NATIONAL STANDARD OF THE

PEOPLE'S REPUBLIC OF CHINA

GB/T 25085.3-2020

Road vehicles--Automotive cables - Part 3: Dimensions and requirements for 30 V a. c. or 60 V d. c. single-core copper conductor cables

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Preface

GB/T 25085 "Road Vehicle Automotive Cable" is expected to be divided into 10 parts.

---Part 1.Vocabulary and design guidelines;

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---Part 4.AC 30V or DC 60V single-core aluminum conductor cable size and requirements;

---Part 5.Dimensions and dimensions of AC 600V or DC 900V, AC 1000V or DC 1500V single-core copper conductor cables

Claim;

---Part 6.Dimensions and dimensions of AC 600V or DC 900V, AC 1000V or DC 1500V single-core aluminum conductor cables

Claim;

---Part 7.Dimensions and dimensions of shielded and unshielded multi-core and single-core copper conductor cables with AC 30V or DC 60V round sheath

Claim;

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Claim;

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The size and requirements of multi-core and single-core copper conductor cables;

---Part 10.Shielded and unshielded round sheaths of AC 600V or DC 900V, AC 1000V or DC 1500V

The size and requirements of multi-core and single-core aluminum conductor cables.

This part is Part 3 of GB/T 25085.

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

This part replaces GB/T 25085-2010 "Road vehicles 60V and 600V single-core wires", and is similar to GB/T 25085-2010

The main technical changes are as follows.

---Modified normative reference documents (see Chapter 2, Chapter 2 of the.2010 edition);

---The cross-sectional area test content for dimensional inspection has been added (see 5.2.4);

---Added the cable outer diameter test content in the manufacturing process of dimensional inspection (see 5.2.5);

---Added the temperature coefficient test content in the electrical performance test (see 5.3.2);

---Added the content of withstand voltage test after environmental test in the electrical

performance test (see 5.3.4);

---Added the test content of the finished cable breaking force in the mechanical performance test (see 5.4.3);

---Added the contents of the cyclic bending test conditions in the mechanical performance test (see 5.4.4);

---Added the flexibility test content in the mechanical performance test (see 5.4.5);

---The content of stress crack resistance test in environmental test has been added (see 5.5.13).

The translation method used in this part is equivalent to the adoption of ISO 19642-3.2019 ``Road vehicles and automotive cables Part 3.AC 30V or direct

Dimensions and requirements for 60V single-core copper conductor cables.

This section has made the following editorial changes.

---Moved the warning of ISO 19642-3.2019 to 4.2 of this part;

--- Use "sqrt" instead of "x" (see Table 2);

--- Use "?" instead of "" (see Table 2, 5.5.3, 5.5.4);

--- Use "-" instead of "x" (see Table 3, Table 5, Table 7, Table A.1);

--- A note has been added, giving reference information about relevant domestic standards (see note 2 in Table 1);

---Added informative appendix NA "Product Model List".

---Revised references.

This part was proposed by the Ministry of Industry and Information Technology of the People's Republic of China.

This part is under the jurisdiction of the National Automotive Standardization Technical Committee (SAC/TC114).

Drafting organizations of this section. Shanghai Fuerxin Wire & Cable Co., Ltd., Changsha Automobile Electric Research Institute, FAW Jiefang Automobile Co., Ltd., Great Wall Motor

Automobile Co., Ltd., Geely Automobile Research Institute (Ningbo) Co., Ltd., SAIC Volkswagen Co., Ltd., Changchun Bulb & Wire Co., Ltd.,

Mande Electronic Appliance Co., Ltd. Baoding Xushui Electric System Branch, Sichuan Fanhua Electric Co., Ltd., Henan Tianhai Electric Co., Ltd.

the company.

1 Scope

This part of GB/T 25085 specifies that the nominal system voltage for general-purpose road vehicles shall not exceed AC 30V or DC 60V.

The size and requirements of core copper conductor cables.

This section applies to single-core cables for road vehicles and also applies to cores in multi-core cables.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

ISO 19642-1 Road Vehicles Automotive Cables Part 1.Vocabulary and Design Guidelines (Roadvehicles-Automotiveca-

bles-Part 1.Vocabularyanddesignguidelines)

ISO 19642-2.2019 Road vehicles automotive cables Part 2.Test methods (Roadvehicles-Automotiveca-

bles-Part 2.Testmethods)

EN13602 Copper and copper alloys are used to make drawn round copper wires (Copperandcopperaloys-Drawn,

roundcopperwireforthemanufactureofelectricalconductors)

ASTMB1 Hard Drawn Copper Wire Standard Specification (Standard Specification for Hard Drawn Copper Wire)

ASTMB3 Standard Specification for Soft or Annealed Copper Wire (Standard Specification for Softor Annealed Copper Wire)

ASTMB33 Standard Specification for Tin Coated Softor

AnnealedCopperWireforElectricalPurposes)

ASTMB298 Standard Specification for Silver Coated Soft or Annealed Copper Wire (Standard Specification for Silver Coated SoftorAn-

nealedCopperWire)

ASTMB355 Nickel-plated soft or annealed copper wire standard specification (StandardSpecificationforNickelCoatedSoftorAn-