

INTERNATIONAL ELECTROTECHNICAL COMMISSION
COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

IEC 60079-2
Edition 6.0 2014-07

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Édition 6.0 2014-07

Explosive atmospheres –

Atmosphères explosives –

Part 2: Equipment protection by pressurized enclosure "p"

Partie 2: Protection du matériel par enveloppe à surpression interne "p"

CORRIGENDUM 1

Corrections to the French version appear after the English text.

Les corrections à la version française sont données après le texte anglais.

Foreword

Add the following new table and text after the first table explaining the significance of changes between IEC 60079-2, Edition 6.0, 2014 and IEC 60079-2, Edition 5.0, 2007:

The significance of changes between IEC 60079-2, Edition 6.0, 2014 and IEC 61241-4, Edition 5.0, 2007 are as listed below:

Changes	Clause in 61241-4	Type		
		Minor and Editorial Changes	Extension	Major Technical Changes
Removed type of protection "pD". Included in 3.20, 3.21 and 3.22	3.1		X	
Definition of pressurization now accommodates both gas and dust	3.3		X	
Definition of protective gas now accommodates both gas and dust	3.4		X	
Removed definition for an enclosure. Defined in IEC 60079-0	3.5	X		
Removed note in definition for pressurized enclosure.	3.6	X		
Replaced definition of static pressurization with 60079-2 definition	3.7	X		
Removed definition for "pressurization with continuous flow of the protective gas". Term not used in 61241-4	3.9	X		
Removed definition for "electrical apparatus". Definition is covered in IEV	3.10	X		
Definition of ignition-capable apparatus now accommodates both gas and dust	3.11	X		
Removed definition for "self-revealing fault". Term not used in 61241-4	3.12	X		
Removed definition for "opening". Term not used in 61241-4	3.13	X		
Removed definition for "protective device". These are mostly referred to as a "safety device" throughout 61241-4.	3.14	X		

Changes	Clause in 61241-4	Type		
		Minor and Editorial Changes	Extension	Major Technical Changes
Removed definition for "protected apparatus". This was only used to address batteries which are now covered in Annex G and Annex H.	3.17	X		
Replaced definition of "pressurization system" with 60079-2 definition	3.18	X		
Removed definition for "alternate (or auxiliary) source of supply of protective gas". Term used is "second source of Supply. This is now addressed in 60079-2, 9.1	3.19	X		
Removed definition for "zones in Area Classification" This definition is provided in 60079-10-2.	3.20	X		
Removed definition for "zone 20 in Area Classification". See above	3.21	X		
Removed definition for "zone 21 in Area Classification". See above	3.22	X		
Removed definition for "zone 22 in Area Classification". See above	3.23	X		
Removed Clause on "Pressurization principle" including sub-clauses. This information is covered by the definition of "Pressurization", see 3.13 and other clauses in the standard.	4	X		
Removed Clause on "Electrical performance of apparatus". Safe performance of equipment is addressed by 60079-0, 6.1 b)	5.1	X		
Removed note about equipment with large surface areas subjected to pressures > 1kPa may be subject to pressure vessel legislation.	5.2	X		
Text on apertures is equivalently covered by 5.5 and 5.6	5.3	X		
Text on electrical connections is equivalently covered in 60079-0, clause 14.	5.4	X		
Text on delaying opening of an enclosure because of internal hot surface is equivalently covered in clause 15.	5.5	X		
Removed text on providing suitable amount of doors or covers to provide for effective removal of dust from the enclosure. The text in 61241-4 would not lend itself to consistent assessments from different CBs.	5.5	X		
Text on temperature limits is equivalently covered in clause 6 and 60079-0, 26.5.1.3.	6	X		
Removed text on the responsibility of the manufacturer. Addressed in 60079-0.	7.1	X		
Removed text on the responsibility of the user. Addressed in 60079-14.	7.1	X		
Removed text that manufacturer shall provide instructions for cleaning the enclosure. Addressed in 60079-14.	7.1	X		
Removed text requiring a safety device to operate when the pressure within the enclosure exceeds the permitted maximum pressure. It is the user responsibility to not exceed the rated maximum pressure.	7.2	X		
Removed text requiring the isolation of the neutral conductor. Addressed in 60079-14.	7.4	X		
Text on failure of pressurization is equivalently covered by clause 7 & 13.3.	7.5	X		
Removed text on location of visible or audible alarms. Addressed in 60079-14.	7.5.1	X		
Removed text requiring both disconnection and alarming for Zone 21 Db. Addressed in 60079-14.	7.5.1.1	X		
Text on warning marking on doors and covers is equivalently covered in 5.3.6.	7.5.1.2	X		
Removed text about providing means for removing oil or moisture. Addressed in 60079-14, 13.1.6.	9.1	X		
Removed text requiring the minimum overpressure be verified over a 5 minute period. It is not considered that this measurement is time dependent.	10.4.1	X		
Removed text requiring the minimum overpressure be verified with	10.4.2	X		

Changes	Clause in 61241-4	Type		
		Minor and Editorial Changes	Extension	Major Technical Changes
through-the-wall moving parts operating in normal use. It is not considered that operating such parts will affect the internal pressure.				
Removed text requiring that the Leakage Test be done at a minimum of 200 Pa. The Leakage Test is only applicable to maximum overpressure specified by the manufacturer for normal service.	10.5	X		
Text on conformity for Leakage Testing of Static Pressurization is equivalently covered in 16.3.2.	10.5	X		
60079-2, Ed 6 does not have an exception to the impact test for pressurized enclosures that are not subject to mechanical damage.	10.6			B1
Removed text on routine Overpressure test	10.7	X		
Added text for routine tests of containment systems. 61241-4 did not address enclosures which contained an internal release of a flammable substance.	10.7		X	
Text on Marking is equivalently covered in clause 60079-0, clause 29	11.1	X		
Removed text requiring that "limitations affecting the safe use of the apparatus" be marked. This is covered in the Instructions, see 60079-0, clause 30.	11.2	X		
Removed text requiring that "the position at which the pressure and flow are monitored" be marked.	11.2	X		
Removed text requiring that "the maximum wattage of the lamp for a light fitting" be marked.	11.2	X		
Removed text "As agreed upon between the certificate applicant and testing station if necessary."	11.4	X		

Explanations:

A) Definitions

Minor and editorial changes clarification decrease of technical requirements minor technical change editorial corrections

These are changes which modify requirements in an editorial or a minor technical way. They include changes of the wording to clarify technical requirements without any technical change, or a reduction in level of existing requirement.

Extension addition of technical options

These are changes which add new or modify existing technical requirements, in a way that new options are given, but without increasing requirements for equipment that was fully compliant with the previous standard. Therefore, these will not have to be considered for products in conformity with the preceding edition. 5.

Major technical changes addition of technical requirements increase of technical requirements

These are changes to technical requirements (addition, increase of the level or removal) made in a way that a product in conformity with the preceding edition will not always be able to fulfill the requirements given in the later edition. These changes have to be considered for products in conformity with the preceding edition. For these changes additional information is provided in clause B) below

B) Information about the background of 'Major Technical Changes'

B1 – Pressurized enclosure must be subjected to impact testing as shown in Table 2.

18.3 Supplementary marking

Replace the existing point a) by the following new text:

a) the Level of Protection "pxb", "pyb", or "pzc"; or