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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 32520-2024

Replacing GB/T 32520-2016

**Metal-oxide surge arresters with external series gap (EGLA) for
overhead transmission and distribution lines of a. c. systems
above 1 kV**

(English Translation)

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Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 32520-2016 "Metal oxides with external series gap for overhead transmission and distribution lines above 1 kV AC" Compared with GB/T 32520-2016, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Added the terms and definitions "series gap", "insulating support", "tensile load" (see 3.3, 3.4, 3.25);

--- Changed the terms and definitions "External series gap line arrester" (see 3.1, 3.1 of the 2016 edition), "Rated voltage of EGLA Pressure" (see 3.8, 3.6 of the 2016 edition);

---Changed the insulation tolerance, residual pressure, mechanical properties of the SVU jacket and the entire EGLA, and the appearance requirements of the SVU composite jacket and support parts Requirements (see 6.1, 6.2, 6.6, 6.15, 6.1, 6.2, 6.6, 6.16 of the 2016 edition);

--- Added requirements for anti-fouling performance, gap distance inspection, insulation support inspection, and galvanized inspection of hardware (see 6.18, 6.19, 6.20, 6.21);

- Deleted the continuous current of SVU (see 6.14 of the 2016 edition);
 - Deleted the EGLA discharge voltage performance requirements (see 6.18 of the 2016 edition);
 - Added normative reference document GB/T 16927.4 (see 7.1);
 - Changed the high current impulse withstand test (see 8.5, 8.5 of the 2016 edition);
 - Deleted the lightning discharge capability test (see 8.6 of the 2016 edition);
 - Deleted the continuous current test (see 8.12 of the 2016 edition);
 - Added repeated charge transfer test, visible corona test, operating impulse withstand voltage test, unified creepage distance inspection, clearance distance Disconnection inspection, power frequency withstand voltage test for support parts, steep wave impulse voltage test for support parts, galvanizing inspection for hardware (see 8.6, 8.18, 8.19, 8.20, 8.21, 8.22, 8.23, 8.24);
 - For polymer (especially composite and resin flex casting) jacket SVU, UV radiation resistance should be in accordance with 8.10.5.1 and 8.10.5.2 (9.3.2 in GB/T 22079-2008) UV test. If according to 10.8.4 in GB 11032-2010 the weathering test report of the 5000h-test (series B) is applicable to this design and can replace the UV test with the agreement of both the supplier and the buyer.
- Change to "For polymer (composite and resin casting) jacket SVU, UV test should be carried out." Delete normative references GB/T 22079-2008 (see 8.10.5, 8.10.5 of the 2016 edition);
- List the sealing test procedure in detail and delete the normative reference document JB/T 7618-2011 (see 8.14.3, 2016 edition) 8.15.3);
 - Deleted the normative reference document GB/T 2317.2 (see 8.18, 10.4 of the 2016 edition);
 - Changed the normative reference document GB/T 191-2008 to an informative reference document (see Appendix G, Appendix G of the 2016 edition).
- This document is modified to adopt IEC 60099-8:2017 "Lightning arresters Part 8: External arresters for overhead transmission and distribution lines for AC systems above 1 kV" Series Gap Metal Oxide Arrester (EGLA)".
- Compared with IEC 60099-8:2017, this document has many structural adjustments. A comparison of the structural number changes between the two documents See Appendix A for the table.
- This document has many technical differences compared with IEC 60099-8:2017.
- A list of these technical differences and their reasons is given in Appendix B.