UL 60079-29-4

STANDARD FOR SAFETY

Explosive Atmospheres – Part 29-4: Gas Detectors – Performance Requirements of Open Path Detectors for Flammable Gases

UL Standard for Safety for Explosive Atmospheres – Part 29-4: Gas Detectors – Performance Requirements of Open Path Detectors for Flammable Gases, UL 60079-29-4

First Edition, Dated August 24, 2018

Summary of Topics

Adoption of IEC 60079-29-4, Explosive Atmospheres – Part 29-4: Gas Detectors – Performance Requirements of Open Path Detectors for Flammable Gases (first edition issued by IEC November 2009) as a new IEC-based UL standard, UL 60079-29-4 with US Differences.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL and FM are committed to updating this harmonized standard jointly.

The new requirements are substantially in accordance with Proposal(s) on this subject dated November 17, 2017 and February 16, 2018.

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FM Approvals LLC
ANSI/FM 60079-29-4-2018
First Edition

Underwriters Laboratories Inc.
UL 60079-29-4
First Edition

Explosive Atmospheres – Part 29-4: Gas Detectors – Performance Requirements of Open Path Detectors for Flammable Gases

August 24, 2018

ANSI/UL 60079-29-4-2018

Commitment for Amendments

This standard is issued jointly by the FM Approvals LLC and Underwriters Laboratories Incorporated (UL). Comments or proposals for revisions on any part of the standard may be submitted to FM Approvals or UL at any time. FM and UL will issue revisions to this standard by means of a new edition or revised or additional pages bearing their date of issue.

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The most recent designation of ANSI/FM 60079-29-4 as an American National Standard (ANSI) occurred on August 24, 2018.

This ANSI/UL Standard for Safety consists of the First Edition. The most recent designation of ANSI/UL 60079-29-4 as an American National Standard (ANSI) occurred on August 24, 2018. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

Comments or proposals for revisions on any part of the Standard may be submitted to UL at any time. Proposals should be submitted via a Proposal Request in UL's On-Line Collaborative Standards Development System (CSDS) at https://csds.ul.com.

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PREFACE

This is the harmonized FM and UL standard for Explosive Atmospheres – Part 29-4: Gas Detectors – Performance Requirements of Open Path Detectors for Flammable Gases. It is the first edition of FM 60079-29-4 and the first edition of UL 60079-29-4.

This harmonized standard is based on IEC Publication 60079-29-4: first edition, Explosive Atmospheres – Part 29-4: Gas Detectors - Performance Requirements of Open Path Detectors for Flammable Gases issued November 2009, as revised by corrigendum 1 issued August, 2010. IEC publication 60079-29-4 is copyrighted by the IEC.

At the time of this publication, IEC 60079-29-4, Edition 1 is available from IEC in English only.

This harmonized standard was prepared by FM Approvals LLC (FM) and Underwriters Laboratories Inc. (UL).

This standard is considered suitable for use for conformity assessment within the stated scope of the standard.

Application of Standard

Where reference is made to a specific number of samples to be tested, the specified number is to be considered a minimum quantity.

Note: Although the intended primary application of this standard is stated in its scope, it is important to note that it remains the responsibility of the users of the standard to judge its suitability for their particular purpose.

Level of Harmonization

This standard adopts the IEC text with national differences.

This standard is published as an identical standard for FM and UL.

An identical standard is a standard that is exactly the same in technical content except for national differences resulting from conflicts in codes and governmental regulations. Presentation is word for word except for editorial changes.

All national differences from the IEC text are included in the FM and UL versions of the standard. While the technical content is the same in each organization's version, the format and presentation may differ.

Interpretations

The interpretation by the standards development organization of an identical or equivalent standard is based on the literal text to determine compliance with the standard in accordance with the procedural rules of the standards development organization. If more than one interpretation of the literal text has been identified, a revision is to be proposed as soon as possible to each of the standards development organizations to more accurately reflect the intent.

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D1 – These are National Differences which are based on **basic safety principles and requirements**, elimination of which would compromise safety for consumers and users of products.

D2 – These are National Differences from IEC requirements based on existing **safety practices**. These requirements reflect national safety practices, where empirical substantiation (for the IEC or national requirement) is not available or the text has not been included in the IEC standard.

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Each national difference contains a description of what the national difference entails. Typically one of the following words is used to explain how the text of the national difference is to be applied to the base IEC text:

Addition / Add - An addition entails adding a complete new numbered clause, subclause, table, figure, or annex. Addition is not meant to include adding select words to the base IEC text.

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