UL 60079-25

STANDARD FOR SAFETY

Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems

This is a preview. Click here to purchase the full publication.

This is a preview. Click here to purchase the full publication.

UL Standard for Safety for Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems, UL 60079-25

Second Edition, Dated December 2, 2011

Summary of Topics

This revision of ANSI/UL 60079-25 dated June 12, 2020 is being issued to update the title page to reflect the reaffirmation of its ANSI approval. No changes in requirements have been made.

This is an Adoption of ANSI/ISA 60079-25, Standard for Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems as ANSI/UL 60079-25.

These requirements are substantially in accordance with Proposal(s) on this subject dated January 24, 2020.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form by any means, electronic, mechanical photocopying, recording, or otherwise without prior permission of UL.

UL provides this Standard "as is" without warranty of any kind, either expressed or implied, including but not limited to, the implied warranties of merchantability or fitness for any purpose.

In no event will UL be liable for any special, incidental, consequential, indirect or similar damages, including loss of profits, lost savings, loss of data, or any other damages arising out of the use of or the inability to use this Standard, even if UL or an authorized UL representative has been advised of the possibility of such damage. In no event shall UL's liability for any damage ever exceed the price paid for this Standard, regardless of the form of the claim.

Users of the electronic versions of UL's Standards for Safety agree to defend, indemnify, and hold UL harmless from and against any loss, expense, liability, damage, claim, or judgment (including reasonable attorney's fees) resulting from any error or deviation introduced while purchaser is storing an electronic Standard on the purchaser's computer system.

This is a preview. Click here to purchase the full publication.

No Text on This Page

This is a preview. Click here to purchase the full publication.

ISA – International Society of Automation
ANSI/ISA 60079-25-2011 (R2020)
Second Edition

Underwriters Laboratories Inc.
ANSI/UL 60079-25
Second Edition

Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems

December 2, 2011

(Title Page Reprinted: June 12, 2020)

ANSI/UL 60079-25-2011 (R2020)

This is a preview. Click here to purchase the full publication.

Commitment for Amendments

This standard is issued jointly by ISA and Underwriters Laboratories Incorporated (UL). Comments or proposals for revisions on any part of the standard may be submitted to UL at any time.

ISBN 978-1-64331-103-69 Copyright © 2020 ISA

These materials are subject to copyright claims of IEC, ANSI, and ISA. All rights reserved. Not for resale. Printed in the United States of America. No part of this publication may be reproduced in any form, including an electronic retrieval system, without the prior written permission of ISA. All requests pertaining to this standard should be submitted to ISA.

Copyright © 2020 Underwriters Laboratories Inc.

UL's Standards for Safety are copyrighted by UL. Neither a printed nor electronic copy of a Standard should be altered in any way. All of UL's Standards and all copyrights, ownerships, and rights regarding those Standards shall remain the sole and exclusive property of UL.

This ANSI/UL Standard for Safety consists of the Second Edition including revisions through June 12, 2020.

The most recent designation of ANSI/UL 60079-25 as a Reaffirmed American National Standard (ANS) occurred on June 12, 2020. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), General Notes, and Preface (ISA). The IEC Foreword is 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.

To purchase UL Standards, visit UL's Standards Sales Site at http://www. shopulstandards. com/HowToOrder.aspx or call toll-free 1-888-853-3503.

This is a preview. Click here to purchase the full publication.

CONTENTS

This is a preview. Click here to purchase the full publication.

This is a preview. Click here to purchase the full publication.

General Notes

This UL Standard is based on IEC Publication IEC 60079-25: Second edition, Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems, and is copyrighted by the IEC.

Efforts have been made to synchronize the UL edition number with that of the corresponding IEC standard with which this standard is harmonized. As a result, one or more UL edition numbers have been skipped to match that of the IEC edition number.

This is the common ISA and UL standard for Explosive Atmospheres – Part 25: Intrinsically Safe Electrical Systems. It is the Second edition of ANSI/ISA-60079-25 (superseding ANSI/ISA-12.02.05)-2011 and the Second edition of ANSI/UL 60079-25. The document is a modification of the IEC document and includes U.S. national differences encompassing both additions and deletions of information.

Efforts have been made to synchronize the UL edition number with that of the corresponding IEC standard with which this standard is harmonized. As a result, one or more UL edition numbers have been skipped to match that of the IEC edition number.

As the publication of this standard by UL is being done as a result of a simple reaffirmation of ISA's currently published standard, National Differences are shown using ISA's format. All future publications of this standard will show National Differences using UL's format.

This common standard was prepared by the (ISA) – The International Society of Automation on November 23, 2011 but is now being maintained by Underwriters Laboratories Inc. (UL).

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.

The requirements in this Standard are not presented in different formats by UL and ISA as this is a simple reaffirmation of an existing ISA standard. Therefore, the UL version of the standard is being published as the ISA version of the standard which illustrates the national differences from the IEC text through the use of legislative text (strike-out and underline).

Interpretations

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

This is a preview. Click here to purchase the full publication.

No Text on This Page

This is a preview. Click here to purchase the full publication.

Preface (ISA)

The preface, as well as all footnotes and annexes, is included for information purposes and is not part of ANSI/ISA-60079-25-2011(R2015).

This document has been prepared as part of the service of ISA toward a goal of uniformity in the field of instrumentation. To be of real value, this document should not be static but should be subject to periodic review.

The ISA Standards and Practices Department is aware of the growing need for attention to the metric system of units in general, and the International System of Units (SI) in particular, in the preparation of instrumentation standards. The Department is further aware of the benefits to USA users of ISA standards of incorporating suitable references to the SI (and the metric system) in their business and professional dealings with other countries. Toward this end, this Department will endeavour to introduce SI-acceptable metric units in all new and revised standards, recommended practices, and technical reports to the greatest extent possible. *Standard for Use of the International System of Units (SI): The Modern Metric System*, published by the American Society for Testing & Materials as IEEE/ASTM SI 10-97, and future revisions, will be the reference guide for definitions, symbols, abbreviations, and conversion factors.

It is the policy of ISA to encourage and welcome the participation of all concerned individuals and interests in the development of ISA standards, recommended practices, and technical reports. Participation in the ISA standards-making process by an individual in no way constitutes endorsement by the employer of that individual, of ISA, or of any of the standards, recommended practices, and technical reports that ISA develops.

CAUTION – ISA DOES NOT TAKE ANY POSITION WITH RESPECT TO THE EXISTENCE OR VALIDITY OF ANY PATENT RIGHTS ASSERTED IN CONNECTION WITH THIS DOCUMENT, AND ISA DISCLAIMS LIABILITY FOR THE INFRINGEMENT OF ANY PATENT RESULTING FROM THE USE OF THIS DOCUMENT. USERS ARE ADVISED THAT DETERMINATION OF THE VALIDITY OF ANY PATENT RIGHTS, AND THE RISK OF INFRINGEMENT OF SUCH RIGHTS, IS ENTIRELY THEIR OWN RESPONSIBILITY.

PURSUANT TO ISA'S PATENT POLICY, ONE OR MORE PATENT HOLDERS OR PATENT APPLICANTS MAY HAVE DISCLOSED PATENTS THAT COULD BE INFRINGED BY USE OF THIS DOCUMENT AND EXECUTED A LETTER OF ASSURANCE COMMITTING TO THE GRANTING OF A LICENSE ON A WORLDWIDE, NON-DISCRIMINATORY BASIS, WITH A FAIR AND REASONABLE ROYALTY RATE AND FAIR AND REASONABLE TERMS AND CONDITIONS. FOR MORE INFORMATION ON SUCH DISCLOSURES AND LETTERS OF ASSURANCE, CONTACT ISA OR VISIT WWW.ISA.ORG/STANDARDSPATENTS.

OTHER PATENTS OR PATENT CLAIMS MAY EXIST FOR WHICH A DISCLOSURE OR LETTER OF ASSURANCE HAS NOT BEEN RECEIVED. ISA IS NOT RESPONSIBLE FOR IDENTIFYING PATENTS OR PATENT APPLICATIONS FOR WHICH A LICENSE MAY BE REQUIRED, FOR CONDUCTING INQUIRIES INTO THE LEGAL VALIDITY OR SCOPE OF PATENTS, OR DETERMINING WHETHER ANY LICENSING TERMS OR CONDITIONS PROVIDED IN CONNECTION WITH SUBMISSION OF A LETTER OF ASSURANCE, IF ANY, OR IN ANY LICENSING AGREEMENTS ARE REASONABLE OR NON-DISCRIMINATORY.

ISA REQUESTS THAT ANYONE REVIEWING THIS DOCUMENT WHO IS AWARE OF ANY PATENTS THAT MAY IMPACT IMPLEMENTATION OF THE DOCUMENT NOTIFY THE ISA STANDARDS AND PRACTICES DEPARTMENT OF THE PATENT AND ITS OWNER.

ADDITIONALLY, THE USE OF THIS DOCUMENT MAY INVOLVE HAZARDOUS MATERIALS, OPERATIONS OR EQUIPMENT. THE DOCUMENT CANNOT ANTICIPATE ALL POSSIBLE

This is a preview. Click here to purchase the full publication.