

AS/NZS 60079.1:2007
IEC 60079-1, Ed. 6.0 (2007)
(Incorporating Amendment No. 1)

AS/NZS 60079.1:2007

Australian/New Zealand Standard™

Explosive atmospheres

**Part 1: Equipment protection by
flameproof enclosures ‘d’**



AS/NZS 60079.1:2007

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 28 June 2007 and on behalf of the Council of Standards New Zealand on 22 June 2007.
This Standard was published on 11 September 2007.

The following are represented on Committee EL-014:

Association of Consulting Engineers Australia
Auckland Regional Chamber of Commerce
Australian Chamber of Commerce and Industry
Australian Electrical and Electronic Manufacturers Association
Australian Industry Group
Australian Institute of Petroleum Ltd
Australian Petroleum Production and Exploration Association
Committee EL-023
Electrical Compliance Testing Association
Electrical Regulatory Authorities Council
Energy Networks Association
Engineers Australia
Environmental Risk Management Authority of New Zealand
Institute of Electrical Inspectors
Institute of Instrumentation, Control and Automation Australia
Mining Electrical and Mining Mechanical Engineering Society
Ministry of Economic Development (New Zealand)
NSW Department of Primary Industries, Mineral Resources
National Electrical and Communications Association
New Zealand Association of Marine, Aviation and Power Engineers
New Zealand Employers and Manufacturers Association
Simtars (Natural Resources, Mines and Water)
WorkCover New South Wales

Keeping Standards up-to-date

Standards are living documents which reflect progress in science, technology and systems. To maintain their currency, all Standards are periodically reviewed, and new editions are published. Between editions, amendments may be issued. Standards may also be withdrawn. It is important that readers assure themselves they are using a current Standard, which should include any amendments which may have been published since the Standard was purchased.

Detailed information about joint Australian/New Zealand Standards can be found by visiting the Standards Web Shop at www.standards.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

Alternatively, both organizations publish an annual printed Catalogue with full details of all current Standards. For more frequent listings or notification of revisions, amendments and withdrawals, Standards Australia and Standards New Zealand offer a number of update options. For information about these services, users should contact their respective national Standards organization.

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 07214.

AS/NZS 60079.1:2007
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Explosive atmospheres

Part 1: Equipment protection by flameproof enclosures ‘d’

Originated as AS/NZS 60079.1:2002.
Second edition 2005.
This edition 2007.
Reissued incorporating Amendment No. 1 (August 2008).

COPYRIGHT

© Standards Australia/Standards New Zealand

All rights are reserved. No part of this work may be reproduced or copied in any form or by any means, electronic or mechanical, including photocopying, without the written permission of the publisher.

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

ISBN 0 7337 8378 3

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.1:2005.

This Standard incorporates Amendment No. 1 (August 2008). 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

The objective of this Standard is to set out the requirements for the construction and testing of electrical apparatus with type of protection flameproof enclosure 'd', intended for use in explosive gas atmospheres.

This Standard is identical with, and has been reproduced from IEC 60079-1, Ed. 6.0 (2007), *Explosive atmospheres – Part 1: Equipment protection by flameproof enclosures 'd'*.

This Standard is to be read in conjunction with AS/NZS 60079.0, *Electrical apparatus for explosive gas atmospheres*, Part 0: *General requirements*.

This edition contains the following significant technical changes with regard to the previous edition:

- (a) Revisions to Clause 5 regarding markings and conditions of safe use when a dimension of a flameproof joint is other than the relevant minimum or maximum.
- (b) Revisions to Table 1 regarding maximum gap for flanged, cylindrical or spigot joints.
- (c) Revisions to Table 4 regarding requirements for taper threaded joints.
- (d) Revisions to Clause 10 regarding volume restrictions and test conditions associated with breathing and draining devices.
- (e) Revisions to Clause 11 regarding requirements for fasteners, associated holes and blanking elements.
- (f) Revisions to Clause 12 regarding material restrictions associated with zinc and zinc alloys.
- (g) Revisions to Table 5 regarding conditions for the determination of maximum surface temperatures.
- (h) Revisions to Clause 15 regarding the determination of explosion pressure (reference pressure).
- (i) Revisions to Table 6 regarding the reduction in length of a threaded joint for non-transmission testing.
- (j) Revisions to Table 7 regarding the test factors to increase pressure or test gap (i_E).
- (k) Revisions to Table 8 regarding the minimum distance of obstructions from flange openings.
- (l) Revisions to Clause 19 regarding tests for flameproofness.
- (m) Revisions to Clause 20 regarding a tabulated collection of marking requirements.
- (n) Revisions to Annex C regarding additional requirements for flameproof entry devices.
- (o) Revisions to Annex D regarding empty flameproof enclosures as Ex components.
- (p) Addition of a new Annex F regarding mechanical properties for screws and nuts.
- (q) Addition of a new Annex G regarding equipment protection levels for Ex equipment.

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.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- Looking for additional Standards? Visit Intertek Inform Infostore
 - Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation
-