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

GB/T 17466.1-2019

**Boxes and enclosures for electrical accessories for household
and similar fixed electrical installations -- Part 1: General
requirements**

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13.3 Added the calculation formula and description of the internal protective volume;

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Foreword

GB/T 17466 `` Electrical accessories installation boxes and enclosures for household and similar fixed electrical installations " is divided into the following sections.

--- Part 1. General requirements;

--- Part 2. Special requirements.

* Part 21. Special requirements for mounting boxes and enclosures for suspension devices;

* Part 22. Special requirements for connection boxes and enclosures;

* Part 23. Special requirements for ground-mounted boxes and enclosures;

* Part 24. Particular requirements for housings for residential protection devices and other power-consuming appliances.

This part is the first part of GB/T 17466.

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

This section replaces GB/T 17466.1-2008 "Household and similar uses of fixed electrical installations, electrical accessories, installation boxes and enclosures, first

Part. General Requirements, compared with GB/T 17466.1-2008, the main technical changes are as follows.

--- In Chapter 1, the temperature range was changed from "usually not exceeding 35 ° C, occasionally reaching 40 ° C ambient temperature" to "usually not exceeding

When the temperature is over 40 degrees C, but the average temperature does not exceed 35 degrees C in 24 hours, the lower limit temperature of the ambient air is

-5 degrees C ";

--- Chapter 2 deleted GB/T 5169.10-2006 and GB/T 19215 (all parts) and added ISO /IEC Guide 51;

--- Chapter 3, modified the definition of the term 3.10 "cable gland", added the term and

definition of 3.20 "clogging head";

--- Chapter 5, the ambient temperature of the test was changed from "(20 +/- 5) degrees C" to "15 degrees C ~ 35 degrees C";

--- Chapter 7, revised the classification of mounting boxes and casings, adding "natural or synthetic rubber or a mixture of both" to the material properties,

Removed the maximum temperature requirement during the installation of 7.5 and added the 7.8 "

Classification of "protection level";

--- Chapter 8, requires the minimum internal volume of the corresponding product to be marked on the product;

--- Chapter 10, added test methods and Figure 2 without entering the interior;

--- Chapter 11, increase the installation requirements of protective devices for grounding devices or similar grounding devices; added 11.3 and 11.4;

--- Chapter 12, added 12.1 general requirements, and modified the serial numbers of other articles; added relevant requirements for plugging heads and increased knock

Requirements for the plane around the drop hole; added test methods for fixing the mounting box and electrical accessories, and added Figure 12, Figure 13, and Figure

14; Added the requirement of 12.13.6 installation box to the finished structure;

--- Chapter 13, 13.1 added test instructions for plugging heads; 13.2 added test instructions for mounting boxes classified according to 7.8;

13.3 Added the calculation formula and description of the internal protective volume;

--- Chapter 14, added the test description of 7.1.4 classification shell;

--- Chapter 15, added 15.1 general requirements, and modified the serial number of other articles; revised the drop height of the impact test in Table 8;

Added 15.5 test requirements for 7.1.4 classified enclosures;

--- Chapter 16, add 16.3.2 test requirements for insulating materials necessary to keep grounded circuit components in normal position;

--- Chapter 18, added a description of "maintain current-carrying components or grounded current components in a normal position".

This section uses the redrafting method to modify the use of IEC 60670-1..2015, Household and similar fixed electrical installations

Boxing and enclosures Part 1. General requirements.

The technical differences between this part and IEC 60670-1..2015 and their causes are as follows.

--- Regarding the normative reference documents, this section has made adjustments with technical differences to adapt to China's technical conditions and the situation of adjustment.

The situation is reflected in Chapter 2 "Regulatory Reference Documents", and the specific adjustments are as follows.

- * Replaced IEC 60112..2003 with GB/T 4207 equivalent to the international standard;
- * Replaced IEC 60423..2007 with GB/T 17194 equivalent to the international standard;
- * Replaced IEC 60529. 1989 with GB/T 4208-2017 equivalent to the international standard;
- * Replaced IEC 60695-2-11..2000 with GB/T 5169.11-2017 equivalent to the international standard;
- * Replaced IEC 60695-10-2..2003 with GB/T 5169.21 equivalent to the international standard;
- * Replaced IEC 60981..2004 with GB/T 17193 equivalent to the international standard;
- * Replaced IEC 61140..2001 with GB/T 17045 equivalent to the international standard.

--- The temperature difference of the damp heat test, IEC 60670-1..2015 14.1 stipulates. "The temperature t of the air where the sample is placed shall be maintained at

Between 20 degrees C ~ 30 degrees C, the deviation is within ± 1 degrees C. Before putting the sample in the humidity chamber, make the sample reach t degrees C ~ $(t \pm 4)$ degrees C

"Considering that part of China has a humid tropical climate, and all electrical and electronic products in China use $(40 \pm 2)^\circ\text{C}$ for humid and hot tests

This section stipulates. "The temperature t of the air where the sample is placed shall be maintained at $(40 \pm 2)^\circ\text{C}$. Place the sample in a humid chamber.

Before, let the temperature of the sample reach this temperature. "

The following editorial changes have been made in this section.

--- According to the relevant provisions of GB/T 1.1, the "Scope" in Chapter 1 was supplemented by "this part of GB/T 17466 specifies household and class

Marks for installation boxes and enclosures of electrical accessories for similar fixed electrical installations, protection against electric shock, structural requirements, mechanical properties, electrical

Technical requirements such as gas performance ";

--- Removed some comments from IEC 60670-1..2015 that are applicable to other countries, such as Table 1, 8.1, 12.6, 12.8, 12.10, 13.2

Note.

This section is proposed by China Electrical Equipment Industry Association.

This section is under the jurisdiction of the National Electrical Accessories Standardization Technical Committee (SAC/TC67).

This section was drafted by. China Electric Appliance Research Institute Co., Ltd., Ningbo Bull Bull Electric Co., Ltd., TCL-Legrand International

Engineering (Huizhou) Co., Ltd., Weikai Testing Technology Co., Ltd., Zhejiang Zhengtai Building Electric Co., Ltd., Hangzhou Hongyan Electric Co., Ltd., Feidiao

Electrical Appliance Group Co., Ltd., Honeywell Langneng Electrical System Technology (Guangdong) Co., Ltd., Siemens (China) Co., Ltd. Shanghai Branch,

Simon Electric (China) Co., Ltd., Tianji Electric (Shenzhen) Co., Ltd., Guangdong Honghelang Electric Co., Ltd., Zhejiang Zhongxun Electronics Co., Ltd.

Division, China Household Electrical Appliances Research Institute, Yuehua Holdings Group Co., Ltd., Zhejiang Delixi International Electric Co., Ltd., Zhejiang Fangyuan Inspection Group Co., Ltd.

Co., Ltd., Shenzhen Huayitong Industrial Electric Co., Ltd.

1 Scope

This part of GB/T 17466 specifies the marks for the installation boxes and enclosures of electrical accessories for household and similar fixed electrical installations,

Technical requirements such as protection against electric shock, structural requirements, mechanical properties, and electrical properties.

This section applies to household and similar fixed-use appliances with a rated voltage not exceeding 1000V a.c. And 1500V d.c. For indoor or outdoor use.

An electrical accessory installation box, housing, or housing component of a stationary electrical device (hereinafter collectively referred to as "installation box" and "enclosure").

Mounting boxes and enclosures complying with this section are suitable for use at ambient temperatures that normally do not exceed 40 ° C, but do not exceed 35 ° C on average within 24 hours.

The lower limit temperature of the ambient air is -5 degrees C.