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

GB/T 14536.12-2024

Replacing GB/T 14536.12-2010

**Automatic electrical controls - Part 12: Particular requirements
for energy regulators
(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 is Part 12 of GB/T 14536. GB/T 14536 has been published in the following parts.

- GB/T 14536.1-2022 Automatic electric controllers Part 1: General requirements;
- GB/T 14536.3-2022 Automatic electric controllers Part 3: Particular requirements for thermal motor protectors;
- GB/T 14536.4-2008 Special requirements for automatic electric controllers for household and similar purposes, ballasts for tubular fluorescent lamps, thermal protectors Require;
- GB/T 14536.6-2022 Electric automatic controllers Part 6: Particular requirements for electric automatic burner control systems;
- GB/T 14536.7-2024 Electric automatic controllers Part 7: Particular requirements for pressure-sensitive electric automatic controllers, including mechanical Require;
- GB/T 14536.8-2010 Particular requirements for timers and time switches for automatic electrical controls for household and similar purposes;
- GB/T 14536.9-2008 Particular requirements for electric water valves for household and similar electric automatic controllers (including mechanical requirements) beg);
- GB/T 14536.10-2022 Automatic electric controllers Part 10: Particular requirements for temperature sensitive controllers;
- GB/T 14536.11-2008 Particular requirements for starting relays for electric motors for automatic electric controllers for household and similar purposes;
- GB/T 14536.13-2022 Automatic electric controllers Part 13: Particular requirements for electric door locks;
- GB/T 14536.15-2022 Automatic electric controllers Part 15: Particular requirements for humidity sensitive controllers;
- GB/T 14536.16-2013 Particular requirements for electric starters for automatic electric controllers for household and similar purposes;
- GB/T 14536.17-2005 Automatic electric controllers for household and similar purposes,

float-type or electrode-sensitive, for use in boiler appliances Special requirements for inductive type water level sensitive electric automatic controllers;

---GB/T 14536.18-2006 Automatic electric controllers for household and similar purposes - Float-type water level controllers for household and similar applications Special requirements;

---GB/T 14536.19-2017 Particular requirements for electric gas valves for household and similar automatic electric controllers, including mechanical Require;

---GB/T 14536.20-2008 Particular requirements for water flow and air flow sensitive controls for automatic electrical controls for household and similar purposes Requirements, including mechanical requirements;

---GB/T 14536.21-2008 Particular requirements for electric oil valves for automatic electric controllers for household and similar purposes, including mechanical Require.

This document replaces GB/T 14536.12-2010 "Particular requirements for energy regulators for automatic electrical controls for household and similar purposes" and Compared with GB/T 14536.12-2010, in addition to structural adjustments and editorial changes, the main technical changes are as follows.

--- Changed the content and expression of "Scope" (see Chapter 1, Chapter 1 of the 2010 edition);

--- Changed the fault requirements during lockout or safety shutdown (see H.28, H.27 of the 2010 edition).

This document is equivalent to IEC 60730-2-11:2019 "Automatic electric controllers Part 2-11.Particular requirements for energy regulators".

This document sets 1.1 Scope and 1.2 Normative References in Chapter 1 of IEC 60730-2-11:2019 as separate Chapters 1 and 2.

Chapter 2 and subsequent chapters will be numbered accordingly. Appendix H will be adjusted accordingly to the main article.

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

--- To coordinate with the existing standard, the name of the standard is changed to "Automatic Electric Controllers Part 12: Particular Requirements for Energy Regulators".

Introduction

Automation and intelligence are the development goals of various types of live equipment today, and electric automatic controllers are the cornerstone of their realization.

The inherent safety and functional safety of electric automatic controllers, the core components of equipment, are closely related to the safety of people and property.

The series of standards adopts the IEC 60730 series of standards, which regulates the electrical automation of household and similar electrical appliances and other electrical and non-electrical equipment.

The requirements for control devices can also be extended to industrial applications in the absence of specific product standards, such as central heating, air conditioning, process heating buildings, Yu Automation, etc., specifically including the following.

---Electric automatic control devices operate mechanically, electromechanically, electrically or electronically to respond to or control conditions such as temperature, pressure, time, Parameters such as humidity, light, electrostatic effects, flow or level.

--- Automatic electric controls for starting small electric motors used primarily in appliances and equipment for household and similar purposes.

The device may be built into the motor or separate from the motor.

--- Non-automatic control devices associated with automatic control devices.

The IEC 60730 series of standards has been revised several times, expanding its scope from household and similar electric automatic controllers to electric automatic controllers.

The revised GB/T 14536 series is to be revised in accordance with the new IEC standard.

It consists of the following parts.

---GB/T 14536.1 Electric automatic controllers Part 1: General requirements. The purpose is to generally standardize electric automatic controller products Require.

---GB/T 14536.3 Electric automatic controllers Part 3: Particular requirements for motor thermal protectors.

Product requirements for machine thermal protectors.

---GB/T 14536.4 Particular requirements for thermal protectors of ballasts for tubular fluorescent lamps for automatic electric controls for household and similar purposes.

The purpose is to standardize the product requirements for thermal protectors for tubular fluorescent lamp ballasts.

---GB/T 14536.6 Electric automatic controllers Part 6: Particular requirements for electric automatic control systems for burners.

Requirements for electric automatic control systems of fan burners.

---GB/T 14536.7 Automatic electric controllers Part 7: Particular requirements for pressure-sensitive automatic electric controllers, including mechanical requirements the purpose is to standardize the product requirements of pressure sensitive electric automatic controllers.