

Förderverein für Elektrotechnische Normung (FEN) e.V.
Cenelec Electronic Components Committee

CECC

Système Harmonisé d'Assurance de la Qualité
des Composants Electroniques

SPECIFICATION PARTICULIERE:

CONDENSATEURS
ELECTROLYTIQUES
A L' ALUMINIUM A ELECTROLYTE
NON SOLIDE

Harmonized System of Quality Assessment for
Electronic Components

DETAIL SPECIFICATION:
**ALUMINIUM ELECTROLYTIC
CAPACITORS WITH NON-SOLID
ELECTROLYTE**

Harmonisiertes Gütebestätigungssystem für
Bauelemente der Elektronik

BAUARTSPEZIFIKATION:
**ALUMINIUM-ELEKTROLYT-
KONDENSATOREN MIT FLÜSSIGEM
ELEKTROLYTEN**



1

Edition
Issue
Ausgabe

CECC 30 301-806

1989

Cette page bleue doit être insérée après la page de garde de la CECC 30 301-806 Edition 1 (1988)

AMENDEMENT 1 A LA CECC 30 301-806:

SPECIFICATION PARTICULIERE:

CONDENSATEURS ELECTROLYTIQUES A L'ALUMINIUM A ELECTROLYTE NON SOLIDE

Supprimer les pages 1/2 et insérer les nouvelles pages 1/2.
(Le titre du paragraphe 1.1 a été supprimé et le nouveau titre a été inséré).

Enregistrer cette modification sur la feuille jaune "Enregistrement des modifications".

Le texte de cette modification a été soumis au vote du CECC dans le document indiqué ci-dessous et a été ratifié par le Président du CECC pour être publié.

Document: CECC(Secretariat)2491
Date de vote: Février 1990
Rapport de vote: CECC(Secretariat)2653

CECC 30 301-806 Edition 1 Amendement 1 (1991)

This blue page should be inserted after the title page of CECC 30 301-806 Issue 1 (1988)

AMENDMENT 1 TO CECC 30 301-806:

DETAIL SPECIFICATION:

ALUMINIUM ELECTROLYTIC CAPACITORS WITH NON-SOLID ELECTROLYTE

Remove pages 1/2 and insert the new pages 1/2.

(The title of clause 1.1 has been deleted and the new title inserted).

Enter this amendment on the yellow "Record of amendments" sheet.

The text of this amendment was circulated to the CECC for voting in the document indicated below and was ratified by the President of the CECC for publication.

Document: CECC(Secretariat)2491
Date of voting: February 1990
Report on the voting: CECC(Secretariat)2653

CECC 30 301-806 Issue 1 Amendment 1 (1991)

Dieses blaue Blatt ist nach dem Titelblatt der CECC 30 301-806 Ausgabe 1 (1988) einzufügen

ÄNDERUNG 1 ZU CECC 30 301-806:

BAUARTSPEZIFIKATION:

ALUMINIUM-ELEKTROLYT-KONDENSATOREN MIT FLÜSSIGEM ELEKTROLYTEN

Die Seiten 1/2 sind herauszunehmen und durch die neuen Seiten 1/2 zu ersetzen.
(Der Titel von Abschnitt 1.1 wurde durch den neuen Titel ersetzt).

Diese Änderung ist auf dem gelben Blatt "Verzeichnis der Änderungen" einzutragen.

Der Text dieser Änderung wurde dem CECC mit dem unten aufgeführten Schriftstück zur Abstimmung vorgelegt und vom Präsidenten des CECC zur Veröffentlichung freigegeben.

Schriftstück: CECC(Sekretariat)2491
Abstimmungsdatum: Februar 1990
Abstimmbericht: CECC(Sekretariat)2653

CECC 30 301-806 Ausgabe 1 Änderung 1 (1991)

Information about the System may be obtained from:



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or from the National Authorized Institutions
of the participating countries listed
who can supply copies of:

- 1 The Internal Regulations of the FEN e.V.
- 2 CECC Specifications of the FEN and National Specifications for the System
- 3 CECC 00 200: Qualified Products List (QPL)
- 4 CECC 00 300: CECC Publications and their related national documents

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DK-1401 Copenhagen K

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Documents

Document Sharing Hub

FOREWORD

The Cenelec Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby accepted by all member countries without further testing.

This specification should be read in conjunction with the current regulations for the CECC System.

At the date of printing of this specification, the member countries of the CECC are Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Italy, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom, and copies of it can be obtained from the addresses shown on the blue fly sheet.

PREFACE

This specification was prepared by CECC WG 3 "Capacitors".

It is based, wherever possible, on the Publications of the International Electrotechnical Commission.

The text of this detail specification was circulated to the members of CECC WG 3 and was approved for publication under the accelerated procedure for the acceptance of detail specifications in accordance with Decision 10 of the minutes of the CECC CD in document CECC(Secretariat)1838.

Secretariat Note

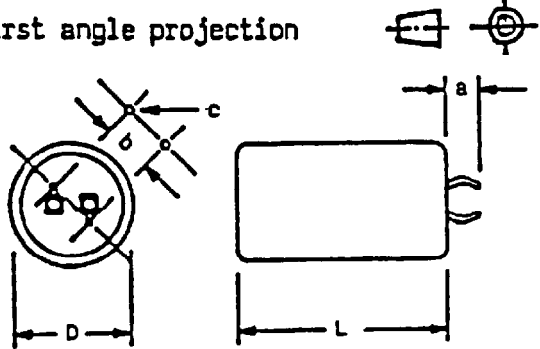
This detail specification was originally drafted by members of CEMEC WG PC 1A and discussed as document

CEMEC WG PC 1A (da Costa)2

by WG 3 at its meeting in Bologna in 1988 with the decision to publish it without voting.

To allow early publication, this detail specification is issued initially in English only.
Corresponding versions in French and German will follow on request of ONHs.

CECC 30 301-806 (Issue 1)

Specification available from: CECC General Secretariat	CECC 30 301-806 (Issue 1) 1989 
ELECTRONIC COMPONENTS OF ASSESSED QUALITY - DETAIL SPECIFICATION IN ACCORDANCE WITH: CECC 30 000 Issue 3, Amdts. 1 to 5 CECC 30 300 Issue 2	
First angle projection  a : $(6,3 \pm 1,0)$ mm b : $(10 \pm 0,1)$ mm c : Diameter of holes in printed board: $(2,0 \pm 0,1)$ mm D, L: See Table 1 Marking information: See clause 1.5	WG-DETAIL SPECIFICATION FOR FIXED ALUMINIUM ELECTRO- LYTIC CAPACITORS WITH NON-SOLID ELECTROLYTE Polar Cylindrical Metallic case Insulated Unidirectional terminations (pins) for use in printed circuits Assessment level E

QUICK REFERENCE DATA: Rated capacitance (C_R) range: 47 to 47 000 μ F
Capacitance tolerance: + 20 %
Rated voltage (U_R) range: 10 to 400 V d.c.
Climatic category: 40/085/56
Performance grade: long-life grade 2000 h

Circuit diagram

Note:
contact of minus pole
to metallic can is not defined



Information about manufacturers who have components qualified to this
detail specification is available in the current CECC 00 200:
Qualified Products List

It is intended that this specification should replace national
specifications. Relevant numbers will be submitted by the national
committees and published under issue 2 of this specification.

1. GENERAL DATA

1.1 Method of mounting for vibration and bump or shock tests

1.1.1 For normal use, the capacitor can be mounted vertically or horizontally, larger cases after soldering to the printed circuit board may require a mounting clip for additional security. See 1.3.2 of CECC 30 300 Issue 2.

1.1.2 The capacitor is to be mounted by its body which shall be rigidly clamped to the work surface.

1.2 DIMENSIONS

Table 1

Dimensions in mm		
Case size reference	D	L
	max. 1)	max. 1)
1	23,0	32
2	23,0	42
3	26,5	27
4	26,5	32
5	26,5	42
6	31,5	32
7	31,5	42
8	31,5	52
9	36,5	32
10	36,5	42
11	36,5	52

1) including insulation sleeve

1.3 RATINGS AND CHARACTERISTICS

Capacitance range	see table 2A
Tolerance on rated capacitance	$\pm 20 \%$
Rated voltage range	see table 2A
Category voltage	rated voltage
Climatic category	40/085/56
Rated temperature	85 °C
Rated ripple current	see Table 2B and sub-clause 1.8
Tangent of loss angle	see Table 2B
Equivalent series resistance (ESR)	see Table 2B
Leakage current in μA	$0,006 \times \frac{R}{\mu F} \times \frac{U_R}{V} + 4$
Impedance	see Table 2B
Shock test severity	18 shocks at 490 m/s^2 , 11ms
Vibration test severity	10 Hz to 500 Hz, 0,75 mm or 10 g
Insulation Resistance	$\geq 100 \text{ M ohm}$