

AS/NZS 4871.6:2013

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Australian/New Zealand Standard™

Electrical equipment for mines and quarries

Part 6: Diesel powered machinery and ancillary equipment



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This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-023, Electrical Equipment in Mines. It was approved on behalf of the Council of Standards Australia on 21 August 2013 and on behalf of the Council of Standards New Zealand on 26 June 2013.

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The following are represented on Committee EL-023:

Australian Cablemakers Association
Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Industry Group
Aviation and Marine Engineers Association
Consult Australia
Department of Mines and Petroleum, WA
Department of Natural Resources and Mines, Qld
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AS/NZS 4871.6:2013

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PREFACE

This Standard was prepared by Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Mines, to supersede AS/NZS 4871.6:2007, *Electrical equipment for coal mines, for use underground, Part 6: Diesel powered machinery and ancillary equipment*.

The objective of this Standard is to set out requirements for the design, construction and testing of electrical systems associated with diesel powered mobile machines for use in underground coal mines.

This Standard is Part 6 of the AS/NZS 4871 series, *Electrical equipment for mines and quarries*, which comprises the following parts:

- Part 1: General requirements
- Part 2: Distribution, control and auxiliary equipment
- Part 3: Substations
- Part 4: Mains powered electrical mobile machines
- Part 5: Battery powered electrical mobile machines
- Part 6: Diesel powered machinery and ancillary equipment (this Standard)

The principal differences between this and the previous edition are as follows:

- (a) The scope and application have been clarified and extended to include diesel powered plant used in quarrying and both above and below ground mining.
- (b) General restructure of sections separating general requirements from specific requirements for fire-protected and explosion-protected plant used in underground coal mines.
- (c) Updated requirements recognizing new and current technologies.
- (d) This edition incorporates requirements from AS 4242—1994, *Earth-moving machinery and ancillary equipment for use in mines—Electrical wiring systems at extra-low voltage* (which is to be withdrawn).
- (e) Added requirements for above ground mine and quarry applications.
- (f) Clearer requirements for cabling and electrical protection, isolation, and safety systems.

The term ‘informative’ has been used in this Standard to define the application of the appendix to which it applies. An ‘informative’ appendix is only for information and guidance.

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