

**AS/NZS 60079.7:2016**  
IEC 60079-7, Ed 5.0 (2015)

AS/NZS 60079.7:2016

**Australian/New Zealand Standard™**

**Explosive atmospheres**

**Part 7: Equipment protection by  
increased safety ‘e’**



## **AS/NZS 60079.7:2016**

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 1 March 2016 and on behalf of the Council of Standards New Zealand on 12 February 2016.  
This Standard was published on 22 March 2016.

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*This Standard was issued in draft form for comment as DR AS/NZS 60079.7:2015.*

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AS/NZS 60079.7:2016

# Australian/New Zealand Standard™

## Explosive atmospheres

### Part 7: Equipment protection by increased safety 'e'

Originated as AS/NZS 60079.7:2002.  
Previous edition 2006.  
Third edition 2016.

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ISBN 978 1 76035 431 2

## PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee, EL-014 Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.7:2006.

The objective of this Standard is to specify the requirements for the design, construction, testing and marking of electrical apparatus with type of protection increased safety ‘e’ intended for use in explosive gas atmospheres. This Standard applies to electrical apparatus where the rated voltage does not exceed 15 kV r.m.s. a.c. or d.c. Additional measures are applied to ensure that the apparatus does not produce arcs, sparks, or excessive temperatures in normal operation or under specified abnormal conditions. The objective of the revision is to adopt the current edition of IEC 60079-7.

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 60079-7, Ed 5.0 (2015), *Explosive atmospheres, Part 7: Equipment protection by increased safety “e”*.

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.

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

<i>Reference to International Standard</i>		<i>Australian/New Zealand Standard</i>	
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’
IEC/IEEE			
60079-30-1	Part 30-1: Electrical resistance trace heating—General and testing requirements	60079.30.1	Part 30.1: Electrical resistance trace heating—General and testing requirements
IEC			
60238	Edison screw lampholders	60238	Edison screw lampholders (IEC 60238, Ed. 8.2 (2011) MOD)
60432	Incandescent lamps—Safety specifications	60432	Incandescent lamps—Safety specifications
60432-1	Part 1: Tungsten filament lamps for domestic and similar general lighting purposes	60432.1	Part 1: Tungsten filament lamps for domestic and similar general lighting purposes
60432-2	Part 2: Tungsten halogen lamps for domestic and similar general lighting purposes	60432.2	Part 2: Tungsten-halogen lamps for domestic and similar general lighting purposes
60432-3	Part 3: Tungsten halogen lamps (non-vehicle)	60432.3	Part 3: Tungsten-halogen lamps (non-vehicle)
IEC		AS	
60529	Degrees of protection provided by enclosures (IP Code)	60529	Degrees of protection provided by enclosures (IP Code)

IEC		AS/NZS	
60947	Low-voltage switchgear and controlgear	60947	Low-voltage switchgear and controlgear
60947-1	Part 1: General rules	60947.1	Part 1: General rules
60947-7-1	Part 7-1: Ancillary equipment—Terminal blocks for copper conductors	60947.7.1	Part 7.1: Ancillary equipment—Terminal blocks for copper conductors
60947-7-2	Part 7-2: Ancillary equipment—Protective conductor terminal blocks for copper conductors	60947.7.2	Part 7.2: Ancillary equipment—Protective conductor terminal blocks for copper conductors
60947-7-4	Part 7-4: Ancillary equipment—PCB terminal blocks for copper conductors	60947.7.4	Part 7.4: Ancillary equipment—PCB terminal blocks for copper conductors
60998	Connecting devices for low-voltage circuits for household and similar purposes	60998	Connecting devices for low-voltage circuits for household and similar purposes
60998-2-4	Part 2-4: Particular requirements for twist-on connecting devices	60998.2.4	Part 2.4: Particular requirements for twist-on connecting devices
60999	Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units	60999	Connecting devices—Electrical copper conductors—Safety requirements for screw-type and screwless-type clamping units
60999-1	Part 1: General requirements and particular requirements for clamping units for conductors from 0,2 mm <sup>2</sup> up to 35 mm <sup>2</sup> (included)	60999.1	Part 1: General requirements and particular requirements for clamping units for conductors from 0.2 mm <sup>2</sup> up to 35 mm <sup>2</sup> (included)
60999-2	Part 2: Particular requirements for clamping units for conductors above 35 mm <sup>2</sup> up to 300 mm <sup>2</sup> (included)	60999.2	Part 2: Particular requirements for clamping units for conductors above 35 mm <sup>2</sup> up to 300 mm <sup>2</sup> (included)
61184	Bayonet lampholders	61184	Bayonet lampholders (IEC 61184, Ed. 3.1 (2011) MOD)
ISO		AS	
2859	Sampling procedures for inspection by attributes	1199	Sampling procedures for inspection by attributes
2859-1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection	1199.1	Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

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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