Australian/New Zealand Standard™

Electrical apparatus for explosive gas atmospheres

Part 1: Flameproof enclosures 'd'





AS/NZS 60079.1:2005

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 8 April 2005 and on behalf of the Council of Standards New Zealand on 15 April 2005.

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AS/NZS 60079.1:2005

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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, to supersede AS/NZS 60079.1:2002.

This Standard is identical with, and has been reproduced from IEC 60079-1, Ed.5.0(2003), Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof enclosures "d".

The objective of this Standard is to set out the requirements for the construction and testing of electrical apparatus with type of protection '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 edition contains the following significant technical changes with regard to the previous edition:

- (a) Revisions to Clause 5 regarding the use of corrosion inhibiting grease, and regarding electroplating of joint surfaces.
- (b) Revisions to Clause 5 regarding gaps whose dimensions are less than required in the tables, and regarding taper threaded joints.
- (c) Revisions to Clause 13 regarding entries for flameproof enclosures.
- (d) Revisions to Clause 13 regarding cable glands and conduit entries.
- (e) Revisions to Clause 14 regarding test voltage for motors.
- (f) Revisions to Clause 15 regarding type tests for apparatus used at an ambient temperature below -20°C, or at an ambient temperature above 60°C.
- (g) Revisions to Clause 16 regarding routine tests for apparatus used at an ambient temperature below -20°C.
- (h) Revisions to Clause 19 regarding non-metallic enclosures.
- (i) Revisions to Annex C regarding Ex blanking elements and thread adapters.
- (j) Addition of a new normative Annex D regarding empty flameproof enclosures as Ex components.
- (k) Addition of a new normative Annex E regarding cells and batteries.

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- (iii) A full point substitutes for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' are used 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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