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

GB/T 46383.301-2025

**E-Transporters - Part 3-1: Performance test method for the total
run time of an e-scooter with consideration of temperature
conditions of actual use**

电气运输设备 第3-1部分：不同温度条件下电动滑板车总运行时间的性能测试方法

(English Translation)

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Foreword

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

Drafting.

This document is Part 3-1 of GB/T 46383 "Electrical Transport Equipment". GB/T 46383 has already published the following parts.

---Part 3-1.Performance testing methods for the total running time of electric scooters under different temperature conditions;

---Part 3-2.Test methods for the mobility performance of electrical transport equipment carrying goods.

This document is equivalent to IEC 63281-3-1:2024 "Electrical transport equipment - Part 3-1. Electric scooters under different temperature conditions" Performance testing methods for runtime.

The following minimal editorial changes have been made to this document.

---Based on the detailed specifications of the rollers in Figure 2, section 6.2.1 states that "the rollers can be made of metal (e.g., SUS304), with a diameter not less than..." "113mm" should be corrected to "The roller can be made of metal (e.g., SUS304) and have a diameter of not less than 114mm".

---Modify the unit descriptions of symbols R, Te, and Ts in formula (1) to "accurate to seconds (s)".

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed and is under the jurisdiction of the China Electrical Equipment Industry Association.

Introduction

Performance refers to the ability of electrical transport equipment to operate normally and stably in its application scenario, and is a key factor affecting the working efficiency of electrical transport equipment.

One of the key factors. To standardize the performance evaluation and related assessment methods for electrical transport equipment, and to establish standards for electrical transport equipment products and product categories.

The formulation and revision of standards laid the technical foundation. GB/T 46383 "Electrical Transport Equipment" specifies the performance test conditions and sample standards for electrical transport equipment.

The equipment, performance indicators, and testing methods are proposed to consist of two parts.

---Part 3-1. Performance Testing Methods for Total Running Time of Electric Scooters under Different Temperature Conditions. The purpose is to clarify the performance testing methods for the total running time of electric scooters under different temperature conditions.

When considering actual operating temperature conditions, the standard atmospheric conditions, sample preparation, and test methods for conducting total operating time tests on the flatbed truck are as follows.

And the requirements of the test results.

---Part 3-2. Test Methods for the Mobility Performance of Electrically Operated Transport Equipment. The purpose is to determine the maximum speed of electrically operated transport equipment.

Degree, maximum climbing angle, maximum climbing speed, turning characteristics, groove detection, narrowest pass width, specific object detection, typical object A method for testing the mobility performance of a body at a detection distance.

Electrical transport equipment, Part 3-1. Different temperature conditions Performance testing method for total running time of electric scooter

1 Scope

This document describes the overall performance of single-person electric transport scooters used on roads or in public spaces under actual operating temperature conditions.

The time-based testing method.

This document does not include electric scooters for use by disabled or elderly people. Furthermore, this document does not include electric transport equipment for carrying goods.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are not included.

For references to documents, only the version corresponding to that date applies to this document; for undated references, the latest version (including all amendments) applies.

This document.

GB/T 2421-2020 Overview and Guidelines for Environmental Testing (IEC 60068-1:2013, IDT) Part 2-1. Tests - Test A. Cold) Note. GB/T 2423.1-2008 Environmental testing for electrical and electronic products - Part 2: Test methods - Test A. Low temperature (IEC 60068-2-1:2007, IDT) Part 2-2. Tests - Test B. Dryheat) Note. GB/T 2423.2-2008 Environmental testing for electrical and electronic products - Part 2: Test methods - Test B. High temperature (IEC 60068-2-2:2007, IDT) standby power) Note. GB/T 35758-2017 Method for measuring standby power of household appliances (IEC 62301:2011, IDT)

3 Terms and Definitions

The following terms and definitions apply to this document.

The terminology databases maintained by ISO and IEC for standardization are located at the following address.

e-scooter

An electric single-person transport device consisting of pedals mounted on two parallel wheels, a steering handle, and no seat.

battery pack

One or more batteries equipped with the necessary devices for use (such as housing, terminals, markings and protective devices).

[Source. IEC 60050-482:2004, 482-01-04]