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

GB/T 18268.25-2010

**Electrical equipment for measurement, control and laboratory use -- EMC requirements --
Part 25: Particular requirements -- Test configurations, operational conditions and
performance criteria for field devices with interfaces according to IEC 61784-1, CP**

测量、控制和实验室用的电设备 电磁兼容性要求 第25部分：特殊要求 接口符合IEC 61784-1, CP3/2的现场装置的试验配置、工作条件和性能判据

(English Translation)

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Foreword

GB/T 18268 "Electromagnetic compatibility requirements for electrical equipment for measurement, control and laboratory use" is composed of the following components.

Part 1. General requirements - Part 21. Particular requirements - Test configuration and operating conditions for susceptibility testing and measurement equipment for electromagnetically compatible protective equipment and performance criteria - Part 22. Particular requirements for portable test, measurement and monitoring equipment for low voltage distribution systems - Test configuration, operating conditions and Performance criteria Part 23. Special requirements Test configuration, operating conditions and performance criteria for integrated or remote signal conditioning transmitters - Part 24. Special requirements Insulation monitoring devices complying with IEC 61557-8 and insulation tolerances according to IEC 61557-9 Test equipment, operating conditions and performance criteria for bit devices - Part 25. Particular requirements for test equipment, working conditions and conditions for field devices complying with IEC 61784-1, CP3/2 can be judged - Part 26. Special requirements for in vitro diagnostic (IVD) medical equipment - Part 31. Immunity requirements for equipment performing or preparing for safety functions (functional safety) General industrial applications - Part 32. Immunity requirements for equipment that performs or is prepared to perform safety functions (functional safety) Specifies that the electromagnetic environment of industrial applications this part is part 25 of GB/T 18268.

This part is equivalent to IEC 61326-2-5.:2006 (English version).

This part is based on GB/T 1.1-2000 "Standardized Working Guideline Part 1. Standard Structure and Writing Rules" and GB/T .20000.2-2001 "Standardization Work Guide Part 2. Adoption of the International Standard Rules" the relevant provisions of the following editorial modify.

- the preamble and the introduction of the international standard;

"This part of IEC 61326" is replaced by "this part of GB/T 18268";

The guide of the original reference file is changed to the guideline of the normative

reference document according to the provisions of GB/T 1.1-2000.

In this part of the international standards used, the chapters of the additional content are used a special number, such as 5.2.101, 5.3.102, etc., to show the difference.

In view of the fact that this part is equivalent to the use of international standards, in keeping with international standards, this part has not been changed.

This part is made by the China Machinery Industry Federation.

This part of the National Industrial Process Measurement and Control Standardization Technical Committee (SAC/TC124) centralized.

This part is responsible for the drafting unit. Shanghai Industrial Automation Instrumentation Research Institute.

This part participates in the drafting unit. Shanghai instrumentation automatic control system inspection and testing institute, Shanghai Yi Bo Shipping Co., Ltd., Jiaying City, Co., Ltd., Fujian Shangrun Precision Instrument Co., Ltd.

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This part is the first release.

Measurement, control and laboratory equipment Electromagnetic compatibility requirements - Part 25. Particular requirements the interface complies with IEC 61784-1, CP3/2 Field device test configuration, working conditions and performance criteria

1 Scope

In addition to the requirements of GB/T 18268.1, this part of GB/T 18268 discusses the interface in accordance with IEC 61784-1, CP3/2 Particular requirements for electromagnetic compatibility testing of installations. This part of GB/T 18268 only considers the fieldbus interface of the device.

Note: Other functional requirements for the equipment are included in other parts of the GB/T 18268 series of standards.

This part of GB/T 18268 deals only with field devices for process measurement and process control.

This part of GB/T 18268 relates to interface operation and interface parameters according to IEC 61784-1, CP3/2. IEC 61784-1 A set of specific communication protocol profiles based on the IEC 61158 series of standards.

The manufacturer shall specify the intended use environment of the equipment and/or select the appropriate test grade from GB/T 18268.1.

2 Normative reference documents

The terms of this document are the terms of this part by reference to this part of ISO/IEC 156868. Any reference to the date of the text, All subsequent amendments (excluding corrigenda) or revisions do not apply to this part, however, encouragement under this section the parties to the agreement study whether the latest version of these documents can be used. For undated references, the latest edition of this document applies section.

Chapter 2 of GB/T 18268.1-2010 applies to this part with the following documents.

GB/T 16657.2-2008 Industrial communication networks - Fieldbus specification - Part 2. Physical layer specification and service definition (IEC 61158-2.:2007, IDT) GB/T 18268.1-2010 Electromagnetic compatibility requirements for electrical equipment for measurement, control and laboratory use - Part 1. General requirements (IEC 61326-1.:2005, IDT) IEC 61158-3.:2003 Measurement and control - Digital data communication - Fieldbus for industrial control systems - Part 3. Data link Layer service definition Measurement and control - Fieldbus for industrial data - control systems for digital data communications - Part 5. Application layer applications (IEC 61158-5.:2003);

Definition

Measurement and control - Fieldbus for industrial data - control systems for digital data communications - Part 6. Application layer association IEC 61158-6.:2003 Norms IEC 61784-1 Measurement and control - Digital data communications - Part 1. Continuous and intermittent fieldbuses for industrial control systems Manufacturing rules

3 Terms and definitions

Chapter 3 of GB/T 18268.1-2010 applies to this part.