

**Generic Specification: Fixed aluminium electrolytic a.c. capacitors with non-solid electrolyte for use with motors**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 137000:2005 sisaldab Euroopa standardi EN 137000:1995 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.12.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 137000:2005 consists of the English text of the European standard EN 137000:1995.</p> <p>This document is endorsed on 19.12.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<b>Käsitlusala:</b>	<b>Scope:</b>
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**ICS** 31.060.50

**Võtmesõnad:**

English version

**Generic Specification:  
Fixed aluminium electrolytic a.c. capacitors with  
non-solid electrolyte for use with motors**

Spécification générique:  
Condensateurs électrolytiques pour  
courant alternatif, à l'aluminium, à  
électrolyte non solide, à utiliser pour  
des moteurs

Fachgrundspezifikation:  
Aluminium-Elektrolyt-Wechsel-  
spannungskondensatoren mit  
flüssigem Elektrolyten zum Betrieb  
mit Motoren

This European Standard was approved on 1995-06-24. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard 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 European Standard 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.

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**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 European Standard was prepared by Working Group CLC/TC CECC/WG 3.

The text of the draft based on document CECC(Secretariat)3247 was submitted to the formal vote; together with the voting report, circulated as document CECC(Secretariat)3659, it was approved as EN 137000 on 1995-06-24.

The following dates were fixed:

- latest date by which the EN has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 1996-07-01
  - latest date by which the national standards conflicting  
with the EN have to be withdrawn (dow) 1997-07-01
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## 1 - SCOPE

This specification is applicable to fixed a.c. aluminium electrolytic capacitors intended:

- for connection to windings of asynchronous motors supplied from a single-phase system having a frequency up to and including 100 Hz.
- to be connected to three-phase asynchronous motors so that the motors may be supplied from a single-phase system.

This specification is not applicable to radio interference suppression capacitors, covered by EN 132 400.

Neither is it applicable to capacitors for use in electronic equipment, covered by EN 130 000.

It establishes standard terms, inspection procedures, methods of test for use in sectional and detail specifications within the CECC System, guide-lines for safety rules and for installation and operation.

## 2 - GENERAL

### 2.1 Related Documents

EN 100 114 Part I (1994)	Approval of manufacturers and other organizations (with amendment 1)
Issue 2 (1991)	Internal Regulations of the FEN e.V. (supersedes CECC 00 100 Issue 2 1988)
CECC 00 114 Part II (1992)	Qualification approval of electronic components (with amendment 1)
CECC 00 114 Part III (1993)	Capability approval of an electronic component manufacturing activity (with amendment and erratum)
ECQAC 1220 (1992)	ECQAC Policy on Uncertainty of Measurement
ISO 497	Guide to the choice of series of preferred numbers and of series containing more rounded values of preferred numbers
ISO 1000	SI units and recommendations for the use of their multiples and of certain other units
IEC 27-1	Letter symbols to be used in electrical technology: Part 1: General
IEC 50	International Electrotechnical Vocabulary
IEC 62	Marking codes for resistors and capacitors
IEC 68	Basic environmental testing procedures

IEC 68-1 (1988)	General
IEC 68-2-1 (1990)	Test A: Cold
IEC-68-2-2 (1974) 68-2-2A (1976)	Test B: Dry heat First supplement
IEC 68-2-3 (1969)	Test Ca: Damp heat, steady state
IEC 68-2-6 (1982) Amendment 1 (1983) Amendment 2 (1985)	Test Fc: Vibration (sinusoidal)
IEC 68-2-13 (1983)	Test M: Low air pressure
IEC 68-2-14 (1984) Amendment 1 (1986)	Test N: Change of temperature
IEC 68-2-17 (1978) Amendment 3 (1989)	Test Q: Sealing
IEC 68-2-20 (1979) Amendment 1 (1986) Amendment 2 (1987)	Test T: Soldering
IEC 68-2-21 (1983) Amendment 1 (1985)	Test U: Robustness of terminations and integral mounting devices
IEC 68-2-27 (1987)	Test Ea: Shock
IEC 68-2-29 (1987)	Test Eb: Bump
IEC 68-2-30 (1980) Amendment 1 (1985)	Test Db: Damp heat, cyclic ((12 + 12) hour cycle)
IEC 68-2-45 (1980) Amendment 1 (1993)	Test XA and guidance: Immersion in cleaning solvents
IEC 68-2-47 (1982)	Mounting of components, equipment and other articles for dynamic tests, including shock (Ea), bump (Eb), vibration (Fc and Fd) and steady-state acceleration (Ga) and guidance)
IEC 117	Recommended graphical symbols
IEC 241	Fuses for domestic and similar purposes
IEC 294	Measurement of the dimensions of a cylindrical component having two axial terminations
IEC 410	Sampling plans and procedures for inspection by attributes
IEC 529	Classification of degrees of protection provided by enclosures

**Note** - The above references apply to the current editions, except for IEC 68 for which the referenced edition shall be used.