



UL 120002

STANDARD FOR SAFETY

Certificate Standard for AEx Equipment for
Hazardous (Classified) Locations

ULNORM.COM : Click to view the full PDF of UL 120002 2014

ULNORM.COM : Click to view the full PDF of UL 120002 2014

UL Certificate Standard for AEx Equipment for Hazardous (Classified) Locations, UL 120002

First Edition, Dated August 29, 2014

Summary of Topics

Adoption of ANSI/ISA-12.00.02, Certificate Standard for AEx Equipment for Hazardous (Classified) Locations as an ANSI/UL 120002, First Edition to reflect the reaffirmation of ANSI approval. No changes in requirements have been made.

As noted in the Commitment for Amendments statement located on the back side of the title page, UL and ISA are committed to updating this co-designated standard jointly after processing according to the standards development procedures by UL.

The revisions are substantially in accordance with Proposal(s) on this subject dated June 27, 2014.

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.

The requirements in this Standard are now in effect, except for those paragraphs, sections, tables, figures, and/or other elements of the Standard having future effective dates as indicated in the preface. The prior text for requirements that have been revised and that have a future effective date are located after the Standard, and are preceded by a "SUPERSEDED REQUIREMENTS" notice.

No Text on This Page

ULNORM.COM : Click to view the full PDF of UL 120002 2014



ISA – The International Society of Automation
ISA-12.00.02-2009 (R2014)
First Edition



Underwriters Laboratories Inc.
UL 120002
First Edition

Certificate Standard for AEx Equipment for Hazardous (Classified) Locations

August 29, 2014



ANSI/UL 120002-2009 (R2014)

ULNORM.COM : Click to view the full PDF of UL 120002-2014

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 978-0-876640-93-7 Copyright © 2014 ISA

All rights reserved. Not for resale. Printed in the United States of America. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means (electronic mechanical, photocopying, recording, or otherwise), without the prior written permission of the Publisher.

The most recent designation of ANSI/ISA-12.00.02 as a Reaffirmed American National Standard (ANSI) occurred on August 29, 2014.

Copyright © 2014 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 First Edition. The most recent designation of ANSI/UL 120002 as a Reaffirmed American National Standard (ANS) occurred on August 29, 2014. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page (front and back), or the Preface.

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 <http://csds.ul.com>.

To purchase UL Standards, visit Comm 2000 at http://www.comm-2000.com/help/how_to_order.aspx or call toll-free 1-888-853-3503.

CONTENTS

General Notes	4
Preface ISA	8
Foreword ISA	8
1 Scope	9
2 Definitions	9
3 Certificates	9
 Annex A (informative) – Certificate example	
 Annex B (informative) – Examples of “X” specific conditions of use	

ULNORM.COM : Click to view the full PDF of UL 120002 2014

General Notes

This is the common ISA and UL Standard for the Certificate Standard for AEx Equipment for Hazardous (Classified) Locations. It is the first edition of ANSI/ISA-12.00.02 and the first edition of ANSI/UL 120002. The document is a modification of the ISA document to create the equivalent UL version and maintain the ANSI approval of this standard.

ANSI/ISA-12.00.02 and ANSI/UL 120002 contain identical requirements, and identical publication dates.

This common Standard was prepared by ISA – The International Society of Automation on May 1, 2009, but is now being maintained by Underwriters Laboratories (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.

UL Effective Date

The requirements in this standard are effective August 29, 2014.

A UL effective date is one established by Underwriters Laboratories Inc. and is not part of the ANSI approved standard.

ULNORM.COM : Click to view the full PDF of UL 120002 2014

Preface ISA

This preface, as well as all footnotes and annexes, is included for information purposes and is not part of ANSI/ISA-12.00.02-2009 (R2014).

This document has been prepared as part of the service of ISA towards 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. Toward this end, the Society welcomes all comments and criticisms and asks that they be addressed to the Secretary, Standards and Practices Board; ISA; 67 Alexander Drive; P. O. Box 12277; Research Triangle Park, NC 27709; Telephone (919) 549-8411; Fax (919) 549-8288; E-mail: standards@isa.org.

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 endeavor 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 APPLICATIONS OR ADDRESS ALL POSSIBLE SAFETY ISSUES ASSOCIATED WITH USE IN HAZARDOUS CONDITIONS. THE USER OF THIS DOCUMENT MUST EXERCISE SOUND PROFESSIONAL JUDGMENT CONCERNING ITS USE AND APPLICABILITY UNDER THE USER'S PARTICULAR CIRCUMSTANCES. THE USER MUST ALSO CONSIDER THE APPLICABILITY OF ANY GOVERNMENTAL REGULATORY LIMITATIONS AND ESTABLISHED SAFETY AND HEALTH PRACTICES BEFORE IMPLEMENTING THIS DOCUMENT.

THE USER OF THIS DOCUMENT SHOULD BE AWARE THAT THIS DOCUMENT MAY BE IMPACTED BY ELECTRONIC SECURITY ISSUES. THE COMMITTEE HAS NOT YET ADDRESSED THE POTENTIAL ISSUES IN THIS VERSION.

The following members of ISA Committee ISA12 contributed to the development of this document:

NAME**COMPANY**

T. Schnaare, Chair
W. Lawrence, Vice Chair
M. Coppler, Managing Director
D. Ankele
A. Ballard
K. Boegli
D. Burns
C. Casso
S. Czaniecki
J. Dolphin
M. Dona
T. Dubaniewicz
A. Engler
W. Fiske
G. Garcha
C. Huntley
D. Jagger
F. Kent
P. Kovscek
J. Kuczka
N. Ludlam
R. Masek
E. Massey
J. Miller
A. Mobley
A. Page
R. Seitz
M. Spencer
D. Wechsler
R. Wigg

Rosemount Inc.
FM Approvals LLC
Ametek Inc.
Underwriters Laboratories Inc.
Cooper Crouse-Hinds
Phoenix Contact Inc.
Shell Exploration & Production Co.
Nabors Industries
Intrinsic Safety Concepts Inc.
PSC Solutions
Santos Ltd.
NIOSH
Det Norske Veritas DNV
Intertek
GE Energy
MSHA A&CC
Bifold-Fluid Power
Honeywell Inc.
Industrial Scientific Corp.
Killark
FM Approvals Ltd.
CSA International
Baldor Electric Co.
Detector Electronics Corp.
3M Co.
Consultant
Artech Engineering
Columbia Gas Transmission
Dow Chemical Co.
E-x Solutions International Pty. Ltd.

This standard was approved for publication by the ISA Standards and Practices Board on 4 February 2009.

NAME**COMPANY**

J. Tatera	Tatera & Associates Inc.
P. Brett	Honeywell Inc.
M. Coppler	Ametek Inc.
E. Cosman	The Dow Chemical Company
B. Dumortier	Schneider Electric
D. Dunn	Aramco Services Co.
R. Dunn	DuPont Engineering
J. Gilsinn	NIST/MEL
E. Icayan	ACES Inc.
J. Jamison	Husky Energy Inc.
D. Kaufman	Honeywell
K. P. Lindner	Endress + Hauser Process Solutions AG
V. Maggioli	Feltronics Corp.
T. McAviney	Jacobs Engineering Group
G. McFarland	Emerson Process Mgmt. Power & Water Sol.
R. Reimer	Rockwell Automation
N. Sands	DuPont
H. Sasajima	Yamatake Corp.
T. Schnaare	Rosemount Inc.
I. Verhappen	MTL Instrument Group
R. Webb	ICS Secure LLC
W. Weidman	Worley Parsons
J. Weiss	Applied Control Solutions LLC
M. Widmeyer	Consultant
M. Zielinski	Emerson Process Management

ULNORM.COM : Click to view the full text of UL 120002-2014

Foreword ISA

There are two annexes in this standard. Annexes A and B are informative and are not considered part of this standard.

ULNORM.COM : Click to view the full PDF of UL 120002 2014