

ICS 29.120.01;29.120.30
CCS K 30



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

GB/T 47637.2-2026

**Direct current (DC) appliance couplers for information and
communication technology (ICT) equipment installed in data
centres and telecom central offices - Part 2: 5.2 kW system**

数据中心和电信中心机房安装的信息和通信技术（ICT）设备用直流器具耦合器
第2部分：5.2kW系统

(English Translation)

Issued on: July 2, 2026

Implemented on: February 1, 2027

Issued by: State Administration for Market Regulation

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Foreword

This document complies with the provisions of GB/T 1.1-2020 "Standardization Work Guidelines Part 1: Structure and Drafting Rules of Standardization Documents".

Drafting.

This document is based on GB/T 47637 "DC Appliance Coupling for Information and Communication Technology (ICT) Equipment Installed in Data Centers and Telecommunication Centers".

Part 2 of GB/T 47637, titled "Compatible Instruments," has been published, including the following parts.

---Part 1.2.6kW System;

---Part 2.5.2kW System;

---Part 3: AC/DC appliance input sockets.

This document is equivalent to IEC TS63236-2:2021 "Information and Communication Technology (ICT) Equipment Installed in Data Centers and Telecommunication Center Rooms".

"Standard Equipment Coupler Part 2.5.2kW System". The document type has been changed from an IEC technical specification to a Chinese national standard.

The following minimal editorial changes have been made to this document.

---AWG (American wire gauge) mentioned in Tables 1, 4, 5, 6, and 24.1 has been deleted to adapt to my country's technical conditions and increase operability.

Please note that some content in this document may involve patents. The issuing organization of this document assumes no responsibility for identifying patents.

This document was proposed by the China Electrical Equipment Industry Association.

This document is under the jurisdiction of the National Technical Committee on Standardization of Electrical Accessories (SAC/TC67).

Introduction

GB/T 47637 "DC Appliance Couplers for Information and Communication Technology (ICT) Equipment Installed in Data Centers and Telecommunication Centers" aims to the requirements for DC appliance couplers used in information and communication technology (ICT) equipment installed in data centers and telecommunications central computer rooms are standardized to ensure product quality.

The product is safe and reliable, and is proposed to consist of the following parts.

---Part 1.2.6kW System. The purpose is to standardize the installation of information and communication technologies in data centers and telecommunications central office rooms.

Technical specifications regarding the type, dimensions, structure, electrical performance, and mechanical performance of DC appliance couplers for 2.6kW systems used in (ICT) equipment.

Technical requirements.

---Part 2.5.2kW System. The purpose is to standardize the installation of information and communication technologies in data centers and telecommunications central office rooms.

Technical requirements.

---Part 3: AC/DC Appliance Input Sockets. The purpose is to standardize the installation of information and communication equipment in data centers and telecommunications central

office rooms.

Additional requirements for AC/DC appliance input sockets for ICT equipment.

This document will help standardize the installation of 5.2kW information and communication technology (ICT) equipment in data centers and telecommunications center rooms.

The requirements for DC-DC equipment couplers are driving the deployment of information and communication technology (ICT) DC equipment in data centers and telecommunications central office rooms.

Applications will enhance the technological level of the information and communication technology (ICT) industry in my country's data centers and telecommunications center computer rooms.

Information on the installation of data centers and telecommunications center computer rooms DC appliance couplers for communication technology (ICT) equipment Part 2.5.2kW System

1 Scope

This document specifies the DC power requirements for 5.2kW systems used in information and communication technology (ICT) equipment installed in data centers and telecommunications center rooms.

Technical requirements for the type, size, structure, electrical performance, and mechanical performance of the device coupler.

This document applies to Class I equipment with two live contacts and one ground contact, a rated power of 5.2kW, and a rated voltage range of [missing information].

DC appliance couplers from 294V to 400V. These are for DC applications only and comply with IEC 62368-1 for information and communication technologies.

Equipment and products.

According to this document, electrical accessories may be used by general personnel in the data center only if the DC voltage power distribution system meets the following requirements.

---(380±20)V equipment, without backup battery and voltage regulation system;

---380V devices with a voltage range of 294V~400V, equipped with a backup battery (voltage regulation cannot be guaranteed);

---During normal operation, the voltage between each live conductor and ground should not exceed 200VDC;

- 260V~294V,
- Greater than 400V~410V.

The maximum current of the device coupler is.

---When the voltage between the live contacts is 400VDC, the current is 13A;

---When the voltage between the live contacts is 294VDC, the A is 17.6A.

When the voltage between the live contacts drops to 260VDC, it can be raised to 20ADC and last for up to 10 minutes.

When the battery discharge voltage reaches the disconnection level, the voltage between the charged conductors drops to 260VDC. As a result, the current decreases accordingly. Increase.

According to this document, no maintenance is required for the attachments.

The appendices within the scope of this document apply to circuits that have already implemented the following protections.

- Basic protection;
- Overcurrent protection (17.6A or less per outlet or multiple outlets);
- Fault protection (indirect contact protection);
- Additional protection.

Appliance couplers conforming to this document are suitable for use in ambient temperatures generally not exceeding 60 °C, and the lowest ambient temperature...

The temperature is -5°C.

Appliance couplers are not suitable as replacements for plug and socket systems conforming to the IEC TS62735 series standards.

A 2.6kW system conforming to GB/T 47637.1 is incompatible with a system conforming to this document because it is impossible to use a 2.6kW connector.

Similarly, it's impossible to adapt a 5.2kW appliance input socket to a 2.6kW appliance input socket.

Note: This document applies to DC appliance couplers exceeding 5.2kW, but they are not compatible with 2.6kW and 5.2kW systems.

2 Normative references

The contents of the following documents, through normative references within the text, constitute essential provisions of this document. Dated citations are listed below.