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

GB/T 34662-2017

**Electrotechnical equipment -- Temperatures of touchable hot
surfaces**

电气设备 可接触热表面的温度指南

(English Translation)

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Foreword

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

This standard uses the translation method is equivalent to using IEC Guide1172010

"Electrical Equipment Contact Hot Surface Temperature Guide." this standard is proposed and managed by the National Electrical Safety Standardization Technical Committee (SAC/TC25).

This standard was drafted. Suzhou Electric Apparatus Research Institute Co., Ltd., Machinery Industry Beijing Institute of Electrical Technology and Economy, Shenzhen Branch-chen Consulting Co., Ltd., China Quality Certification Center Shanghai Branch, Guangzhou Baiyun Electric Equipment Co., Ltd., China Electronics Standard Standardization Institute, Shenzhen Institute of Standards and Technology.

1 Scope

This standard provides guidance on the risk assessment of burns when exposed to the hot surfaces of electrical equipment. Provides the surface temperature limit, people pick the maximum exposure time to the risk of burns without touching the surface. Describe the contact time and maximum temperature of different contact surfaces of different materials Contrast curve.

When setting surface temperature limits in product standards, the following factors that affect temperature limits should be considered.

- the possibility of contact with the thermal element;
- Thermal element area size and heat capacity;
- Expertise, knowledge and judgment on the possibility of temperature rise during operation or maintenance of the product;
- Whether there is a suitable warning or warning;
- other similar factors (see 4.3).

Acceptable temperature limits (which may be higher) should be specified to ensure that the surface of the product is in safe contact with this product. If the product standard Without considering the accessible temperature, manufacturers may use the temperature limits specified in this standard for risk assessment of their products.

The following types of surfaces do not apply to this standard.

- Thermal functional surface;
- adjacent surface
- joystick, control knob (including the keypad, keyboard, etc.);
- Impossible to touch the surface.

This standard does not make specific provisions for protective measures. Preventive measures are prescribed by the manufacturer and product standards based on the

intended use of the product. If any Necessary, should be delivered with electrical equipment.

Note: This standard does not provide specific protective measures, only cited examples of protective measures (see Chapter 5). One of the protective measures is to control the surface temperature to burn Below threshold. In order to do this, the product standard specifies a surface temperature limit not higher than the burn threshold. At the same time require product manufacturers to take Technical solutions meet the specified temperature limits.

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.

ISO 13732-1-2006 Thermal environmental ergonomic evaluation of human exposure to the surface reaction method - Part 1. Hot surface

(Ergonomics of the thermal environment- Methods for the assessment of human responses to contact with surfaces- Part 1: Hot surfaces)

3 Terms and definitions

The following terms and definitions apply to this document.

Adjacent surface

Surface adjacent to the thermal functional surface.