AS/NZS 60079.1:2002
IEC 60079-1:2001

Australian/New Zealand Standard™

Electrical apparatus for explosive gas atmospheres

Part 1: Flameproof enclosures ‘d’

Standards Australia
STANDARDS NEW ZEALAND

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 11 February 2002 and on behalf of the Council of Standards New Zealand on 19 February 2002. It was published on 11 March 2002.

The following interests are represented on Committee EL-014:

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of either Standards Australia International or Standards New Zealand at the address shown on the back cover.

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Australian/New Zealand Standard™

Electrical apparatus for explosive gas atmospheres

Part 1: Flameproof enclosures ‘d’

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Electrical Equipment in Hazardous Areas.

This Standard is identical with and has been reproduced from IEC 60079-1:2001, *Electrical apparatus for explosive gas atmospheres*, Part 1: *Flameproof enclosures 'd'*, including Corrigendum 1:2001.

Footnotes were included in pages 11 and 12 to highlight minor corrections to the original text (identified by shading and *).

The objective of this Standard is to set out the requirements for the construction and testing of electrical apparatus with type of protection flameproof enclosures 'd', intended for use in explosive gas atmospheres.

This Standard is to be read in conjunction with AS/NZS 60079.0, the requirements of which apply to electrical apparatus with flameproof enclosures.

This Standard will run concurrently with AS 2380.2—1991, *Electrical equipment for explosive atmospheres—Explosion-protection techniques*, Part 2: *Flameproof enclosure d*, until the AS/NZS 60079 series is complete, at which time the AS 2380 series will be withdrawn.

This Standard will supersede AS 1828—1984 *Electrical equipment for explosive atmospheres - Cable glands*, two years from publication.

A reference to an International Standard identified in the Normative References Clause by strikethrough (~~example~~) is replaced by a reference to the 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 term 'normative' has been used in this Standard to define the application of the annex to which it applies. A 'normative' annex is an integral part of a Standard.

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1 Scope

This part of IEC 60079 contains the specific requirements for the construction and testing of electrical apparatus with the type of protection flameproof enclosure ‘d’, intended for use in potentially explosive gas atmospheres.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of IEC 60079. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of IEC 60079 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

References to International Standards that are struck through in this Clause are replaced by references to equivalent Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading.

IEC 60061 (all parts), *Lamp caps and holders together with gauges for the control of interchangeability and safety*

~~IEC 60079-0:1998, *Electrical apparatus for explosive gas atmospheres – Part 0: General requirements*~~

AS/NZS 60079.0:2000, *Electrical apparatus for explosive gas atmospheres,* Part 0: *General requirements* (identical to IEC 60079.0:1998)

IEC 60079-1A:1975, *Electrical apparatus for explosive gas atmospheres – Part 1: Construction and verification test of flameproof enclosures of electrical apparatus – First supplement: Appendix D: Method of test for ascertainment of maximum experimental safe gap*

IEC 60079-7:1990, *Electrical apparatus for explosive gas atmospheres – Part 7: Increased safety ‘e’*

~~IEC 60079-11:1999, *Electrical apparatus for explosive gas atmospheres – Part 11: Intrinsic safety ‘i’*~~

AS/NZS 60079.11:2000, *Electrical apparatus for explosive gas atmospheres,* Part 11: *Intrinsic safety ‘i’* (identical to IEC 60079.11:1999).

~~IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*~~

AS/NZS 4695.112:1996, *Fire hazard testing of electrotechnical products,* Part 112: *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions* (identical to IEC 60112:1979)