

ICS 29.020  
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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 9089.4-2008**

Replacing GB/T 9089.4-1992

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**Electrical installations for outdoor sites under heavy conditions  
-- Part 4: Requirements for the installation**

户外严酷条件下的电气设施 第4部分：装置要求

**(English Translation)**

**Issued on: June 18, 2008**

**Implemented on: March 1, 2009**

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**Issued by: Standardization Administration of China**

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### Foreword

GB/T 9089 "Electrical installations for outdoor sites under heavy conditions" series of standards are divided into the following parts.

- Part 1. Scope and definitions;
- Part 2. General protection requirements;
- Part 3. General requirements for equipment and accessories;
- Part 4. equipment requirements;
- Part 5. Operational requirements.

This section GB/T 9089 series of standards Part 4, under identical with IEC 60621-4 "harsh outdoor conditions (including opencast mines and quarries) Electrical installations - Part 4. Device Requirements "(in English).

This part is GB/T 9089.4-1992 "Electrical installations for outdoor harsh conditions means requirements" amendments.

This section compared with the GB/T 9089.4-1992, there are some changes in the text, there is an increase of some clauses and amendments related to the main Differences are as follows.

--- In accordance with the provisions of GB/T 1.1-2000, the original standard Chapter 1, "subject matter and scope" to "program", Chapter 2 "Reference standard" to "normative references", Chapter 3, "term" to "terms and definitions."

--- The terms, definitions and GB 7251 series of standards in this section consistent translation, equipment for industry use.

For example, the following terms have been modified.

Activities formula -> can migrate (mobile), movable -> mobile (movable).

Appendix A of this section is an informative annex.

This Part replaces GB/T 9089.4-1992 "Electrical installations for outdoor harsh conditions device requirements." this part is proposed by the China Electrical Equipment Industrial Association.

This part of the jurisdiction of the National Standardization Technical Committee on Low-voltage switchgear and control equipment.

This section is drafted. Tianjin Electric Drive Design Institute, Beijing Coal Electric Co., Ltd., Chint Group Equipment Manufacturing Co., the company, Linhai City Yao-ming Power Equipment Co., Ltd., Beijing State Power Technology Co., Ltd. Kang.

## 1 Scope

This section GB/T 9089 specifies the requirements for electrical apparatus --- facilities under harsh outdoor conditions, to ensure that people, animals and property security Full normal operation and equipment.

This section applies to outdoor sites under heavy conditions (including opencast mines, quarries, storage yard and similar places) mining, stacker, primary processing machinery and Delivery systems and other electrical facilities.

Range GB/T 9089.1-2008 apply to this section.

## 2 Normative references

The following documents contain provisions which, through reference to GB/T 9089 to the present, constitute provisions of this section. For dated reference documents Member, all subsequent amendments (not including errata content) or revisions do not apply to this section, however, encouraged to reach under this section Parties to research agreement to use the latest versions of these documents. For undated reference documents, the latest versions apply to this section.

GB/T 9089.1-2008 Electrical installations outdoors under harsh conditions - Part 1. Scope and definitions (IEC 60621-1. 1987, IDT);

Electrical installations - Part 2 9089.2-2008 under harsh outdoor conditions GB/T . General protection requirements (IEC 60621-2.

1987, MOD);

General requirements for equipment and accessories for. Electrical installations Part 3 under GB/T 9089.3-2008 harsh outdoor conditions (IEC 60621-3. 1986, IDT);

Electrical installations - Part 5 GB 9089.5-2008 outdoors under harsh conditions.

Operational requirements (IEC 60621-5. 1987, IDT).

### **3 Terms and Definitions**

Terms and definitions in this section, see GB/T 9089.1-2008.

The first piece of mining, stacker and primary processing machinery requirements

#### **4.1 Parts mounting**

When installing the motor, when current limit switches and sockets, if sufficient lead in articulating surfaces frame and structural components between the electrical equipment when the electricity area, is not required for structural components of the device using a special protection connection. In this case only requires a connection with ordinary bolts and screws.

These principles are also suitable for connecting power distribution cabinets and terminal boxes of various types of electrical equipment.

Equipment for corrosive gas or severe vibration conditions, you should use a separate protective conductor of the motor, the current limit switches, etc.

connection.

4.2 can migrate away from the console and mobile accessories for can migrate and mobile auxiliary equipment (such as welding equipment, curing transformers, etc.), when they are being monitored and neither the protective conductor when obvious visible, should potential connection between such auxiliary equipment and electrical equipment with visible conductors like.

#### **4.3 IT system insulation monitor**

In IT systems, such as the built-in power supply with electrical insulation transformer coil, generator or battery power supply line without configuration GB/T 9089.4-2008/IEC 60621-4. 1981