NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 31465.6-2017

Road vehicles -- Fuse-links -- Part 6: Fuse-links with bolt-in contacts with high voltage

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Foreword

GB/T 31465 Road Vehicle - Fuse-Links includes the following 7 parts.

--- Part 1. Definition and General Test Requirements;

--- Part 2. User Guide;

--- Part 3. Fuse-Link with Blade Type;

--- Part 4. Fuse-Links with Female Contacts and Bolt-in Contacts;

--- Part 5. Strip Fuse-Links;

--- Part 6. Fuse-Links with Bolt-in Contact with High Voltage;

--- Part 7. Fuse-Links with Shortened Tabs.

This Part belongs to Part 6 of GB/T 31465.

This Part was drafted as per the rules specified in GB/T 1.1-2009.

This Part adopts the re-drafting method to modify and use ISO 8820-8.2012 Road Vehicles - Fuse-Links - Part 8. Fuse-Links with Bolt-in Contacts (Type H and J) with Rated Voltage of 450V.

The technical differences and causes between this Part and ISO 8820-8.2012 are as follows.

--- Three H1 of Type-H in Table 9 is the obvious error of the original text, which shall

be H1, H2, and H3.

--- For the Clause 2, this Part adjusts the technical differences; modify the international standards that have converted or is about to convert into our national standards into the national standards; delete the document ISO 8820-2 that has not been quoted in the text. The specific situation can refer to Clause 2 "Normative References".

--- Transfer the original text's 5.1 "test sequence shall be subject to the provisions of Table 2" to the 5.1.1; which conforms to the logic and standard preparation requirements more.

--- Delete original text's 5.1.2 "only use the wire with wall-thickness specified in ISO 6722", due to the actual situation, the thin-walled wire can also be used.

--- For the sake of standard use, the text quoted from GB/T 31465.1 are added the clause number.

--- Referring to JASO D622-2011, change 450V in the Clause 1 into 60V~450V, so that the description of applicable scope is more accurate.

--- The Table 2, Table 3 and Table 6 are increased two specification types of 80A and 250A as per JASO D622-2011 to facilitate the user selection. Thereof, 250A in Table 2 corresponding test wire specification JASO D622 is 100mm2, which is inconsistent with our national wire specification; the closest 100mm2 of 95mm2 in GB/T 25085 is determined to change into 95mm2, which can totally meet the requirements of test.

--- Delete the original text's 5.6 without specific requirements, the following clause number shall be modified correspondingly.

--- Transfer the NOTE in 5.7.1 (original text's 5.8.1) into the Table 1, so that facilitate the understanding and textual description.

--- For 5.9 (original text's 5.10) temperature impact test, the original text appears obvious errors (drawing number and test time); this Part directly quotes 5.4.2.3 in Clause 1, so that avoid repeated provisions and inconsistency.

--- The original text's Appendix A is not mentioned in this text; add NOTE to Clause

1 of this Part, so that the appendix echoes with the text.

This Part shall be under the jurisdiction of National Technical Committee for Standardization of Automotive (SAC/TC 114).

Drafting organizations of this Part. Chongqing Lifan Passenger Vehicle Co., Ltd., China Automotive Technology & Research Center, Zeeman Fuses Manufacturing (Xiamen) Co., Ltd., Henan Tianhai Electric Co., Ltd., Aerospace Hi-Tech Holding Group Co., Ltd., Zhengzhou Yueboo Automobile Electric Appliance Co., Ltd., Zhengzhou Yutong Bus Co., Ltd., Anhui Jianghuai Automobile Co., Ltd., Pacific Industries Co., Ltd., Shanghai Office of Littlefuse, and Great Wall Motor Baoding Peter Auto Parts Co., Ltd.

Chief drafting staffs of this Part. Chen Yukang, Xu Xiuxiaing, Chen Rengtai, Wang Rongxi, Wei Jingjun, Zhang Yongying, Lu Changjun, Wang Yimhai, Chi Yongjie, Ning Jing, and Wang Guohui.

Road Vehicles - Fuse-Links - Part 6.

Fuse-Links with Bolt-in Contacts with High Voltage

1 Scope

This Part of GB/T 31465 specifies the rated voltage, test and requirements, and dimension etc. of fuse-links with bolt-in contacts with high voltage for road vehicles.

This Part is applicable to the Type-H and Type-J fuse-links with rated voltage of DC60~DC450V, rated current of no greater than 400A, fuse capacity of 2000A.

NOTE. the corresponding relationship between product model and specification can refer to Appendix A.

2 Normative References

The following documents are essential to the application of this document. For the dated documents, only the versions with the dates indicated are applicable to this document; for the undated documents, only the latest version (including all the amendments) are applicable to this document.

GB/T 31465.1-2015 Road Vehicles - Fuse-Link - Part 1. Definitions and General Test Requirements (ISO 8820-1.2008, MOD)

GB/T 25085 Road Vehicles - 60V and 600V Single-Core Cables (GB/T 25085-2010, ISO 6722.2006, IDT)

3 Terms and Definitions

The terms and definitions stipulated in GB/T 31465.1-2015 are applicable to this document.

4 Mark and Label

The rated current, manufacturer name or trademark and rated voltage shall be marked permanently on the body of fuse-links.

5.1 General

In addition to do the test as per the GB/T 31465.1-2015, the following provisions of this Part shall also be conformed to.

a) The electrical test fixture shall be designed as per the Figure 4. Ensure the normal function of the test fixture, and the connection resistance shall not exceed 0.35m ohm.

b) If two or more samples are to be tested at the same time, the interval of two samples shall be ensured no less than 150mm.

5.1.1 Test sequence

The test sequence shall be subject to the provisions of Table 1.

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