Australian/New Zealand Standard™

Explosive atmospheres

Part 14: Electrical installations design, selection and erection (IEC 60079-14, Ed. 4.0 (2007) MOD)





AS/NZS 60079.14:2009

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Equipment for Explosive Atmospheres. It was approved on behalf of the Council of Standards Australia on 13 August 2009 and on behalf of the Council of Standards New Zealand on 11 September 2009. This Standard was published on 18 September 2009.

The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce Australian Chamber of Commerce and Industry Australian Industry Group Australian Institute of Petroleum Ltd Australian Petroleum Production and Exploration Association Department of Mines and Energy, Qld **Electrical Compliance Testing Association Energy Networks Association** Engineers Australia Institute of Instrumentation, Control and Automation Australia Inc. Institution of Professional Engineers New Zealand Mining Electrical and Mining Mechanical Engineering Society National Electrical and Communications Association New Zealand Employers and Manufacturers Association NSW Department of Primary Industries, Mineral Resources The Aviation and Marine Engineers Associations Workcover New South Wales

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This Standard was issued in draft form for comment as DR 08193.

AS/NZS 60079.14:2009 (Incorporating Amendment No. 1)

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PREFACE

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This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres. In conjunction with AS/NZS 60079-17, it is intended to replace the AS/NZS 2381, AS 2381 and AS 1076 series, in September 2012. After this time it is intended that the AS/NZS 2381, AS 2381 and AS 1076 series will be withdrawn. It is also intended that this Standard, in conjunction with AS/NZS 60079.17, will replace AS/NZS 61241.14, in September 2012. After this time it is intended that AS/NZS 61241.14 will also be withdrawn.

This Standard incorporates Amendment No. 1 (August 2011). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

The objective of this Standard is to set out the requirements for the design, selection and erection of electrical installations in hazardous areas associated with explosive atmospheres; these requirements are in addition to the requirements for electrical installations in non-hazardous areas.

This Standard is an adoption with national modifications and has been reproduced from IEC 60079-14, Ed. 4.0 (2007), *Explosive atmospheres - Part 14: Electrical installations design, selection and erection*. It has been varied as indicated to take account of Australian/New Zealand conditions and for the protection of human health and safety, a legitimate reason under the WTO Agreement on Technical Barriers to Trade (TBT).

Variations to IEC 60079-14, Ed. 4.0 (2007) are indicated at the appropriate places throughout this Standard. Strikethrough (example) identifies IEC text, tables and figures, that for the purposes of this Australian/New Zealand Standard, are deleted. Where text, tables or figures are added, each is set in its proper place and identified by shading (example). Added figures are not themselves shaded, but are identified by a shaded border.

The adoption of this Standard forms part of the strategic objective established by Standards Australia and Standards New Zealand for adoption of all of the IEC 60079 series.

The change to the IEC based Standard introduces changes in both technical content and presentation. However many of the technical changes are also introduced as a result of changes within the IEC as part of the fourth edition of IEC 60079-14.

Included in this Standard are selected details and informative annexes from AS/NZS 2381.1:2005 that are considered appropriate to retain.

Significant technical changes included in this Standard, with respect to the previous IEC edition are as follows:

- (a) Equipment Protection Levels (EPLs) have been introduced and are explained in Annex I.
- (b) Dust requirements included from AS/NZS 61241.14.
 NOTE: Dust requirements are included as an interim presentation for the purpose of this edition and will be refined in a next edition with other required technical changes.

As this Standard is reproduced from an International Standard, the following applies:

- (i) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (ii) A full point should be substituted 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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