

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 30301-802

1988

Cette page bleue doit être insérée après la page de garde de la CECC 30 301-802 Edition 1 (1988) AMENDEMENT 1 A LA CECC 30 301-802: 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(Secrétariat)2491 Date de vote: Février 1990 Rapport de vote: CECC(Secrétariat)2653	This blue page should be inserted after the title page of CECC 30 301-802 Issue 1 (1988) AMENDMENT 1 TO CECC 30 301-802: 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	Dieses blaue Blatt ist nach dem Titelblatt der CECC 30 301-802 Ausgabe 1 (1988) einzufügen ÄNDERUNG 1 ZU CECC 30 301-802: 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 30 301-802 Edition 1 Amendement 1 (1991)	CECC 30 301-802 Issue 1 Amendment 1 (1991)	CECC 30 301-802 Ausgabe 1 Änderung 1 (1991)

Information about the System may be obtained from:



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Telefax (069) 6308273 (Gr. 2/3)
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) (biannual issues January and July, with three-monthly amendments)
- 4 CECC 00 300: CECC Publications and their related national documents (biannual issues June and December, with three-monthly amendments)

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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

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by WG 3 at a previous meeting in London in 1986 with the decision to publish a revised version without voting.

The revision was carried out by a German delegate of WG 3.

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.

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Specification available from:
CECC General Secretariat

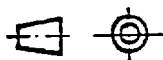
CECC 30 301- 802
(Issue 1) 1988



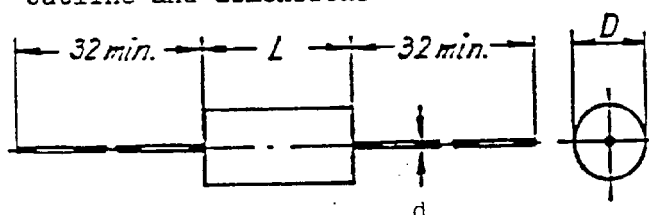
ELECTRONIC COMPONENTS OF ASSESSED
QUALITY - DETAIL SPECIFICATION IN
ACCORDANCE WITH:

CECC 30 000 Issue 3, Amdts. 1 to 5
CECC 30 300 Issue 2

First angle projection



Outline and dimensions



All dimensions in mm. Values for d, D and L see table 1. Other shapes are permitted within the dimensions given.

For taped versions, the requirements of IEC 286-1 are to be applied.

The polarity shall be clearly marked.

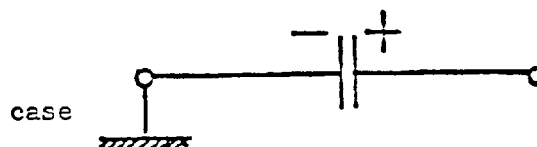
WG-DETAIL SPECIFICATION FOR
FIXED ALUMINIUM ELECTRO-
LYTIC CAPACITORS WITH
NON-SOLID ELECTROLYTE

Polar
Cylindrical
Metallic case
Insulated
Axial terminations

Assessment level E

QUICK REFERENCE DATA: Rated capacitance (C_R) range: 1 to 22 000 μF
Capacitance tolerance: -10/+50 %
Rated voltage (U_R) range: 6,3 to 250 V d.c.
Climatic category: 55/125/56
Performance grade: long-life grade 2000 h

Circuit diagram



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

The capacitors are to be mounted by their wire leads at a distance of 6 mm $\pm$ 1 mm from the case. Capacitors with a case size exceeding DC shall be additionally clamped by the case. See 1.3.2 of CECC 30 300 Issue 2.

1.2 DIMENSIONS

Table 1

case size reference	Dimensions (mm)		
	D max. 2)	L max. 2)	d nominal
AA	7,5	22	0,6 to 0,8
BA	9,5		
CA	11		
CB		27	
DC	13,5	32	0,8
EC	15,5		
FC	17		
GC	19		
GD			
HD	23	42	0,8 to 1,0
JE	26,5	46	
JF		63	
JG		79	

2) including insulation sleeve.

1.3 RATINGS AND CHARACTERISTICS

Capacitance range	1 to 22 000 μ F
Tolerance on rated capacitance	-10/+50 %
Rated voltage range	6,3 to 250 V d.c.
Category voltage	rated voltage
Climatic category	55/125/56
Rated temperature	125 °C
Rated ripple current	see Table 2B and sub-clause 1.8
Tangent of loss angle	see Table 2B
Leakage current	see Table 2B
Impedance	see Table 2B
Maximum reverse voltage	2 V

Table 2A

Values of capacitance and voltage related to case size reference

$\frac{U_R(V)}{C_R(\mu F)}$	6,3	10	16	25	40	63	100	160	250
1						AA	AA		
1,5						AA			
2,2						AA	AA		
3,3						AA	BA	CA	
4,7						AA	BA		
6,8						AA	BA	CB	
10					AA	BA	BA		
15					BA	BA	CB	DC	GC
22				AA	BA	BA	CB	GC	GC
33					BA	CB			GD
47		AA	BA	BA	BA	CB	DC	GD	JE
68					CB	CB	EC	HD	JF
100		BA	BA	CA	CB	DC	FC	JE	JG
150		CA	CA	DC	DC	EC	FC	JF	
220	CB	CB	CB	DC	DC	FC	GD	JG	
330	DC	DC	DC	DC	EC	GC	HD		
470	DC	DC	DC	EC	FC	HD	JE		
680		EC	EC	GC	GC	HD	JF		
1 000	EC	EC	FC	GC	HD	JE	JG		
1 500	GC	GC	GC	GD	HD	JF			
2 200	GC	GD	GD	HD	JE	JG			
3 300	GC	GD	HD	JE	JF				
4 700	GD	HD	JE	JF	JG				
6 800	HD	JE	JF	JG					
10 000	JE	JF	JG						
15 000	JF	JG							
22 000	JG								