

STN	Technológie palivových článkov Časť 6-107: Výkonové sústavy palivových mikročlánkov Bezpečnosť Nepriame zlúčeniny reagujúce s vodou (divízia 4.3)	STN EN IEC 62282-6-107 36 4512
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Fuel cell technologies - Part 6-107: Micro fuel cell power systems - Safety - Indirect water-reactive (Division 4.3) compounds

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/24

Táto norma čiastočne nahrádza normu STN EN 62282-6-100 zo septembra 2010. Súbežná platnosť do 10. 5. 2027.

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EN IEC 62282-6-107

NORME EUROPÉENNE

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Supersedes EN 62282-6-100:2010 (partially);
EN 62282-6-100:2010/A1:2012 (partially)

English Version

**Fuel cell technologies - Part 6-107: Micro fuel cell power
systems - Safety - Indirect water-reactive
(Division 4.3) compounds
(IEC 62282-6-107:2024)**

Technologies des piles à combustible - Partie 6-107:
Systèmes à micropiles à combustible - Sécurité -
Composés hydroréactifs indirects (Division 4.3)
(IEC 62282-6-107:2024)

Brennstoffzellentechnologien - Teil 6-107:
Mikrobrennstoffzellen-Energiesysteme - Sicherheit -
Indirekte wasserreaktive Verbindungen
(Gefahrgutklasse 4.3)
(IEC 62282-6-107:2024)

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN IEC 62282-6-107:2024 (E)**European foreword**

The text of document 105/1018/FDIS, future edition 1 of IEC 62282-6-107, prepared by IEC/TC 105 "Fuel cell technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62282-6-107:2024.

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) 2025-02-10
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Annex ZA (normative)

Normative references to international publications with their corresponding European publications

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NOTE 1 Where an International Publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

NOTE 2 Up-to-date information on the latest versions of the European Standards listed in this annex is available here: www.cencenelec.eu.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 62282-6-101	2024	Fuel cell technologies - Part 6-101: Micro fuel cell power systems - Safety - General requirements	EN IEC 62282-6-101	2024



IEC 62282-6-107

Edition 1.0 2024-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fuel cell technologies –
Part 6-107: Micro fuel cell power systems – Safety – Indirect water-reactive
(Division 4.3) compounds**

**Technologies des piles à combustible –
Partie 6-107: Systèmes à micropiles à combustible – Sécurité – Composés
hydroréactifs indirects (Division 4.3)**



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IEC 62282-6-107

Edition 1.0 2024-04

INTERNATIONAL STANDARD

NORME INTERNATIONALE

**Fuel cell technologies –
Part 6-107: Micro fuel cell power systems – Safety – Indirect water-reactive
(Division 4.3) compounds**

**Technologies des piles à combustible –
Partie 6-107: Systèmes à micropiles à combustible – Sécurité – Composés
hydroréactifs indirects (Division 4.3)**

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FUEL CELL TECHNOLOGIES –

**Part 6-107: Micro fuel cell power systems – Safety –
Indirect water-reactive (Division 4.3) compounds**

FOREWORD

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IEC 62282-6-107 has been prepared by IEC technical committee 105: Fuel cell technologies. It is an International Standard.

This first edition, together with the other parts of the IEC 62282-6-1XX series, cancels and replaces IEC 62282-6-100:2010 and IEC 62282-6-100:2010/AMD1:2012.

This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to IEC 62282-6-100:2010 and IEC 62282-6-100:2010/AMD1:2012:

- a) A new structure has been set up: IEC 62282-6-101 covers the general safety requirements common to all fuel types whereas IEC 62282-6-102 and subsequent parts of the IEC 62282-6-1XX series cover particular requirements for individual fuel types.

The text of this International Standard is based on the following documents:

Draft	Report on voting
105/1018/FDIS	105/1033/RVD

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

The language used for the development of this International Standard is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications.

A list of all parts in the IEC 62282 series, published under the general title *Fuel cell technologies*, can be found on the IEC website.

This document is to be used in conjunction with IEC 62282-6-101:2024 and is not to be used as a stand-alone document. This document provides additional requirements specific to water-reactive fuel formulations, which apply in addition to the general requirements specified in IEC 62282-6-101:2024. The (sub)clause numbers in this document are aligned with those of IEC 62282-6-101:2024 and are intended to provide additional information and refined requirements, as appropriate.

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

- reconfirmed,
- withdrawn, or
- revised.

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It is the recommendation of the committee that the content of this publication be adopted for implementation nationally not earlier than 12 months from the date of publication.

FUEL CELL TECHNOLOGIES –

Part 6-107: Micro fuel cell power systems – Safety – Indirect water-reactive (Division 4.3) compounds

1 Scope

This part of IEC 62282 covers micro fuel cell power systems, micro fuel cell power units and fuel cartridges using hydrogen produced from water-reactive (UN Division 4.3) compounds as fuel. These systems and units use proton exchange membrane (PEM) fuel cell technologies. The designs can include fuel processing subsystems to derive hydrogen gas from the water-reactive fuel formulation.

This document only applies to water-reactive (UN Division 4.3) solid compounds which solely evolve hydrogen gas upon contact with water (or non-hazardous aqueous solutions). This document does not apply to compounds with a subsidiary hazard risk, or which are not permitted to be transported by air according to the International Civil Aviation Organization (ICAO) Technical Instructions.

IEC 62282-6-101:2024, Figure 1 is applicable.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 62282-6-101:2024, *Fuel cell technologies – Part 6-101: Micro fuel cell power systems – Safety – General requirements*

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