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

GB/T 7000.223-2023

Replacing GB 7000.18-2003

**Luminaires - Part 2-23: Particular requirements -
Extra-low-voltage lighting systems for ELV light sources
(English Translation)**

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Table of Contents

Introduction

1 Scope

2 Normative references

3 Terms and Definitions

4 General test requirements

5 Category

6 Mark

7 Structure

8 Creepage distance and clearance

9 Grounding regulations

10 Terminals and electrical connections

11 External and internal wiring

12 Protection against electric shock

13 Durability test and thermal test

14 Protection against dust, solid foreign objects and water

15 Insulation resistance and electrical strength

16 Heat resistance, fire resistance and electric tracking resistance

Appendix A (informative) List of modified sub-clauses for more stringent or critical requirements that require retesting

Reference

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 2-23 of GB (T)7000: GB (T)7000 has released the following parts:

---Lamps Part 1: General requirements and tests (GB/T 7000.1-2023);

---Lamps Part 2-1: Fixed universal lamps with special requirements (GB/T 7000.201-2023);

---Lamps Part 2-2: Special requirements for embedded lamps (GB/T 7000.202-2023);

---Lamps Part 2-3: Special requirements for road and street lighting fixtures (GB 7000.203-2013);

- Lamps Part 2-4: Movable general-purpose lamps with special requirements (GB/T 7000.204-2023);
- Lamps Part 2-5: Special requirements for floodlights (GB/T 7000.205-2023);
- Lamps Part 2-6: Special requirements for lamps with built-in tungsten filament lamp transformers or converters (GB 7000.6-2008);
- Lamps Part 2-8: Special requirements portable lamps (GB/T 7000.208-2023);
- Safety requirements for lighting fixtures for photography and film (non-professional use) (GB 7000.19-2005);
- Lamps Part 2-10: Special requirements for removable lamps for children (GB 7000.4-2007);
- Lamps Part 2-11: Special requirements for aquarium lamps (GB/T 7000.211-2023);
- Lamps Part 2-12: Night lights with special requirements for power socket installation (GB/T 7000.212-2023);
- Lamps Part 2-13: Special requirements for ground recessed lamps (GB/T 7000.213-2023);
- Lamps Part 2-14: Special requirements for lamps using cold cathode tubular discharge lamps (neon lamps) and similar equipment (GB 7000.214-2015);
- Lamps Part 2-17: Special requirements for stage lighting, television, film and photography venues (indoor and outdoor) (GB/T 7000.217-2023);
- Lamps Part 2-18: Special requirements for lamps for swimming pools and similar places (GB/T 7000.218-2023);
- Lamps Part 2-20: Special requirements for light strings (GB/T 7000.220-2023);
- Lamps Part 2-21: Special requirements for light strips (GB/T 7000.221-2023);
- Lamps Part 2-22: Special requirements for emergency lighting fixtures (GB/T 7000.222-2023);
- Lamps Part 2-23: Special requirements for extra-low voltage (ELV) lighting systems for extra-low voltage (ELV) light sources GB/T 7000.223-2023);
- Lamps Part 2-24: Special requirements for surface temperature lamps (GB/T 7000.224-2023);
- Lamps Part 2-25: Special requirements for lamps used in hospitals and rehabilitation building clinics (GB 7000.225-2008):

This document replaces GB 7000.18-2003 "Safety Requirements for Extra Low Voltage Lighting Systems for Tungsten Filament Lamps" and is consistent with GB 7000.18-2003 Compared with the above, the main technical changes are as follows:

- a) Changed the scope of the standard (see Chapter 1, Chapter 1 of the:2003 edition);
- b) The short circuit test has been deleted (see 7.6:1 and 7:6:2 of the:2003 edition):

This document is modified to adopt IEC 60598-2-23:2020 "Lamps Part 2-23: Special requirements for extra low voltage (ELV) light sources" Low Voltage Lighting Systems":

The technical differences between this document and IEC 60598-2-23:2020 and their reasons are as follows:

---Changed the scope of Chapter 1;

---Replaced IEC 60598-1 with normatively cited GB/T 7000.1 to facilitate the reading and application of product standards:

Please note that some content in this document may be subject to patents: The publisher of this document assumes no responsibility for identifying patents:

Introduction

GB (T)7000 "Lamps" is intended to consist of the following parts:

---Part 1: General requirements and tests: The purpose is to specify the use of electric light sources and lamps with a power supply voltage not exceeding 1000V:

General requirements:

---Part 2-1: Special requirements for fixed general-purpose luminaires: The purpose is to stipulate that the power supply voltage does not exceed 1000V for electro-optical Requirements for fixed general-purpose luminaires whose source is a light source:

---Part 2-2: Special requirements for recessed lighting fixtures: The purpose is to stipulate that the power supply voltage does not exceed 1000V and the electric light source is used as the light source:

source of recessed light fixtures:

---Part 2-3: Special requirements for road and street lighting fixtures: The purpose is to stipulate that the power supply voltage of the electric light source does not exceed Requirements for 1000V lighting fixtures for roads, street lighting and other outdoor public places, as well as tunnel lighting and normal ground lighting Requirements for column-type synthetic luminaires with a minimum total height above the surface of 2:5m:

---Part 2-4: Removable general-purpose lamps with special requirements: Purpose is to provide for indoor and/or outdoor use other than portable lamps Requirements for portable

general-purpose lamps with power supply voltage not exceeding 250V and using electric light sources as light sources (such as for courtyard use):

---Part 2-5: Special requirements for floodlights: The purpose is to stipulate the use of electric light sources and power supply voltages not exceeding 1000V:

lighting requirements:

---Part 2-8: Special requirements for portable lamps: The purpose is to stipulate the use of portable electric light sources with a power supply voltage not exceeding 250V:

Requirements for lamps and similar portable luminaires:

---Part 2-10: Removable lamps for children with special requirements: The purpose is to stipulate the safety requirements for removable lamps for children:

Please use tungsten lamps or single-ended fluorescent lamps with a power supply voltage not exceeding 250V:

---Part 2-11: Special requirements for aquarium lighting fixtures: The purpose is to stipulate the use of electric light sources with a power supply voltage not exceeding 1000V Special requirements for home aquarium lighting fixtures:

---Part 2-12: Night lights with special requirements for power outlet installation: The purpose is to stipulate the use of electric light sources and power supply voltages not exceeding Requirements for night lights installed in AC 250V50/60Hz power sockets:

---Part 2-13: Special requirements for ground recessed lighting fixtures: The purpose is to stipulate the use of electric light sources and the power supply voltage does not exceed 1000V Requirements for ground recessed lighting fixtures:

---Part 2-14: Special requirements for the use of cold cathode tubular discharge lamps (neon lamps) and similar equipment: The purpose is to stipulate the power supply voltage does not exceed 1000V and the no-load rated output voltage is greater than 1000V but not more than 10000V:

Requirements for the manufacture and use of cold cathode tubular discharge lamps and similar equipment:

---Part 2-17: Special requirements for stage lighting, television, film and photography venues (indoor and outdoor) lighting fixtures: The purpose is to provide for the Electric light source, power supply voltage does not exceed 1000V, used in outdoor and indoor stage lighting, television, movie and photography venues Requirements for luminaires (including spot and floodlight projections):

---Part 2-18: Special requirements for lighting fixtures in swimming pools and similar places: The purpose is to provide for use in water or contact with water Safety requirements for fixed luminaires: