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

GB/T 20041.1-2015

Replacing GB/T 20041.1-2005

**Conduit systems for cable management -- Part 1: General
requirements**

电缆管理用导管系统 第1部分：通用要求

(English Translation)

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Foreword

GB/T 20041 "Conduit systems for cable management" has or plans to release the following sections.

- Part 1. General requirements;
- Part 2. Special requirements.
- Part 21. Particular requirements for rigid conduit systems;
- Part 22. Particular requirements for flexible conduit systems;
- Part 23. Particular requirements for flexible conduit systems;
- Part 24. Particular requirements for conduit systems buried underground;
- Part 25. Particular requirements for conduit fixing device.

This part of GB/T 20041 Part 1.

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

This Part replaces GB/T 20041.1-2005 "Electrical Installation Conduit systems - Part 1. General requirements." this section compared with the GB/T 20041.1-2005, the main changes are as follows.

- Modify the IEC standard name, the standard name "Electrical installation duct systems - Part 1. General requirements" by the adjusted "Conduit systems for cable management - Part 1. General requirements";
- 7.1.1 increased since the resumption of the catheter labeling requirements;
- 7.3 increases the flame spread conduit marking requirements, and symbols;
- 7.6 Note 1 deleted Kauri-butanol value and modify the initial boiling point and density;
- 10.3.2 revised test methods;
- 10.7.1 amend paragraph 2 of the length of the conduit between parts;
- 11.3.1.2 paragraph 1, the test voltage increases with "increased from 1500V to 3000V";
- 13.1.3 Information about the spread of flame catheter injection;
- Increased by reference.

This section uses redrafted law revision using IEC 61386-1:2008 (2nd edition) "Conduit systems for cable management - Part 1. pass with the requirements "and Rev. 1 (2014) document.

This part of IEC 61386-1:2008 and its technical differences for the following reasons.

--- On normative references, this part has been adjusted technical differences, in order to adapt our technical conditions, the adjusted situation Focus is reflected in the status of Chapter 2, "Normative references", the specific adjustments are as follows.

- with GB 4208 housing protection (IP Code) (GB 4208-2008, IEC 60529:2001, IDT) instead of IEC 60529. 1989 A1.1999;
- with the GB/T 5169.11-2006 Fire hazard testing for electric and electronic products - Part 11. Glowing/hot wire based test Glow-wire flammability test method finished (IEC 60695-2-11:2000, IDT) instead of IEC 60695-2-11:2000;
- with the GB/T 5169.14-2007 Fire hazard testing for electric and electronic products - Part 14. Test flames - 1kW Standard He said pre-mixed flame - Apparatus, confirmatory test arrangement and guidance (IEC 60695-11-2:2003, IDT) instead of the IEC 60695-11-2:2003;
- with the GB/T 5465.2-2008 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417DB. 2007, IDT) instead of IEC 60417;
- with the GB/T 17194 electrical conduit conduits for electrical installations and the outer diameter of the catheter and threaded fittings (GB/T 17194-1997, eqv IEC 60423:1993) instead of the IEC 60423:2007.

This part made the following editorial changes.

This section regulation --- According to GB/T 1.1-2009 relevant provisions in Chapter 1, "scope" in the first sentence amended to "GB/T 20041 of Set the cable management classification, marking, and file size, structure and mechanical properties of the duct system (including conduit and conduit fittings), and Electrical properties, thermal properties and other technical requirements. ";

--- Remove the IEC 61386-1:2008 6.5.2 and 13.1.4 for instructions on Australia and Austria.

This part is proposed by the China Electrical Equipment Industrial Association.

This part of the National Electric annex Standardization Technical Committee (SAC/TC67) centralized.

This section drafted by. China Electric Apparatus Research Institute Co., Ltd., Guangzhou Panyu Tianhong Industrial Development Co., Ltd., Guangdong through a tube Technology Co., Ltd., Guangdong Walsall Steel Pipe Industrial Co., TCL- Legrand International Electrical (Huizhou) Co., Ltd., Guangdong Liansu Technology Real Industry Co., Yuehua Group Holdings Ltd., Weikai Detection Technology Co., Ltd. Flying Eagle Electric Group Co., Ltd., Shenzhen Hua ETS ENGINEERING Electric Industry Co., Ltd.

1 Scope

This section GB/T 20041 specifies the cable management duct system (including conduit and conduit fittings) classification, marking and documentation, ruler Inch, structure, mechanical properties, electrical properties, thermal properties and other technical requirements.

This section applies to metallic, non-metallic and composite conduit systems, including threaded conduit entry termination of these systems and non-threaded. This these catheter system is to protect and manage 1000V AC and/or DC 1500V and below the electrical device or communication system or the absolute Edge wires and/or cables.

This section does not apply to GB 17466 within the scope of the housing and the junction box.

Note 1: Certain conduit systems may also be applicable for use in hazardous environments. If used in hazardous environments, the equipment installed in this environment should have additional Claim.

Note 2: The grounding wire can be insulated, it can be uninsulated.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 4208 housing protection (IP Code) (GB 4208-2008, IEC 60529:2001, IDT) GB/T 5169.11-2006 Fire hazard testing for electric and electronic products - Part 11. Glowing/hot-wire based test methods to Glow-wire flammability test method for products (IEC 60695-2-11:2000, IDT) GB/T 5169.14-2007 Fire hazard testing for electric and electronic products - Part 14. Test flames - 1kW nominal pre - mixed Fire equipment, confirmatory test arrangement and guidance (IEC 60695-11-2:2003, IDT) GB/T 5465.2-2008 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417DB.2007, IDT) GB/T 17194 electrical conduit conduits for electrical installations and the outer diameter of the catheter and threaded fittings (GB/T 17194-1997, eqv IEC 60423:1993)

3 Terms and Definitions

The following terms and definitions apply to this document.

Catheter system conduitsystem the cable management system, composed by the conduit and conduit fittings for electrical installations and to the communication device in the insulated wires and/or cables provided Protection and configuration, the wires and cables to