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

GB/T 18233.3-2018

**Information technology -- Generic cabling for customer
premises -- Part 3: Industrial premises**

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Foreword

GB/T 18233 "Information Technology User Building General Cable" is divided into the following parts.

- Part 1. General requirements;
- Part 2. office space;
- Part 3. Industrial buildings;
- Part 4. Residential;
- Part 5. Data Center;
- Part 6. Distributed building facilities.

This part is the third part of GB/T 18233.

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

This section uses the translation method equivalent to ISO /IEC 11801-3..2017 "Information

Technology User Buildings General Cables Part 3

Points. Industrial Buildings.

This standard incorporates the contents of ISO /IEC 11801-3.2017/COR1.2018 and is used in the margins of the outer side of its corresponding clause.

The vertical double line (||) is marked.

The documents of our country that have a consistent correspondence with the international documents referenced in this part are as follows.

GB/T 34961.2-2017 Information technology user building group cabling implementation and operation Part 2. Planning and installation

(ISO /IEC 14763-2.2012, IDT)

Introduction

The cabling infrastructure is as important as other building infrastructure utilities such as water, lighting, and distribution. It and its

Like his utilities, service disruptions can have serious consequences. If the cabling design lacks predictability, such as the use of inappropriate components,

Improper installation, inadequate management systems, or inadequate support can affect service quality and cause economic losses to all types of users.

This part of GB/T 18233 describes the general cabling system for industrial spaces in industrial buildings or other types of buildings.

The automation area provides an important role in providing reliable service.

Other building types can include.

--- ISO /IEC 11801-2 specifies the office space of its universal cabling;

--- ISO /IEC 11801-5 specifies the data center for its general cabling.

The general cabling requirements for distributed building services in industrial space are specified in ISO /IEC 11801-6, which gives the above various

General cabling regulations for distributed building services in type buildings and spaces.

This section considers the phase between ISO /IEC 11801 (all parts) and IEC 61918 and IEC 61784-5 (all parts).

Relevance.

Figure 1 shows the relationship between the structure and content of the information technology cabling standards established by ISO /IEC JTC1/SC25, ie,

ISO /IEC 11801 (all parts) for general cabling design, standards for general cabling installation, operation and implementation, and cabling

The relationship between the test standards of the cable.

The universal cabling specified in this section provides the following for the user.

- a) A stand-alone cabling system that supports a wide range of information technology applications within a certain installation and operating environment.
- b) Flexible cabling solutions make changes easy and economical.
- c) Allow matching of cabling components between multiple suppliers.

In addition, this section also provides.

- d) Provide installation guidance for industry professionals on the premise that application requirements are unknown, such as pre-construction in new or renovated buildings

Timing, and when determining deployment requirements for capacity expansion.

- e) Provide guidance to the cabling system industry and standards organizations supporting existing products as standardization for future product development and application basis.

The applications covered in this section include sub-technical committees under the IEC (including ISO /IEC JTC1 sub-technical committees) and

Key industrial process control and monitoring applications developed by ITU-T study groups.

Therefore, this part.

- a) specifies cabling structures that support a wide range of information technology applications;
- b) reference to balanced cabling channels and links at levels C, D, E, EA, F and FA that meet ISO /IEC 11801-1.2017

Claim;

- c) references the component requirements specified in ISO /IEC 11801-1.2017 and specifies the cabling implementation to ensure permanent links and channels

Performance meets or exceeds the requirements of the cabling category in the relevant application.

Figure 2 shows all the standards applicable to industrial buildings (general cabling standards developed by ISO /IEC JTC1/SC25 and

The interrelationship between the specific application standards developed by IEC SC65C.

Figure 1 Relationship between common cabling standards established by ISO /IEC JTC1/SC25

Figure 2 Relationship between ISO /IEC and IEC standards applied to industrial buildings

Information technology user building group general cable

Part 3. Industrial buildings

1 Scope

This part of GB/T 18233 specifies general cabling in industrial buildings or industrial areas in other types of buildings, or

One or more buildings. Includes balanced cabling and fiber optic cabling.

This section is mainly applicable to buildings with a telecom service distance of 10,000m. Systems with larger distances can be used as reference.

The cabling system defined in this section supports a wide range of services, including automation, process control and monitoring applications. It also includes power supply services.

This section is directly or by reference to ISO /IEC 11801-1:2017.

- a) the structure and minimum configuration of the general cabling system for industrial buildings;
- b) a telecommunications outlet (TO) port;
- c) transmission performance requirements for cabling links and channels;
- d) (right) requirements and options for implementation;
- e) performance requirements for cabling components;
- f) Compliance requirements and acceptance procedures.

Cabling of critical automation, process and monitoring application services in the automation area is outside the scope of this section. Such specific applications

See IEC 61784-5 (Design) and IEC 61918 (Installation) for information on cabling.

Safety (electrical safety and protection, fire protection, etc.) and electromagnetic compatibility (EMC) requirements are regulated by other standards and regulations and are not included in this section.

In the range. However, the information given in this section helps to comply with these standards and specifications.