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

GB/T 18858.3-2012

Replacing GB/T 18858.3-2002

**Low-voltage switchgear and controlgear -- Controller-device
interface (CDIs) -- Part 3: DeviceNet [including MODIFICATION
1]**

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Foreword

GB/T 18858 "low-voltage switchgear and control equipment Controller - Device Interface (CDI)" is divided into three parts.

--- Part 1. General;

--- Part 2. Actuator Sensor Interface (AS-i);

Part --- Section 3. DeviceNet.

This is Part 3 GB/T 18858 in.

Rules in this section in accordance with GB/T 1.1-2009 given draft.

This Part replaces GB/T 18858.3-2002 "low-voltage switchgear and control equipment Controllers - Part 3 Device Interface (CDI)

Points. DeviceNet ".

This section compared with GB/T 18858.3-2002, following major technical differences.

--- 5.2 based on packet added new services;

--- Detailed reference should adopt the latest version of IEC 61158 (2007) of the relevant provisions replace the previous version in the appendix 5.3 given

With a layer requirements;

--- 5.6 adds the appropriate security requirements of the agreement (by reference IEC 61784-3);

--- 8.2 and 8.4 in connection specification manifestation made changes to cables and connectors, and adds a new type;

--- 8.10 adds new references to electromagnetic compatibility and safety test test test logic and 9.3.

This section identical with IEC 62026-3.2008 "Low-voltage switchgear and control equipment controller - device interfaces - Part 3.

DeviceNet ".

This part is proposed by the China Electrical Equipment Industrial Association.

The low-voltage electrical part by the National Standardization Technical Committee (SAC/TC189) centralized.

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Introduction

DeviceNet is used, but not limited to industrial automation, these applications may include limit switches, proximity sensors, power - pneumatic valve, following

Electrical appliances, motor starters, control panel, analog input, analog output, and a controller.

GB/T 18858.3-2012/IEC 62026-3.2008

Low-voltage switchgear and control equipment Controllers -

Device Interface (CDI) - Part 3. DeviceNet

1 Scope

This section GB/T 18858 requirements of a single or multiple interface system controller and control circuit devices or switching elements between the skills requirement.

This section applies to the interface system used within the same cable of two pairs of shielded twisted pair wire --- a pair of wires to provide a differential communication medium,

Another pair of wires provide device power. The purpose of this section is to enable the development of a device having the interface can be interoperable technical requirements.

This section provides the following specific requirements of DeviceNet.

--- Interface requirements between the controller and the switching element;

Normal operating conditions --- equipment;

--- Structure and performance requirements.

--- Verify the consistency of the required tests.

These specific requirements are added on top of GB/T 18858.1 of.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated edition applies to this article

Member. For undated references, the latest edition (including any amendments) applies to this document.

GB 4208-2008 enclosure protection (IP code) (IEC 60529.2001, IDT)

GB 4824-2004 industrial, scientific and medical (ISM) radio-frequency equipment - Electromagnetic disturbance characteristics - Limits and methods of measurement (CISPR11.

2003, IDT)

GB/T 14048.10-2008 voltage switchgear and control equipment Part 5-2. Control circuit devices and switching elements connected

Proximity switch (IEC 60947-5-2.2004, IDT)

GB/T 17626.2-2006 electromagnetic compatibility test and measurement techniques - Electrostatic discharge immunity test (IEC 61000-4-2.2001,

IDT)

GB/T 17626.3-2006 electromagnetic compatibility test and measurement technology RFEMS test (IEC 61000-4-

3.2002, IDT)

GB/T 17626.4-2008 Electromagnetic compatibility Testing and measurement techniques - Electrical fast transient burst immunity test (IEC 61000-

4-4.2004, IDT)

GB/T 17626.5-2008 electromagnetic compatibility test and measurement technology surge

(impact) immunity test (IEC 61000-4-5.

2005, IDT)

GB/T 17626.6-2008 electromagnetic compatibility test and measurement technology RF field induction of immunity to conducted disturbances (IEC 61000-

4-5.2006, IDT)

GB/T 18858.1-2012 low-voltage switchgear and control equipment Controller - Device Interface (CDI) - Part 1. General

(IEC 62026-1.2007, IDT)

GB/T 19659 (all parts), Industrial automation systems and integration - Open systems application integration framework (IEC 61158 (all section

Minute))

GB/T 20438 (all parts), Functional safety of electrical/electronic/programmable electronic safety-related systems (IEC 61508 (all section

GB/T 18858.3-2012/IEC 62026-3.2008