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

GB/T 4798.4-2023

**Classification of environmental conditions - Classification of
groups of environmental parameters and their severities - Part
4: Stationary use at non-weatherprotected locations**

环境条件分类 环境参数组分类及其严酷程度分级 第4部分：无气候防护场所固定
使用

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Foreword

This document was issued on 23 May 2023 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 December 2023.

It is a GB/T standard: recommended rather than compulsory, but it is the text a Chinese reviewer applies when assessing a submission.

It is classified under ICS 19.040, Chinese classification A21.

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for Standardization Work Part 1. Structure and Drafting Rules for Standardization Documents" drafting.

This document is part 4 of GB/T 4798. GB/T 4798 has issued the following parts.

---GB/T 4798.1-2019 Classification of environmental conditions Classification of environmental parameter groups and their severity classification Part 1. Storage;

---GB/T 4798.2-2021 Classification of environmental conditions Classification of environmental parameter groups and their severity classification Part 2. Transportation and loading and unloading;

---GB/T 4798.3-2023 Classification of environmental conditions Classification of environmental parameter groups and their severity classification Part 3. Gas

Fixed use in weather protection places;

Fixed use in weather protection places;

---GB/T 4798.5-2007 Environmental conditions for the application of electrical and electronic products Part 5. Use of ground vehicles;

---GB/T 4798.6-2012 Classification of Environmental Conditions Classification of environmental parameter groups and their severity classification for marine use;

---GB/T 4798.7-2007 Environmental conditions for the application of electrical and electronic products Part 7. Portable and non-fixed use;

---GB/T 4798.9-2012 Classification of Environmental Conditions Classification of Environmental Parameter Groups and Classification of Severity

climate.

---GB/T 4798.10-2006 Introduction to environmental conditions for the application of electrical and electronic products.

This document replaces GB/T 4798.4-2007 "Environmental conditions for the application of electrical and electronic products - Part 4. Stationary use in places without weather protection

Compared with GB/T 4798.4-2007, except for structural adjustment and editorial changes, the main technical changes are as follows.

- a) Added "Terms and Definitions" (see Chapter 3);
- b) Supplementary explanations for "short-term impact of extreme environmental conditions" and "long-term impact of non-extreme environmental stress" have been added (see Chapter 4);
- c) "Climatic environmental conditions" and "mechanical active substance conditions", the old classification is replaced by the new classification (see 5.2, 5.6,.2007 edition

Introduction

GB/T 4798 "Environmental Condition Classification Environmental Parameter Group Classification and Severity Classification" covers the product in transportation, installation, storage and

Environmental conditions that may be encountered during use. For different conditions of use (such as fixed use with weather protection, installation on ground vehicles,

Shipping and handling) products are given individual parameter grades. These

classifications also take into account the degree of restriction of the product in use, ranging from strict

from limited conditions (such as in a temperature-controlled room) to unlimited conditions. GB/T 4798 is proposed to be composed of the following 10 parts.

--- Part 1. Storage. The purpose is to give the environmental parameters and severity classification of the product during storage.

--- Part 2. Transport and handling. The purpose is to give the environmental parameter group and its severe

cool rating.

--- Part 3. Stationary use in weather-protected places. The purpose is to give the products that are subjected to fixed use in weather-protected places

Environmental parameter groups and their severity ratings.

--- Part 4. Stationary use without weather protection. The purpose is to give the product to withstand the fixed use in the place without weather protection

Environmental parameter groups and their severity ratings.

--- Part 5. Use of ground vehicles. The purpose is to give the environmental parameters to which products installed in vehicles but not constituting vehicles are subjected

Groups and their severity ratings.

--- Part 6. Marine. The purpose is to give the environmental parameter group and its severity classification that the products installed on the ship are subjected to.

--- Part 7. Portable and non-stationary use. The purpose is to give the environmental parameter groups that the products for portable and non-fixed use are subjected to and its severity rating.

--- Part 9. Microclimate inside the product. The purpose is to give the environmental parameter group and its severe degree that the internal components of the product are subjected to

degree grading.

--- Part 10. Introduction. The purpose is to give guidelines for the use of GB/T 4798.

--- Part 11. Environmental severity distribution map drawing. The purpose is to draw the distribution map of the severity of the service environment of the product

method.

This revision to GB/T 4798.4 is equivalent to adopting IEC 60721-3-4.2019 "Classification

of Environmental Conditions Part 3-4. Environmental Parameters

Group classification and its severity classification "Fixed use in places without climate protection", the revision is consistent with the level of international standards, which is conducive to

Eliminate technical barriers to trade and better promote trade, exchanges and technical cooperation.

Classification of environmental conditions

Classification of Environmental Parameter Groups and Severity Grading

Part 4. Stationary use in places without weather protection

1 Scope

GB/T 4798.4-2023 covers products that are installed at a fixed location and left permanently exposed, with no roof, cabinet or enclosure between them and the weather. The conditions they meet are sorted into groups, and each group into severity classes: climatic conditions marked K, special climatic conditions marked Z, biological conditions marked B, chemically active substances marked C, mechanically active substances marked S, and mechanical conditions marked M, preceded by general requirements that explain how a class is chosen and what it does and does not promise. An informative annex describes the seismic environment. The point of the exercise is that a buyer and a maker need one short form of words for a whole set of stresses. Without agreed classes every contract re-argues from scratch what rain, salt, sand, mould, vibration and shock a roadside cabinet or a transformer in an open yard has to survive, and equipment that fails outdoors usually fails because nobody wrote down which of those was expected of it. Identical in content to IEC 60721-3-4:2019, and used alongside part 3 for weather-protected locations, it is written for designers, purchasers and the people who draft equipment specifications.

This document is applicable to the environmental parameters and severity classification of products for fixed use in places without weather protection. weather protected place fixed

The use is given in GB/T 4798.3-2023.

The environmental conditions given in this document are limited to the conditions that directly affect the performance of the product, and only such environmental conditions are considered. This document does not

Do not describe the effect of these conditions on the product.

This document does not cover environmental conditions directly related to explosion hazards, microclimates within the product, flame extinguishing and ionizing radiation, nor other