Australian/New Zealand Standard™

Electrical apparatus for use in the presence of combustible dust

Part 1.2: Electrical apparatus protected by enclosures and surface temperature limitation—Selection, installation and maintenance

[Modified and including the full text of IEC 61241-1-2:1999]

Standards Australia

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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 17 December 1999 and on behalf of the Council of Standards New Zealand on 22 November 1999. It was published on 23 February 2000.

The following interests are represented on Committee EL/14:

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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.

This Standard was issued in draft form for comment as DR 99156.

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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, to supersede AS 2381.10—1995 , *Electrical equipment for explosive atmospheres—Selection, installation and maintenance* Part 10: *Equipment in combustible dust (Class II) areas*.

This Standard is a modified adoption of the International Standard, IEC 61241-1-2:1999, *Electrical apparatus for use in the presence of combustible dust—Part 1.2: Electrical apparatus protected by enclosures and surface temperature limitation—Selection, installation and maintenance*; it has been varied, as indicated, for the protection of human health and safety, a legitimate reason under the WTO Agreement on Technical Barriers to Trade (TBT).

Variations to IEC 61241-1-2:1999 are indicated at the appropriate places throughout this Standard. Strikethrough (~~example~~) identifies IEC tables, figures and passages of text which, for the purposes of this Australian/New Zealand Standard, are deleted. Where Australian/New Zealand tables, figures or passages of text 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. Added Annexes (information transferred from the superseded AS 2381.10) have been shaded in the Contents list only. Annex ZZ contains a summary of all variations and their respective explanations.

The objective of this Standard is to provide guidance on the selection, installation and maintenance of electrical apparatus to be used in areas where combustible dusts are or may be present.

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 Australian or Australian/New Zealand Standard(s) listed immediately thereafter and identified by shading (example). Where the struck-through referenced document and the referenced Australian or Australian/New Zealand Standard are identical, this is indicated in parenthesis after the title of the latter.

In the case of identical Standards, the references to the International Standards have been replaced in the text by the respective Australian/New Zealand Standards.

This Standard is part of a series covering electrical apparatus for use in the presence of combustible dust which comprises the following:

AS/NZS	
61241	Electrical apparatus for use in the presence of combustible dust
61241.1.1	Part 1.1: Electrical apparatus protected by enclosures and surface temperature limitation—Specification for apparatus
61241.1.2	Part 1.2: Electrical apparatus protected by enclosures and surface temperature limitation—Selection, installation and maintenance (this Standard)
61241.2.1	Part 2.1: Test methods—Methods for determining the minimum ignition temperatures of dust
61241.2.2	Part 2.2: Test methods—Method for determining the electrical resistivity of dust in layers
61241.2.3	Part 2.3: Test methods—Method for determining minimum ignition energy of dust/air mixtures
61241.3	Part 3: Classification of areas where combustible dusts are or may be present

At this stage other Standards are being developed by IEC for electrical equipment using alternate protection techniques suitable for dust hazardous areas—pressurization, intrinsic safety and encapsulation.

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.