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

GB/T 22390.6-2026

Replacing GB/T 22390.6-2008

**Control and protection equipment of high-voltage direct current
(HVDC) transmission systems - Part 6: Converter station
transient fault oscillograph devices**

高压直流输电系统控制与保护设备 第6部分：换流站暂态故障录波装置

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part

1.Structure and Drafting Rules of Standardization Documents". Drafting. This document is Part 6 of GB/T 22390 "Control and Protection Equipment for High Voltage Direct Current Transmission Systems". GB/T 22390 has been published. The following parts were included.

1.Operational Personnel Control System;

---Part 2: AC/DC System Station Control Equipment;

---Part 3: DC System Polar Control Equipment;

---Part 4: DC System Protection Equipment;

---Part 5: DC Line Fault Location Device;

6.Transient Fault Recording Device for Converter Stations This document replaces GB/T 22390.6-2008 "Control and Protection Equipment for High Voltage Direct Current Transmission Systems - Part

6.Transient Faults in Converter Stations". Compared with GB/T 22390.6-2008, the main technical changes in the "Blocking Wave Recording Device" are as follows, except for structural adjustments and editorial modifications.

---The scope of application of this document has been changed. This document applies to transient fault recording of converter stations in $\pm 500\text{kV}$ and below high-voltage direct

current transmission systems. Wave apparatus (see Chapter 1, Chapter 1 of the.2008 edition);

---The term "transient fault recording device" and its definition have been added (see 3.1);

---The ambient temperature under normal operating atmospheric conditions has been changed (see 4.1.1,.2008 version 4.1.1);

---The requirements for vibration at the place of use have been changed (see 4.1.4.1,.2008 version 4.1.4.1);

---Special environmental conditions have been added (see 4.1.6);

1 Scope

GB/T 22390.6-2026 is the Chinese national standard covering the fault recorder of an HVDC converter station - the instrument that captures the milliseconds around a disturbance, at a sampling rate high enough to reconstruct what the valves and controls actually did, which is the only evidence available afterwards. Part 6 of the series. It replaces GB/T 22390.6-2008, with Part 5 on line fault location revised in the same batch. It was issued on 28 January 2026 and has been in force since 1 August 2026, replacing GB/T 22390.6-2008. The document is under the responsibility of the China Electrical Equipment Industry Association. This page is published from the official record of the 2026 edition; the clause text of a standard this recent is not yet in circulation, and the figures, limits and tables it contains are those of the document itself, delivered in full with the English translation.

This document specifies the technical requirements, test methods, inspection rules, and packaging for transient fault recording devices in converter stations of high-voltage direct current transmission systems. Transportation, storage, marking, labeling, instruction manuals, completeness of supply, and quality assurance, etc. This document applies to transient fault recording devices (hereinafter referred to as "devices") in converter stations of $\pm 500\text{kV}$ and below high-voltage direct current transmission systems.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included. For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies. This document.

GB/T 2887-2011 General Specifications for Computer Venues

GB/T 2900.49 Electrical Engineering Terminology - Power System Protection

GB/T 4208-2017 Degrees of protection provided by enclosures (IP code)

GB/T 7261-2016 Basic Test Methods for Relay Protection and Safety Automatic Devices

GB/T 9361-2011 Safety Requirements for Computer Sites

GB/T 9969 General Rules for Instructions for Use of Industrial Products

GB/T 11287-2000 Electrical relays - Part

21. Vibration, shock, impact and earthquake of measuring relays and protective devices
Experiment

3 Terms and Definitions

The terms and definitions defined in GB/T 2900.49, GB/T 13498 and DL/T 553-2013, as well as the following terms and definitions, apply to this document.

3.1 Specialized recording equipment for recording steady-state and transient processes in a power system.