

Australian/New Zealand Standard™

Explosive atmospheres

**Part 6: Equipment protection by oil
immersion ‘o’**



AS/NZS 60079.6:2007

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 1 June 2007 and on behalf of the Council of Standards New Zealand on 29 June 2007. This Standard was published on 31 July 2007.

The following are represented on Committee EL-014:

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Auckland Regional Chamber of Commerce
Australian Chamber of Commerce and Industry
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Australian Industry Group
Australian Institute of Petroleum
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Australian/New Zealand Standard™

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Part 6: Equipment protection by oil immersion 'o'

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.6:2000.

The objective of this Standard is to set out the requirements for the construction and testing of oil-immersed electrical equipment, oil-immersed parts of electrical equipment and Ex components in the type of protection oil immersion ‘o’, intended for use in explosive gas atmospheres.

This Standard is identical with, and has been reproduced from IEC 60079-6, Ed.3.0 (2007), *Explosive atmospheres – Part 6: Equipment protection by oil immersion “o”*.

This part is to be used in conjunction with AS/NZS 60079.0, *Electrical apparatus for explosive gas atmospheres, Part 0: General requirements*.

The significant changes with respect to the previous edition are—

- (a) all requirements for third-party certification removed;
- (b) added requirements for external connections;
- (c) collected all marking requirements in the marking clause;
- (d) added requirements for instructions.

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 term ‘informative’ is used to define the application of the annex to which it applies. An informative annex is only for information and guidance.

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Australian/New Zealand Standard**Explosive atmospheres
Part 6: Equipment protection by oil immersion 'o'****1 Scope**

This part of IEC 60079 specifies the requirements for the construction and testing of oil-immersed electrical equipment, oil-immersed parts of electrical equipment and Ex components in the type of protection oil immersion "o", intended for use in explosive gas atmospheres.

NOTE Type of protection oil immersion "o" provides equipment protection level (EPL) Gb. For further information, see Annex A.

This standard supplements and modifies the general requirements of IEC 60079-0. Where a requirement of this standard conflicts with a requirement of IEC 60079-0, the requirement of this standard takes precedence.

This standard is applicable to electrical equipment, parts of electrical equipment, and Ex components which, in the absence of oil immersion, are not ignition capable in normal operation as determined by IEC 60079-15 or IEC 60079-11.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60079-0, *Electrical apparatus for explosive gas atmospheres — Part 0: General requirements*~~

AS/NZS 60079.0, *Electrical apparatus for explosive gas atmospheres, Part 0: General requirements* (identical to IEC 60079-0)

~~IEC 60079-7, *Electrical apparatus for explosive gas atmospheres — Part 7: Increased safety "e"*~~

AS/NZS 60079.7, *Electrical apparatus for explosive gas atmospheres, Part 7: Increased safety 'e'* (identical to IEC 60079-7)

~~IEC 60079-11, *Electrical apparatus for explosive gas atmospheres — Part 11: Intrinsic safety "i"*~~

AS/NZS 60079.11, *Electrical apparatus for explosive gas atmospheres, Part 11: Intrinsic safety 'i'* (identical to IEC 60079-11)