

INTERNATIONAL STANDARD

IEC 60896-21

First edition
2004-02

Stationary lead-acid batteries –

Part 21: Valve regulated types – Methods of test

*This **English-language** version is derived from the original **bilingual** publication by leaving out all French-language pages. Missing page numbers correspond to the French-language pages.*



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Stationary lead-acid batteries – Part 21: Valve regulated types – Methods of test

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

STATIONARY LEAD-ACID BATTERIES –

Part 21: Valve regulated types – Methods of test

FOREWORD

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International Standard IEC 60896-21 has been prepared by IEC technical committee 21: Secondary cells and batteries.

This standard cancels and replaces IEC 60896-2 published in 1995.

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

FDIS	Report on voting
21/594/FDIS	21/600/RVD

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.

This standard constitutes Part 21 of the IEC 60896 series, published under the general title *Stationary lead-acid batteries*. At the time of the publication of this part, the following parts had already been published or were in the process of being published:

Part 11: Vented types – General requirements and methods of tests

Part 21: Valve regulated types – Methods of test ¹⁾

Part 22: Valve regulated types – Requirements

The committee has decided that the contents of this publication will remain unchanged until 2011. At this date, the publication will be

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- withdrawn,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

¹ This standard replaces IEC 60896-2:1995, *Stationary lead-acid batteries – General requirements and methods of test – Part 2: Valve regulated types*.

STATIONARY LEAD-ACID BATTERIES –

Part 21: Valve regulated types – Methods of test

1 Scope

This part of IEC 60896 applies to all stationary lead-acid cells and monobloc batteries of the valve regulated type for float charge applications, (i.e. permanently connected to a load and to a d.c. power supply), in a static location (i.e. not generally intended to be moved from place to place) and incorporated into stationary equipment or installed in battery rooms for use in telecom, uninterruptible power supply (UPS), utility switching, emergency power or similar applications.

The objective of this part of IEC 60896 is to specify the methods of test for all types and construction of valve regulated stationary lead acid cells and monobloc batteries used in standby power applications.

This part of IEC 60896 does not apply to lead-acid cells and monobloc batteries used for vehicle engine starting applications (IEC 60095 series), solar photovoltaic energy systems (IEC 61427), or general purpose applications (IEC 61056 series).

2 Normative references

The following referenced documents are indispensable for the application 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 60068-2-32:1975, *Basic environmental testing procedures – Part 2: Test; Test Ed: Free fall Amendment 2* (1990)

IEC 60695-11-10, *Fire hazard testing – Part 11-10 Test flames – 50 W horizontal and vertical flame test methods*

IEC 60707, *Flammability of solid non-metallic materials when exposed to flame sources – List of test methods*

IEC 60896-22:2004, *Stationary lead acid batteries – Part 22: Valve regulated types – Requirements*

IEC 60950-1:2001, *Information technology equipment – Safety – Part 1: General requirements*

IEC 61430:1997, *Secondary cells and batteries – Test methods for checking the performance of devices designed for reducing explosion hazards – Lead-acid starter batteries*

ISO 1043-1, *Plastics – Symbols and abbreviated terms – Part 1: Basic polymers and their special characteristics*