This is a free page sample. Access the full version online.

AS/NZS 60079.17:2017

Australian/New Zealand Standard™

Explosive atmospheres

Part 17: Electrical installations inspection and maintenance (IEC 60079-17:2013 (ED.5.0) MOD)

STANDARDS Australia

STANDARDS® NEW ZEALAND PAEREWA AOTEAROA

This is a free page sample. Access the full version online.

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 16 October 2017 and by the New Zealand Standards Approval Board on 1 November 2017.
This Standard was published on 12 December 2017.

The following are represented on Committee EL-014:

Auckland Regional Chamber of Commerce
Australian Chamber of Commerce and Industry
Australian Industry Group
Australian Institute of Petroleum
Australian Petroleum Production and Exploration Association
Australian Pipelines and Gas Association
Aviation and Marine Engineers Association
Bureau of Steel Manufacturers of Australia
Department of Natural Resources and Mines, Qld.
Department of Trade and Investment, NSW
Electrical Contractors Association of New Zealand
Electrical Regulatory Authorities Council
Electrical Safety New Zealand
Engineers Australia
Independent Expert
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 Business, Innovation and Employment, New Zealand
University of Newcastle
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 Standards may also be withdrawn.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 Australia Web Site at www.standards.org.au or Standards New Zealand web site at www.standards.govt.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 Standards Australia or the New Zealand Standards Executive at the address shown on the back cover.

This Standard was issued in draft form for comment as DR AS/NZS 60079.17:2016.

This is a free page sample. Access the full version online.

AS/NZS 60079.17:2017

Australian/New Zealand Standard™

Explosive atmospheres

Part 17: Electrical installations inspection and maintenance (IEC 60079-17:2013 (ED.5.0) MOD)

Originated as AS/NZS 60079.17:2009.
Second edition 2017.

COPYRIGHT

© Standards Australia Limited

© The Crown in right of New Zealand, administered by the New Zealand Standards Executive

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).

ISBN 978 1 76035 964 5

This is a free page sample. Access the full version online.

PREFACE

This Standard was prepared by the Joint Standards Australia/Standards New Zealand Committee EL-014, Equipment for Explosive Atmospheres, to supersede AS/NZS 60079.17:2009, *Explosive atmospheres*, Part 17: *Electrical installations inspection and maintenance (IEC 60079-17, Ed. 4.0 (2007) MOD)*.

The objective of this Standard is to set out the requirements for ongoing inspections of electrical installations and maintenance of electrical equipment in explosive atmospheres.

This Standard is an adoption with national modifications; it has been reproduced from IEC 60079-17:2013 (ED.5.0), *Explosive atmospheres*, Part 17: *Electrical installations inspection and maintenance*, and has been varied as indicated to take account of Australian/New Zealand conditions.

This Standard is structured as follows:

(a) Preface.

(b) IEC 60079-17:2013 (ED.5.0) (unedited from the contents page to the final clause of the source document).

(c) Appendix ZZ—Australian/New Zealand variations to the source document.

The variations listed in Appendix ZZ address issues including the following:

(i) Identification of relevant AS or AS/NZS Standards as normative references.

(ii) Reference to competency of personnel rather than qualifications, and deletion of Annex B and in its place reference to AS/NZS 4761.1, *Competencies for working with electrical equipment for hazardous areas (EEHA)* Part 1: *Competency Standards*.

(iii) Modification of normal inspection periods from 3 years to 4 years for established practice in Australia and New Zealand.

(iv) Reduction and clarification of some inspection details to meet accepted practice in Australia and New Zealand.

(v) Addition of inspection details for Ex'v' and type of protection 'p' for rooms to Australian Standards.

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

(A) In the source text 'this part of the IEC 60079 series' should read 'this Australian/New Zealand Standard'.

(B) A full point substitutes for a comma when referring to a decimal marker.

Australian or Australian/New Zealand Standards that are identical adoptions of international normative references may be used interchangeably. Refer to the online catalogue for information on specific standards.

The terms 'normative' and 'informative' have been used in this Standard to define the application of the annex or appendix to which they apply. A 'normative' annex or appendix is an integral part of a Standard, whereas an 'informative' annex or appendix is only for information and guidance.

This is a free page sample. Access the full version online.

CONTENTS

FOREWORD 5
INTRODUCTION 7
1 Scope 8
2 Normative references 8
3 Terms and definitions 9
4 General requirements 11
4.1 Documentation 11
4.2 Qualification of personnel 11
4.3 Inspections 11
4.3.1 General 11
4.3.2 Grades of inspection 12
4.3.3 Types of inspection 13
4.4 Periodic inspections 13
4.4.1 Personnel 13
4.4.2 Fixed installations 13
4.4.3 Movable equipment 14
4.5 Continuous supervision by skilled personnel 14
4.5.1 Concept 14
4.5.2 Objectives 14
4.5.3 Responsibilities 15
4.5.4 Frequency of inspection 15
4.5.5 Documents 16
4.5.6 Training 16
4.6 Maintenance requirements 16
4.6.1 Remedial measures and alterations to equipment 16
4.6.2 Maintenance of flexible cables 17
4.6.3 Withdrawal from service 17
4.6.4 Fastenings and tools 17
4.7 Environmental conditions 17
4.8 Isolation of equipment 18
4.8.1 Installations other than intrinsically safe circuits 18
4.8.2 Intrinsically safe installations live maintenance 19
4.9 Earthing and equipotential bonding 20
4.10 Specific conditions of use 20
4.11 Movable equipment and its connections 20
4.12 Inspection schedules (Tables 1 to 3) 20
4.12.1 General 20
4.12.2 Equipment is appropriate to the EPL/zone requirements of the location 20
4.12.3 Equipment group 20
4.12.4 Equipment maximum surface temperature 20
4.12.5 Equipment circuit identification 20
4.12.6 Cable gland 21
4.12.7 Type of cable 21
4.12.8 Sealing 21

SAI GLOBAL

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