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

GB/T 2900.73-2025

Replacing GB/T 2900.73-2008

**Electrotechnical terminology - Part 73: Earthing and protection
against electric shock**

电工术语 第73部分：接地与电击防护

(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 is part 73 of the "Electrical Terminology". There are more than 100 parts of the "Electrical Terminology" published. The "Basic Concepts" category includes.

- Basic terms of electrical engineering (GB/T 2900.1);
- Electrical terminology - Electromagnetism (GB/T 2900.60);
- Electrical terminology Multiphase system and multiphase circuit (GB/T 2900.72);
- Electrical terminology Part 73: Grounding and protection against electric shock (GB/T 2900.73);
- Electrical terminology circuit theory (GB/T 2900.74);
- Electrical terminology. Electric and magnetic devices (GB/T 2900.83);
- Electrical terminology - General mathematical concepts and linear algebra (GB/T 2900.85);
- Electrical terminology - Quantities and units (GB/T 2900.91);
- Electrical terminology - mathematical functions (GB/T 2900.92);
- Electrical terminology-Electrophysics (GB/T 2900.93);
- Electrical terminology - Electrochemistry (GB/T 2900.98);
- Credibility of electrical terminology (GB/T 2900.99);

---Electrical terminology - Electromagnetic compatibility (GB/T 4365).

This document replaces GB/T 2900.73-2008 "Electrical Terminology Grounding and Protection against Electric Shock". Compared with GB/T 2900.73-2008, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

a) Changed the reference ground, local ground, electric shock, conductor, grounding, equipotential, bonding, protective grounding, operational grounding, functional grounding, System grounding, protective equipotential bonding, functional equipotential bonding, grounding electrode, independent grounding electrode, grounding conductor, intermediate point, neutral point, Neutral conductor, intermediate conductor, line conductor, protective conductor, protective bonding conductor, protective earthing conductor, functional earthing conductor, protection and Functional earthing conductor, protective and functional bonding conductor, live parts, earthing arrangement, equipotential bonding system, protective equipotential bonding System, functional equipotential bonding system, common equipotential bonding system, electrical buried ground wire system, underground cable line grounding electrode, Parallel grounding conductor, ground return path, grounding terminal, equipotential bonding terminal, main grounding terminal, grounding switch, housing, shield, electric screen Shielding, magnetic shielding, electromagnetic shielding, functional insulation, electric shock spasm, ventricular fibrillation, sensing current threshold, spasm current threshold, escape current threshold, ventricular fibrillation current threshold, skilled technicians, trained personnel, general personnel, restricted access Entry area, neutral point grounding method, direct grounding system, ungrounded system, impedance grounding system, resonant grounding system, automatic cut-off Power supply, short circuit, line-to-ground short circuit, ground fault, conductor continuity fault, line-to-line short circuit, line voltage, phase voltage, line-to-ground voltage, Neutral point displacement voltage, ground conductor voltage, ground voltage, expected touch voltage, agreed touch voltage limit, touch voltage, step voltage Voltage, earth fault factor, leakage current, stray current, partial short circuit current, short circuit current, partial conductor continuous fault current, Conductor continuous fault current, touch current, basic protection, direct contact, indirect contact, hazardous live parts, basic insulation, reinforced Insulation, exposed conductive parts, external conductive parts, reach, electrical enclosure, protective enclosure, protective fence, protective barrier Terms and definitions for objects, protective shields, protective screens, protective partitions, current limiting sources, and non-conductive environments (see 195-01-01, 195-01-03, 195-01-04, 195-01-07~195-01-16, 195-02-01~195-02-11, 195-02-15, 195-02-17~195-02-20, 195-02-22~195-02-25, 195-02-27~195-02-35, 195-02-37~195-02-41, 195-03-02, 195-03-05, 195-03-07~195-03-10, 195-04-01~195-04-12, 195-04-14~195-04-16, 195-05-01~195-05-04, 195-05-07~195-05-12, 195-05-14~195-05-21, 195-06-01, 195-06-03~195-06-06, 195-06-09~ 195-06-21, 2008 edition 195-01-01~195-01-04, 195-01-07~195-01-16, 195-02-01~195-02-11, 195-02-15, 195-02-17~195-02-20, 195-02-22~195-02-25, 195-02-27~195-02-35, 195-02-37~ 195-02-41, 195-03-02,

195-03-05, 195-03-07~195-03-10, 195-04-01~195-04-12, 195-04-14~ 195-04-16, 195-05-01~195-05-04, 195-05-07~195-05-12, 195-05-14~195-05-21, 195-06-01, 195-06-03~195-06-06, 195-06-09~195-06-21);

b) Changed the chapter titles Electric shock and threshold current, electrical safety protection measures (see 195-03, 195-06, 195-03, 2008 edition) 195-06);

c) Added electrical safety, normal state, enhanced protection, single fault state, grounding, protection bonding terminal, protection terminal, protection conductor Body current, ground fault current, extra low voltage, extra low voltage, low voltage, low voltage, high voltage, high voltage, additional protection, isolation, accessible Part, protection provisions, protection measures, enhanced protection provisions, SELV system, PELV system, simple separation, electrical separation, at the same time Accessible parts, protection of limiting steady-state contact current and charge, impedance protectors, Class I equipment, Class II equipment, Class III equipment Terms and definitions (see 195-01-20 to 195-01-24, 195-02-42, 195-02-43, 195-05-22 to 195-05-26, 195-06-22~95-06-37);

d) Delete the terms and definitions of protection against electric shock, resistance to earth, and soil resistivity (see 195-01-05, 195-01-18, 195-01-19, 195-02-36, 195-04-13).

This document is equivalent to IEC 60050-195:2021 "International Electrotechnical Vocabulary (IEV) Part 195: Earthing and protection against electric shock".

The following minimal editorial changes have been made to this document.

--- To coordinate with the existing standard, the name of the standard is changed to "Electrical Terminology Part 73: Grounding and Protection against Electric Shock".

Introduction

GB/T 2900 "Electrical Terms" is divided into nine categories. (1) Basic concepts, (2) Electrical materials, (3) Instruments and meters, (4) Electrical equipment, (5) Electronics Equipment, (6) Generation, transmission and distribution of electricity, (7) Telecommunications technology, (8) Special applications, (9) Standardization.

This document belongs to the first category of basic concepts, which are common and basic terms in grounding and electric shock protection, and can be used for the formulation and revision of technical standards in this field.

Technical exchange assistance.

The first category "Basic Concepts" of GB/T 2900 "Electrical Technical Terms" is planned to consist of 14 parts.

--- Part 1: Basic terminology. The purpose is to support the compilation of technical standards and other documents, teaching and technical communication in the field of electrical engineering.

--- Part 60: Electromagnetism. The purpose is to support the compilation of technical standards and other documents, teaching and technical exchanges in the field of electromagnetics.

--- Part 72: Multiphase systems and multiphase circuits. The purpose is to support technical standards and other documents in the field of multiphase systems and multiphase circuits Preparation, teaching and technical exchange.

--- Part 73: Grounding and protection against electric shock. The purpose is to support the preparation of technical standards and other documents in the field of grounding and protection against electric shock, Teaching and technical exchange.

--- Part 74: Circuit Theory. The purpose is to support the compilation of technical standards and other documents, teaching and technical communication in the field of circuits.

--- Part 83: Electric and magnetic devices. The purpose is to support the preparation of technical standards and other documents in the field of electric and magnetic devices.

Teaching and technical exchange.

--- Part 85: General concepts in mathematics and linear algebra. The purpose is to support the general concepts in mathematics and linear algebra.

Preparation of technical standards and other documents, teaching and technical exchanges.

--- Part 91: Quantities and Units. The purpose is to support the preparation, teaching and technical support of technical standards and other documents in the field of quantities and units.

communicate.

--- Part 92: Mathematical functions. The purpose is to support the preparation, teaching and technical support of technical standards and other documents in the field of mathematical functions.

Technical exchange.

--- Part 93: Electrophysics. The purpose is to support the preparation, teaching and technical support of technical standards and other documents in the field of electrophysics.

communicate.

--- Part 98: Electrochemistry. The purpose is to support the compilation of technical standards and other documents, teaching and technical exchanges in the field of electrochemistry.

--- Part 99: Dependability. The purpose is to support the compilation of technical standards and other documents, teaching and technical exchanges in the field of dependability.