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PEOPLE'S REPUBLIC OF CHINA**

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Replacing GB 19510.8-2009

**Controlgear for electric light sources - Part 2-7: Particular requirements
for electric source for safety services (ESSS) supplied electronic
controlgear for emergency lighting (self-contained)**

(English Translation)

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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 2-7 of GB/T 19510 "Light Source Control Device": GB/T 19510 has published the following parts:

- Part 1: General requirements and safety requirements;
- Part 2-1: Special requirements for starting devices (except glow starters);
- Part 2-2: Special requirements for DC/AC electronic buck converters for tungsten lamps;
- Part 2-3: Special requirements for AC and/or DC electronic control devices for fluorescent lamps;
- Part 2-7: Special requirements for electronic control devices powered by safety service power supply (ESSS) for emergency lighting (self-contained);
- Part 2-8: Special requirements for ballasts for fluorescent lamps;
- Part 2-9: Special requirements for electromagnetic control devices for discharge lamps (except fluorescent lamps);
- Part 2-10: Special requirements for electronic inverters and frequency converters for high-frequency cold start tubular discharge lamps (neon lamps);
- Part 2-11: Special requirements for miscellaneous electronic circuits used with lamps;
- Part 2-12: Special requirements for DC or AC electronic ballasts for discharge lamps (except fluorescent lamps);
- Part 2-13: Special requirements for DC or AC electronic control devices for LED modules:

This document replaces GB 19510.8-2009 "Lamp control devices - Part 8: Special requirements for DC electronic ballasts for emergency lighting" "Requirements", compared with GB 19510.8-2009, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

---The scope of application of this document has been changed to make it only for safety service power supplies for self-contained emergency lighting used in non-central power supplies:

(ESSS) Standard for power supply electronic control devices (see Chapter 1, Chapter 1 of GB 19510.8-2009);

---Added the content of automatic test function (see Chapter 4 ~ Chapter 7 and Appendix K);

---Added the terms automatic test function, emergency output factor, emergency output current, rest mode, remote suppression mode, and deleted the terms Ballast lumen coefficient and starting aids (see Chapter 3, Chapter 3 of GB 19510.8-2009);

---The number of samples that can be used for Chapter 15 tests has been increased to 3, and "new samples of the type matching the control device should be submitted" "ESSS or ESSS of the type specified by the manufacturer of the control device" (see Chapter 5);

---Added "automatic test function classification" (see Chapter 6);

---Added "Identification symbols for control devices that comply with this document and control devices with automatic test functions", and added a new Chapter 35 Statement of the maximum operating voltage (see 7.1);

---Added the information needed to select the correct battery and (electric double layer capacitor) (EDLC), and added the emergency input of the LED control device Parameter information of output factors and output parameters, information on the installation and use of the automatic test function, sleep mode and remote Suppression mode allows dwell time information (see 7.2);

---Deleted the "pulse voltage of ballast common system" and changed it to "blank" section (see Chapter 14 of GB 19510.8-2009);

---Changed the battery voltage characteristics to support EBLF testing and added requirements for LED control devices and other light control devices (see Chapter 20, Chapter 20 of GB 19510.8-2009);

---Added new types of batteries and EDLC discharge voltage requirements, added "battery discharge characteristics" and "light failure", added lithium the requirements for battery charging devices have added requirements for voltage, current and temperature values of various types of batteries (see Chapter 22);

---Added specific requirements for preventing polarity change and over-discharge for different battery types (see Chapter 23);

---Added the contents of rest mode and suppression mode (see Chapter 25);

---Added "The operation of the control device in emergency mode should not be affected by short circuit, contact with the ground wire, or connection to the normal power line of the control device:

"The impact of circuit interruption" and "For lithium batteries, the values of V_{max} and I_{max} in Table 2 or the battery manufacturer's design statement should not be exceeded:

"specified value" (see 28.2, 28:3);