Australian/New Zealand Standard™

Explosive atmospheres

Part 28: Protection of equipment and transmission systems using optical radiation





AS/NZS 60079.28:2016

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 9 March 2016 and by the Standards New Zealand Approval Board on 20 April 2016.

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This Standard was issued in draft form for comment as DR AS/NZS 60079.28:2015.

AS/NZS 60079.28:2016

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Part 28: Protection of equipment and transmission systems using optical radiation

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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 60079.28:2007.

The objective of this Standard is to specify the requirements, testing and marking of equipment emitting optical radiation intended for use in explosive atmospheres. It also covers equipment located outside the explosive atmosphere or protected by a type of protection listed in IEC 60079-0, but which generates optical radiation that is intended to enter an explosive atmosphere. It covers Groups I, II and III, and EPLs Ga, Gb, Gc, Da, Db, Dc, Ma and Mb. The objective of the revision is to adopt the current edition of IEC 60079-28.

The particular requirements of this Standard supplement the general requirements specified in AS/NZS 60079.0. This Standard is intended to be read in conjunction with AS/NZS 60079.0.

This Standard is identical with, and has been reproduced from IEC 60079-28, Ed. 2.0 (2015), Explosive atmospheres, Part 28: Protection of equipment and transmission systems using optical radiation.

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

- (a) In the source text 'this part of IEC 60079' should read 'this Australian/New Zealand standard'.
- (b) A full point substitutes for a comma when referring to a decimal marker.

Reference to International Standard

References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

Australian/New Zealand Standard

| Reference to International Standard | | Australian/New Zealana Stanaara | | |
|-------------------------------------|---|---------------------------------|---|--|
| IEC | | AS/NZS | | |
| 60079 | Explosive atmospheres | 60079 | Explosive atmospheres | |
| 60079-0 | Part 0: Equipment—General requirements | 60079.0 | Part 0: Equipment—General requirements | |
| 60079-11 | Part 11: Equipment protection by intrinsic safety "i" | 60079.11 | Part 11: Equipment protection by intrinsic safety 'i' | |
| 60079-15 | Part 15: Equipment protection by type of protection "n" | 60079.15 | Part 15: Equipment protection by type of protection 'n' | |
| 60825 60825-2 | Safety of laser products Part 2: Safety of optical fibre communication systems (OFCS) | 60825 60825.2 | Safety of laser products Part 2: Safety of optical fibre communication systems (OFCS) | |

Only normative references that have been adopted as Australian or Australian/New Zealand Standards have been listed.

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.

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