AS/NZS 60079.18:2011 IEC 60079-18 Ed.3.0 (2009) IEC 60079-18 Ed.3.0 Cor.1 (2009)

Australian/New Zealand Standard™

Explosive atmospheres

Part 18: Equipment protection by encapsulation 'm'





AS/NZS 60079.18:2011

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 27 May 2011 and on behalf of the Council of Standards New Zealand on 13 May 2011. This Standard was published on 10 June 2011.

The following are represented on Committee EL-014:

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

Australian/New Zealand Standard[™]

Explosive atmospheres

Part 18: Equipment protection by encapsulation 'm'

Originated in Australia as AS 2431—1981. Previous edition AS/NZS 60079.18:2005. Second edition 2011.

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1

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.18:2005, *Electrical apparatus for explosive gas atmospheres*, Part 18: *Construction, test and marking of type of protective encapsulation 'm' electrical apparatus*.

The objective of this Standard is to establish the specific requirements for design, construction and testing of electrical equipment protected by encapsulation for use in flammable gas and vapour atmospheres and explosive dust atmospheres. It is intended to be read in conjunction with AS/NZS 60079-0. The objective of the revision is to adopt the current edition of IEC 60079-18. A list of 'significant changes' is given in the Foreword.

This Standard is identical with, and has been reproduced from IEC 60079-18 Ed.3.0 (2009), *Explosive atmospheres—Part* 18: *Equipment protection by encapsulation 'm'*, and its corrigendum, IEC 60079-18 Ed.3.0 Cor.1 (2009), which is incorporated into the source text.

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

- (a) Its number appears on the cover and title page while the international standard number appears only on the cover.
- (b) In the source text 'this part of IEC 60079' should read 'this part of AS/NZS 60079'.
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References to International Standards should be replaced by references to Australian or Australian/New Zealand Standards, as follows:

<i>Reference</i> IEC	to International Standard	Australian/New Zealand Standard AS/NZS		
60079	Explosive atmospheres	60079	Explosive atmospheres	
60079-0	Part 0: General requirements	60079.0	Part 0: General requirements	
60079-7	Part 7: Equipment protection by increased safety 'e'	60079.7	Part 7: Equipment protection by increased safety 'e'	
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'	
60079-26	Part 26: Equipment with equipment protection level (EPL) Ga	60079.26	Part 26: Equipment with equipment protection level (EPL) Ga	
60079-31	Part 31: Equipment dust ignition protection by enclosures 't'	60079.31	Part 31: Equipment dust ignition protection by enclosures 't'	
61241	Electrical apparatus for use in presence of combustible dust	61241	Electrical apparatus for use in presence of combustible dust	
61241-11	Part 11: Protection by intrinsic safety 'iD'	61241.11	Part 11: Protection by intrinsic safety 'iD'	

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

2

CONTENTS

				Page			
FO	REW	ORD		4			
1	Scop	e		6			
2	Norm	Normative references					
3	Term	erms and definitions					
4	General						
	۸ 1		of protection (Equipment protection level (EPL))	۰ ۵			
	42	9 9					
	4.3	4.3 Rated voltage and prospective short circuit current					
5	Reau	Requirements for compounds					
	5 1	Gener	al	9			
	5.2 Specification			9			
	5.3	Prope	rties of the compound				
		5.3.1	Water absorption				
		5.3.2	Dielectric strength				
6	Tem	perature	ح S	10			
-	6.1	Gener	al				
	6.2	Deterr	nination of the limiting temperature				
	•	6.2.1	Maximum surface temperature				
		6.2.2	Temperature of the compound				
	6.3	Tempe	erature limitation	10			
7	Cons	Constructional requirements					
	7.1	7.1 General					
	7.2	Deterr	nination of faults	11			
		7.2.1	Fault examination	11			
		7.2.2	Components considered as not subject to fail	12			
		7.2.3	Isolating components	12			
		7.2.4	Infallible separation distances	12			
	7.3	Free s	pace in the encapsulation	13			
		7.3.1	Group III "m" equipment	13			
		7.3.2	Group I and Group II "m" equipment	14			
	7.4	Thickr	ness of the compound	15			
		7.4.1	"m" equipment	15			
		7.4.2	Windings for electrical machines	17			
		7.4.3	Rigid, multi-layer printed wiring boards with through connections	17			
	7.5	Switch	ning contacts	18			
		7.5.1	Level of protection "ma"	18			
		7.5.2	Level of protection "mb"	18			
		7.5.3	Level of protection "mc"				
	7.6	Extern	al connections				
		7.6.1	General				
		7.6.2	Additional requirements for "ma" equipment				
	1.1	7.7 Protection of bare live parts					
	6.1		and batteries				
		1.0.1 700	General				
		2.0.1 د م ד	Protection against inadmissible temperatures and demage to the set				
		1.0.3	Frotection against machinespile temperatures and damage to the cer	1520			



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