

SLOVENSKI STANDARD

SIST EN 60079-35-2:2012

01-oktober-2012

Nadomešča:
SIST EN 62013-2:2006

**Čeladne svetilke za uporabo v rudnikih, občutljive na jamski eksplozivni plin - 2.
del: Tehnične lastnosti in druge varnostne zadeve (IEC 60079-35-2:2011)**

Caplights for use in mines susceptible to firedamp - Part 2: Performance and other safety
-related matters (IEC 60079-35-2:2011)

Explosionsfähige Atmosphäre - Teil 35-2: Kopfleuchten für die Verwendung in
schlagwettergefährdeten Grubenbauen - Gebrauchstauglichkeit und andere
sicherheitsrelevante Themen (IEC 60079-35-2:2011)

[SIST EN 60079-35-2:2012](#)

Lampes-chapeaux utilisables dans les mines grisouteuses - Partie 2: Performance et
autres sujets relatifs à la sécurité (CEI 60079-35-2:2011)

Ta slovenski standard je istoveten z: EN 60079-35-2:2012

ICS:

29.260.20	Električni aparati za eksplozivna ozračja	Electrical apparatus for explosive atmospheres
73.100.20	Prezračevalna, klimatizacijska in razsvetljevalna oprema	Ventilation, air-conditioning and illumination equipment

SIST EN 60079-35-2:2012

en

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60079-35-2:2012](#)

<https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-6ba4db6078dc/sist-en-60079-35-2-2012>

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60079-35-2

August 2012

ICS 29.260.20

Supersedes EN 62013-2:2006

English version

**Explosive atmospheres -
Part 35-2: Caplights for use in mines susceptible to firedamp -
Performance and other safety-related matters
(IEC 60079-35-2:2011)**

Atmosphères explosives -
Partie 35-2: Lampes chapeaux utilisables
dans les mines grisouteuses -
Performances et autres sujets relatifs à la
sécurité
(CEI 60079-35-2:2011)

Explosionsfähige Atmosphäre -
Teil 35-2: Kopfleuchten für die
Verwendung in schlagwettergefährdeten
Grubenbauen -
Gebrauchstauglichkeit und andere
sicherheitsrelevante Themen
(IEC 60079-35-2:2011)

**iTeh STANDARD PREVIEW
(standards.iteh.ai)**

[SIST EN 60079-35-2:2012](https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-09a4d00744c8/sist/60079-35-2-2012)

<https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-09a4d00744c8/sist/60079-35-2-2012>
This European Standard was approved by CENELEC on 2012-01-11. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 31/955/FDIS, future edition 1 of IEC 60079-35-2, prepared by IEC/TC 31 "Equipment for explosive atmospheres" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 60079-35-2:2012.

The following dates are fixed:

- latest date by which the document has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2013-02-10
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2015-01-11

This document supersedes EN 62013-2:2006.

The general revision and updating of EN 62013-2:2006 has been necessitated by the advent of new technologies related to caplight design, in particular those related light-emitting diode (LED) light sources. It is intended that there should be a stronger link between Part 1 (Construction) and Part 2 (Performance) of this standard by upgrading the reference in the scope of part 1 from a note to a requirement.

In addition, as this standard is now to become one of the EN 60079 series, changes have been made to bring it more in line with others in the series by cross referencing. This has enabled there to be a reduction in the number and length of clauses in the standard.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC [and/or CEN] shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

The text of the International Standard IEC 60079-35-2:2011 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60050-845	-	International Electrotechnical Vocabulary (IEV) - Chapter 845: Lighting	-	-
IEC 60079-35-1	-	Explosive atmospheres - Part 35-1: Caplights for use in mines susceptible to firedamp - General requirements - Construction and testing in relation to the risk of explosion	EN 60079-35-1	-
IEC 60983	-	Miniature lamps	EN 60983	-
ISO 80000-1	-	Quantities and units - Part 1: General		-

iTeH STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60079-35-2:2012](https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-6ba4db6078dc/sist-en-60079-35-2-2012)

<https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-6ba4db6078dc/sist-en-60079-35-2-2012>

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 60079-35-2:2012](https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-6ba4db6078dc/sist-en-60079-35-2-2012)

<https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-6ba4db6078dc/sist-en-60079-35-2-2012>



IEC 60079-35-2

Edition 1.0 2011-12

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Explosive atmospheres –
Part 35–2: Caplights for use in mines susceptible to firedamp – Performance
and other safety-related matters**

**Atmosphères explosives –
Partie 35-2: Lampes chapeaux utilisables dans les mines grisouteuses –
Performances et autres sujets relatifs à la sécurité**

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

COMMISSION
ELECTROTECHNIQUE
INTERNATIONALE

PRICE CODE
CODE PRIX

M

ICS 29.260.20

ISBN 978-2-88912-818-1

CONTENTS

FOREWORD.....	3
1 Scope.....	5
2 Normative references	5
3 Terms and definitions	5
4 Light output	5
4.1 Light sources.....	5
4.2 Light source holder.....	6
4.3 Luminous intensity and illuminance	6
4.4 Auxiliary light source	6
4.5 Focus	6
4.6 Chromaticity	6
5 Reliability	6
5.1 Lamp life	6
5.2 Battery life (charge/discharge cycles).....	7
5.3 Caplight useful working period.....	7
5.4 Durability.....	7
5.4.1 Fasteners and connectors	7
5.4.2 Resistance to abrasion	7
5.4.3 Operability after mechanical tests.....	7
6 Ergonomics	7
6.1 Mass	7
6.2 Ease of operation.....	8
6.3 Maintainability	8
6.4 Headpiece security.....	8
7 Type tests – Illumination throughout the useful working period	8
8 Instructions.....	9
9 Marking	9
Annex A (informative) Examples of the manufacturer's instructions for routine testing by the user.....	10
Figure A.1 – Schematic drawing of a typical photometric sphere	11
Table A.1 – Tabulation of tests	12

INTERNATIONAL ELECTROTECHNICAL COMMISSION

EXPLOSIVE ATMOSPHERES –**Part 35-2: Caplights for use in mines susceptible to firedamp –
Performance and other safety-related matters**

FOREWORD

- 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 non-governmental 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.
- 2) The formal decisions or agreements of IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested IEC National Committees.
- 3) IEC Publications have the form of recommendations for international use and are accepted by IEC National Committees in that sense. While all reasonable efforts are made to ensure that the technical content of IEC Publications is accurate, IEC cannot be held responsible for the way in which they are used or for any misinterpretation by any end user. (standards.iteh.ai)
- 4) In order to promote international uniformity, IEC National Committees undertake to apply IEC Publications transparently to the maximum extent possible in their national and regional publications. Any divergence between any IEC Publication and the corresponding national or regional publication shall be clearly indicated in the latter. (<https://standards.iteh.ai/catalog/standards/sist/0507f86d-0698-4dca-8726-0507f86d-0698-4dca-8726-0507f86d-0698-4dca-8726>)
- 5) IEC itself does not provide any attestation of conformity. Independent certification bodies provide conformity assessment services and, in some areas, access to IEC marks of conformity. IEC is not responsible for any services carried out by independent certification bodies.
- 6) All users should ensure that they have the latest edition of this publication.
- 7) No liability shall attach to IEC or its directors, employees, servants or agents including individual experts and members of its technical committees and IEC National Committees for any personal injury, property damage or other damage of any nature whatsoever, whether direct or indirect, or for costs (including legal fees) and expenses arising out of the publication, use of, or reliance upon, this IEC Publication or any other IEC Publications.
- 8) Attention is drawn to the Normative references cited in this publication. Use of the referenced publications is indispensable for the correct application of this publication.
- 9) Attention is drawn to the possibility that some of the elements of this IEC Publication may be the subject of patent rights. IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60079-35-2 has been prepared by IEC technical committee 31: Equipment for explosive atmospheres.

This first edition of IEC 60079-35-2 cancels and replaces the second edition (2005) of IEC 62013-2 published in 2005 and constitutes a full technical revision.

The general revision and updating of Edition 2 of IEC 62013-2 has been necessitated by the advent of new technologies related to caplight design, in particular those related light-emitting diode (LED) light sources. It is intended that there should be a stronger link between Part 1 (Construction) and Part 2 (Performance) of this Standard by upgrading the reference in the Scope of part 1 from a note to a requirement.

In addition as this Standard is now to become one of the IEC 60079 series, changes have been made to bring it more in line with others in the series by cross referencing. This has enabled there to be a reduction in the number and length of clauses in the Standard.