

AS/NZS 60079.11:2011

IEC 60079-11, Ed. 6.0 (2011)

IEC 60079-11, Ed. 6.0 (2011)/Cor.1 (2012)

(Incorporating Amendment No. 1)

Reconfirmed 2022

Australian/New Zealand Standard™

Explosive atmospheres

**Part 11: Equipment protection by
intrinsic safety ‘i’**



AS/NZS 60079.11:2011

This Joint Australian/New Zealand Standard was prepared by Joint Technical Committee EL-014, Explosive Atmospheres. It was approved on behalf of the Council of Standards Australia on 5 September 2011 and on behalf of the Council of Standards New Zealand on 5 August 2011.

This Standard was published on 27 September 2011.

The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce
Australian Chamber of Commerce and Industry
Australian Coal Association
Australian Industry Group
Australian Institute of Petroleum
Australian Institute of Refrigeration Air Conditioning and Heating
Australian Petroleum Production and Exploration Association
Australian Pipeline Industry Association
Bureau of Steel Manufacturers of Australia
Consult Australia
Department of Industry and Investment, NSW
Department of Mines and Energy, Qld
Electrical Compliance Testing Association
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Energy Networks Association
Engineers Australia
Environmental Protection Authority New Zealand
Institute of Electrical Inspectors
Institute of Instrumentation, Control and Automation Australia
Institution of Professional Engineers New Zealand
Mining Electrical and Mining Mechanical Engineering Society
Ministry of Economic Development (New Zealand)
National Electrical and Communications Association
New Zealand Employers and Manufacturers Association (Central)
The Aviation and Marine Engineers Association
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 Standards may also be withdrawn.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.saiglobal.com.au or Standards New Zealand web site at www.standards.co.nz and looking up the relevant Standard in the on-line catalogue.

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 AS/NZS 60079.11.

AS/NZS 60079.11:2011 (Reconfirmed) 2022-05-23

STANDARDS AUSTRALIA/STANDARDS NEW ZEALAND

RECONFIRMATION OF AS/NZS 60079.11:2011 Explosive atmospheres Part 11: Equipment protection by intrinsic safety 'i'

RECONFIRMATION NOTICE

Technical Committee EL-014 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 7 February 2022.

Approved for reconfirmation in New Zealand on behalf of the New Zealand Standards Approval Board on 20 May 2022.

The following are represented on Technical Committee EL-014:

- Auckland Regional Chamber of Commerce
- Australian Chamber of Commerce and Industry
- Australian Industry Group
- Australian Petroleum Production and Exploration Association
- Australian Pipelines and Gas Association Limited
- Aviation and Marine Engineers Association
- Better Regulation Division (Fair Trading, SafeWork NSW, TestSafe)
- Bureau of Steel Manufacturers of Australia Limited
- Business New Zealand
- Communications, Electrical and Plumbing Union - Electrical Division
- Department of Regional NSW
- Electrical Compliance Testing Association of Australia
- Electrical Regulatory Authorities Council, Australia
- Electrical Safety New Zealand Inc
- Engineering New Zealand
- Engineers Australia
- Institute of Electrical Inspectors
- Institute of Instrumentation, Control & Automation Australia Inc
- Joint Accreditation System of Australia & New Zealand
- Master Electricians New Zealand
- Mining Electrical and Mining Mechanical Engineering Society
- Resources Safety & Health Queensland
- University of Newcastle
- Worksafe New Zealand- Energy Safety

AS/NZS 60079.11:2011
(Incorporating Amendment No. 1)

Australian/New Zealand Standard™

Explosive atmospheres

Part 11: Equipment protection by intrinsic safety ‘i’

Originated as AS/NZS 60079.11:2000.
Previous edition 2006.
Third edition 2011.
Reissued incorporating Amendment No. 1 (April 2013).

COPYRIGHT

© Standards Australia Limited/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, unless otherwise permitted under the Copyright Act 1968 (Australia) or the Copyright Act 1994 (New Zealand).

Jointly published by SAI Global Limited under licence from Standards Australia Limited, GPO Box 476, Sydney, NSW 2001 and by Standards New Zealand, Private Bag 2439, Wellington 6140.

ISBN 978 0 7337 9932 7

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Explosive Atmospheres, to supersede AS/NZS 60079.11:2006.

This Standard incorporates Amendment No. 1 (April 2013). 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.

The objective of this Standard is to establish the specific requirements for design, construction and testing of electrical equipment with protection by intrinsic safety ‘i’ 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, *Explosive atmospheres*, Part 0: *Equipment—General requirements*.

A1 | This Standard is identical with, and has been reproduced from IEC 60079-11, Ed.6.0 (2011), *Explosive atmospheres—Part 11: Equipment protection by intrinsic safety ‘i’*, and its Corrigendum 1 (2012), which is added at the end of 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’.
- (c) 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:

<i>Reference to International Standard</i>		<i>Australian or Australian/New Zealand Standard</i>	
IEC		AS	
60529	Degrees of protection provided by enclosures (IP Code)	60529	Degrees of protection provided by enclosures (IP Code)
		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’
60079-25	Part 25: Intrinsically safe electrical systems	60079.25	Part 25: Intrinsically safe electrical systems
60112	Method for the determination of the proof and the comparative tracking indices of solid insulating materials	60112	Method for the determination of the proof and the comparative tracking indices of solid insulating materials
62013	Caplights for use in mines susceptible to firedamp	62013	Caplights for use in mines susceptible to firedamp
62013-1	Part 1: General requirements—Construction and testing in relation to the risk of explosion	62013.1	Part 1: General requirements—Construction and testing in relation to the risk of explosion

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

It should be noted this edition merges the apparatus requirements of AS/NZS 60079.27 (FISCO) and AS/NZS 61241.11 (intrinsic safety for dusts), and therefore supersedes both standards. However many other parts of IEC 60079 and IEC 61241 are now published as identically-numbered parts of AS/NZS 60079 and AS/NZS 61241 respectively. The latter should be referenced when necessary.

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.

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
-