AS/NZS 60079.18:2016 IEC 60079-18, Ed. 4.0 (2014) IEC 60079-18:2014 (ED.4.0)/AMD 1:2017 (Incorporating Amendment No. 1)

Australian/New Zealand Standard<sup>™</sup>

**Explosive atmospheres** 

Part 18: Equipment protection by encapsulation 'm'





#### AS/NZS 60079.18:2016

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. This Standard was published on 10 May 2016.

The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce Australian Chamber of Commerce and Industry Australian Industry Group Australian Institute of Petroleum Australian Petroleum Production and Exploration Association Australian Pipelines and Gas Association Aviation and Marine Engineers Association Bureau of Steel Manufacturers of Australia Department of Industry, Skills and Regional Development, NSW Department of Natural Resources and Mines, Qld (SIMTARS) Electrical Contractors Association of New Zealand Electrical Regulatory Authorities Council **Engineers** Australia Institute of Electrical Inspectors Institute of Instrumentation, Control and Automation Australia Institution of Professional Engineers New Zealand Mining Electrical and Mining Mechanical Engineering Society SafeWork NSW University of Newcastle WorkSafe New Zealand

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We also welcome suggestions for improvement in our Standards, and especially encourage readers to notify us immediately of any apparent inaccuracies or ambiguities. Please address your comments to the Chief Executive of Standards Australia or the New Zealand Standards Executive at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 60079.18:2015.

AS/NZS 60079.18:2016 (Incorporating Amendment No. 1)

## Australian/New Zealand Standard™

## **Explosive atmospheres**

# Part 18: Equipment protection by encapsulation 'm'

Originated in Australia as AS 2431—1981. Previous edition AS/NZS 60079.18:2011. Third edition 2016. Reissued incorporating Amendment No. 1 (April 2020).

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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 60079.18:2011.

This Standard incorporates Amendment No. 1 (April 2020). The changes required by the Amendment are indicated in the text by a marginal bar and amendment number against the clause, note, table, figure or part thereof affected.

A1 Amendment No. 1 to this Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres.

The objective of this Standard is to establish the specific requirements for construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components with the type of protection encapsulation 'm' intended for use explosive gas atmospheres or explosive dust atmospheres. The objective of the revision is to adopt the current edition of IEC 60079-18.

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 60079-18:2014 (ED. 4.0), *Explosive atmospheres* — *Part 18: Equipment protection by encapsulation "m"* and its Amendment 1 (2017) which has been added at the end of the source text.

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:

Australian/New Zealand Standard

Reference	to Inter	rnational	Standara
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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'
60079-31	Part 31: Equipment dust ignition protection by enclosure "t"	60079.31	Part 31: Equipment dust ignition protection by enclosure 't'
61558	Safety of power transformers, power supplies, reactors and similar products	61558	Safety of power transformers, power supplies, reactors and similar products
61558-1	Part 1: General requirements and tests	61558.1	Part 1: General requirements and tests (IEC 61558-1 Ed 2.1, MOD)
61558	Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V	61558	Safety of transformers, reactors, power supply units and similar products for supply voltages up to 1 100 V
61558-2-6	Part 2-6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers	61558.2.6	Part 2.6: Particular requirements and tests for safety isolating transformers and power supply units incorporating safety isolating transformers (IEC 61558-2-6 Ed 2, MOD)

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

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



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