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

GB 30439.7-2014

**Safety requirements for industrial automation products-Part 7:
Safety requirements for loop regulator**

工业自动化产品安全要求 第7部分：回路调节器的安全要求

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Foreword

All technical content in this Part of GB 30439 is mandatory. GB 30439 "Industrial Automation product safety requirements" is divided into 18 sections as follows:

- 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. Radar level meter and ultrasonic level meter safety requirements;
- Part 13. magnetostrictive level gauge safety requirements;

1 Scope

GB 30439.7-2014 is the Chinese national standard on safety requirements for industrial automation products-part 7: safety requirements for loop regulator, 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 24 July 2014 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 February 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.

GB This section 30439 provides for industrial automation products loop controller shockproof and electrical burns, anti-mechanical hazards, anti-flame Spread outward from the inner loop controller, against excessive heat, fluid-fluid pressure and the impact of the 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. This Part shall not apply to products In corrosive environments. If you want to loop regulator products used in other environments (such as buildings, medical, etc.), the loop controller products must also meet applicable Particular requirements for appropriate environmental standards and installation guidelines. This section applies to industrial processes, the signal into an electrical signal, for indoor use, the power supply voltage of 300V or less and the controlled output signal No adjustment of the instrument. This section does not apply to one sensor input signal to physical devices (such as. bimetallic temperature controller).

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 1633-2000 thermoplastics Vicat softening temperature (VST) Determination (idt ISO 306.1994)

GB/T 3098.1-2010 Mechanical properties of fasteners Bolts, screws and studs (ISO 898-1.2009, MOD)

GB/T 3098.3-2000 Mechanical properties of fasteners set screws (idt ISO 898-5.1998)

GB/T 4207-2003 solid insulating materials under moist conditions index tracking of the measuring method and the proof tracking index compared (IEC 60112. 1979, IDT)

GB 4208-2008 housing protection (IP Code) (IEC 60529.2001, IDT)

GB 4793.1-2007 measurement, control and laboratory safety requirements for electrical equipment Part 1. General requirements (IEC 61010-1. 2001, IDT)

GB/T 5465.2-2008 Graphical symbols for electrical equipment - Part 2. Graphical symbols (IEC 60417DB.2007, IDT)

GB/T 7354-2003 partial discharge measurements (IEC 60270.2000, IDT)

GB 8898-2001 Audio, video and similar electronic apparatus - Safety requirements (eqv IEC 60065.1998)

GB 9364.1-1997 Miniature fuses Part 1. Definitions and miniature fuses and general requirements for miniature fuse-links (idt IEC 60127-1. 1988)

GB 9364.2-1997 Miniature fuses - Part 2. Cartridge fuse-links (idt IEC 60127-2. 1989)

GB 9364.3-1997 Miniature fuses Part 3. Ultra-miniature fuse-links (idt IEC 60127-3. 1988)

GB 9364.4-2006 Miniature fuses - Part 4. Universal modular fuse-links (IEC 60127-4.1996, IDT)

3 Terms and Definitions

GB 4793.1 define the following terms and definitions apply to this document. For ease of use, repeat the following list of GB 4793.1 Some terms and definitions. Unless otherwise specified, "voltage" value and "current" refers to the value of RMS AC, DC, or synthetic voltage or current. 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 Only permanent connection method and tools to disconnect the electrical power supply connected equipment.