

Australian/New Zealand Standard™

**Electrical apparatus for explosive gas  
atmospheres**

**Part 0: General requirements**

## **AS/NZS 60079.0:2000**

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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL/14, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 15 March 2000 and on behalf of the Council of Standards New Zealand on 20 March 2000. It was published on 26 April 2000.

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# Australian/New Zealand Standard™

## **Electrical apparatus for explosive gas atmospheres**

### **Part 0: General requirements**

First published as AS/NZS 60079.0:2000.

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## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL/14, Electrical Equipment in Hazardous Areas.

This Standard is identical with and has been reproduced from IEC 60079-0:1998, *Electrical apparatus for explosive gas atmospheres*, Part 0: *General requirements*.

Footnotes have been incorporated into the original text of IEC 60079-0:1998 with the purpose of providing updated information on the specific items/aspects marked with \*.

The objective of this Standard is to provide general requirements for the manufacturers, testing authorities and certification bodies concerned with electrical apparatus for explosive gas atmospheres.

This Standard will run concurrently with AS 2380.1 *Electrical equipment for explosive atmospheres—explosion-protection techniques*, Part 1: *General requirements*, until the AS/NZS 60079 series is complete at which time the AS 2380 series will be withdrawn.

In January 1997, the IEC commenced numbering its Standards from 60000 by adding 60000 to the number of each existing Standard. This coordinates IEC numbering with ISO numbering. During the transition period an IEC Standard might be identified by its new number or its old number (for example IEC 60050 or IEC 50).

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the identical Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (**example**).

As this Standard is reproduced from an International Standard a full point should be substituted for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex to which they apply. A normative annex is an integral part of a Standard, whereas an informative annex is only for information and guidance.

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Part 0: General requirements**

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**1 Scope**

This part of AS/NZS 60079 specifies the general requirements for construction, testing and marking of electrical apparatus, Ex cable entries and Ex components, intended for use in potentially explosive atmospheres of gas, vapour and mist.

This standard does not specify requirements for safety, other than those directly related to the explosion risk.

This standard is or will be supplemented or modified by the following parts of IEC 60079 concerning specific types of protection:

IEC 60079-1, *flameproof enclosures 'd'*;

IEC 60079-2, *pressurized enclosures 'p'*;

IEC 60079-5, *powder filling 'q'*;

IEC 60079-6, *oil immersion 'o'*;

IEC 60079-7, *increased safety 'e'*;

IEC 60079-11, *intrinsic safety 'i'*;

IEC 60079-18, *encapsulation 'm'*;

IEC 60079-22, *Caplights for mines susceptible to firedamp (under consideration)*.\*

This part of AS/NZS 60079 and the parts of IEC 60079 mentioned above are not applicable to the construction of electromedical apparatus, shot-firing exploders, test devices for exploders and for shot-firing circuits.

NOTE 1 – In addition to the types of protection listed above, IEC 60079-15 is applicable for use in a potentially explosive atmosphere.

NOTE 2 – Apparatus not conforming with this standard or the standards listed in this clause may be considered safe by a national or other authorised body for use in potentially explosive atmospheres. In such cases, the apparatus is identified with the symbol 's'.

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\* The International Electrotechnical Commission (IEC) has redesignated IEC 60079-22 as IEC 62013 Part 1: *General requirements—Construction and testing in relation to the risk of explosion* and Part 2: *Performance and other safety related matters*, and its publication is expected during 2000.