



SLOVENSKI STANDARD
SIST EN 60285:1997/A1:1997
01-februar-1997

Alkaline secondary cells and batteries - Sealed nickel-cadmium cylindrical rechargeable single cells - Amendment A1

Alkaline secondary cells and batteries - Sealed nickel-cadmium cylindrical rechargeable single cells

Alkalische Sekundärzellen und Batterien - Gasdichte zylindrische wiederaufladbare Nickel-Cadmium-Einzelnzellen

Accumulateurs alcalins - Eléments individuels cylindriques rechargeables étanches au nickel-cadmium

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Ta slovenski standard je istoveten z: EN 60285:1994/A1:1995

ICS:

29.220.30 Alkaline secondary cells and batteries

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EUROPEAN STANDARD

EN 60285/A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 1995

ICS 29.220.30

Descriptors: Alkaline batteries, nickel-cadmium batteries, specifications, tests, overload protection

English version

Alkaline secondary cells and batteries
Sealed nickel-cadmium cylindrical rechargeable single cells
(IEC 285:1993/A1:1995)

Accumulateurs alcalins
Eléments individuels cylindriques
rechargeables étanches au
nickel-cadmium
(CEI 285:1993/A1:1995)

Alkalische Sekundärzellen und Batterien
Gasdichte zylindrische wiederaufladbare
Nickel-Cadmium-Einzelzellen
(IEC 285:1993/A1:1995)

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This amendment A1 modifies the European Standard EN 60285:1994; 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

The text of document 21A(CO)82, future amendment 1 to IEC 285:1993, prepared by SC 21A, Alkaline secondary cells and batteries, of IEC TC 21, Secondary cells and batteries, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A1 to EN 60285:1994 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

Endorsement notice

The text of amendment 1:1995 to the International Standard IEC 285:1993 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME
INTERNATIONALE
INTERNATIONAL
STANDARD

CEI
IEC
285

1993

AMENDEMENT 1
AMENDMENT 1

1995-02

Amendement 1

Accumulateurs alcalins –

Éléments individuels cylindriques
rechargeables étanches au nickel-cadmium

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Amendment 1

SIST EN 60285:1997/A1:1997

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Sealed nickel-cadmium cylindrical
rechargeable single cells

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Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

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FOREWORD

This amendment has been prepared by sub-committee 21A: Alkaline secondary cells and batteries, of IEC technical committee 21: Secondary cells and batteries.

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

DIS	Report on voting
21A(CO)82	21A/167/RVD

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

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4.4.1 Endurance in cycles

Add, at the end of the subclause, the following new text:

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In order to accelerate the test or to use cycling conditions approximating those in actual applications, one of the following alternative procedures may be chosen.

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Table 5a – Endurance in cycles for cell categories H and X

Cycle number	Charge	Stand in charged condition	Discharge	
			Conditions	Total duration including subsequent rest
1	0,1 C ₅ A for 16 h	30 min	1 C ₅ A to 1,0 V	90 min
2 to 48	0,3 C ₅ A for 4 h	30 min	1 C ₅ A to 1,0 V	90 min
49	0,3 C ₅ A for 4 h	24 h	1 C ₅ A to 1,0 V	90 min
50	0,1 C ₅ A for 16 h	1 h to 4 h	0,2 C ₅ A to 1,0 V	*

* It is permissible to allow sufficient open-circuit rest time after the completion of discharge at cycle 50, so as to start cycle 51 at a convenient time. A similar procedure may be adopted at cycles 100, 150, 200, 250, 300 and 350.

Cycles 1 to 50 shall be repeated until the discharge duration to the final voltage of 1,0 V on any 49th cycle becomes less than 30 min or on any 50th cycle becomes less than 3 h.

The number of cycles shall be not less than 400.

Table 5b – Endurance in cycles for cell category X

Cycle number	Charge	Stand in charged condition	Discharge	
			Conditions	Total duration including subsequent rest
1	0,1 C ₅ A for 16 h	30 min	5 C ₅ A to 0,8 V	42 min
2 to 48	1 C ₅ A for 1 h	30 min	5 C ₅ A to 0,8 V	42 min
49	1 C ₅ A for 1 h	24 h	5 C ₅ A to 0,8 V	42 min
50	0,1 C ₅ A for 16 h	1 h to 4 h	0,2 C ₅ A to 1,0 V	*

* It is permissible to allow sufficient open-circuit rest time after the completion of discharge at cycle 50, so as to start cycle 51 at a convenient time. A similar procedure may be adopted at cycles 100, 150, 200, 250, 300 and 350.

Cycles 1 to 50 shall be repeated until the discharge duration to the final voltage of 0,8 V on any 49th cycle becomes less than 5 min or until the discharge duration to the final voltage of 1,0 V on any 50th cycle becomes less than 3 h.

The number of cycles shall be not less than 400.

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