

INTERNATIONAL STANDARD

NORME INTERNATIONALE

Explosive atmospheres –

Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v"

Atmosphères explosives –

Partie 13: Protection du matériel par salle à surpression interne «p» et salle à ventilation artificielle «v»



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IEC Central Office
3, rue de Varembe
CH-1211 Geneva 20
Switzerland

Tel.: +41 22 919 02 11
info@iec.ch
www.iec.ch

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INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

ICS 29.260.20

ISBN 978-2-8322-6204-7

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CONTENTS

FOREWORD.....	5
INTRODUCTION.....	7
1 Scope.....	8
2 Normative references	10
3 Terms and definitions	11
4 Requirements for all rooms.....	13
4.1 General.....	13
4.2 Type and level of protection	13
4.2.1 Pressurization "p"	13
4.2.2 Artificial ventilation "v"	14
4.3 Construction	14
4.4 Mechanical strength.....	14
4.5 Penetrations and seals	14
4.6 Personnel access doors	14
4.7 Inlets and outlets	15
4.8 Ducts	15
4.9 Purging and cleaning	15
4.9.1 General	15
4.9.2 Gases – Purging.....	15
4.9.3 Enclosures within the room.....	16
4.10 Ignition prevention under system failure	16
5 Clean air supply.....	16
5.1 General.....	16
5.2 Source of clean air.....	16
5.3 Environmental and air temperature conditions.....	17
5.4 Heating, ventilation and air conditioning services	17
6 Requirements for pressurized rooms	17
6.1 General.....	17
6.1.1 Design	17
6.1.2 Source of clean air	17
6.1.3 Flow	17
6.1.4 Pressurization system.....	17
6.1.5 Preventing the explosive atmosphere from entering through an open door.....	18
6.1.6 Airlock	18
6.1.7 Outward air velocity through a door	18
6.1.8 Air consuming device.....	19
6.1.9 Action when pressurization system fails.....	19
6.1.10 Re-energizing the room	19
6.2 Purging of rooms	19
6.2.1 General	19
6.2.2 Sequence of operations of the purging safety devices	20
6.2.3 Dusts – Cleaning	20
6.3 Minimum safety provisions, safety devices and electrical disconnects	20
6.3.1 Safety devices	20
6.3.2 Safety devices based upon level of protection	21

6.3.3	Gas detectors	21
6.4	Verification for pressurized rooms	21
6.4.1	General	21
6.4.2	Tests	21
6.4.3	Overpressure test	22
6.4.4	Purging test	22
6.4.5	Minimum pressure differential test	22
6.4.6	Confirmation of the ratings of the safety devices	22
6.4.7	Verification of sequence of operation of the safety devices	22
7	Requirements for artificially ventilated rooms	22
7.1	General	22
7.1.1	Design	22
7.1.2	Source of clean air	22
7.1.3	Minimum flow rate	23
7.1.4	Ventilation system	23
7.1.5	Air consuming device	24
7.1.6	Safety actions when ventilation system fails	24
7.1.7	Energizing the artificially ventilated area	24
7.2	Purging of artificially ventilated rooms	25
7.2.1	General	25
7.2.2	Sequence of operations of the purging safety devices	25
7.3	Minimum safety provisions, safety devices and electrical disconnects	25
7.3.1	Safety devices	25
7.3.2	Safety devices based upon equipment protection level	25
7.3.3	Artificial ventilation protection	26
7.3.4	Gas detectors	26
7.4	Loss of artificial ventilation	26
7.5	Verification for artificially ventilated rooms	27
7.5.1	General	27
7.5.2	Tests	27
7.5.3	Purging test	27
7.5.4	Minimum ventilation flow rate test	27
7.5.5	Confirmation of the ratings of the safety devices	27
7.5.6	Verification of sequence of operation of the safety devices	27
7.5.7	Testing of ventilation system	28
8	Marking	28
8.1	General	28
8.2	Marking of pressurized rooms	28
8.3	Marking for artificially ventilated rooms	29
9	Instructions	30
9.1	General	30
9.2	Technical documentation for pressurized rooms	30
9.3	Technical documentation for artificially ventilated rooms	30
9.4	Technical documentation for rooms protected by pressurization and artificial ventilation combined	31
9.5	Modifications	31
Annex A (informative)	Maintenance	32
A.1	Periodic verification	32
A.2	Modifications	32

Annex B (informative) Guidelines when pressurization or artificial ventilation is not immediately restored.....	33
Annex C (informative) Examples of applications and associated guidelines	34
C.1 Examples of applications	34
C.2 Guidelines for gas turbine enclosure/package	34
Bibliography.....	35
Table 1 – Exclusion of specific clauses or subclauses of IEC 60079-0	9
Table 2 – Safety devices for pressurized rooms	21
Table 3 – Safety actions for artificial ventilation failure.....	24
Table 4 – Required safety devices for artificial ventilation	26

INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –**Part 13: Equipment protection by pressurized room "p" and artificially ventilated room "v"**

FOREWORD

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International Standard IEC 60079-13 has been prepared by IEC technical committee 31: Equipment for explosive atmospheres.

This bilingual edition (2018-11) corresponds to the monolingual English version, published in 2017-05.

This second edition cancels and replaces the first edition published in 2010. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) modification of the title of this document to include artificially ventilated room "v" in addition to pressurized room "p";
- b) addition of types of protection "pb", "pc", and "vc" and removal of types of protection "px", "py", "pz" and "pv";

- c) definition of the differences between pressurization and artificial ventilation types of protection;
- d) removal of protection of rooms with an inert gas or a flammable gas from the scope of this document;
- e) addition of an informative annex to include examples of applications where types of protection pressurization or artificial ventilation or pressurization and artificial ventilation can be used and associated guidelines.

The text of this document is based on the following documents:

FDIS	Report on voting
31/1309/FDIS	31/1317/RVD

Full information on the voting for the approval of this document can be found in the report on voting indicated in the above table.

The French version of this standard has not been voted upon.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

This document is to be used in conjunction with the principles of hazardous area classification from IEC 60079-10-1 and artificial ventilation for the protection of analyser(s) houses from IEC 60079-16.

A list of all parts in the IEC 60079 series, published under the general title *Explosive atmospheres*, can be found on the IEC website.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "<http://webstore.iec.ch>" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

This part of IEC 60079 gives requirements for the design, construction, assessment, verification and marking of rooms used to protect internal equipment by pressurization or artificial ventilation or both as applicable when located in an explosive gas atmosphere or combustible dust atmosphere hazardous area with or without an internal source of a flammable gas or vapour. It also includes a room located in a non-hazardous area that has an internal source of release of a flammable gas or vapour.

This document deals with rooms that are partially constructed in a manufacturer's facility and intended to have the final installation completed on-site, as well as rooms that are constructed completely on-site. Rooms partially constructed in a manufacturer's facility may include third-party verification. For rooms built on-site, this document can be used by plant operators as a guide for assessment of those facilities.

This document represents a major technical revision of the requirements for equipment protection by pressurized room "p" and artificially ventilated room "v" and should be considered as introducing all new requirements.