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

GB 25287-2023

Replacing GB 25287-2010

Perimeter protection high-voltage grid device

周界防范高压电网装置

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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 replaces GB 25287-2010 "Perimeter Protection High Voltage Power Grid Devices". Compared with GB 25287-2010, except for structural adjustment and compilation. In addition to editorial changes, the main technical changes are as follows:

- a) The scope has been changed and system inspection, acceptance, operation and maintenance, etc. have been added (see Chapter 1, Chapter 1 of the 2010 edition);
- b) "Perimeter protection high-voltage power grid device", "grid contact", "short grid" and "grid disconnection" were added to the terms and definitions, and "shock current start" was deleted. "Time" and "Shock Current End Time", modified "Electric Shock Current", "Electric Shock Intensity", "Electric Shock Duration" and "Electric Shock Interval Time" (See Chapter 3, Chapter 3 of the 2010 edition);
- c) Added the composition and classification of perimeter protection high-voltage power grid devices to the general requirements (see 4.1.1, 4.1.2);
- d) The functional requirements have been changed, and the requirements for power grid contact attack, short network recovery, alarm linkage and networking have been expanded (see 4.2, 2010 version) 4.2);
- e) Changed the requirements for warning output voltage (see 4.3.1, 4.2.2 of the 2010 edition);
- f) Changed the requirements for combat power (see 4.3.2, 4.3.2 of the 2010 version);
- g) The requirements for strike current have been changed (see 4.3.3, 4.3.1 of the 2010 edition);
- h) Added requirements for strike duration (see 4.3.4);
- i) Added requirements for strike interval time (see 4.3.5);

1 Scope

GB 25287-2023 is the Chinese national standard on perimeter protection high-voltage grid device, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 8

September 2023 by the State Administration for Market Regulation; Standardization Administration of China, and has been in force since 1 April 2025. Classification: ICS 13.310, CCS A91. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This document specifies the technical requirements, inspection rules, acceptance, operation and maintenance and marking, packaging, storage, Shipping, Operating and Technical Manual, describing the test methods. This document applies to the design, production, installation, testing and inspection, acceptance, operation and maintenance of perimeter protection high-voltage power grid devices.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations For undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 191 Packaging, storage and transportation pictorial mark

GB/T 2423.1 Environmental testing of electrical and electronic products Part

3 Terms and definitions

The following terms and definitions apply to this document.

3.1 Set up at the perimeter of protective areas in specific high-security places such as prisons and detention centers, its electrified network can control the power of objects that touch the network. Communicating device for striking in a manner.

3.2 touchofmetalwire When the object touches the metal wire of the perimeter protection high-voltage power grid device, a high-voltage strike current path is formed through the object body.

3.3 short networkmetalwireshort-circuit The perimeter prevents electrical short circuits between adjacent live metal wires of high-voltage power grid devices or between live metal wires and ground wires.

3.4 Disconnection Due to the failure or destruction of the perimeter protection high-voltage power grid device, the high-voltage part cannot form a closed electrical circuit.

3.5 blow current electricshockcurrent When a grid contact event occurs in the perimeter protection high-voltage power grid device, the current passes through the grid contact

object.

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