



SLOVENSKI STANDARD

SIST EN 60095-1:1997/A11:1997

01-februar-1997

Svinčeno-kislinske zagonske baterije - 1. del: Splošne zahteve in metode preskušanja

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

Blei-Starterbatterien -- Teil 1: Allgemeine Anforderungen und Prüfungen

Batteries d'accumulateurs de démarrage au plomb -- Partie 1: Prescriptions générales et méthodes d'essai

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Ta slovenski standard je istoveten z: SIST EN 60095-1:1997/A11:1997 EN 60095-1:1993/A11:1995

<https://standards.iteh.ai/catalog/standards/sist/ac/7a/7a-95b7-4d64-ad21-64a68dcc3436/sist-en-60095-1-1997-a11-1997>

ICS:

| | | |
|-----------|--|------------------------------------|
| 29.220.20 | Kislinski sekundarni člani in baterije | Acid secondary cells and batteries |
|-----------|--|------------------------------------|

SIST EN 60095-1:1997/A11:1997 en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 60095-1/A11

March 1995

UDC 621.355.2:621.43.044.7:620.1
ICS 01.080.20; 29.220.20

Descriptors: Lead-acid battery, starter battery, identification, labelling, electrical characteristics, mechanical characteristics, test conditions, test methods, tests

English version

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

Batteries d'accumulateurs de démarrage
au plomb
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This amendment A11 modifies the European Standard EN 60095-1:1993; it was approved by CENELEC on 1995-03-06. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This amendment was prepared by the Technical Committee CENELEC TC 21X, Secondary cells and batteries.

The text of the draft was submitted to the Unique Acceptance Procedure and was approved by CENELEC as amendment A11 to EN 60095-1:1993 on 1995-03-06.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 1996-03-01
 - latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 1996-03-01
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Subclause 2.1, a) replace "(under development by CENELEC/TC 21X" by "(see annex ZB)".

Add: **ANNEX ZB (normative)**
European Type Number for starter batteries

INTRODUCTION

A single identification system for starter batteries will make the references of the batteries clearer and help the users.

It is in the interest of the user to identify with a single number of batteries from different manufacturers with the same standard level of performance and the same features.

NOTE: CLC/TC 21X intends to prepare a separate standard "marking of starter batteries" to describe the complete demand for labelling:
ETN - nominal voltage - supplier identification - safety precautions - recycling and disposal advice. This separate standard will include and replace this annex.

This annex defines the structure and the construction method of the starter battery type number ETN (European Type Number for Starter Batteries).

ETN as an identification number is part of the marking and may be used by anyone but only for starter batteries that comply with the requirements of EN 60095-1:1993.

To keep the ETN updated, administration and maintenance is necessary because 3 digits of the 9-digit-type-number derive from a set of specification sheets while 6 digits can be defined by a manufacturer himself. Administration and maintenance means that e.g. geometrical characteristics of a new battery with demand for an ETN have to be checked for identification. The CENELEC TC 21X is responsible for the administration and maintenance of the ETN. For practical reasons this CLC/TC delegates the daily work to an external service company, the address of which is available from CLC/TC 21X.

ZB.1 STRUCTURE OF THE EUROPEAN TYPE NUMBER

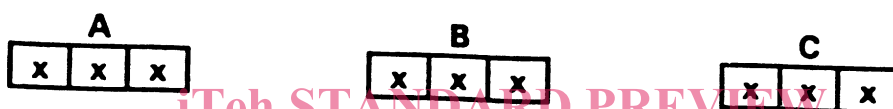
The ETN consists of 9 digits assigned to 3 groups with 3 digits in each group. The three groups are designated by the letters A, B, C in the following text.

These three groups of digits are indicative of:

Group A: Battery voltage and nominal capacity (C_n).

Group B: Battery geometrical characteristics and requirement levels for specified features of EN 60095-1.

Group C: Battery cold cranking intensity (I_{CC}).



Note: Alterations to dimensions, mechanical or electrical characteristics require the creation of a new ETN.

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ZB.2 CONSTRUCTION METHOD FOR THE EUROPEAN TYPE NUMBER**ZB.2.1 Group A****ZB.2.1.1 Group A Construction**

Group A consists of 3 digits identifying battery voltage and nominal capacity.

(a) For 6 volt batteries, the 3 digit number is equal to the value of the nominal capacity as described below:

| | | | |
|------|-------|---------|---------------------------|
| 1 Ah | up to | 499 Ah: | <u>Group A</u> 001-499 |
|------|-------|---------|---------------------------|

(b) For 12 volt batteries, the 3 digit number is equal to the value of the nominal capacity increased by 500 as described below:

| | | | |
|------|-------|---------|---------------------------|
| 1 Ah | up to | 299 Ah: | <u>Group A</u> 501-799 |
|------|-------|---------|---------------------------|

ZB.2.1.2 Requirements for the assignation of a new number resulting from nominal capacity change for 6 V and 12 V Batteries

If digit Group B (see ZB.2.2) and digit Group C (see ZB.2.3) are identical to those of on an existing ETN, a new type number will only be assigned if the nominal capacity C_n difference between the existing battery and the proposed new battery is equal to or greater than:

| | | | | |
|-------|--------------|--------|----|--------|
| 1 Ah | in the range | 1 Ah | to | 20 Ah |
| 3 Ah | in the range | 21 Ah | to | 50 Ah |
| 4 Ah | in the range | 51 Ah | to | 80 Ah |
| 5 Ah | in the range | 81 Ah | to | 120 Ah |
| 10 Ah | in the range | 121 Ah | to | 499 Ah |

Thus if an ETN exists

e.g.

| |
|----------|
| A 555 |
|----------|

 059 042

and new batteries are proposed having identical Group B and C digits, but differing nominal capacities, new ETN's will be issued with Group A 551 and 559, but not 552, 553, 554, 556, 557, 558.

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ZB.2.2 Group B

[SIST EN 60095-1:1997/A11:1997](https://standards.iteh.ai/catalog/standards/sist/ac7a7c7a-93b7-4d64-ad21-1a0000000000/EN-60095-1-1997-A11-1997)

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Group B consists of 3 digits relating to battery geometric characteristics and requirement levels for specified features of EN 60095-1.

The 3 digit group is a serial number generated from a list.

Information contained in the list covers the aspects:

- | | | | | |
|-----|--------------|--------------------------|---|---|
| (a) | Dimensions : | Maximum length | = | L |
| | | Maximum width | = | W |
| | | Maximum overall height | = | H |
| | | Maximum container height | = | h |

Tolerances are not fixed.

The starter batteries to be defined are mainly, but not exclusively, those detailed in European Standards EN 60095-2 and EN 60095-4.

- (b) Assembly: terminal location

- (c) Terminal type

- (d) Container type: hold down, handles ...
- (e) Cover type
- (f) Requirement level to be achieved in the cranking performance test
- (g) Low water loss battery
- (h) Requirement level to be achieved in the endurance test
- (i) Requirement level to be achieved in the vibration test
- (j) Other characteristics

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ZB.2.3 Group C

[SIST EN 60095-1:1997/A11:1997](https://standards.iteh.ai/catalog/standards/sist/ac7a7c7a-93b7-4d64-ad21-64a68dcc3436/sist-en-60095-1-1997-a11-1997)

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ZB.2.3.1 Group C Construction

Group C consists of a 3 digit number equal to one tenth of the cold cranking intensity I_{CC} :

| Thus | e.g. | I_{CC} (A) | Group C |
|------|------|--------------|---------|
| | | 330 | 033 |
| | | 420 | 042 |
| | | 1050 | 105 |

Note: The requirement level, in accordance with EN 60095-1, to be achieved in the cranking performance test is defined in Group B.

ZB.2.3.2 Scale of Fixed Values for Cold Cranking Intensity

I_{CC} less than 200 A : step 10 A