



UL 60079-2

STANDARD FOR SAFETY

Explosive Atmospheres – Part 2:
Equipment Protection by Pressurized
Enclosure "p"

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UL Standard for Safety for Explosive atmospheres – Part 2: Equipment protection by pressurized enclosure "p", UL 60079-2

Sixth Edition, Dated June 2, 2017

Summary of Topics

This revision of ANSI/UL 60079-2 dated September 15, 2021 is being issued to update the title page to reflect the reaffirmation of its ANSI approval. No changes in requirements have been made.

UL 60079-2 is an adoption of IEC 60079-2, Explosive Atmospheres – Part 2: Equipment Protection by Pressurized Enclosure "p" (Edition 6, issued by IEC July, 2014 including corrigendum 1:2015). Please note that the national difference document incorporates all of the U.S. national differences for UL 60079-2.

Text that has been changed in any manner or impacted by UL's electronic publishing system is marked with a vertical line in the margin.

The requirements are substantially in accordance with Proposal(s) on this subject dated June 25, 2021.

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UL 60079-2

**Standard for Explosive atmospheres – Part 2: Equipment protection by
pressurized enclosure "p"**

First Edition – Not Printed
Second Edition – Not Printed
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Fourth Edition – Not Printed
Fifth Edition – August, 2010

Sixth Edition

June 2, 2017

This ANSI/UL Standard for Safety consists of the Sixth Edition including revisions through September 15, 2021.

The most recent designation of ANSI/UL 60079-2 as a Reaffirmed American National Standard (ANS) occurred on September 15, 2021. ANSI approval for a standard does not include the Cover Page, Transmittal Pages, Title Page, or Preface. The National Difference Page and IEC Foreword are also excluded from the ANSI approval of IEC-based standards.

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Preface (UL)

This UL Standard is based on IEC Publication 60079-2: Edition 6 Standard for Safety for Explosive Atmospheres – Part 2: Equipment protection by pressurized enclosure "p" issued July, 2014, as revised by corrigendum 1 (2015). IEC publication 60079-2 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.

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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.

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National Differences from the text of International Electrotechnical Commission (IEC) Publication 60079-2, Explosive Atmospheres – Part 2: Equipment Protection by Pressurized Enclosure "p", copyright 2014, are indicated by notations (differences) and are presented within the body of the UL printed standard in bold text with legislative mark-ups (strike-out and underline).

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FOREWORD

INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES – Part 2: Equipment protection by pressurized enclosure "p"

1) The International Electrotechnical Commission (IEC) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, IEC publishes International Standards, Technical Specifications, Technical Reports, Publicly Available Specifications (PAS) and Guides (hereafter referred to as "IEC Publication(s)"). Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and nongovernmental organizations liaising with the IEC also participate in this preparation. IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.

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International Standard IEC 60079-2 has been prepared by technical committee 31: Explosive atmospheres.

This sixth edition cancels and replaces the fifth edition published in 2007. This sixth edition cancels and replaces the first edition of IEC 61241-4 published in 2001. This sixth edition constitutes a technical revision.

The significance of changes between IEC 60079-2, Edition 6.0, 2014 and IEC 60079-2, Edition 5.0, 2007 are as listed below:

Changes	Clause	Type		
		Minor and Editorial Changes	Extension	Major Technical Changes
Scope Expanded to include combustible dust	1		X	
Protective Gas Replaced "apparatus" with "equipment"	3			
Protective Gas Revised to show that purging is not required for explosive dust atmospheres	3.16	X		
Level of Protection "pxb" Term and definitions revised to reflect EPL and level of protection	3.21	X		
Level of Protection "pyb" Term and definitions revised to reflect EPL and level of protection	3.22	X		
Level of Protection "pzc" Term and definitions revised to reflect EPL and level of protection	3.23	X		
Lower Flammable Limit Term and definition revised to agree with 60079-0	3.26	X		
Upper Flammable Limit Term and definition revised to agree with 60079-0	3.27	X		
Table 1 – Determination of protection level Revised to use EPL terminology	Table 1	X		
Table 2 – Design Criteria based upon level of protection Revised to use EPL terminology	Table 2	X		
Enclosure Requirements relaxed for specific designs	5.1		X	
Group II and Group III pressurized enclosures Text revised to use EPL terminology	5.3.3	X		
Group II and Group III Level of Protection "pxb" Added that warning also applies for explosive dust atmospheres	5.3.5		X	
Group II and Group III door and cover warning Added that warning also applies for explosive dust atmospheres	5.3.6		X	
Group II and Group III door and cover warning Revised warning from atmosphere "may be present" to "is present"	5.3.6	X		
Mechanical Strength Removed reference to 60079-0 by clause number for "X" condition	5.4	X		
Spark and particle barriers Removed reference to 60079-0 by clause number for "X" condition	5.9	X		
Cells and batteries Added requirements for cells and batteries	5.10			C1
For Level of Protection "pxb" or Level of Protection "pyb" Revised Table to use terminology consistent with EPLs	6.2	X		