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Fuel cell technologies - Part 6-200: Micro fuel cell power systems - Performance test methods

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. 05/17

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Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

English Version

Fuel cell technologies -  
Part 6-200: Micro fuel cell power systems -  
Performance test methods  
(IEC 62282-6-200:2016)

Technologies des piles à combustible -  
Partie 6-200: Systèmes à micropiles à combustible -  
Méthodes d'essai des performances  
(IEC 62282-6-200:2016)

Brennstoffzellentechnologien -  
Teil 6-200: Mikro-Brennstoffzellen-Energiesysteme -  
Leistungskennwerteprüfverfahren  
(IEC 62282-6-200:2016)

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

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## European foreword

The text of document 105/527/CDV, future edition 3 of IEC 62282-6-200, prepared by IEC/TC 105 "Fuel cell technologies" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN 62282-6-200:2017.

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) 2017-07-27
- latest date by which the national standards conflicting with the document have to be withdrawn (dow) 2019-10-27

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## 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 1 When 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](http://www.cenelec.eu).

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-6	-	Environmental testing - Part 2-6: Tests - Test Fc: Vibration (sinusoidal)	EN 60068-2-6	-
IEC 60721-3-7	-	Classification of environmental conditions - Part 3: Classification of groups of environmental parameters and their severities - Section 7: Portable and non-stationary use	EN 60721-3-7	-
IEC/TS 62282-1	2013	Fuel cell technologies - Part 1: Terminology	-	-
ISO/IEC 17025	-	General requirements for the competence of testing and calibration laboratories	EN ISO/IEC 17025	-



# INTERNATIONAL STANDARD

# NORME INTERNATIONALE

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**Fuel cell technologies –  
Part 6-200: Micro fuel cell power systems – Performance test methods**

**Technologies des piles à combustible –  
Partie 6-200: Systèmes à micropiles à combustible – Méthodes d’essai  
des performances**





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**Fuel cell technologies –  
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## INTERNATIONAL ELECTROTECHNICAL COMMISSION

**FUEL CELL TECHNOLOGIES –****Part 6-200: Micro fuel cell power systems –  
Performance test methods**

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International Standard IEC 62282-6-200 has been prepared by IEC technical committee 105: Fuel cell technologies.

This third edition cancels and replaces the second edition, published in 2012. This edition constitutes a technical revision.

This edition includes the following significant technical changes with respect to the previous edition:

- a) deletion of 5.3 (Fuel consumption test) as it was impractical to measure the actual consumption rate of some kinds of fuels;
- b) addition and modification of some terms and definitions.

The text of this standard is based on the following documents:

CDV	Report on voting
105/527/CDV	105/545A/RVC

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

This publication 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 *Fuel cell technologies*, can be found on the IEC website.

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- reconfirmed,
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- replaced by a revised edition, or
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## INTRODUCTION

With advancements in technology, the expectation or demand for the commercial introduction of fuel cells has increased dramatically in recent years. It is especially strong for micro fuel cell power systems intended for applications in laptop computers, mobile phones, personal digital assistants (PDAs), cordless home appliances, TV broadcast cameras, autonomous robots, etc. The essential component of a micro fuel cell power system is its power unit. Some micro fuel cell power systems have built-in power units and others have external power units.

## FUEL CELL TECHNOLOGIES –

### Part 6-200: Micro fuel cell power systems – Performance test methods

#### 1 Scope

This part of IEC 62282 specifies test methods for the performance evaluation of micro fuel cell power systems for laptop computers, mobile phones, personal digital assistants (PDAs), cordless home appliances, TV broadcast cameras, autonomous robots, etc.

This document describes the performance test methods for power characteristics, and mechanical durability for micro fuel cell power systems with output up to 60 V DC and 240 VA. The functional arrangement of a typical example of a micro fuel cell power system, evaluated according to this document, is shown in Figure 1.

This document does not address the safety of micro fuel cell power systems.

This document does not address the interchangeability of micro fuel cell power systems.

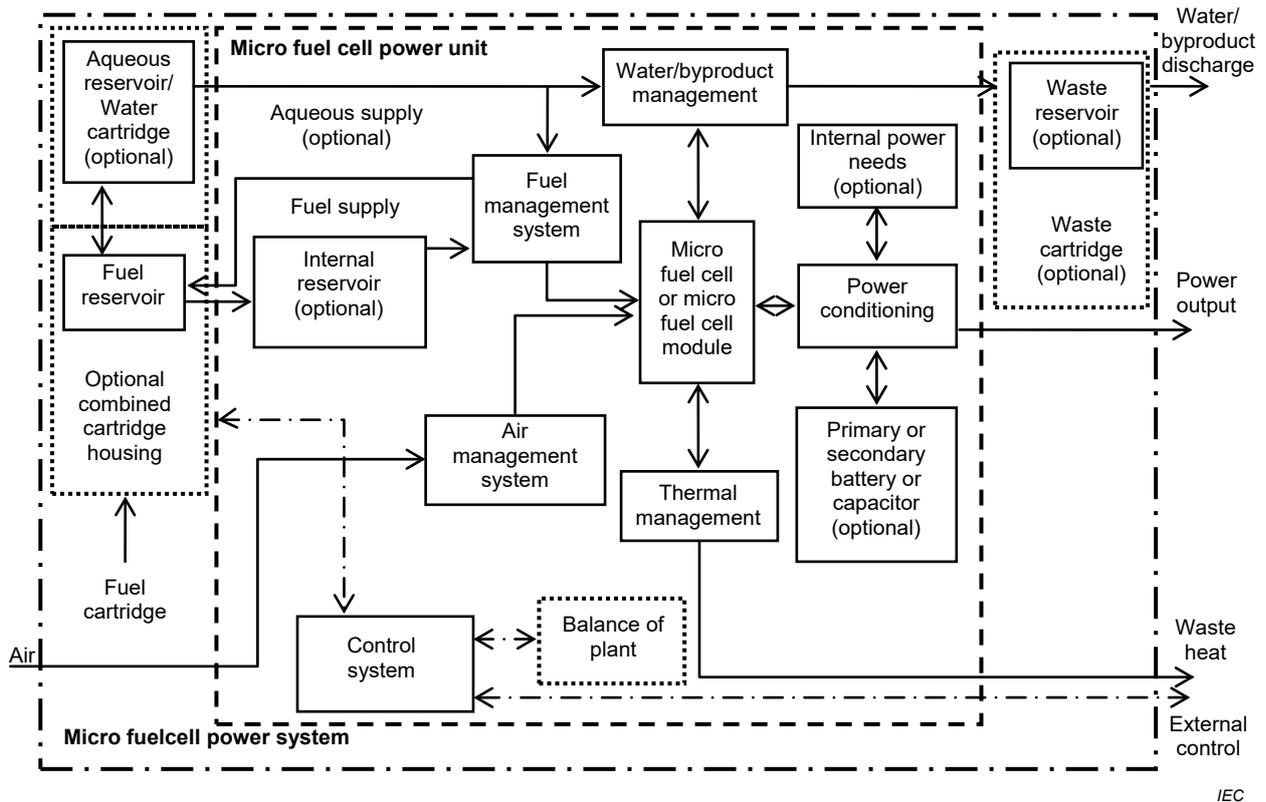


Figure 1 – Micro fuel cell power system block diagram

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IEC 60721-3-7, *Classification of environmental conditions – Part 3-7: Classification of groups of environmental parameters and their severities – Portable and non-stationary use*

IEC TS 62282-1:2013, *Fuel cell technologies – Part 1: Terminology*

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