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**JIS C 0920** : 2003

(IEC 60529 : 2001)

**Degrees of protection provided  
by enclosures (IP Code)**

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## Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law. Consequently **JIS C 0920 : 1993** is replaced with this Standard.

This revision has been made based on **IEC 60529 : 2001** *Degrees of protection provided by enclosures (IP Code)* for the purposes of making it easier to compare this Standard with International Standard; to prepare Japanese Industrial Standard conforming with International Standard; and to propose a draft of an International Standard which is based on Japanese Industrial Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with a patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have technical properties. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying the patent right, application for a patent after opening to the public, utility model right or application for registration of utility model after opening to the public which have the said technical properties.

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## Degrees of protection provided by enclosures (IP Code)

**Introduction** This Japanese Industrial Standard has been prepared based on the 2.1 edition of **IEC 60529** *Degrees of protection provided by enclosures (IP Code)* published in 2001 without any modification in technical contents.

The portions shown by sidelines or dotted underlines mean the matters not stated in the original International Standard.

This Standard describes a system for classifying the degrees of protection provided by the enclosures of electrical machinery and apparatus (hereafter referred to as “electrical equipment”). Whilst this system is suitable for use with most types of electrical equipment, it should not be assumed that all the listed degrees of protection are applicable to a particular type of equipment. The manufacturer of the equipment should be consulted to determine the degrees of protection available and the parts of equipment to which the stated degree of protection applies.

The adoption of this classification system, wherever possible, will promote uniformity in methods of describing the protection provided by the enclosure and in the tests to prove the various degrees of protection. It should also reduce the number of types of test devices necessary to test a wide range of products.

The 2.1 edition of **IEC 60529** takes account of experiences with the first edition, and clarifies the requirements. It provides for an optional extension of the IP Code by an additional letter A, B, C, or D if the actual protection of persons against access to hazardous parts is higher than that indicated by the first characteristic numeral.

In general, enclosures with an IP coding to the first edition would be eligible for the same code according to the 2.1 edition.

**1 Scope** This Standard applies to the classification of degrees of protection provided by enclosures for electrical equipment with a rated voltage not exceeding 72.5 kV. The object of this Standard is to give:

- a) Definitions for degrees of protection provided by enclosures of electrical equipment as regards:
  - 1) protection of persons against access to hazardous parts inside the enclosure;
  - 2) protection of the equipment inside the enclosure against ingress of solid foreign objects;
  - 3) protection of the equipment inside the enclosure against harmful effects due to the ingress of water.
- b) Designations for these degrees of protection.
- c) Requirements for each designation.
- d) Tests to be performed to verify that the enclosure meets the requirements of this Standard.