



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

GB/T 19334-2021

**Dimensions of low-voltage switchgear and controlgear -
Standardized mounting on rails for mechanical support of
switchgear, controlgear and accessories**

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Foreword

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

Drafting.

This document replaces GB/T 19334-2003 "Dimensions of low-voltage switchgear and control equipment in the complete set of switchgear and control equipment"

Standard installation rail for mechanical support of Zhongzuo, compared with GB/T 19334-2003, in addition to structural adjustments and editorial changes, the main technology

The changes are as follows.

---Clarify that this standard is a horizontal standard for reference by relevant standard committees;

---The requirements for the installation rail used as a protective conductor are specified in the scope;

---Add "base plane, reference plane" and other content;

---Updated the drawing to make it meet the tolerance and drawing standards.

The translation method used in this document is equivalent to the adoption of IEC

60715.2017 (version 2.0) "The dimensions of low-voltage switchgear and control equipment are

Standard mounting rail for mechanical support in equipment and control equipment and its accessories".

Introduction

As a horizontal standard, this document clarifies the standards for mechanical support in low-voltage switchgear and control equipment, electrical accessories and similar equipment.

Quasi-installation rail.

Users hope that electrical components can be easily fixed, moved or rearranged.

There are two ways to fix the appliance on the mounting rail.

---Clamp directly on the rail (this method is especially suitable for "TH" rails or "G" rails);

--- With the help of various accessories, such as movable nuts and hook type or "T" type head bolts (this method is suitable for "C" type rail).

For the "G" rail, the first method is mainly used to install the terminal block, which can be quickly inserted and disassembled. With the help of an adjustable baffle, it can be

Clamp in rows.

Guide rails with standard cross-sectional shapes can be used as an integral part of the housing.

The guide rail can also be a mixed cross-section of "TH" type and "C" type cross-sectional dimensions, so that electrical appliances can be installed in a variety of arrangements.

In order to fix the appliance, one or several guide rails can be used when necessary.

Because rail installation may affect the performance of electrical appliances, it is recommended that the manufacturer explain the applicability of the rail installation form in its product information.

Dimensions of low-voltage switchgear and control equipment

In switchgear and control equipment and its accessories

Standard mounting rail for mechanical support

1 Scope

This document specifies the corresponding dimensional requirements and functional requirements for rail installation of switchgear, control equipment and electrical accessories.

This document applies to standard mounting rails for mechanical support in switchgear and control equipment and their accessories.

The purpose of this document is to specify the relevant dimensions for the correct design of the mounting rail and the electrical appliances fixed on the rail.

This document includes the following sections of guide rails.

---"TH" type;

---"C" type;

--- "G" type.

Note 1. Installation adaptability does not mean functional interchangeability.

The appendix specifies the special steel mounting rail that meets the requirements of this document, and supplements the corresponding dimensional data and application requirements.

Note 2. See the appendix for the design and material of the special rail.

Note 3. Rails of other shapes not listed in Appendix A that conform to this document can also be used.

The installation guide rail used as a protective conductor by connecting with the protective conductor terminal, the relevant requirements see IEC 60947-7-2. In the installation guide

In other applications where rails are used as grounding conductors, relevant product standards apply.

As a horizontal standard, this document complies with the relevant provisions of IEC Guide 108.2006.

This document is mainly used by technical committees when drafting standards based on the principles specified in IEC Guide 108.

Drafting publications with reference to the relevant requirements of horizontal standards is a responsibility of the technical committee. In addition to being explicitly quoted or included in the relevant

Except for the situation in the publication, the content of this document does not apply.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

The following terms and definitions apply to this document.

The addresses of the ISO and IEC standard terminology databases are as follows.

3.1

Mountingrail

Standard-shaped guide rails made of any material used to support switchgear, control equipment and electrical accessories.

3.2

(Measurement) reference plane (formeasurement)

Contact the flat surface of the front end of the guide rail.