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

GB 30439.1-2013

**Safety requirements for industrial automation products - Part 1:
General requirements**

工业自动化产品安全要求 第1部分: 总则

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Foreword

In addition to all the technical content of GB 30439 Appendix A of this section is mandatory. GB 30439 "Industrial Automation product safety requirements" is currently divided into 18 parts.

- Part 1. General;
- Part 2. pressure/differential pressure transmitter safety requirements;
- Part 3. Temperature Transmitter safety requirements;
- Part 4. Safety requirements for the control valve;
- Part 5. flowmeter safety requirements;
- Part 6. solenoid valve safety requirements;
- Part 7. loop controller safety requirements;
- Part 8. Safety requirements for electric actuators;

- Part 9. Digital display instrument safety requirements;
- Part 10. recording instrument safety requirements;
- Part 11. Programmable Controller safety requirements;
- Part 12. Echo Ranging (TOF) Level Meter safety requirements;
- Part 13. magnetostrictive level gauge safety requirements;

1 Scope

GB 30439.1-2013 is the Chinese national standard on safety requirements for industrial automation products - part 1: general requirements, in the field of manufacturing engineering. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 31 December 2013 by the General Administration of Quality Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 January 2015. Classification: ICS 25.040.01, CCS N10. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This section GB 30439 provisions of industrial automation products and electrical burns against electric shock, against mechanical hazards and fire prevention equipment from the inside out Spread against excessive heat, fluid-fluid pressure and the influence of radiation impact (including lasers, sound and ultrasonic pressure) and release of gas Body, explosion and implosion of security content. This section does not include security features and device-independent, performance or other characteristics, the effectiveness of transport packaging, electromagnetic compatibility (EMC) to Requirements, functional safety, environmental protection measures for the explosion, maintenance (repair), maintenance (repair) personnel protection. If you want other industrial automation products for the environment (such as buildings, medical, etc.), automation products must also meet applicable to the respective Special environmental requirements, standards and installation guidelines. This section applies to industrial manufacturing or processing, continuous automatic measurement, temperature control, material or product, pressure, flow and other parameters The amount of industrial automation systems, instruments and devices. This section also applies to the predetermined attachment and automation products used together (such as instrument calibration Means).

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references,

the latest edition (including any amendments) applies to this document.

GB/T 4213-2008 pneumatic control valve

GB 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment - Part 1. General requirements

GB/T 7635.1-2002 national main product categories and codes - Part 1. Transportation Products

GB/T 11918-2001 industrial plug and socket couplers - Part 1. General requirements

GB/T 11919-2001 industrial plug and socket coupling - Part 2. With pin and sleeve size interchangeable electrical accessories Requirements

GB/T 15969.2-2008 Programmable Controllers Part 2. Equipment Requirements and Tests

GB 30439.2 industrial automation product safety requirements - Part 2. Safety requirements for pressure/differential pressure transmitter

GB 30439.3 Industrial Automation Products Safety requirements - Part 3. Safety requirements Temperature Transmitter

GB 30439.4 industrial automation product safety requirements - Part 4. Safety requirements for control valves

GB 30439.5 industrial automation product safety requirements - Part 5. Safety requirements Flowmeter

GB 30439.6 industrial automation product safety requirements - Part 6. Safety requirements for solenoid valves

GB 30439.7 industrial automation product safety requirements - Part 7. Safety requirements loop controller

GB 30439.8 Safety requirements for industrial automation products Part 8. Safety requirements for electric actuators

3 Terms and Definitions

GB 4793.1-2007 and GB/T 15969.2-2008 and as defined in the following terms and definitions apply to this document. In order to facilitate Use the following list of repeated GB 4793.1-2007 and GB/T 15969.2-2008 in some terms and definitions. Category

3.1 Equipment and devices

3.1.1 Stationary equipment fixedequipment Fixed to the support member or an additional fixture at a specific location. [GB 4793.1-2007, the definition 3.1.1]

3.1.2 PERMANENTLY CONNECTED EQUIPMENT permanentlyconnectedequipment

Scheduled to use screw terminals or other reliable methods and building installation wiring connected device. [GB 4793.1-2007, the definition 3.1.2]

3.1.3 Portable device portable equipment A closed system, it can be moved in operation, along with the power supply or can it be easily moved from one location to another. example For example, programming and debugging tool (PADT) and test equipment (TE). [GB 4793.1-2007, the definition 3.1.3]

3.1.4 Tools tool To help people to perform some kind of mechanical function and use, including keys and coins, including an external device. [GB 4793.1-2007, the definition 3.1.5]

3.2 Parts and Accessories

3.2.1 Protective conductor protective conductor For security purposes (for example, protection against electric shock) to provide a conductor. [GB/T 15969.2-2008, the definition 3.53]

3.2.2 Housing enclosure Provide protection suitable for the intended application and the type of housing protection rating. [GB/T 15969.2-2008, the definition 3.19]

3.3 Electrical values

3.3.1 Rated (value) rated (value) Usually by the manufacturer for the components, apparatus, or device reaches a given magnitude of working status. [IEV151-04-03]

3.4 Test

3.4.1 Type test type test For one or more products of the project done by a representative compliance testing. [GB 4793.1-2007, the definition 3.4.1]

3.4.2 Routine tests (routine tests) routine test During or after the manufacturing of various technical indicators do conformance testing. [GB 4793.1-2007, the definition 3.4.2]

3.5 Security Terminology 3.5.1 (Parts) palpable accessible (of a part) GB 4793.1-2007 in accordance with the provisions of

6.2 can be the standard test finger or test pin to the touch. [GB 4793.1-2007, the definition 3.5.1]

3.5.2 Dangerous hazard Potential source of harm. [GB 4793.1-2007, the definition 3.5.2]

3.5.3 Hazardous live hazardous live It means capable of causing electrical shock or burns under normal conditions of use or single fault condition. Under normal conditions of use apply to the value of GB 4793.1-2007 see 6.3.1; for under a single fault condition values see GB 4793.1-2007 6.3.2. [GB 4793.1-2007, the definition 3.5.3]

3.5.4 Power supply mains It is designed to make about the device connected thereto need