears and regulating electrical equipment	27.12	8537	Short-circuit current withstand	Passed/failed -
	methods without specification				Current	- 0 to 200 kA

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.60.	IEC 62271-103:2021 ed. 2.0, subclause 7.101; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8537	Switching capacity	Passed/failed -
					Current	0 kA to 100 kA
					Voltage	- 0 kV to 20 kV
1.61.	IEC 62271-111:2019 ed. 3, subclause 7.6; Electrophysical investigations (testings); electrophysical investigation (testing)	Switchgears and regulating electrical equipment	27.12	8535; 8536	Short-circuit current withstand	Passed/failed -
	methods without specification				Current	- 0 kA to 100 kA

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<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.62.	IEC 62271-111:2019 ed. 3, subclause 7.101; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8535; 8536	Switching capacity  Current  Voltage	Passed/failed 0 kA to 100 kA - 0 kV to 38 kV
1.63.	IEC 62271-111:2019 ed. 3, subclause 7.102; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8535; 8536	Switching capacity  Current	Passed/failed - 0 kA to 20 kA

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.63.					Voltage	- 0 kV to 6 kV
1.64.	IEC 62271-111:2019 ed. 3, subclause 7.103; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8535; 8536	Switching capacity  Current	Passed/failed 0 kA to 10 kA
					Voltage	- 0 to 6 kV
1.65.	IEC/IEEE 62271-37- 013:2021 ed. 2.0, subclause 7.106; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8537	Switching capacity	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.65.					Current	- 0 kA to 63 kA
					Voltage	- 0 kV to 42 kV
1.66.	1.66. GOST 2213, subclause 7.7; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	High-voltage fuses;	27.12.10.140	853610	Short-circuit current withstand	Passed/failed -
					Current	- 0 kA to 100 kA
1.67.	GOST 2213, subclause 7.8; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	High-voltage fuses;	27.12.10.140	853610	Breaking capacity	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.67.					Current  Voltage	- 0 kA to 32 kA
1.68.	GOST R 55188,	Electronic transformers;	27.11.4	8504210000;	Thermal resistance at	0 kV to 35 kV  Passed/failed
	subclause 4.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without			850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000;	short-circuit  Current	-
1.69.	specification  GOST R 55188-2012,	Electronic transformers;	27.11.4	8504210000;	Dynamic resistance at	0 kA to 100 kA  Passed/failed
1.07.	subclause 4.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic adiistornicis,	2/	8504221000; 8504221000; 8504229000; 8504230 00; 850431; 850432000; 8 50433000; 8504340000	short-circuit	- Tussed failed

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.69.					Current	- 0 kA to 200 kA
1.70.	GOST R 55195, subclause 8.1.4, 8.3.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electromotors, generators, and transformers; Switchgears and regulating electrical equipment; Electronic and electrical leads and cables, etc.; Other electrical equipment;	27.11; 27.12; 27.32; 27.90	8504; 8535; 8536; 8546	Insulation strength	Passed/failed -
1.71.	GOST 22756, subclause 3.1; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000; 8504340000	Insulation strength	Passed/failed -
1.72.	IEC 60076-1(2011), subclause 11.4; Electrophysical investigations (testings); electrophysical investigation (testing) methods	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000;	Air temperature	- 0 °C to 300 °C

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.72.	Without specification			8504340000	AC current	- 0 A to 6000 A
					Voltage short-circuit	Calculated rate: -
					Short-circuit losses	Calculated rate: -
					Active power	- 0 kW to 2000 kW
					Alternating current	- 0 kV to 100 kV

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.73.	IEC 60076-5(2006), clause 4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8	AC current  Short-circuit current withstand	- 0 kA to 200 kA  Passed/failed -
1.74.	GOST 14794, subclause 6.1; non-destructive testing; exterior inspection and measurements	Electronic transformers;	27.11.4	8504340000 850450	Dimensions	0 mm to 50000 mm
1.75.	GOST 14794, subclause 6.10; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850450	AC current	- 0 A to 10000 A
1.76.	GOST R 52719, subclause 10.1; non-destructive testing; exterior inspection and measurements	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000; 8504340000	Dimensions	- 0 mm to 50000 mm

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<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.77.	GOST R 52719, subclause 10.5; Electrophysical investigations (testings); electrophysical investigation (testing)	Electronic transformers;	27.11.4	8504210000; 850422100 0; 8504229000; 8504230 00; 850431; 850432000; 8 50433000;	Maximum current peak (electrodynamic withstand current)	- 0 kA to 200 kA
	methods without specification				Current RMS	- 0 kA to 100 kA
					Short-circuit current withstand and load impact resistance	Passed/failed -
1.78.	GOST R 55190, subclause 8.2 (visually); Non-destructive testing; exterior inspection and measurements	subclause 8.2 (visually); regulating electrical equipment; exterior inspection and neasurements regulating electrical equipment; Electric circuit switching and protection devices for	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Surface condition	Compliant/noncompliant
		voltages not greater than 1 kV Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages;			Protective coating condition	Compliant/noncompliant

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.78.		Parts of switchgears and regulating electrical equipment;			Marking and branding	Compliant/noncompliant -
1.79.	GOST R 55190-2022, subclause 8.2 (multipurpose instrument); non- destructive testing; exterior inspection and measurements	Switchgears and regulating electrical equipment; Packaged switchgears; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Overall dimensions / setting dimensions / connecting dimensions	- 0 mm to 15000 mm

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.80.	GOST R 55190-2022, subclause 8.2 (general- purpose balance); Non- destructive testing; exterior inspection and measurements	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Mass	- 0 kg to 5000 kg
1.81.	GOST R 55190, subclause 8.4.1 (exterior inspection); Non- destructive testing; exterior inspection and measurements	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electrical switchgear or protection	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Accessory equipment	Compliant/noncompliant

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.81.		equipment packages; Parts of switchgears and regulating electrical equipment;				
1.82.	GOST R 55190, subclause 8.4.2 (multipurpose instrument); Physical and mechanical; geometric processing (Length, angle)	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Dimensions	- 0 mm to 1000 mm
1.83.	GOST R 55190-2022, subclause 8.4.4.2; Functional tests of systems and structure elements; functional tests of systems	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Operation	Passed/failed -

§§	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.83.	Structures	Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device			Power voltage Force	- 0 V to 1000 V - 0 N to 500 N
					Force	- 0 N to 500 N
1.84.	GOST R 55190-2022, subclause 8.4.5.1; physical and mechanical; measurement of physical quantities	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Proper time/ Closing time/ opening time	- 0 s to 100 s

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.84.						
1.85.	GOST R 55190, subclause 8.4.6.1, 8.4.6.5- 8.4.6.8, 8.4.6.10; physical and mechanical; strength test	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Mechanical strength  Power voltage	Passed/failed - 0 V to 1000 V
1.86.	GOST R 55190, subclause 8.4.6.2- 8.4.6.4; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Actuation	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.86.		Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;			Actuating current  Actuating voltage  Power voltage	- 0 A to 30 A - 0 V to 500 V - 0 V to 1000 V
1.87.	GOST R 55190-2022, subclause 8.4.8; Functional tests of systems and structure elements; Functional tests of systems and structure elements	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Interlocking device  Power voltage	Passed/failed - 0 V to 1000 V

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.87.		Parts of switchgears and regulating electrical equipment;			Force	- 0 N to 500 N - 0 N to 500 N
1.88.	GOST R 55190-2022, subclause 8.4.9; Functional tests of systems and structure elements; Functional tests of systems and structure elements	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Fixing device  Force  Force	Passed/failed - 0 N to 500 N - 0 N to 500 N

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.89.	GOST R 55190, subclause 8.4.10; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Pressure continuity of sliding earthing contacts  DC resistance  Test current	Passed/failed 0 Ω to 1 Ω - 10 A to 100 A
1.90.	GOST R 55190-2022, subclause 8.10.4- 8.10.6; Functional tests of systems and structure elements; Functional tests of systems and structure elements	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	8535; 8537	Dimensions	- 0 mm to 1000 mm - 0 N to 500 N

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.90.		Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;			Force	- 0 N to 500 N
					Compatibility of identic component parts	Passed/failed -
1.91.	GOST 34839, subclause 9.5.1; Environmental effect testing; high operating ambient temperature testing	Plastic electrically insulating accessories; Plastic electrically insulating accessories;	27.33.14; 27.33.14.000		Resistance to elevated environmental temperature	Passed/failed -
					Temperature	- 0 °C to 85 °C
1.92.	GOST 34839, subclause 9.5.2; Environmental effect testing; low operating ambient temperature testing	Plastic electrically insulating accessories; Plastic electrically insulating accessories;	27.33.14; 27.33.14.000		Low-temperature resistance	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.92.					Temperature	-60 to 0 (°C)
1.93.	GOST 34839, subclause 9.5.3; Environmental effect testing; long-term and accelerated high air humidity testing	Plastic electrically insulating accessories; plastic electrically insulating accessories	27.33.14; 27.33.14.000	-	Resistance to high relative air humidity  Relative humidity	Passed/failed
1.94.	GOST 20.57.406, subclause 1.45, 1.56, 2.16.3; Environmental effect testing; low operating ambient temperature testing	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	853590000	Resistance to elevated environmental temperature  Temperature	Passed/failed 0°C to 85 °C

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.94.		Parts of switchgears and regulating electrical equipment;				
1.95.	GOST 20.57.406, subclause 1.45, 1.56, 2.18; Environmental effect testing; low operating ambient temperature testing	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Parts of switchgears and regulating electrical equipment;	27.12; 27.12.1; 27.12.2; 27.12.3; 27.12.4	853590000	Low-temperature resistance  Temperature	Passed/failed60 °C to 0 °C
1.96.	GOST 1983, subclause 9.6; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42	850431; 8504320002	Alternating current	- 0 kV to 230 kV

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.96.					Angle error (voltage phase angle error)	Passed/failed -600 min to 600 min
					Vector group	Compliant/noncompliant -
					VT voltage scaling factor error	Passed/failed -20 to 20 %
1.97.	GOST 8.216, subclause 10.2, 10.3.1- 10.3.11, 10.3.13.2, 10.13.13.3, 10.3.14; Electrophysical investigations (testings); electrophysical investigation (testing)	Other transformers of power not greater than 16 kVA;	27.11.42	850431; 8504320002	Alternating current	- 0 kV to 230 kV
	methods without specification				Angle error (voltage phase angle error)	Passed/failed -600 min to 600 min

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.97.					Vector group	Compliant/noncompliant -
					VT voltage scaling factor error	Passed/failed - 20 % to 20 %

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range		
1. Testin	1. Testings (investigations), production measurement							
1.1.	GOST 1983, subclause 9.6; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42	850431; 8504320002	VT voltage scaling factor error  Vector group	Passed/failed - 20 % to 20 %  Compliant/noncompliant -		
					Angle error (voltage phase angle error)	Passed/failed - 600 min to 600 min		

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.2.	GOST 8.216, subclause 10.2, 10.3.1-10.3.11, 10.3.13.2, 10.13.13.3, 10.3.14; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42	850431; 8504320002	VT voltage scaling factor error  Angle error (voltage phase angle error)	Passed/failed - 20 % to 20 %  Passed/failed -600 min to 600 min
					Alternating current  Vector group	- 0 kV to 230 kV  Compliant/noncompliant
1.3.	GOST 15581, subclause 5.2; Environmental effect testing; hermeticity testing	Electrical capacitors	27.90.5	8532	Hermeticity	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.4.	GOST 15581, subclause 5.3, 5.10, 5.12; electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical capacitors ;	27.90.5	8532	Capacity  Electrical capacity	- 20 pF to 106 pF - 20 pF to 106 pF
1.5.	GOST 15581, subclause 5.4, 5.14, 5.15; Electrophysical investigations (testings); electrophysical investigation (testing)	Electrical capacitors	27.90.5	8532	Impulse voltage with wave shape 1.2/50 μs	- 0 kV to 2250 kV
	methods without specification				Switching impulse voltage  Alternating current	- 750 kV to 1600 kV - 1 kV to 950 kV

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.5.					Insulation strength	Passed/failed -
1.6.	GOST 15581, subclause 5.6, 5.9; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electrical capacitors	27.90.5	8532	Dielectric loss angle tangent	0.01 % to 100 %
1.7.	GOST 15581, subclause 5.7; Non-destructive testing; exterior inspection and measurements	Electrical capacitors	27.90.5	8532	Exterior	Compliant/noncompliant -
					Dimensions	0 mm to 50000 mm
1.8.	GOST 15581, subclause 5.16; Non-destructive testing; exterior inspection and measurements	Electrical capacitors	27.90.5	8532	Mass	0.5 kg to 5000 kg

	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.9.	GOST 15581, subclause 5.18; Environmental effect testing; other environmental effect investigating (testing) methods	Electrical capacitors;	27.90.5	8532	Heat resistance	Passed/failed -
					Temperature	- 0 °C to 85 °C
1.10.	GOST 15581, subclause 5.19; Environmental effect testing; other environmental effect investigating (testing) methods	Electrical capacitors;	27.90.5	8532	Water proofness	Passed/failed -
					Relative humidity	- 10% to 98 %
					Temperature	0 °C to 85 °C

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.11.	GOST 15581, subclause 5.20; Environmental effect testing; other environmental effect investigating (testing) methods	Electrical capacitors ;	27.90.5	8532	Resistance to temperature changes  Temperature	Passed/failed 60 °C to +85 °C
1.12.	GOST 15581, subclause 5.21; Environmental effect testing; other environmental effect investigating (testing) methods	Electrical capacitors;	27.90.5	8532	Test voltage	- 1 kV to 230 kV
					Resistance to frost with its subsequent melting	Passed/failed -
					Temperature	-60 to 85 °C

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.13.	GOST 15581, subclause 5.22; Environmental effect testing; other environmental effect investigating (testing) methods	5.22; Environmental effect esting; other environmental effect investigating (testing)	27.90.5	8532	Temperature	- -60 °C to 85 °C
					Cold-resistance (Frost-resistance)	Passed/failed -
1.14.	GOST 8.217, subclause 10.1; Non-destructive testing; exterior inspection and measurements	Electronic transformers;	27.11.4	850431; 8504320002	Visual inspection	Compliant/noncompliant -
1.15.	GOST 8.217, subclause 10.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40,0 TΩ
1.16.	GOST 8.217, subclause 10.3, 10.4, 10.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Absolute angle error	- - 600 min to 600 min

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.16.					Relative current error	- - 20 % to 20 %
					AC current	- 0 A to 12000 A
					Correctness of marking	Compliant/noncompliant -
1.17.	GOST 7746, subclause 9.3; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40,0 TΩ
1.18.	GOST 7746, subclause 9.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electronic transformers;	27.11.4	850431; 8504320002	Relative current error	Passed/failed - 20 % to 20 %

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.18.					Absolute angle error  Correctness of marking	Passed/failed -600 min to 600 min  Compliant/noncompliant
1.10	COST INC. (1420.1		27.10	0524 0525	AC current	- 0 A to 12000 A
1.19.	GOST IEC 61439-1, subclause 10.5.2; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Switchgears and regulating electrical equipment	27.12	8536; 8537	Continuity of protective circuit	Passed/failed

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.19.					Protective circuit resistance	$^{-}$ $10^{-6}\Omega$ to $100*10^3\Omega$
1.20.	GOST 8024, subclause 2.1; thermotechnical testings; temperature measurement	gs; and protection devices for	27.12.1; 27.12.2; 27.33. 1; 23.43.1	-	Temperature rise	Calculated rate: -
					Temperature	- - 40 °C to 300 °C
1.21.	GOST 8024, subclause 2.2; thermotechnical testings; temperature measurement	Switchgears and regulating electrical equipment; Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV;	27.12.1; 27.12.2; 27.12. 3; 23.43.1	-	Ambient air temperature	- - 40°C to 100 °C

§§	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.21.		Electric circuit switching and protection device packages; Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices;				
1.22.	GOST 8024, subclause 2.3; thermotechnical testings; temperature measurement	Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Wiring products; Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices;	27.12.1; 27.12.2; 27.12. 3; 27.33.1; 23.43.1	-	Temperature	- 40 °C to 100 °C
1.23.	GOST 8024, subclause 2.4; thermotechnical testings; temperature measurement	Electric circuit switching and protection devices for voltages greater than 1 kV;	27.12.1; 27.12.2; 27.12. 3; 23.43.1; 27.33.1	-	Temperature	- - 40 °C to 300 °C

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.23.		Electric circuit switching and protection devices for voltages not greater than 1 kV Electric circuit switching and protection device packages; Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices; Wiring products;				
1.24.	GOST 8024, subclause 2.5; other investigations (testings); methods of other investigations (testings) without specification	Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV Electric circuit switching and protection device packages; Wiring products; Ceramic electrical insulators; insulating accessories for electric equipment and ceramic devices;	27.12.1; 27.12.2; 27.12.3; 27.33.1; 23.43.1	-	Ambient air temperature  Resistance	Calculated rate: -  - 0 °C to 100 °C  - 0,0000001 Ω to 199,9 Ω

<b>§</b> §	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.24.						
1.25.	GOST 8024, subclause 2.6; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection devices for voltages not greater than 1 kV; Electric circuit switching and protection device packages; Wiring products; Ceramic electrical insulators; insulating accessories for electric	27.12.1; 27.12.2; 27.12. 3; 27.33.1; 23.43.1	-	Resistance of the gear main circuit	- 0,000001 Ω to 199,9 Ω
1.26.	IEC 62271-1:2017 ed. 2.1, subclause 7.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection device packages;	27.12.1; 27.12.3	-	Temperature rise	Calculated rate: -

<b>\$</b> \$	Documents establishing rules and methods of investigations (testings) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.26.					Resistance of the gear main circuit	- 0,000001 Ω to 1999,9 Ω
					Ambient air temperature	- - 40 °C to 100 °C
					Test current	- 0 to 30000 A
					Temperature	- 0°C to 300 °C
1.27.	IEC/IEEE 62271-37- 013:2021, subclause 7.5; Electrophysical investigations (testings); electrophysical investigation (testing) methods without specification	Electric circuit switching and protection devices for voltages greater than 1 kV; Electric circuit switching and protection device packages;	27.12.1; 27.12.3	-	Temperature rise	Calculated rate: -

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.27.					Ambient air temperature	-40 °C to 100 °C
					Temperature	0 °C to 300 °C
					Test current	0.5 A to 30000 A
					Resistance of the gear main circuit	- 0.000001 Ω to 1999.9 Ω
	10.10; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Panels and other electrical switchgear or protective equipment packages for voltages not greater than 1 kV;			Temperature rise	Calculated rate: -

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.28.					Ambient air temperature	-40°C to 100°C
					Temperature	- 0 °C to 300 °C
					Test current	0.5 A to 30000 A
	Electrophysical investigation (testing); electrophysical investigation (testing) methods	Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electrical switchgear or protective equipment packages;	27.12.1;27.12.3			Calculated rate: -
					Ambient air temperature	-40 °C to 100 °C

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.29.						0 °C to 300 °C
						0.5 A to 30000 A
	(testing); electrophysical investigation (testing) methods	Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electrical switchgear or protective equipment packages;	27.12.1;27.12.3		Temperature rise	Calculated rate: -
					Ambient air temperature	-40 °C to 100 °C
					Temperature	- 0 °C to 300 °C

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.30.					Test current	0.5 A to 3000 A
	Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Insulating accessories for electrical equipment and ceramic devices; Electric insulators; Other technical-purpose	23.43.10.110;23.43.10. 120;27.90.12.110; 22.19.73.119		Temperature rise	Calculated rate: -
		vulcanized rubber products not elsewhere classified;	it .		Ambient air temperature	-40 °C to 100 °C
					Temperature	- 0 °C to 300 °C
					Test current	0.5 A to 30000 A

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	(visually); Non-destructive testing; other methods of non- destructive testing				Ç	Compliant/noncompliant - Passed/failed - Passed/failed -
	(using multipurpose instrument); Non-destructive testing; other methods of non-destructive testing	electrical equipment; Electric circuit switchgear or	27.12.3;27.12.4;27.90.5		Overall and connecting dimensions	- 0 mm to 10000 mm

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.33.		Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment; Electric capacitors;				
1.34.	(using general-purpose balance); Non-destructive testing; other methods of non-destructive testing	electrical equipment; Electric circuit switchgear or	27.12.3;27.12.4;27.90.5	8532	Mass	0 kg to 5000 kg

- 0 N to 500 N
Passed/failed -
0 s to 100 s
- 0 s to 100 s
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<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	8.4.6.1, 8.4.6.2, 8.4.6.4-8.4.6.8, 8.4.6.10; Environmental effect testing; other methods of environmental effect investigation (testing)	electrical equipment; Electric circuit switchgear or protection devices for voltages			Power supply voltage	Passed/failed - 0 V to 1000 V
	Environmental effect testing; other methods of environmental effect investigation (testing)		27.12;27.12.1;27.12.2; 27.12.3;27.12.4		Force	Passed/failed - 0 N to 500 N

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.39.		Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment;				- 0 N to 500 N
					Power supply voltage	0 V to 1000 V
	Environmental effect testing; other methods of environmental effect investigation (testing)	electrical equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or	27.12;27.12.1;27.12.2; 27.12.3;27.12.4		Operation of fixing devices	Passed/failed -
		protection devices for voltages not greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment;				- 0 N to 500 N
					Force	- 0 N to 500 N

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	without specification	27.12;27.12.1;27.12.2; 27.12.3;27.12.4		Pressure continuity of sliding earthing contacts  Protective circuit efficiency  Resistance	Passed/failed - Passed/failed - $0~\Omega~to~10~\Omega$
		 27.12;27.12.1;27.12.2; 27.12.3;27.12.4		Dimensions  Compatibility testing of identic withdrawable parts	- 0 mm to 1000 mm  Passed/failed

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.42.		Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment;			Force	- 0 N to 500 N
					Force	- 0 N to 500 N
1.43.	Environmental effect testing; elevated operating environmental	accessories;	27.33.14;27.33.14.000		Resistance to elevated environmental temperature	Passed/failed -
					Temperature	- 0 °C to 130 °C
1.44.	Environmental effect testing; low operating environmental		27.33.14;27.33.14.000		Low-temperature resistance	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
.44.					Temperature	- -75 °C to 0 °C
.45.	GOST 34839, subclause 9.5.3; Environmental effect testing; long-term and accelerated high air humidity testing	Plastic electrically insulating accessories; Plastic electrically insulating accessories;	27.33.14;27.33.14.000		Resistance to high relative air humidity  Relative humidity	Passed/failed
6.	1.45, 1.56, 2.16.3; Environmental effect testing; low operating environmental temperature testing		27.12.3;27.12.4	853590000	Temperature  Resistance to elevated environmental temperature	- 0 °C to 130 °C  Passed/failed

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.46.		Sections of electrical switchgear or regulating equipment;				
1.47.	testing; low operating environmental temperature testing	electrical equipment; Electric circuit switchgear or		853590000	Low-temperature resistance  Temperature	Passed/failed75 °C to 0 °C
1.48.	GOST R 52565, subclauses 9.10.2.1, 9.10.2.3, 9.10.5; Environmental effect testing; other methods of environmental effect investigation (testing)	AC high-voltage circuit-breakers, contactors and reversers (high-voltage power circuit-breakers); Power circuit-breakers;	27.12.10.110	8535	Temperature	- 0 °C to 130 °C

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.48.					Resistance to operating temperature upper value	Passed/failed -
	9.10.2.1, 9.10.2.2, 9.10.4; Environmental effect testing;	AC high-voltage circuit-breakers, contactors and reversers (high-voltage power circuit-breakers); Power circuit-breakers;	27.12.10.110	8535	Temperature	- -75°C to 0°C
					Resistance to operating temperature lower value	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1. Produc	ets testing (investigation) and me	easurements				
1.1.		Electrical transformers; Power transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Transformation ratio	Calculated rate: -
					Alternating voltage	- 0 kV to 1100 kV
1.2.	GOST 3484.1, subclauses 5.1,5.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Power transformers; Electrical transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431800;850432000; 850433000;8504340000	Short circuit voltage	- 0 kV to 100 kV
					Alternating voltage	- 0 kV to 100 kV
					Electrical DC resistance	$^{-}$ $^{-}$ $^{-}$ $^{0.6}$ $\Omega$ to $^{10^5}$ $\Omega$

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.2.					Air temperature	- 0 °C to 300 °C
						0 A to 6000 A
						- 0 MW to 2 MW
	GOST 3484.1, subclause 5.3 (calculation); Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Power transformers; Electrical transformers;	27.11.4	850431800;850432000; 850433000;8504340000	percentage terms	Calculated rate: -
					Alternating voltage	- 0 kV to 100 kV

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.3.					Alternating current	- 0 A to 6000 A
					Short-circuit losses	0 MW to 2 MW
					Short-circuit losses normalized to calculated temperature	Calculated rate: -
					Air temperature	- 0 °C to 300 °C
					Electrical DC resistance	$^{-}$ $10^{-6}~\Omega$ to $10^{5}~\Omega$

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
.3.					Short circuit voltage	- 0 kV to 100 kV
.4.	GOST 3484.1, clause 6; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Power transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	No-load current	Calculated rate: -
					No-load losses	Calculated rate: -
					Alternating current	- 0 A to 6000 A
					Alternating voltage	- 0 kV to 100 kV

\$\$ 1.4.	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	<b>Defined parameter</b> Active power	Range
1.4.					Active power	0 kW to 2000 kW
	GOST 3484.3, subclauses 4.1, 5.1; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Power transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000		Calculated rate: -
						- 0 ΤΩ to 40.0 ΤΩ
					Time	- 1 s to 60 s
	GOST 34839, subclause 9.2.1; Non-destructive testing; exterior inspection and measurements	Plastic electrically insulating accessories;	27.33.14	853590000	Structure	Compliant/noncompliant -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.6.					Completeness	Compliant/noncompliant -
					Mass	- 0 kg to 50 kg
1.7.		Plastic electrically insulating accessories;	27.33.14	853590000	Dimensions	Compliant/noncompliant 0 mm to 1000 mm
1.8.		Plastic electrically insulating accessories;	27.33.14	853590000	Mark permanency	Negative/positive -
1.9.		Plastic electrically insulating accessories;	27.33.14	853590000	Exterior	Compliant/noncompliant

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.9.					Markimg	Compliant/noncompliant -
	GOST 28114, clauses 3-5; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	accessories; Other electrical conductors for voltages not greater than 1 kV; Other electrical conductors for voltages greater than 1 kV;	27.32.14	853590000;854460	Partial discharge	Satisfactory/unsatisfactory 1 pC to 10000 pC
	4221-001-75617971-2007 RE, clause 4; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	transformers; Switchgear and regulating electrical equipment; Other electronic and electric leads and cables;	27.11;27.12;27.32;27.33; 27.90		Dielectric loss angle tangent	- 0.01 % to 100 %
		Wiring products; Other electrical equipment;			Electric capacity	- 20 pF to 1*10 <sup>6</sup> pF

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.12.	GOST IEC 60898-1, subclause 9.7.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	AC high-voltage circuit-breakers, contactors and reversers (high-voltage power circuit-breakers);	27.12.10.110		Main circuit insulation resistance	Passed/failed 0 TΩ to 40.0 TΩ
1.13.	GOST 1983, subclause 9.3; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA; Voltage transformers;	27.11.42	850431;8504320002	Winding insulation resistance	- 0 TΩ to 40.0 TΩ
1.14.	GOST 20248, clause 9; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical switchgear or protective equipment packages;	27.12.3	853720	Insulation resistance	Sufficient/insufficient $0 \text{ T}\Omega$ to $40.0 \text{ T}\Omega$
1.15.	GOST R 55187, subclause 9.2; Environmental effect testing; Hermeticity test	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110; 22.19.73	8546200000;8546901000	Hermeticity	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.15.		Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;			Test pressure	- 0 bar to 5 bar
1.16.	investigation (testing) methods without specification		23.43.10;27.90.12.110; 22.19.73	8546200000;8546901000		Satisfactory/unsatisfactory 0 TΩ to 40 TΩ
1.17.	GOST R 55187, subclause 9.16; Environmental effect testing; Hermeticity test		23.43.10;27.90.12.110; 22.19.73	8546200000;8546901000	Hermeticity	Passed/failed -

<b>\$\$</b>	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.17.		Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;			Test pressure	- 0 bar to 5 bar
	IEC 60137(2008), ed 6.0 subclauses 8.10. 9.7; Environmental effect testing; Hermeticity test		22.19.73		Hermeticity  Test pressure	Passed/failed 0 bar to 5 bar
	IEC 60137(2008), ed 6.0 subclause 9.9; Environmental effect testing; Hermeticity test	L	23.43.10;27.90.12.110; 22.19.73	8546200000;8546901000	Hermeticity	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.19.		Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;			Test pressure	- 0 bar to 5 bar
1.20.	GOST 31996, subclause 8.3.1; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV; Other electrical conductors for voltages greater than 1 kV;	27.32.13;27.32.14	854460	Electrical resistance of power core	- 10 <sup>-6</sup> Ω to 10*10 <sup>3</sup> Ω
1.21.	GOST 31996, subclauses 8.3.2, 8.3.3; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV; Other electrical conductors for voltages greater than 1 kV;	27.32.13;27.32.14	854460	Specific insulation resistance	Calculated rate: -
					Electrical insulation resistance	- 0 ΤΩ to 40.0 ΤΩ

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.21.					Outer diameter of insulated core  Length	0.1 mm to 1000 mm
						1 m to 100 m
1.22.	GOST 3345, clauses 2, 3, 4;	Other electronic and electric leads	27.22.1		Electrical insulation resistance	0.1 mm to 1000 mm
		and cables;	27.32.1	834460		- 0 ΤΩ to 40.0 ΤΩ
	Electrophysical investigation (testing); electrophysical investigation (testing) methods	Electric insulators; Insulating accessories for electrical machines and equipment; Electric pipes;	27.90.12	8535900008	Electrical insulation resistance	- 0 TΩ to 40.0 TΩ

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	,	Other electrical conductors for voltages greater than 1 kV;	27.32.14	854460	Insulation strength  Test lightning impulse voltage	Passed/failed 3 kV to 2250 kV
	Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	AC high-voltage circuit-breakers, contactors and reversers (high-voltage power circuit-breakers); AC high-voltage disconnecting switches, short-circuiting switches, isolating switches, earthing switches;	27.12.10.110;27.12.10.12 0		Equipment elements heating  Temperature rise	Passed/failed - Calculated rate: -
					Temperature	- 0 °C to 300 °C

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	646588, IEC 815-86, IEC 694- 80), subclause 2.2; Electrophysical investigation (testing); electrophysical	Electromotors, generators, and transformers; Switchgear and regulating electrical equipment; Other electronic and electric leads and cables; Other electrical equipment;	27.11;27.12;27.32;27.90	8504;8535;8536;8546	Leakage path length for external insulation surface	- 0 mm to 50000 mm
	GOST 2990, subclauses 4.1, 4.4.1; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other electrical conductors for voltages not greater than 1 kV;	27.32.13	854442;854449	Insulation strength  DC voltage	Passed/failed 1 kV to 70 kV
	Non-destructive testing; exterior	Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Dimensions	- 0 mm to 15000 mm

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.28.					Completeness	Compliant/noncompliant -
					Marking and branding	Compliant/noncompliant
					Mass	0 kg to 5000 kg
					Verification of nameplate data compliance to the specified requirements	Compliant/noncompliant
					Protective coating condition	Compliant/noncompliant

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.28.					Surface condition	Compliant/noncompliant -
	GOST R 70507.1, subclauses 9.2.10, 9.2.11; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Power-frequency voltage	- 1 kV to 950 kV
					Insulation strength	Passed/failed -
	GOST R 70507.1, subclause 9.2.4; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40 TΩ
	GOST R 70507.1, subclause 9.2.6; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Partial discharge	Passed/failed 1 pC to 100000 pC

\$8	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
		Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Power-frequency voltage	- 1 kV to 500 kV
						Passed/failed 10 dB to 100 dB
	Environmental effect testing;	Electrical transformers; Other transformers of power not greater than 16 kVA;	27.11.4;27.11.42	850431;8504320002	Gas concentration	- 0 ppm to 1000 ppm
					Gas leakage rate	Calculated rate: -
					Dimensions	0 mm to 15000 mm

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST R 70507.1, subclause 9.5; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Other transformers of power not greater than 16 kVA; Voltage transformers; Current transformers;	27.11.4;27.11.42	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000; 8504320002	DC winding resistance	- 10 <sup>-6</sup> Ω to 100*10 <sup>3</sup> Ω
	GOST R 70507.2, subclause 9.5.1; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Current transfromers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000		$10^{-6}\Omega$ to $100*10^3\Omega$
	GOST R 70507.2, subclause 9.15; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Current transfromers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000		- 0 A to 6000 A
					Relative current error	

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.36.					Absolute angle error	-600 min to 600 min
1.37.	GOST R 70507.2, subclause 9.17; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers; Current transfromers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000		- 0 V to 2000 V
					Exciting current	- 0 A to 100 A
1.38.	Non-destructive testing; exterior	Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	27.12.2	8536	Interchangeability of parts	Compliant/noncompliant -
					Exterior	Compliant/noncompliant -

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.38.					Dimensions	0 mm to 15000 mm
					Completeness	Compliant/noncompliant
					Marking and branding	confirmed/not confirmed
					Mass	- 0 kg to 5000 kg
1.39.	Electrophysical investigation	Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	27.12.2	8536	Actuating voltage	- 0 V to 500 V

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.39.					Actuating current	Passed/failed - 0 A to 30 A
	Electrophysical investigation	Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	27.12.2		One-minute AC test voltage  Test lightning impulse voltage	Passed/failed - 0 kV to 10 kV - 0 kV to 20 kV

\$\$	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
		Electric circuit switchgear or protection devices for voltages not greater than 1 kV;		8536		Passed/failed 0 TΩ to 40 TΩ
	Electrophysical investigation	Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	27.12.2	8536		- 0 kW to 100 kW
						10 <sup>-6</sup> Ω to 100*10 <sup>3</sup> Ω
						0.1*10 <sup>-3</sup> A to 600 A
					Voltage drop	0 V to 1000 V

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.43.	Electrophysical investigation	Electric circuit switchgear or protection devices for voltages not greater than 1 kV;		8536	Number of cycles	l cycle to 100000 cycles
					Switching wear-resistance	Passed/failed -
					Mechanical wear-resistance	Passed/failed -
					Alternating current	0 kA to 25 kA
1.44.	Electrophysical investigation (testing); electrophysical investigation (testing) methods	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110	8546200000	Breakdown voltage at 50 Hz	- 0 kV to 500 kV

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	exterior inspection and measurements	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110	8546200000		Passed/failed 0 mm to 20000 mm
	8.7.4; Non-destructive testing; exterior inspection and measurements	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110		Flange face surfaces eccentricity  Vertical axis deviation	0 mm to 10 mm
					(verticanty)	0 mm to 10 mm
	8.7.4; Non-destructive testing; exterior inspection and measurements	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110	8535900001;8546901000		Passed/failed 0 mm to 50000 mm

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.48.	GOST R 52034, subclause 8.7.4; Non-destructive testing; exterior inspection and measurements	Ceramic electric insulators; Insulating accessories for electrical equipment and ceramic devices; Electric insulators;	23.43.10;27.90.12.110	8535900001;8546901000	Mass	Passed/failed 0 kg to 5000 kg
	investigation (testing) methods	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73		Insulation strength  Test lightning impulse voltage  One-minute AC test voltage	Passed/failed  O kV to 2250 kV  I kV to 950 kV
	1 3	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof;	27.90.12.110;22.19.73		Protected against steep impulse voltage breakdown	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.50.		Porous vulcanized rubber flooring and matting;				Calculated rate: - 500 kV/μs to 2500 kV/μs  - 0.5 μs to 6 μs
1.51.	GOST R 52082, subclause 8.1.11; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;		8546901000	Breakdown voltage at 50 Hz	0 kV to 2250 kV

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.52.	(testing); electrophysical investigation (testing) methods without specification	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73	8546901000	Partial discharge	Passed/failed 1 pC to 10000 pC
1.53.	electrophysical investigation (testing) methods without specification		27.90.12.110;22.19.73	8546901000	Tracking erosion resistance  Alternating voltage	Passed/failed
1.54.	Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73	8546901000	Radio interference	Passed/failed 10 dB to 100 dB

\$\$ 	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.54.						
1.55.	subclausesubclause 8.8.1, 8.8.5; Non-destructive testing; exterior inspection and measurements	Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;				Passed/failed 0 mm to 50000 mm
1.56.	exterior inspection and measurements	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;			Flange face surfaces eccentricity	0 mm to 10 mm

\$\$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.56.					Vertical axis deviation (verticality)	- 0 mm to 10 mm
	8.8.5; Non-destructive testing; exterior inspection and measurements	Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73	8535900001;8546901000		Passed/failed 0 mm to 50000 mm
	GOST R 52082, subclauses 8.8.4, 8.8.5; Non-destructive testing; exterior inspection and measurements	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73	8535900001;8546901000		Passed/failed 0.5 kg to 5000 kg

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	Appendix B.1; Environmental effect testing; other methods of environmental effect investigation (testing)	Other vulcanized rubber products not elsewhere classified;	27.90.12.110;22.19.73	8546901000	Water repellence class	1 to 7
	Non-destructive testing; exterior inspection and measurements	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73		marking	Passed/failed - Passed/failed -
					Protective enclosure surface quality	Passed/failed -

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.60.					Corrosion-protective coating quality	Passed/failed -
	GOST R 52082, subclause 8.9.3; Non-destructive testing; exterior inspection and measurements	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;	27.90.12.110;22.19.73	8546901000	Quality of connection between accessories and insulation part	Passed/failed 0 mm to 10000 mm
	GOST R 52082, subclause 8.9.4; Non-destructive testing; exterior inspection and measurements	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof;	27.90.12.110;22.19.73	8546901000	Corrosion-protective coating quality	Passed/failed -
		Porous vulcanized rubber flooring and matting;			Protective coating thickness	Passed/failed 5 μm to 3000 μm

88	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	Physical and mechanical; other investigation (testing) methods to determine physical and mechanical characteristics	Electric insulators; Other vulcanized rubber products not elsewhere classified; Hard rubber in all forms and products thereof; Porous vulcanized rubber flooring and matting;			Protective coating adhesion  Dimensions	Passed/failed - 0 mm to 1000 mm
					Shear force	- 0 kN to 2 kN - 0 kN to 2 kN
	GOST R 52082, subclause 8.9.7; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electric insulators;	27.90.12.110	8535900001;8546901000	Water diffusion	Passed/failed -

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.64.					Test voltage	0 kV to 50 kV
1.65.	GOST 8.217, subclause 10.1; Non-destructive testing; exterior inspection and measurements	Electrical transformers;	27.11.4	850431;8504320002	Identification and marking	Compliant/noncompliant
					Exterior (description)	Compliant/noncompliant
1.66.	GOST 8.217, subclause 10.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850431;8504320002	Winding insulation resistance	Passed/failed 0 TΩ to 40.0 TΩ
1.67.	GOST 8.217, subclauses 10.3, 10.4, 10.5; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850431;8504320002	Alternating current	0 A to 6000 A

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.67.						-600 min to 600 min
						-20 % to 20 %
					Correctness of marking  Angle error (voltage phase angle	Compliant/noncompliant
1.60	COST 7746 1 1 0 2		27.11.4		error)	-
1.68.	GOST 7746, subclause 9.3; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850431;8504320002		Passed/failed 0 TΩ to 40.0 TΩ

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.69.	GOST 7746, subclause 9.5; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850431;8504320002	Alternating current	- 0 A to 6000 A
					Angle error (voltage phase angle error)	Compliant/noncompliant -
					Correctness of marking	Compliant/noncompliant -
					Relative current error	- -20 % to 20 %
					Absolute angle error	- -600 min to 600 min

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST IEC 61439-1, subclause 10.5.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Switchgear and regulating electrical equipment;	27.12	8536;8537		- 10 A to 100 A Passed/failed
					, and the second	-
					Protective circuit resistance	$^{-}$ $^{-}$
	GOST R 55195, subclauses 8.1.4, 8.3.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Switchgear and regulating electrical equipment; Other electrical equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV;	27.12;27.90;27.12.1	8537	Insulation strength	Passed/failed -

\$8	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST 22756, subclause 3.1; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Insulation strength	Passed/failed -
	IEC 60076-1(2011), subclause 11.3; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Transformation ratio	Calculated rate: - 0 kV to 1100 kV 0 degrees to 360 degrees - 0.1 a.u. to 9999 a.u.
					Alternating voltage	- 0 kV to 1100 kV
	IEC 60076-1(2011), subclause 11.4; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Air temperature	- 0 °C to 300 °C

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.74.					Alternating current	- 0 A to 6000 A
					Short circuit voltage	Calculated rate: -
					Short-circuit losses	Calculated rate: -
					Active power	0 kW to 2000 kW
					Alternating voltage	- 0 kV to 100 kV

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	IEC 60076-1(2011), subclause 11,5; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;		8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Active power	- 0 kW to 2000 kW
					Alternating voltage	- 0 kV to 100 kV
					No-load losses	Calculated rate: -
					No-load current	Calculated rate: -
					Alternating current	- 0 A to 6000 A

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST 14794, subclause 6.1; Non- destructive testing; exterior inspection and measurements	Electrical transformers;	27.11.4	850450	Dimensions	0 mm to 50000 mm
	GOST 14794, subclause 6.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850450		Calculated rate: -
						- 0 kV to 100 kV
						- 0 A to 6000 A
					Electrical DC resistance	$^{-}$ $10^{\sim 6}~\Omega$ to $10^{5}~\Omega$

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.78.	GOST 14794, subclause 6.7; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4		Alternating voltage	Calculated rate: 0 kV to 100 kV
					Alternating current  Electrical DC resistance	- 0 A to 6000 A - 10 <sup>-6</sup> Ω to 10 <sup>5</sup> Ω
	GOST 14794, subclause 6.8; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850450		Calculated rate: - 0 kW to 2000 kW

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.79.					Alternating voltage	- 0 kV to 100 kV
					Alternating current	0 A to 6000 A
					Air temperature	0 °C to 300 °C
					Electrical DC resistance	$^{-}$ $^{-}$ $^{-}$ $^{0.6}$ $\Omega$ to $10^{5}$ $\Omega$
	GOST 14794, subclause 6.10; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Electrical transformers;	27.11.4	850450	Alternating current	- 0 A to 6000 A

Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
GOST R 52719, subclause 10.1; Non-destructive testing; exterior inspection and measurements	Electrical transformers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000		0 mm to 50000 mm
8.2.2; Non-destructive testing; exterior inspection and measurements	electrical equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear	27.12.3;27.12.4	8537	Dimensions	Compliant/noncompliant 0 kg to 5000 kg  Compliant/noncompliant 0 mm to 50000 mm
				Correctness of marking and branding and other technical documentation requirements that can be checked visually  Protective coating and insulation part surface condition	
O i	GOST R 52719, subclause 10.1; Non-destructive testing; exterior nspection and measurements  GOST R 55190, subclauses 8.2.1, 8.2.2; Non-destructive testing; exterior and measurements	GOST R 52719, subclause 10.1; Non-destructive testing; exterior and measurements  GOST R 55190, subclauses 8.2.1, 8.2.2; Non-destructive testing; exterior inspection and measurements  Electrical transformers; Switchgear and regulating electrical equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	Electrical transformers;  GOST R 52719, subclause 10.1; Non-destructive testing; exterior inspection and measurements  GOST R 55190, subclauses 8.2.1, electrical equipment; electrical equipment; electrical equipment; electrical equipment; electric circuit switchgear or protection devices for voltages greater than 1 kV; electric circuit switchgear or protection devices for voltages not greater than 1 kV; electrical switchgear or protective equipment packages; Sections of electrical switchgear	### To Protection devices for voltages greater than 1 kV;	GOST R 52719, subclause 10.1; Non-destructive testing; exterior inspection and measurements  Electrical transformers; 27.11.4 8.504210000;8504221000; B50422000;850423000; 850431850432000; 850433000;8504340000  GOST R 55190, subclauses 8.2.1, Switchgear and regulating electrical equipment; electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment;  Correctness of marking and branding and other technical documentation requirements that can be checked visually

				<b>.</b>		
<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST R 55190, subclause 8.4.1; Non-destructive testing; visual method		27.12.3;27.12.4	8537	Visual inspection	Compliant/noncompliant
	Non-destructive testing; exterior	Electrical switchgear or protective equipment packages; Switchgear and regulating electrical equipment;	27.12.3;27.12;27.12.4; 27.12.1;27.12.2		Installation of accessory equipment and the way of its fixing	Compliant/noncompliant -

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.84.		Sections of electrical switchgear or regulating equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not greater than 1 kV;				
	Non-destructive testing; exterior inspection and measurements	Electrical switchgear or protective equipment packages; Switchgear and regulating electrical equipment; Sections of electrical switchgear or regulating equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not greater than 1 kV;	27.12.1;27.12.2	8537	Alignment of main and auxiliary circuits detachable contacts	0 mm to 1000 mm

<b>§</b> §	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	8.4.4.2; Functional testing of systems and structural elements;	electrical equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not	27.12.3;27.12.4	8537	Force	0 V to 1000 V
		greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment; Packaged switchgears; Single-end service assembled chambers;	gear		Force	0 N to 500 N
					Operation	0 N to 500 N  Passed/failed
	8.4.5.1; Physical and mechanical; measurement of physical	1, , , , , , , ,	27.12;27.12.1;27.12.2; 27.12.3;27.12.4	8537	Closing time	- 0 s to 100 s

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements		OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.87.		Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment; Packaged switchgears; Single-end service assembled chambers;			Opening time	- 0 s to 100 s
1.88.	GOST R 55190, subclauses 8.4.6.1, 8.4.6.2, 8.4.6.4 - 8.4.6.8, 8.4.6.10; Functional testing of systems and structural elements; functional testing of systems and structural elements	1	27.12.1;27.12.2	8537		- 0 V to 1000 V Passed/failed

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.88.		Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Single-end service assembled chambers;				
1.89.	Functional testing of systems and structural elements; functional testing of systems and structural elements  elements  electrical equipment; Electrical switchgear or protections of electrical switchgear or regulating equipment; Electric circuit switchgear or protection devices for voltages greater than 1 kV; Electric circuit switchgear or protection devices for voltages not protection d	27.12.1;27.12.2	8537	Test control voltage	- 0 N to 500 N - 0 V to 1000 V	
		greater than 1 kV; Packaged switchgears;			Locking devices	Passed/failed -

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.89.		Single-end service assembled chambers;				
1.90.		1		8537	Force	Passed/failed  O N to 500 N

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
	GOST R 55190, subclause 8.4.10.1, 8.4.10.3, 8.4.10.4; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification		27.12.3;27.12.4	8537	DC resistance	Passed/failed $10^{-6} \Omega$ to $199.9 \Omega$
	GOST R 55190, subclause 8.4.10.2; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification		27.12;27.12.1;27.12.2; 27.12.3;27.12.4	8537	Pressure continuity of sliding earthing contacts	Passed/failed

§§	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.92.		Electric circuit switchgear or protection devices for voltages not greater than 1 kV; Electrical switchgear or protective equipment packages; Sections of electrical switchgear or regulating equipment;				
	functional testing of systems and structural elements	1	27.12.1;27.12.2	8537	Compatibility of identic withdrawable parts	Passed/failed

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.93.		Single-end service assembled chambers;				
1.94.		Electrical transformers; Current transfromers;	27.11.4	8504210000;8504221000; 8504229000;850423000; 850431;850432000; 850433000;8504340000	Winding insulation resistance	Passed/failed 0 TΩ to 40 TΩ
1.95.		Electrical transformers; Current transfromers;	27.11.4	8504229000;850423000; 850431;850432000; 850433000;8504340000	Absolute angle error  Relative current error	-600 min to 600 min
						-20 % to 20 %
					Test current	- 0 A to 6000 A

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.96.	GOST 1983, subclause 9.6; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42		Voltage transformer (VT)	- 0 kV to 347 kV  Passed/failed -20 % to 20 %
					Vector group  Angle error (voltage phase angle error)	Compliant/noncompliant - Passed/failed -600 min to 600 min
	GOST 8.216, subclauses 10.2. 10.3.1-10.3.11, 10.3.13.2, 10.13.13.3, 10.3.14; Electrophysical investigation (testing); electrophysical investigation (testing) methods without specification	Other transformers of power not greater than 16 kVA;	27.11.42			Passed/failed -20 % to 20 %

<b>\$</b> \$	Documents establishing rules and methods of investigation (testing) and measurements	Equipment	OKPD 2 CODE	TN VED EAEU CODE	Defined parameter	Range
1.97.					Vector group	Compliant/noncompliant -
						Passed/failed -600 min to 600 min
					Alternating voltage	0 kV to 347 kV

Head of the TC VEI Electronically signed Milkin Evgenii Aleksandrovich