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

GB/T 42125.4-2024

**Safety requirements for electric equipment for measurement, control,
and laboratory use - Part 4: Particular requirements for climatic and
environmental testing and other temperature conditioning equipment**

测量、控制和实验室用电气设备的安全要求 第4部分：气候与环境试验以及其他
温度调节设备的特殊要求

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Foreword

This document was issued on 26 October 2024 by the State Administration for Market Regulation; Standardization Administration of the PRC and takes effect on 1 November 2026.

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 19.080, Chinese classification N09.

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 42125 "Safety requirements for electrical equipment for measurement, control and laboratory use".

The following parts have been published.

- Part 1. General requirements;
- Part 2. Particular requirements for laboratory equipment for heating materials;
- Part 3. Particular requirements for refrigeration equipment;
- Part 4. Particular requirements for climate and environmental tests and other temperature regulation equipment;
- Part 5. Particular requirements for laboratory centrifuges;
- Part 7. Safety requirements for hand-held and hand-operated probe assemblies for electrical measurement and test;
- Part 10. Particular requirements for insulation resistance measurement and dielectric strength test equipment;
- Part 14. Particular requirements for automatic and semi-automatic equipment for laboratory use for analytical and other purposes;
- Part 18. Particular requirements for control equipment;
- Part 19. Particular requirements for electric control valve actuators.

This document is equivalent to IEC 61010-2-012:2019 "Safety requirements for electrical equipment for measurement, control and laboratory use Part 2-012"

Part 3. Special requirements for climate and environmental tests and other temperature regulation equipment.

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

- In order to coordinate with the existing standard, the name of the standard is changed to "Safety requirements for electrical equipment for measurement, control and laboratory use Part 4.

Special requirements for climate and environmental testing and other temperature regulation equipment";

- Deleted the informative Appendix L "Term Index".

Please note that some of the contents of this document may involve patents. The issuing

organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

This document is under the jurisdiction of the National Technical Committee for Safety Standardization of Measurement, Control and Laboratory Electrical Equipment (SAC/TC338).

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Introduction

GB/T 42125 "Safety requirements for electrical equipment for measurement, control and laboratory use" is planned to consist of 20 parts.

--- Part 1.General requirements. The purpose is to specify the general safety requirements of electrical equipment for measurement, control and laboratory use and their accessories

Require.

--- Part 2.Particular requirements for laboratory equipment for material heating. The purpose is to specify the special requirements for laboratory equipment for material heating.

Safety requirements.

--- Part 3.Particular requirements for refrigeration equipment. The purpose is to specify the special safety requirements for refrigeration equipment used in measurement, control and laboratory

Require.

--- Part 4.Climate and environmental tests and special requirements for other temperature regulation equipment. The purpose is to specify climate and environmental tests

Special safety requirements for testing and other temperature regulating equipment.

--- Part 5.Particular requirements for laboratory centrifuges. The purpose is to specify special safety requirements for laboratory centrifuges.

--- Part 6.Particular requirements for test and measuring circuits. The purpose is to specify special safety requirements for test and measuring circuits.

--- Part 7.Safety requirements for hand-held and hand-operated probe assemblies for electrical measurement and testing. The purpose is to specify the safety requirements for hand-held and hand-operated probe assemblies.

Safety requirements for head assemblies and related accessories.

--- Part 8.Particular requirements for hand-held and hand-operated current sensors for