Australian/New Zealand Standard™

Electrical apparatus for use in the presence of combustible dust

Part 18: Protection by encapsulation 'mD'





AS/NZS 61241.18:2005

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Electrical Equipment in Hazardous Areas. It was approved on behalf of the Council of Standards Australia on 8 April 2005 and on behalf of the Council of Standards New Zealand on 15 April 2005.

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The following are represented on Committee EL-014:

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Australian Chamber of Commerce and Industry

Australian Electrical and Electronic Manufacturers Association

Australian Industry Group

Australian Institute of Petroleum Ltd

Certification Interests (Australia)

Department of Natural Resources and Mines (Qld)

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AS/NZS 61241.18:2005

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PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Electrical Equipment in Hazardous Areas.

This Standard is identical with, and has been reproduced from IEC 61241-18, Ed.1(2004), Electrical apparatus for use in the presence of combustible dust - Part 18: Protection by encapsulation 'mD'.

The objective of this Standard is to specify requirements for the construction, testing and marking of electrical apparatus, parts of electrical apparatus and Ex components with the type of protection 'mD', for use in the presence of combustible dusts.

This Standard supplements the general requirements in AS/NZS 61241.0.

AS/NZS 61241 consists of the following parts under the general title: *Electrical apparatus for use in the presence of combustible dust:*

Part 0: General requirements

Part 1: Protection by enclosures 'tD'

Part 2: Type of protection 'pD'*

Part 10: Classification of areas where combustible dusts are or may be present

Part 11: Protection by intrinsic safety 'iD'*

Part 14: Selection and installation

Part 17: Inspection and maintenance of electrical installations in hazardous areas (other

than mines)†

Part 18: Protection by encapsulation 'mD'

Part 20: Test methods‡

Part 20.1: Methods for determining the minimum ignition temperatures of dust

Part 20.2: Method for determining the electrical resistivity of dust in layers

Part 20.3: Method for determining minimum ignition energy of dust/air mixtures

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- (a) Its number does not appear on each page of text and its identity is shown only on the cover and title page.
- (b) In the source text 'this international standard' should read 'this Australian/New Zealand Standard'.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The terms 'normative' and 'informative' are used 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.

^{*} To be published (to supersede current AS/NZS 61241.4).

[†] To be published.

[‡] Under consideration (to supersede current Parts 2.1, 2.2 and 2.3).

CONTENTS

			Page			
INT	RODU	JCTION	iv			
1	Scope					
2	Normative references					
3	Terms and definitions					
4	General					
	4.1	Temperature classification	4			
	4.2	Level of protection				
	4.3	Level of protection "maD"				
	4.4	Level of protection "mbD"				
	4.5	Supply specifications				
5	Requirements for compounds					
	5.1	General	5			
	5.2	Specification	5			
6	Temperatures					
	6.1	General	5			
	6.2	Temperature limitation	6			
	6.3	Determination of the limiting temperature values	6			
7	Constructional requirements					
	7.1	General	6			
	7.2	Determination of possible faults	7			
	7.3	Switching contacts	13			
	7.4	External connections	13			
	7.5	Protection of bare live parts	13			
	7.6	Cells and batteries	13			
	7.7	Protective devices				
8	Type tests					
	8.1	Tests on the compound – water absorption test	17			
	8.2	Tests on the apparatus	17			
9	Routine verifications and tests					
	9.1	Visual inspections	20			
	9.2	Dielectric strength test	21			
10	Mark	ng	21			
		(informative) Basic requirements for compounds for encapsulation "mD"				
		S				
Anr	ex B	(normative) Allocation of test samples	23			
Anr	ex C	(normative) Test procedure during thermal cycling test	24			



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