

AS/NZS 3800:2012

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Australian/New Zealand Standard™

# Electrical equipment for explosive atmospheres—Repair and overhaul



## **AS/NZS 3800:2012**

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-023, Electrical Equipment in Mines and Quarries. It was approved on behalf of the Council of Standards Australia on 5 November 2012 and on behalf of the Council of Standards New Zealand on 1 November 2012.  
This Standard was published on 22 November 2012.

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The following are represented on Committee EL-023:

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Australian Industry Group  
Consult Australia  
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Department of Mines and Petroleum, WA  
Department of Mines and Energy, Qld  
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*This Standard was issued in draft form for comment as DR AS/NZS 3800.*

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## **Electrical equipment for explosive atmospheres—Repair and overhaul**

Originated in Australia as AS 2290.2—1979.  
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## PREFACE

This Standard was prepared by Joint Standards Australia/Standards New Zealand Committee EL-023, Electrical Equipment in Mines and Quarries, to supersede AS/NZS 3800:2005 two years after publication.

The basic content of this Standard was prepared by the International Electrotechnical Commission (IEC) with participation of Joint Standards Australia/Standards New Zealand Committees EL-014, Equipment for Explosive Atmospheres, and EL-023, Electrical Equipment in Mines and Quarries, and Australian and New Zealand experts.

The objective of this Standard is to establish specific requirements for and give instruction, principally of a technical nature on, the repair, overhaul, reclamation and modification of equipment designed for use in explosive atmospheres.

This Standard is based on but not equivalent to IEC 60079-19, Ed.3.0 (2011), *Explosive atmospheres*, Part 19: *Equipment repair, overhaul and reclamation*, and as such represents changes in presentation and content. It has been varied to take account of Australian/New Zealand conditions and the changes are listed in Appendix L.

The major changes from IEC 60079-19, Ed.3.0 (2011) include the addition of Clauses covering the following types of protection:

- (a) Encapsulation 'm'.
- (b) Oil filled 'o'.
- (c) Powder filled 'q'.
- (d) Special 's'.

Additional requirements for evaluation procedures and parameters are given in Appendices D, E, G, H, I and J.

The major differences/variations between this document and AS/NZS 3800:2005 are as follows:

- (i) Changes to the definition of 'Alteration' and 'Modification'.
- (ii) Changes to symbols referred to in Appendix A of this document.
- (iii) Relocation of sample report formats to SA/SNZ Handbook HB 239, *Guidance on the repair and overhaul of electrical equipment for explosive atmospheres*.
- (iv) Relocation of evaluation procedures to protection technique-specific appendices.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a Standard, whereas an 'informative' appendix is only for information and guidance.

Statements expressed in mandatory terms in footnotes to tables are deemed to be requirements of this Standard.

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