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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 19436.4-2016

Electrical safety of machinery -- Electro-sensitive protective equipment -- Part 4: Particular requirements for equipment using vision based protective devices (VBPD)

机械电气安全 电敏保护设备 第4部分：使用视觉保护装置(VBPD)设备的特殊要求

(English Translation)

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Foreword

GB/T 19436 "mechanical electrical safety and electrical protection equipment" is divided into four parts.

- Part 1. General requirements and testing;

- Part 2. Particular requirements for the use of active optoelectronic protection devices (AOPDs);

- Part 3. Particular requirements for response to diffuse active optical protection devices (AOPDDR);

- Part 4. Particular requirements for the use of visual protection devices (VBPD) equipment.

This part is part 4 of GB/T 19436.

This part is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the translation method equivalent to the use of IEC/T R61496-4..2007 "Mechanical safety Electro-sensitive protective equipment Part 4.

Sensory protection device (VBPD) equipment special requirements ".

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In this part of the normative reference to the international documents have a consistent correspondence between the following documents.

Locations of protective equipment related to the proximity of the human body (ISO 13855. GB/T 19876-2005) 2002, MOD) this section makes the following editorial changes.

- the introduction of the international standard preface and the introduction;

--- Standard name "Mechanical safety Electro-sensitive protection device Part 4. Special use of visual protection device (VBPD) Change "to" electrical and mechanical safety of electrical protection equipment Part 4. use of visual protection device (VBPD) equipment special Special requirements ".

This part is made by the China Machinery Industry Federation.

This part of the National Industrial Machinery Electrical System Standardization Technical Committee (SAC/TC231) centralized.

This part of the drafting unit. Shenzhen, China Testing Technology Co., Ltd., Jining Branch of the photoelectric industry limited liability company, the state machine Quality Supervision and Inspection Center.

1 Scope

This part of GB/T 19436 specifies the requirements for the design, manufacture and testing of electro-sensitive protective equipment (ESPE). The device is safe A part of the relevant system, designed specifically for the detection of the human body, which uses a visual protection device (VBPD) to achieve sensitive (or sensing) function. this this section gives special attention to the nature of the security-related performance that ensures proper implementation of VBPD. ESPE can include selective security Related functions, Appendix A of this part of GB/T 19436.1-2013 and this part of this requirement.

This section does not specify the size or shape of the test area, as well as the arrangement of the relevant hazardous components for any particular application, by what constitutes a dangerous state of any machinery, limited to the function of ESPE and how it is connected with the machine.

This section is limited to automatic visual inspection ESPE without manual intervention.

This part is limited to the detection of automatic visual inspection type ESPE that enters or exists in the detection area.

This part does not include VBPD with radiation wavelengths in excess of 400nm to 1500nm.

This section does not address the requirements for complex classification or differentiation of objects to be tested.

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This section may be related to non-human protective applications such as the protection of machinery or products from mechanical damage. In these applications, Additional requirements may be required, such as those identified by sensitive functions, which have characteristics different from those of the human body.

This part does not address electromagnetic interference (EMC) interference requirements.

Note: As an example of the development of this part of the standard, VBPD is defined as being sensitive by a two-dimensional image that monitors the background of a passive pattern (or Induction) device configuration, the detection principle is to detect the passive pattern monitoring of the block. The thickness, shape and surface characteristics of the object to be detected Information is not required. The passive pattern is not required for light source.

2 Normative reference documents

The following documents are indispensable for the application of this document. For dated references, only the dated edition applies to this article Pieces. For undated references, the latest edition (including all modifications) applies to this document.

supplement.

GB/T 19436.1-2013 Mechanical electrical safety - Electro - sensitive protective equipment - Part 1. General requirements and tests (IEC 61496-1.

2008, IDT)

ISO 13855.:2002 Mechanical safety and positioning of protective equipment related to the proximity of the human body parts (Safetyofmachinery-Positioningofprotectiveequipmentwithrespecttotheapproachspeedsofpartsofthehumanbody) IEC 60825-1.:2007, Safety of laser products - Part 1. Classification and requirements for equipment (Safetyoflaserproducts-Part 1. Equipmentclassificationandrequirements)

3 Terms and definitions

GB/T 19436.1-2013 The definitions and definitions of the following terms and definitions apply to this document.

replace.

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