SLOVENSKI STANDARD
SIST EN IEC 62282-6-400:2019

01-oktober-2019

Tehnologije gorivnih celic - 6-400. del: Elektroenergetski sistemi z mikro gorivnimi celicami - Izmenljivost moči in podatkov (IEC 62282-6-400:2019)

Fuel cell technologies - Part 6-400: Micro fuel cell power systems - Power and data interchangeability (IEC 62282-6-400:2019)

Brennstoffzellentechnologien - Teil 6-400: Mikro-Brennstoffzellen-Energiesysteme - Austauschbarkeit von Leistung und Daten

Technologies des piles à combustible - Partie 6-400: Systèmes à micropiles à combustible - Interchangeabilité de la puissance et des données

Ta slovenski standard je istoveten z: **EN IEC 62282-6-400:2019**

ICS:

27.070	Gorilne celice	Fuel cells

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Fuel cell technologies - Part 6-400: Micro fuel cell power systems - Power and data interchangeability (IEC 62282-6-400:2019)

Technologies des piles à combustible - Partie 6-400: Systèmes à micropiles à combustible - Interchangeabilité de la puissance et des données (IEC 62282-6-400:2019)

Brennstoffzellentechnologien - Teil 6-400: Mikro-Brennstoffzellen-Energiesysteme - Austauschbarkeit von Leistung und Daten (IEC 62282-6-400:2019)

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European foreword

The text of document 105/721/FDIS, future edition 1 of IEC 62282-6-400, prepared by IEC/TC 105 "Fuel cell technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 62282-6-400:2019.

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) 2020-03-26
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2022-06-26

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Endorsement notice

The text of the International Standard IEC 62282-6-400:2019 was approved by CENELEC as a European Standard without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

IEC 62684	NOTE	Harmonized as EN IEC 62684
IEC 62282-6-100	NOTE	Harmonized as EN 62282-6-100
IEC 62282-6-200	NOTE	Harmonized as EN 62282-6-200
IEC 62680-2-2:2015	NOTE	Harmonized as EN 62680-2-2:2015 (not modified)

Annex ZA
(normative)

Normative references to international publications with their corresponding European publications

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.

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.cenelec.eu.

Publication	Year	Title	EN/HD	Year
IEC/TS 62282-1	-	Fuel cell technologies - Part 1: Terminology	-	-

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INTERNATIONAL STANDARD

NORME INTERNATIONALE

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Fuel cell technologies –
Part 6-400: Micro fuel cell power systems – Power and data interchangeability

Technologies des piles à combustible –
Partie 6-400: Systèmes à micropiles à combustible – Interchangeabilité de la puissance et des données

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FUEL CELL TECHNOLOGIES –

Part 6-400: Micro fuel cell power systems – Power and data interchangeability

FOREWORD

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International Standard IEC 62282-6-400 has been prepared by IEC technical committee 105: Fuel cell technologies.

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

FDIS	Report on voting
105/721/FDIS	105/724/RVD

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

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

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

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

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

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FUEL CELL TECHNOLOGIES –

Part 6-400: Micro fuel cell power systems – Power and data interchangeability

1 Scope

This part of IEC 62282 covers the interchangeability of power and data between micro fuel cell power systems and electronic devices to provide the micro fuel cell power system compatibility for a variety of electronic devices while maintaining the safety and performance of the micro fuel cell system. For that purpose, this document covers power interfaces and their connector configuration. The power management circuitry and power sharing methodology are also provided.

This document also covers the data communication protocol and its data specification. Operation modes and alert conditions are also provided for the means to comply with the power control requirements of the electronic device.

A micro fuel cell power system and micro fuel cell power unit block diagram is shown in Figure 1. Micro fuel cell power systems and micro fuel cell power units are defined as devices that are wearable or easily carried by hand, providing DC outputs that do not exceed 60 V DC and power outputs that do not exceed 240 VA. This document covers the power and data interfaces between the micro fuel cell power unit and electronic device.

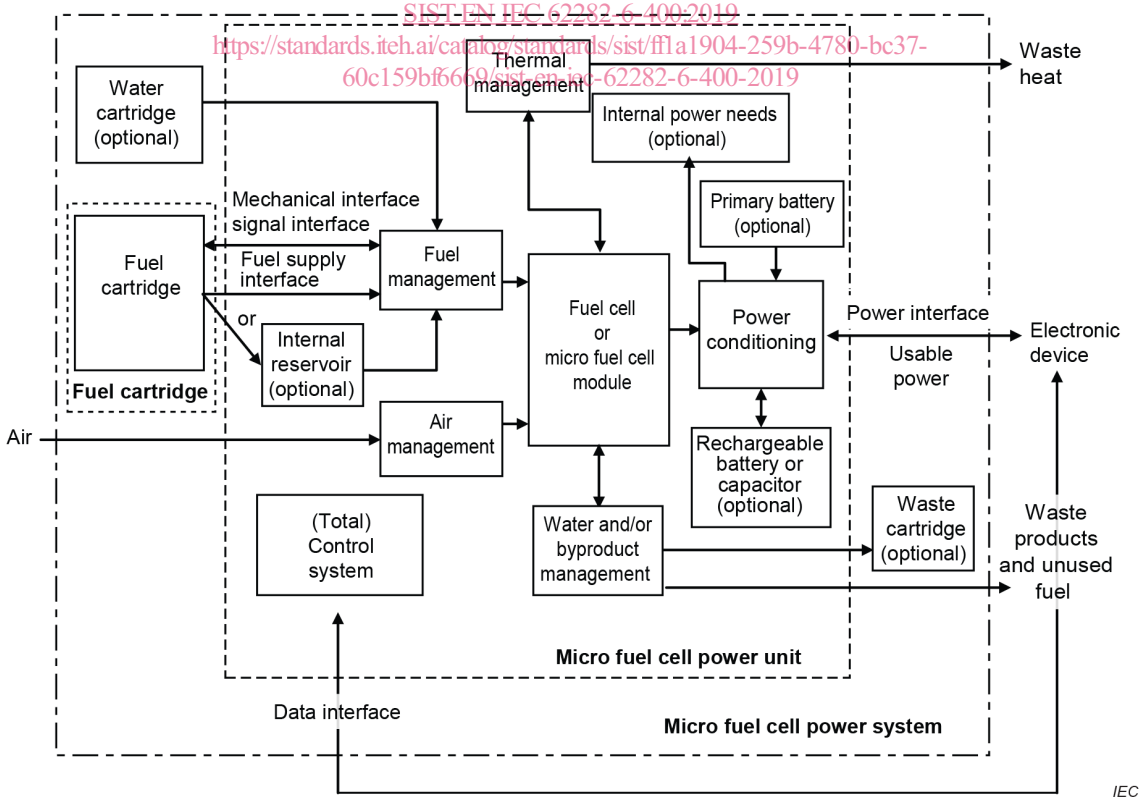

Figure 1 – Micro fuel cell power system and micro fuel cell power unit block diagram