



SLOVENSKI STANDARD
oSIST prEN IEC 60079-46:2025
01-september-2025

Eksplozivne atmosfere - 46. del: Sklopi opreme

Explosive atmospheres - Part 46: Equipment assemblies

Atmosphères explosives - Partie 46: Assemblages d'appareils

Ta slovenski standard je istoveten z: prEN IEC 60079-46:2025

ICS:

29.260.20

Električni aparati za
eksplozivna ozračja

Electrical apparatus for
explosive atmospheres

oSIST prEN IEC 60079-46:2025

en,fr,de



31/1871/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

PROJECT NUMBER:

IEC 60079-46 ED1

DATE OF CIRCULATION:

2025-07-04

CLOSING DATE FOR VOTING:

2025-09-26

SUPERSEDES DOCUMENTS:

31/1831/CD, 31/1857A/CC

IEC TC 31 : EQUIPMENT FOR EXPLOSIVE ATMOSPHERES

SECRETARIAT:

United Kingdom

SECRETARY:

Mr Tom Stack

OF INTEREST TO THE FOLLOWING COMMITTEES:

HORIZONTAL FUNCTION(S):

ASPECTS CONCERNED:

☒ SUBMITTED FOR CENELEC PARALLEL VOTING☐ NOT SUBMITTED FOR CENELEC PARALLEL VOTING**Attention IEC-CENELEC parallel voting**

The attention of IEC National Committees, members of CENELEC, is drawn to the fact that this Committee Draft for Vote (CDV) is submitted for parallel voting.

The CENELEC members are invited to vote through the CENELEC online voting system.

This document is still under study and subject to change. It should not be used for reference purposes.

Recipients of this document are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Recipients of this document are invited to submit, with their comments, notification of any relevant "In Some Countries" clauses to be included should this proposal proceed. Recipients are reminded that the CDV stage is the final stage for submitting ISC clauses. (SEE AC/22/2007 OR NEW GUIDANCE DOC).

TITLE:

Explosive atmospheres - Part 46: Equipment assemblies

PROPOSED STABILITY DATE: 2029

NOTE FROM TC/SC OFFICERS:

Copyright © 2025 International Electrotechnical Commission, IEC. All rights reserved. It is permitted to download this electronic file, to make a copy and to print out the content for the sole purpose of preparing National Committee positions. You may not copy or "mirror" the file or printed version of the document, or any part of it, for any other purpose without permission in writing from IEC.

IEC CDV 60070-46 © IEC 2025

CONTENTS

1		
2		
3	FOREWORD.....	4
4	INTRODUCTION.....	9
5	1 Scope.....	10
6	2 Normative references	11
7	3 Terms and definitions	11
8	4 General requirements and specifications for equipment assemblies.....	12
9	4.1 General.....	12
10	4.2 Explosion protection details	12
11	4.3 Hazardous area classification related to the equipment assembly	13
12	4.3.1 General	13
13	4.3.2 Equipment assembly with its own source of release.....	13
14	4.4 Competencies.....	14
15	5 Design of equipment assemblies	14
16	5.1 General.....	14
17	5.2 Ignition hazard assessment.....	14
18	5.3 Ex Equipment	14
19	5.3.1 Individual items	14
20	5.3.2 Specific Conditions of Use and Schedule of Limitations	15
21	5.3.3 Item list	15
22	5.4 Calculations	16
23	5.5 Wiring system	16
24	5.6 Drawings.....	17
25	6 Construction and assembly.....	17
26	6.1 General.....	17
27	6.2 System interfaces	17
28	6.3 Inspection and testing	17
29	6.4 Disassembly and reassembly	18
30	6.5 Validation and documentation	18
31	6.5.1 General	18
32	6.5.2 Other material specifications	20
33	6.5.3 Schedule Drawings.....	20
34	6.6 Instructions	20
35	7 Type and Routine Testing.....	20
36	8 Certificate.....	20
37	9 Marking	21
38	9.1 General.....	21
39	9.2 Determining equipment group marking	22
40	9.3 Determining temperature class or maximum surface temperature marking	22
41	9.4 Determining Equipment Protection Level (EPL) marking.....	22
42	9.5 Determining ambient temperature range marking	23
43	9.6 Determining degree of protection (IP Code)	23
44	9.7 Example of marking	23
45	Annex A (informative) Application of hazardous area classifications related to	
46	equipment assembly configurations	25

IEC CDV 60070-46 © IEC 2025

47	A.1	General.....	25
48	A.2	Example equipment assembly configurations	25
49	A.2.1	Example 1	25
50	A.2.2	Example 2	25
51	A.2.3	Example 3	26
52	A.2.4	Example 4	27
53	A.2.5	Example 5	28
54	A.3	Verifying area classifications.....	28
55		Bibliography.....	29
56			
57		Figure A.2 – Source of release associated with the assembly, Hazardous area	
58		classified due to this source of release does not extend beyond assembly boundaries,	
59		and Intended to be installed in a hazardous area classified due to a source of release	
60		external to the assembly	26
61		Figure A.3 – Source of release associated with the assembly, Hazardous area	
62		classified due to this source of release extends beyond assembly boundaries, and	
63		Intended to be installed in a hazardous area classified due to a source of release	
64		external to the assembly	27
65		Figure A.4 – Source of release associated with the assembly, and Intended to be	
66		installed in a hazardous area classified due to the source of release associated with	
67		the assembly	27
68		Figure A.5 – Source of release associated with the assembly, but Not intended to be	
69		installed in a hazardous area classified due to any source of release external to the	
70		assembly	28
71			
72			

iTeh Standards
 (https://standards.iteh.ai)
 Document Preview

oSIST prEN IEC 60079-46:2025

<https://standards.iteh.ai/catalog/standards/sist/fca12e17-a1f1-4c33-9653-d4cbf60e651f/osist-pren-iec-60079-46-2025>