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

GB/T 13539.3-2017

Replacing GB/T 13539.3-2008

**Low-voltage fuses -- Part 3: Supplementary requirements for fuses for
use by unskilled persons (fuses mainly for household and similar
applications) -- Examples of standardized systems of fuses A to F
(English Translation)**

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Table of Contents

Preface

1 The total range of

Fuse system A --- D type fuse system

Appendix AA (informative) Special test for cable overload protection (for fuse system A)

Fuse system B --- tube fuse (NF tube fuse system)

Fuse system C --- tube fuse (BS tube fuse system)

Foreword

GB/T 13539 "low-voltage fuse" now includes the following six sections.

--- Part 1. Basic requirements;

--- Part 2. Supplementary requirements for fuses used by full time personnel (mainly for industrial fuses) Standard Fuse Systems Cases A to K;

--- Part 3. Supplementary requirements for fuses used by unskilled persons (fuses mainly for household and similar use) Standardization Fuse system examples A to F;

--- Part 4. Semiconductor equipment protection fuse with the additional requirements;

--- Part 5. Application guidelines for low voltage fuses;

--- Part 6. Supplementary requirements for fuses for the protection of solar photovoltaic systems.

This section GB/T 13539 Part 3.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This Part replaces GB/T 13539.3-2008 "Low-voltage fuses Part 3. Supplementary requirements for fuses used by unskilled personnel (Fuses mainly for household and similar use) Standard Fuse System Examples A to F".

This section compared with GB/T 13539.3-2008, the main changes are as follows.

--- Increased fuse system A in the fuse body rated current of 32A level, and the power consumption, time - current band and other requirements (See 5.5);

--- Increased fuse system A in the bus-mounted fuse base requirements (see 7.1.2);

--- Modify the fuse system load A mechanical strength test requirements, and an increase of Figure 126 "for D II, D III, D01, D02 and D03 contained in the test simulation test pieces

"(see 8.1.2.1, 2008 edition of 8.11.1.2);

--- Modify the fuse system C type I fuse rated voltage, changed from AC 240V to AC 230V, type II fuse the body's rated voltage is changed from AC 415V to AC 400V (see 5.2);

--- Modify the fuse system Type C fuse I rated breaking capacity, from 20kA to a minimum 16kA (see 5.7.2, 2008 edition 5.7.2);

--- Increasing the color system requirements for Type I fuse links in fuse system C (see Chapter 6);

--- Increased fuse system C type II fuse rated current 80A level (see Figure 301);

--- Remove the fuse system D and fuse system E;

--- Modify the fuse system F "at 0.01s" gG "before the arc I_{2t} value fuse" (see Table 604, the 2008 version of the table

604).

This section uses the translation method identical with IEC 60269-3:2013 "Low-voltage fuses Part 3. Fuses used by unskilled personnel (Mainly for household and similar fuses) Examples of standardized fuse systems A to F and Corrigendum 1 (2013) and Corrigendum 2 (2013).

The documents of our country that are consistent with the corresponding international documents that are normative references in this section are as follows.

--- GB/T 16935 (all parts) Insulation coordination of equipment in low voltage systems [IEC 60664 (all parts)];

--- GB/T 17464-2012 connecting device electrical copper wire thread-type and non-threaded clamping parts of the safety requirements apply General requirements and special requirements for clamps for conductors above 0.2 mm² up to 35 mm² (included) (IEC 60999-1:1999, IDT);

--- GB/T 20636-2006 electrical connector copper lead screw thread and non-threaded clamping parts of the safety requirements apply Particular requirements for conductors above 35 mm² up to 300 mm² (IEC 60999-2:2003, IDT).

This part made the following editorial changes according to the specific conditions of our country.

--- Remove the fuse system A Chapter 6 "Mark" in paragraph 2 of the "meet this standard products, awarded by the National Accreditation Laboratory National recognition. Nationally recognized markings may be marked on the corresponding parts of the fuse, the mark is permanent, should be the appropriate durability test Test "sentence, the sentence is redundant statements, and for GB/T 13539.2 unified, it deleted;

- The last sentence of 8.3.5 in fuse system A, "Table 114" in "Schedule 114" in "Schedule of fuses" Number is wrong, changed to "Table 101";

--- In order to facilitate the test, a new note is added after clause 8.3.5 "Discrimination of test results" in fuse system A. For GB/T 13539.1-2015 Table 17 does not require the wire cross-sectional area, according to the table next to the smaller rated current corresponding to the cut Area selection;

--- Table.201, Figure.201 and Figure 207 size "10 x 38" is wrong, changed to "10.3 x 38";

--- Figure.201 "fuse", the size of "10.3 x 38" tolerance " 38.0 ± 0.6 " is wrong, changed to " 38.0 ± 0.6 ";

--- Table 606 footnote a "Table B.1" is wrong, to "Table BB.1";

--- Delete the figure 601 figure editorial comments.

This part is proposed by China Electrical Equipment Industry Association.

This part of the National Fuses Standardization Technical Committee (SAC/TC340) centralized.

This section is drafted unit. Shanghai Electric Apparatus Research Institute, Zhejiang Chint Electric Co., Ltd., Shanghai Electric Ceramics Co., Ltd., in Thai Electrical Co., Ltd., Zhejiang West melt Electric Co., Ltd., Xi'an West fuse factory, Xi'an in the Electric Co., Ltd., Suzhou Electrical Research Institute Co., Ltd., Wenzhou Sanshi Electric Co., Ltd., Zhejiang Xinli Fuse Co., Ltd., Zhejiang Province, high and low voltage electrical product quality inspection Inspection Center, Zhejiang People Electric Co., Ltd.

1 Total range

The following non-skilled use of the fuse system should be consistent with all the provisions of GB/T 13539.1 and the corresponding fuse system requirements.

GB/T 13539 of this section has four systems, each involving a non-skilled use of standardized fuses specific Example.

- Fuse system AD type fuse system - Fuse Systems B. Tubular Fuses (NF Tubular Fuse Systems) - Fuse Systems C. Tubular Fuses (BS Tubular Fuse Systems) - Fuse system F. Tubular fuse for plug (BS plug fuse system)

Note 1: This section lists the standard type of fuse in line with the requirements of GB/T 13539.1-2015, as long as these requirements can meet, but also add other types.

Recommendations on the future structure of fuses are given in Annex CC.

Note 2: The following fuse systems refer to standardized systems regarding their safety.

Color coding does not apply to each fuse system. When a fuse system specifies color

coding, the color coding applies only to that fuse system.

1.2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version applies to this article Pieces. For undated references, the latest edition (including all amendments) applies to this document.

GB/T 10963.1-2005 Electrical accessories for household and similar places over-current protection circuit breaker Part 1 for the exchange Circuit Breakers (IEC 60898-1:2002, IDT)
 Low voltage fuses Part 1. Basic requirements (IEC 60269-1:2009, IDT) IEC 60068-2-31
 Environmental testing - Part 2-31. Tests - Tests Ec. Roughing impact (mainly for equipment samples) (En-vironmentaltesting-Part 2-31.Tests-TestEc.Roughhandlingshocks,
 primarilyforequipment-type specimens IEC 60664 (all parts) Low voltage system equipment within the alchemy (alparts) (Insulationcoordinationfor equipmentwithinlow-voltagesystems IEC 60999-1990, Connecting devices, safety requirements for threaded and unthreaded clamping devices for electrical copper conductors (Connecting devices-Electricalcopperconductors-Safetyrequirementsforscrew-typeandscrewless-typeclampingunits forelectricalcopperconductors) Fuse system A --- D type fuse system

1 General

In addition to the provisions of GB/T 13539.1-2015, add the following requirements.