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**Guideline of environmentally conscious design for electrical
accessories**

(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 replaces GB/T 24976.1-2010 "Guidelines for Environmental Design of Electrical Accessories Part 1: General Principles" and GB/T 24976.2-2010 "Guidelines for Environmental Design of Electrical Accessories Part 2: Conduit Systems and Trough Systems for Cable Management", GB/T 24976.3-2010 "Electrical Accessories Environmental Design Guidelines Part 3: Cable Reels for Household and Similar Purposes", GB/T 24976.4-2010 "Environmental Design Guidelines for Electrical Appliances Part 3 Part 4: Industrial plugs, sockets and couplers", GB/T 24976.5-2010 "Guidelines for the environmental design of electrical accessories Part 5: Household and similar Purpose Plugs and Sockets", GB/T 24976.6-2010 "Environmental Design Guidelines for Electrical Accessories Part 6: Coupling of household and similar appliances ", GB/T 24976.7-2010 "Guidelines for Environmental Design of Electrical Accessories Part 7: Connecting Devices for Low-Voltage Electrical Appliances for Household and Similar Purposes" and GB/T 24976.8-2010 "Guidelines for Environmental Design of Electrical Accessories Part 8: Switches for Household and Similar Fixed Electrical Installations", with GB/T 24976.1-2010, GB/T 24976.2-2010, GB/T 24976.3-2010, GB/T 24976.4-2010, GB/T 24976.5-Compared with 2010, GB/T 24976.6-2010, GB/T 24976.7-2010, and GB/T 24976.8-2010, except for structural adjustments and editorial changes in addition, the main technical changes are as follows.

- Changed the scope of application (see Chapter 1, Chapter 1 of GB/T 24976.1-2010);
- Updated terms and definitions (see Chapter 3, Chapter 3 of GB/T 24976.1-2010);
- Deleted "Introducing environmental factors into the overall consideration of product design and development" (see Chapter 4 of GB/T 24976.1-2010);
- Added the principles of environmentally conscious design (see Chapter 4);
- Added the content of environmentally conscious design (see Chapter 5);
- Change "Introducing environmental factors into the basic principles of product design and development" to "Introducing elements of environmentally conscious design into design and development" Development guidance" (see Chapter 6, Chapter 5 of GB/T 24976.1-2010);
- Added guidance on review and information sharing of environmentally aware design (see 6.1 and 6.2);
- Changed the guidance on environmentally conscious design and replaced GB/T 24976.2-2010, GB/T 24976.3-2010, GB/T 24976.4-2010, GB/T 24976.5-2010, GB/T 24976.6-2010, GB/T 24976.7-2010, GB/T 24976.8-2010 regulations the special considerations for certain electrical accessories products are summarized in this document (see 6.3, GB/T 24976.1-2010, GB/T 24976.2-2010, GB/T 24976.3-2010, GB/T 24976.4-2010, GB/T 24976.5-2010, GB/T 24976.6-2010, Chapter 5 of GB/T 24976.7-2010 and GB/T 24976.8-2010);
- Added guidance on review and information sharing of environmentally aware design (see 6.4 and 6.5).

Please note that some content in this document may be subject to patents. The publisher of this document assumes no responsibility for identifying patents.

1 Scope

This document gives the principles and content of environmentally conscious design of electrical accessories products, and provides guidance on how to introduce environmentally conscious design elements into the design.

and development guidance.

This document applies to the environmentally conscious design of the following categories of electrical accessory products. Other categories of electrical accessory products can be used as a reference.

- Electrical conduit and trough systems for cable management;
- Cable reels for household and similar purposes;
- Industrial plugs, sockets and couplers;

- Household and similar plugs and sockets;
- Appliance couplers for household and similar purposes;
- Connecting devices for low-voltage electrical appliances for household and similar purposes;
- Switches for fixed electrical installations for household and similar purposes.

2 Normative reference documents

The contents of the following documents constitute essential provisions of this document through normative references in the text. Among them, the dated quotations for undated referenced documents, only the version corresponding to that date applies to this document; for undated referenced documents, the latest version (including all amendments) applies to this document.

GB/T 1002 Types, basic parameters and dimensions of single-phase plugs and sockets for household and similar purposes GB/T 1003 Types, basic parameters and dimensions of three-phase plugs and sockets for household and similar purposes GB/T 2099 (all parts) Plugs and sockets for household and similar purposes GB/T 2900.70-2008 Electrical terminology and electrical accessories GB 4943.1 Audio, video, information technology and communication technology equipment Part 1: Safety requirements GB/T 13140 (all parts) Connecting devices for low-voltage circuits for household and similar purposes GB/T 16316 Technical requirements for conduit fittings for electrical installations Part 1: General requirements GB/T 16915 (all parts) Switches for fixed electrical installations for household and similar purposes GB/T 17193 Super heavy load rigid steel conduit for electrical installation GB/T 17465 (all parts) Couplers for household and similar appliances GB/T 18455 packaging recycling mark GB/T 19001-2016 Quality Management System Requirements GB/T 19215 (all parts) Cable duct systems for electrical installations GB/T 19637 Electrical accessories Cable reels for household and similar purposes GB/T 20041 (all parts) Conduit systems for cable management GB/T 23686-2022 Environmentally conscious design principles, requirements and guidance GB/T 24001-2016 Environmental management system requirements and usage guidelines GB/T 26572 Limit requirements for restricted substances in electronic and electrical products GB/T 38280 Specification for conduit fittings and accessories for extra-heavy duty rigid electrical conduit cable installations in cable management systems