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

GB/T 45941-2025

**Test methods for electric cables with rated voltages up to and
including 450/750 V**

额定电压450/750 V及以下电缆试验方法

(English Translation)

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Reference

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 is equivalent to IEC 63294:2021 "Test methods for cables with rated voltages up to and including 450/750V".

1 Scope

This document describes the test methods for cables with rated voltages up to and including 450/750V. The test methods described in this document do not include those specified in IEC 60811. Series test method.

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document.

For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document.

ISO 1302 Geometrical Product Specifications (GPS) - Representation of surface structures in technical product documentation

Note: GB/T 131-2006 Geometrical Product Specification (GPS) - Representation of surface structure in technical product documentation (ISO 1302:2002, IDT)

IEC 60502-1 Power cables with extruded insulation and accessories of rated voltage 1 kV ($U_m=1.2$ kV) to 30 kV ($U_m=36$ kV)

Note: GB/T 12706.1-2020 Rated voltage 1kV ($U_m=1.2$ kV) to 35kV ($U_m=40.5$ kV) extruded insulated power cables and accessories Part 1 Part. Cables with rated voltage of 1 kV ($U_m=1.2$ kV) and 3 kV

(Um=3.6 kV) (IEC 60502-1:2004, MOD)

IEC 60811-201 Electrical and optical fiber cables - Test methods for non-metallic materials - Part.201.General tests - Measurement of insulation thickness

IEC 60811-202 Electrical and optical cables - Test methods for non-metallic materials - Part 202: General tests - Determination of thickness of non-metallic sheaths

IEC 60811-203 Electrical and optical fiber cables - Test methods for non-metallic materials - Part 203: General test - Measurement of dimensions

IEC 60811-401:2012 Electrical and optical cables - Test methods for non-metallic materials - Part 401: Comprehensive tests - Thermal aging methods

IEC 60811-501 Electrical and optical cables - Test methods for non-metallic materials - Part 501: Mechanical tests for insulating and sheathing materials compounds)

IEC 62230 Electric cables-Spark-test method

3 Terms and Definitions

There are no terms or definitions that require definition in this document.