

INTERNATIONAL STANDARD



Lead-acid starter batteries – Part 1: General requirements and methods of test



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CONTENTS

FOREWORD.....	4
1 Scope.....	6
2 Normative references	6
3 Terms and definitions	6
4 Designation of starter batteries – Electrolyte density and open circuit voltage	7
4.1 Designation according to type	7
4.2 Dry-charged batteries	7
4.3 Electrolyte density and open circuit voltage.....	8
5 Condition on delivery	8
6 General requirements	8
6.1 Identification, labelling	8
6.1.1 General	8
6.1.2 The identification of manufacturer or supplier	8
6.1.3 Nominal voltage: 12 V.....	8
6.1.4 Capacity or reserve capacity (see 7.1.2) and nominal cranking current (see 7.1.1).....	8
6.1.5 Production date code.....	9
6.1.6 Safety labelling.....	9
6.1.7 Recycling labelling.....	9
6.1.8 Valve-regulated batteries.....	9
6.2 Marking of the polarity	9
6.3 Fastening of the battery	9
7 Functional characteristics	10
7.1 Electrical characteristics	10
7.2 Mechanical characteristics	11
8 General test conditions.....	11
8.1 Sampling of batteries	11
8.2 Charging method – Definition of a fully charged battery	11
8.3 Test equipment.....	11
8.3.1 Measuring instruments.....	11
8.3.2 Water bath.....	12
8.3.3 Environmental chamber	12
8.4 Test sequence	12
8.4.1 Batteries filled and charged	12
8.4.2 Dry-charged or conserved-charge batteries	13
9 Tests methods.....	14
9.1 20 h capacity check C_e	14
9.2 Reserve capacity check RC_e	14
9.3 Cranking performance test.....	14
9.3.1 Cranking performance test – Standard temperature (–18 °C).....	14
9.3.2 Cranking performance test – Very cold climates	15
9.3.3 High current discharge test at low temperature	15
9.4 Charge acceptance test	16
9.5 Charge retention test	16
9.6 Endurance test for batteries	16

9.6.1	Corrosion test.....	16
9.6.2	Optional endurance cycle test for passenger car batteries – Maximum capacity 100 Ah.....	18
9.7	Water consumption test	19
9.8	Vibration resistance test	19
9.9	Electrolyte retention test	20
9.10	Cranking performance for dry-charged (or conserved-charge) batteries after activation	20
10	Requirements	20
	Annex A (normative) Correlation between C_n and RC_n	22
	Annex B (informative) Water consumption test – Conversion of test temperatures and test durations.....	23
	B.1 General.....	23
	B.2 Conversion formula.....	23
	Annex C (informative) Safety labelling	24
	C.1 Definition of the six coloured symbols	24
	C.2 Safety labelling – Label for North America area	24
	Bibliography.....	26
	Figure C.1 – Symbol dimensions.....	24
	Figure C.2 – Safety labelling – Label for North America area, former version (still valid)	25
	Figure C.3 – Safety labelling – Label for North America area, new version.....	25
	Table 1 – Charging method.....	11
	Table 2 – Accuracy of test equipment	12
	Table 3 – Test sequence.....	13
	Table 4 – Parameters cycle test.....	17
	Table 5 – Vibration resistance – Levels V1 to V3	19
	Table 6 – Summary of requirements	21
	Table C.1 – Definition of safety symbols according to ISO 7010.....	24

INTERNATIONAL ELECTROTECHNICAL COMMISSION

LEAD-ACID STARTER BATTERIES –

Part 1: General requirements and methods of test

FOREWORD

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International Standard IEC 60095-1 has been prepared by IEC technical committee 21: Secondary cells and batteries.

This eighth edition cancels and replaces the seventh edition published in 2006. This edition constitutes a technical revision.

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

- a) charge acceptance test;
- b) cranking performance test;
- c) charge retention test; and
- d) endurance test added.

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

FDIS	Report on voting
21/974/FDIS	21/987/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 60095 series, published under the general title *Lead-acid starter batteries*, 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
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LEAD-ACID STARTER BATTERIES –

Part 1: General requirements and methods of test

1 Scope

This part of IEC 60095 is applicable to lead-acid batteries with a nominal voltage of 12 V, used primarily as a power source for the starting of internal combustion engines, lighting, and for auxiliary equipment of internal combustion engine vehicles. These batteries are commonly called "starter batteries".

This document is applicable to batteries for the following purposes:

- batteries for passenger cars;
- batteries for commercial and industrial vehicles.

This document is not applicable to batteries for other purposes, such as the starting of railcar internal combustion engines or for motorcycles and other power sport vehicles.

This document defines many general properties of lead-acid batteries. Single sections can be referenced in other parts of the IEC 60095 series even if the application is excluded in the scope of this document.

This document specifies the:

- general requirements;
- essential functional characteristics, relevant test methods and results required,

for several classes of starter batteries:

- according to the general type of application;
- according to the type of product.

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 60050-482, *International Electrotechnical Vocabulary – Chapter 482: Primary and secondary cells and batteries*

IEC 60095-2, *Lead-acid starter batteries – Part 2: Dimensions of batteries and dimensions and marking of terminals*

IEC 60095-4, *Lead-acid starter batteries – Part 4: Dimensions of batteries for heavy vehicles*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-482 and the following apply.