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

GB/T 38123-2019

**Guide on inclusion of energy efficiency aspects into
electrotechnical product publications**

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Standardization Administration**

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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 redrafting method to modify the adoption of IEC Guide 118.2017 "Introduction of Energy Efficiency Factors into Electrical Publications".

The technical differences between this standard and IEC Guide 118.2017 and their reasons are as follows.

--- Revised the statement of the "Scope" chapter to comply with the requirements of the preparation of Chinese standards;

--- Removed the "IEC Guide 119" in Chapter 2 "Regulatory References", which is not quoted in the text;

--- Deleted the first sentence of paragraph 3, paragraph 7, the last and last paragraphs of paragraph 9, and the last paragraph of 5.4.

This standard has made the following editorial changes.

--- Change the standard name to "Guidelines for Introducing Energy Efficiency Factors in Electrical Product Standards";

--- Change the "IEC Publications" in IEC Guide 118.2017 to "Electrical Product Standards", "Technical Committees" or "Technical Committees"

Will be changed to "Standard Writer";

--- Adjust the order of the appendix in the order mentioned in the text;

--- Adjusted the order of the references.

This standard is proposed and managed by the China Electrical Equipment Industry Association.

This standard was drafted. Beijing Institute of Electrical and Mechanical Technology,

Machinery Industry, Shenzhen Science and Technology Standards Service Center, Anhui Tailong Electric

Company, Shanghai Electric Apparatus Research Institute, China Electrical Equipment Industry Association, Shanghai Motor System Energy Conservation Engineering Technology Research Center Co., Ltd., Tianjin

Electrical Science Research Institute Co., Ltd., Harbin Electric Instrument Research Institute Co., Ltd., China Electronics Technology Standardization Research Institute, Shenzhen Standard

Technical Research Institute.

Introduction

Energy efficiency plays a key role in addressing the challenges of supporting energy policies while protecting the environment.

There are a lot of cost-effective energy-efficient technologies and solutions, but the obstacles hinder the application of these technologies and hinder them.

Realize the energy efficiency potential of these technologies.

Standardization can play an important role in helping to overcome these barriers and to spread and promote energy efficiency technologies, solutions and services. This standard

The aim is to provide standard writers with recommendations for considering and introducing energy efficiency in electrical product standards.

This standard is intended to provide recommendations for standards writers to consider energy efficiency and introduce energy efficiency into electrical product standards.

The purpose of this standard is to.

- Describe the contribution of electrical product standards to energy efficiency;
- Describe the concept of energy efficiency factors;
- Provide a breakdown of energy efficiency factors and a range of energy efficiency factors considered in the technical committee.

Electrical product standards may only cover energy efficiency or include only energy efficiency provisions; in any case, standard writers are encouraged.

- Consider energy efficiency in its standardization work;
- Identify energy efficiency factors related to standardization;
- Use a structured approach to energy efficiency;
- Use the system approach to handle energy efficiency.

In this standard, the term "product" includes "process", "service", and a combination of the two, also commonly referred to as "system."

Guide to introducing energy efficiency factors in electrical product standards

1 Scope

This standard gives guidelines for standard writers to consider energy efficiency factors in the development of electrical product standards.

This standard applies to the following aspects of the standardization of electrical products.

- Help coordinate energy efficiency methods;
- Elevated electrical product standards can negatively impact energy performance on the product itself (alone considered) and overall application (after loading)
- And the perception of positive impact;
- Help the technical committee identify energy efficiency factors that contribute to the product itself and the overall application of energy efficiency;
- Promote a systematic approach to energy efficiency in standardization work;
- Promote the use of systematic methods for energy efficiency factors in standardization work.

2 Normative references

The following documents are indispensable for the application of this document. For dated references, only dated versions apply to this article.

Pieces. For undated references, the latest edition (including all amendments) applies to this document.

ISO /IEC 13273-1.2015 General Terms of Energy and Renewable Energy - Part 1. Energy efficiency (Energy efficiency)

andrenewableenergysources-Commoninternationalterminology-Part 1.Energyefficiency)

3 Terms and definitions

The following terms and definitions defined by ISO /IEC 13273-1.2015 apply to this document. For ease of use, the following is repeated

Certain terms and definitions in ISO /IEC 13273-1.2015.

Note. The URLs for ISO and IEC terms are.

3.1

Energy efficiency

The ratio or other quantitative relationship between the performance, service, goods, or energy output and the energy input.

Examples. conversion efficiency; energy required/energy used; output/input; energy theoretically used for operation/energy actually used for operation.

Note. Both input and output include both qualitative and quantitative specifications and are measurable.

[ISO /IEC 13273-1.2015, definition 3.4.1]

3.2

Energy performance

Measurable results related to energy efficiency, energy use, and energy consumption.

[ISO /IEC 13273-1.2015, definition 3.3.1]

3.3

Energy efficiency enhance energyefficiencyimprovement

Increased energy efficiency due to technological changes, design changes, behavioral changes, or economic changes.

[ISO /IEC 13273-1.2015, definition 3.4.3]