AS/NZS 60079.5:2007
IEC 60079-5, Ed.3.0 (2007)

AS/NZS 60079.5:2007

Australian/New Zealand Standard™

Explosive atmospheres

Part 5: Equipment protection by powdered filling 'q'

STANDARDS Australia

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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 June 2007 and on behalf of the Council of Standards New Zealand on 11 May 2007.
This Standard was published on 31 July 2007.

The following are represented on Committee EL-014:

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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 either Standards Australia or Standards New Zealand at the address shown on the back cover.

This Standard was issued in draft form for comment as DR 07159.

Australian/New Zealand Standard™

Explosive atmospheres

Part 5: Equipment protection by powdered filling 'q'

First published as AS/NZS 60079.5:2000.
Second edition 2007.

Jointly published by Standards Australia, GPO Box 476, Sydney, NSW 2001 and Standards New Zealand, Private Bag 2439, Wellington 6020

ISBN 0 7337 8282 5

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.5:2000.

The objective of this Standard is to set out the requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components in the type of protection powder filling 'q', intended for use in explosive gas atmospheres.

This Standard is identical with, and has been reproduced from IEC 60079-5, Ed.3.0 (2007), *Explosive atmospheres – Part 5: Equipment protection by powder filling "q"*.

The significant changes with respect to the previous edition are:

(a) All requirements for third-party certification have been removed.

(b) Requirements for external connections have been added.

(c) All requirements for cable glands have been deleted as they have been transferred to AS/NZS 60079.0.

(d) Specific requirements for cells and batteries have been introduced.

(e) Added relaxation requirements on required faults for fuse-protected equipment.

(f) Added requirements for instructions.

As this Standard is reproduced from an International Standard 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.

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

Australian/New Zealand Standard

Explosive atmospheres
Part 5: Equipment protection by powdered filling 'q'

1 Scope

This part of IEC 60079 contains specific requirements for the construction, testing and marking of electrical equipment, parts of electrical equipment and Ex components in the type of protection powder filling “q”, intended for use in explosive gas atmospheres.

NOTE 1 Electrical equipment and Ex components protected by powder filling “q” may contain electronic circuits, transformers, protection fuses, relays, intrinsically safe electrical apparatus, associated electrical apparatus, switches, etc.

NOTE 2 Type of protection powder filling “q” provides equipment protection level (EPL) Gb. For further information, see Annex A.

This standard supplements and modifies the general requirements of IEC 60079-0. Where a requirement of this standard conflicts with a requirement of IEC 60079-0, the requirement of this standard will take precedence.

This standard applies to electrical equipment, parts of electrical equipment and Ex components with:

– a rated supply current less than or equal to 16 A;

– a rated supply voltage less than or equal to 1 000 V;

– a rated power consumption less than or equal to 1 000 W.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

References to international standards that are struck through in this clause are replaced by references to Australian or Australian/New Zealand Standards that are listed immediately thereafter and identified by shading. Any Australian or Australian/New Zealand Standard that is identical to the International Standard it replaces is identified as such.

~~IEC 60079-0:2004, *Electrical apparatus for explosive gas atmospheres – Part 0: General requirements*~~

AS/NZS 60079.0:2005, *Electrical apparatus for explosive gas atmospheres*, Part 0: *General requirements* (identical to IEC 60079-0:2004)

IEC 60079-1, *Electrical apparatus for explosive gas atmospheres – Part 1: Flameproof enclosure “d”*

IEC 60079-7, *Electrical apparatus for explosive gas atmospheres – Part 7: Equipment protection by increased safety “e”*

IEC 60079-11, *Electrical apparatus for explosive gas atmospheres – Part 11: Equipment protection by intrinsic safety “i”*