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

GB/T 25392-2024

Replacing GB/T 25392-2010

**Agricultural engineering - Electrical and electronic equipment -
Testing resistance to environmental conditions**

农业工程 电气和电子设备 耐环境试验

(English Translation)

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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" Drafting.

This document replaces GB/T 25392-2010 "Durability test of agricultural engineering electrical and electronic equipment to environmental conditions" and Compared with GB/T 25392-2010, in addition to structural adjustments and editorial changes, the main technical changes are as follows:

- a) The scope has been changed (see Chapter 1, Chapter 1 of the 2010 edition);
- b) Changed the term "impaired function" to "malfunction", "basic assembly structure" to "standard configuration", and changed some terms The definition of "portable device" has been deleted (see Chapter 3, Chapter 3 of the 2010 edition);
- c) The "General Requirements" has been changed (see Chapter 4, Chapter 4 of the 2010 edition);
- d) The relevant provisions of "Testing" have been changed (see Chapter 5, Chapter 5 of the 2010 edition).

This document is equivalent to ISO 15003:2019 "Environmental testing for electrical and electronic equipment in agricultural engineering".

1 Scope

This document specifies the electrical and electronic equipment for mobile (including handheld) agricultural machinery, forestry machinery, horticultural machinery (hereinafter referred to as machinery)

The machinery in this document includes tractors and their associated implements. This document describes the test methods for specific environmental conditions.

The severity level of environmental conditions is given according to the extreme environmental conditions that may be encountered in the actual operation of mechanical

equipment.

This document is applicable to testing the suitability of mechanical equipment under specific environmental conditions.

Note: The severity levels given in this document are general guidelines only and do not guarantee the worst environmental conditions.

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 2421-2020 Overview and Guidelines for Environmental Testing (IEC 60068-1:2013, IDT)

Note: GB/T 21398-2008 Test methods and acceptance rules for electromagnetic compatibility of agricultural and forestry machinery (ISO 14982:1998, IDT)

ISO 16750 (all parts) Environmental conditions and tests for electrical and electronic equipment of road vehicles (Road vehicles-Environment- Note: GB/T 28046 (all parts) Environmental conditions and tests for electrical and electronic equipment of road vehicles [ISO 16750 (all parts)])

IEC 60068-2-5:2018 Environmental testing Part 2-5. Test methods Test S. Simulated solar radiation on the ground and the sun

Note: GB/T 2423.24-2022 Environmental testing Part 2: Test methods Test S. Simulated solar radiation on the ground and solar radiation test and climate Weathering test guide (IEC 60068-2-5:2018, IDT)

IEC 60068-2-6 Environmental testing Part 2-6. Test methods Test Fc. Vibration (sinusoidal)

Note: GB/T 2423.10-2019 Environmental testing Part 2: Test methods Test Fc. Vibration (sinusoidal) (IEC 60068-2-6:2007, IDT) Part 2-11:Tests-TestKa:Saltmist)

Note: GB/T 2423.17-2008 Environmental testing for electric and electronic products Part 2: Test methods Test Ka. Salt spray (IEC 60068-2-11. 1981,IDT) Part 2-13. Tests-TestM. Low air pressure)

Note: GB/T 2423.21-2008 Environmental testing for electric and electronic products Part 2: Test methods Test M. Low pressure (IEC 60068-2-13. 1983,IDT)