



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

GB/T 23107-2020

**Household and similar electric blankets - Methods for
measuring performance**

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Foreword

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

This Standard serves as a replacement of GB/T 23107-2008 Household and Similar Electrical Blankets - Methods for Measuring Performance. In comparison with GB/T 23107-2008, the main technical changes are as follows:

---The scope "household and similar electric blankets, wraps and duvets" is added (see Chapter 1);

---Normative references "GB 4706.8 Household and Similar Electrical Appliances - Safety - Particular Requirements for Blankets, Pads and Similar Flexible Heating Appliances" and "GB/T 35758-2017 Household Electrical Appliances - Measurement of Standby Power" are added (see Chapter 2);

---The terms "wrap", "duvet", "blanket with non-uniform temperature", "blanket with a high temperature zone" and "blanket with ambient temperature compensation"

are added; the term "multi-temperature electric blanket" is deleted (see Chapter 3);

---The classification by "heated area", "adjustment mode" and "mode of fixing underblanket on the mattress" is added (see 4.3, 4.6 and 4.9);

---The method of dimensional measurement is modified (see 7.1.1 and 7.1.2; 7.1.1 and 7.1.2 of Version 2008);

---The requirements for "textile composition" are added (see 7.3);

---"Heating time" is modified into "heating time and energy consumption" (see Chapter 9; Chapter 9 of Version 2008);

---The requirements for "controller settings" are added (see Chapter 12).

This Standard uses the re-drafting method in the modification and adoption of IEC 60299:2014 Household Electric Blankets - Methods for Measuring Performance.

In comparison with IEC 60299:2014, the technical differences and the causes for these differences are as follows:

---In terms of Normative References, this Standard adjusts the technical differences to adapt to the technical conditions of China. The adjustment is intensively reflected in Chapter 2 "Normative References". See the specific adjustments below:

? GB 4706.8, which equivalently adopts the international standard, is used to replace IEC 60335-2-17:2012 (see Chapter 6);

Household and Similar Electric Blankets - Methods for Measuring Performance

1 Scope

This Standard specifies the main performance characteristics and test methods of household and similar electric blankets, wraps and duvets.

This Standard is applicable to household and similar electric blankets, wraps and duvets.

This Standard does not specify performance characteristic value.

NOTE: this Standard does not involve the safety requirements covered by GB 4706.8.

2 Normative References

The following documents are indispensable to the application of this document. In terms of references with a specified date, only versions with a specified date are applicable to this document. In terms of references without a specified date, the latest version (including all the modifications) is applicable to this document.

GB 4706.8 Household and Similar Electrical Appliances - Safety - Particular Requirements for Blankets, Pads and Similar Flexible Heating Appliances (GB 4706.8-2008, IEC 60335-2-17:2006 (Ed 2.1), IDT)

GB/T 10807 Flexible Cellular Polymeric Materials - Determination of Hardness (indentation technique) (GB/T 10807-2006, ISO 2439:1997, IDT)

GB/T 35758-2017 Household Electrical Appliances - Measurement of Standby Power (IEC 62301:2011, IDT)

3 Terms and Definitions

The following terms and definitions are applicable to this document.

3.1 Blanket

Blanket refers to a basically flat and soft electric heating appliance intended to form part of the bedding for bed heating.

3.2 Flexible Part

Flexible part refers to the various layers of materials that contain heating element, temperature controller and all other current-carrying components to form the permanent outer cover of the appliance.

NOTE: this flexible part may be contained in a detachable outer cover.

3.3 Underblanket

Underblanket refers to an electric blanket used to spread under the person lying on the bed.

3.4 Overblanket

Overblanket refers to an electric blanket used to cover the person lying on the bed.

3.5 Wrap

Wrap refers to an electric blanket (with a flexible part) that is put on the human body to keep warm.

3.6 Duvet

Duvet refers to a type of blanket-shaped overblanket that can be put on the person lying on the bed without adding additional bedding; the heating element can provide supplementary heat.

3.7 Blanket with Uniform Temperature

Blanket with uniform temperature refers to an electric blanket with a uniform temperature in the entire heated area.

3.8 Blanket with Non-uniform Temperature

Blanket with non-uniform temperature refers to an electric blanket whose temperature gradually increases from the upper end to the lower end of the heated area.

3.9 Blanket with a High Temperature Zone

Blanket with a high temperature zone refers to an electric blanket which has a uniform temperature at the main part and usually a relatively high temperature zone at the lower end of the heated area.

3.10 Blanket with Ambient Temperature Compensation

Blanket with ambient temperature compensation refers to an electric blanket whose input power significantly changes in the opposite direction with the change of the ambient temperature.

3.11 Heated Area

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