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

GB/T 43974-2024

General specifications of cargo e-Transporters

载物电气运输设备通用规范

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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 for standardization documents"

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Jinlong: General specification for electrical transport equipment for carrying goods

1 Scope

GB/T 43974-2024 is the Chinese general specification for cargo e-Transporters, the electrically driven, path-planning delivery machines that have appeared on Chinese pavements, campuses and building corridors: indoor logistics carts, campus delivery vehicles, following electric suitcases and their relatives. They fall outside both vehicle regulation and industrial truck standards, and this document is the text that finally covers them. It sets the classification by usage scenario and by cargo box construction, then the technical requirements, general, functional, performance, safety, electromagnetic compatibility, environmental adaptability, appearance and structure, intelligence and key components, and then the test methods for each of those in detail, with the performance tests alone running to twelve pages and the safety tests to six. It then sets the inspection rules, type and factory inspection with their inspection items, and the marking, nameplate, safety warnings, instruction manual, packaging, transport and storage. Two normative annexes cover the key components, batteries and packs, charging facilities, motor and controller, operating screen, cables and connectors, materials and tyres, and the wireless charging equipment with its installation, power levels, operating frequency and system efficiency. It applies to machines used on roads or in public spaces, and excludes motor vehicles, factory environments and any device carrying people.

This document specifies the classification, technical requirements, test methods, key parts/components, inspection rules, and marking, instructions, etc: of electrical transport equipment for cargo Description, packaging, transportation and storage: This document applies to electric transport equipment with path planning capability and powered by electricity, used on roads or public spaces: Equipment, including but not limited to indoor logistics vehicles, campus logistics vehicles, follow-up electric luggage boxes, etc: This document is not applicable to electrical transport equipment for use in motor vehicles and factory environments: This document does not address requirements for manned electrical transportation equipment:

2 Normative references

The contents of the following documents constitute the essential clauses of this document through normative references in this document: For referenced documents without a date, only the version corresponding to that date applies to this document; for referenced documents without a date, the latest version (including all amendments) applies to This document:

GB/T 191-2008 Pictorial markings for packaging, storage and transportation GB/T 2423:

1 Environmental testing for electric and electronic products Part 2: Test methods Test A:

Low temperature GB/T 2423:

2 Environmental testing for electric and electronic products Part 2: Test methods Test B:

High temperature GB/T 2423:

3 Environmental testing Part 2: Test method Test Cab: Steady state damp heat test GB/T 2423:

17 Environmental testing for electric and electronic products Part 2: Test methods Test Ka: Salt spray

GB/T 2423:38-2021 Environmental testing Part 2: Test methods Test R: Water test methods and guidance

GB/T 2423:55-2023 Environmental testing for electric and electronic products Part 2: Environmental test test Eh: Hammer test

GB 3096 Acoustic Environment Quality Standard

GB/T 4208-2017 Enclosure protection degree (IP code)

GB 4785-2019 Provisions for the installation of external lighting and light signaling devices for motor vehicles and trailers GB 4806:

1 National food safety standard General safety requirements for food contact materials and products GB/T 4857:

22 Test method for stability of unit cargo in packaging and transport packages

GB 4943:1-2022 Audio, video, information technology and communication technology equipment Part 1: Safety requirements