

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 FIXES
ELECTROLYTIQUES
A L'ALUMINIUM
A ELECTROLYTE NON SOLIDE

Harmonized System of Quality Assessment for
Electronic Components

DETAIL SPECIFICATION:

FIXED ALUMINIUM ELECTROLYTIC
CAPACITORS WITH
NON-SOLID ELECTROLYTE

Harmonisiertes Gütebestätigungssystem für
Bauelemente der Elektronik

BAUARTSPEZIFIKATION:

ALUMINIUM-ELEKTROLYT-
FESTKONDENSATOREN
MIT FLÜSSIGEM ELEKTROLYTEN



2

Edition
Issue
Ausgabe

CECC 30 301-804

1994

AVA Documents
Document Sharing Hub

Information about the System may be obtained from:



FEN e.V. Secretariat
and
CECC General Secretariat
Gartenstraße 179
D - 60596 Frankfurt
Telephone: Int. + 49 69 639171
Telefax: Int. + 49 69 639427

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 The Rules of Procedure of the System
- 3 CECC Specifications of the FEN and National Specifications for the System
- 4 CECC 00 200: Register of Firms, Products, and Services Approved under the CECC System
- 5 CECC 00 300: Register of National Documents Implementing CECC Publications and CECC European Standards
- 6 CECC 00 301: Register of CECC Specifications and Related Detail Specifications
- 7 Other CECC Publications and publicity documents

AUSTRIA

Osterreichischer Verband für Elektrotechnik (ÖVE)
Eschenbachgasse 9
A-1010 VIENNA

BELGIUM

Comité Electrotechnique Belge
Avenue F. Van Kalken. 9
B-1070 BRUSSELS

DENMARK

Dansk Elektroteknisk Komite
Dansk Standard
Electrotechnical Sector
Baunegårdsvej 73
DK-2900 HELLERUP

FINLAND

Finnish Electrotechnical Standards Association (SESKO)
P.O. Box 134
SF-00211 HELSINKI 21

FRANCE

Union technique de l'Electricité
Participation française au CECC
F-92052 PARIS La Défense Cedex 64

GERMANY

Deutsche Elektrotechnische Kommission im DIN und VDE (DKE)
Stresemannallee 15
D-60596 FRANKFURT

IRELAND

EOLAS - The Irish Science and Technology Agency
Glasnevin
IRL-DUBLIN 9

ITALY

Comitato Elettrotecnico Italiano (CEI)
Viale Monza, 259
I-20126 MILAN

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Nederlands Elektrotechnisch Comité (NEC)
Kalfjeslaan 2
P.O. Box 5059
NL-2600 GB DELFT

NORWAY

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P.O. Box 280
Skøyen
N-0212 OSLO 2

PORTUGAL

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Rua José Estevão, 83A
P-1199 LISBOA CODEX

SPAIN

New Spanish Member
to be determined.

SWEDEN

Svenska Elektriska Kommissionen (SEK)
Box 1284
S-16428 KISTA-STOCKHOLM

SWITZERLAND

Schweizerischer Elektrotechnischer Verein (SEV)
Luppenstr. 1
CH-8320 FEHRALTORF

UNITED KINGDOM

UK Electronic Components Policy Council
Electrical Department
British Standards Institution
2, Park Street
GB-LONDON W1A 2BS

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 acceptable in 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 (IEC).

The text of this specification was circulated to the members of the CECC WG 3 and was approved for publication under the accelerated procedure for the acceptance of detail specifications with Decisions 10, 11 and 12 of the minutes of the CECC CD meeting in document CECC(Sec)1838.

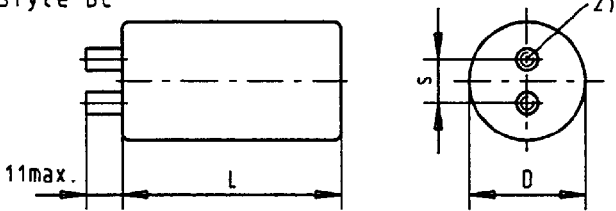
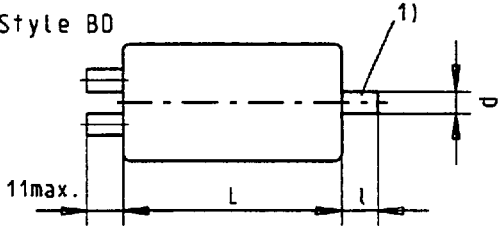
This second issue of 30 301-804 shall become effective for all new qualification approvals on 31 August 1994. Issue 1 will continue to remain effective to cover all past approvals.

Secretariat Note

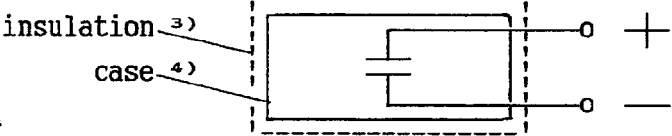
This detail specification is a revision of the former Issue 1 of 30 301-804, and is based on proposals of CEMEC WG PC 1A concerning some editorial corrections and improvements. These proposals have been discussed at the 1991 meeting of CECC WG 3, held in Brussels. It was decided to accept the proposed amendments and to publish a revised version without voting as stated in the minutes of the Brussels meeting:

CECC WG3(Secretariat)224, items 16.1, 16.2 and 16.3.

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.

Specification available from: CECC General Secretariat	CECC 30 301-804 Issue 2  1994
ELECTRONIC COMPONENTS OF ASSESSED QUALITY - DETAIL SPECIFICATION IN ACCORDANCE WITH: EN 130 000 : 1993 CECC 30 300 Issue 2, Amdts. 1 to 5	
First angle projection  Style BC  Style BD  Notes: All dimensions in mm ¹⁾ Stud not fitted to style BC ²⁾ M5 thread, depth 8 mm min. For d, D, l, L, s see Table 1 The polarity must be clearly indicated.	WG-DETAIL SPECIFICATION FOR FIXED ALUMINIUM ELECTROLYTIC CAPACITORS WITH NON-SOLID ELECTROLYTE Polar Cylindrical Metallic case Style BC: plain, insulated Style BD: studded case, not insulated (insulation optional) Screw terminations Assessment level E

QUICK REFERENCE DATA: Rated capacitance range (C_R): 220 to 150 000 μF
 Capacitance tolerance: -10/+30 %
 Rated voltage range (U_R): 16 to 250 V d.c.
 Climatic category: 55/125/56
 Performance grade: long-life grade 2000 h

Circuit diagram ³⁾ optional for Style BD ⁴⁾ contact of minus pole to metallic case not defined	
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Information about manufacturers who have components qualified to this detail specification is available in the current CECC 00 200: Register of Firms, Products, and Services Approved under the CECC System

It is intended that this specification should replace national specifications.
Relevant numbers will be submitted by the national committees and published
under Issue 3 of this specification.

1. GENERAL DATA

1.1 METHOD OF MOUNTING FOR VIBRATION AND SHOCK TESTS

The capacitor is to be mounted by its stud (Style BD) or using clamps (Style BC) available from the manufacturer. See 1.3.2 of CECC 30 300 Issue 2.

1.2 DIMENSIONS

Table 1

Case size reference	Dimensions in mm				
	D _{max.} 5)	L _{max.} 5)	s ± 0,5	d	l
33	37	66	12,7	M8	12 ± 1
34		86			
35		109			
54	52	86	22,2	M12	16 ± 1,5
55		109			
65	67		28,5		
75	78		149		
76					

⁵⁾ including insulation sleeve if any

1.3 RATINGS AND CHARACTERISTICS

Rated capacitance range (C_R)	220 to 150 000 μF
Tolerance on rated capacitance	-10/+30 %
Rated voltage range (U_R)	16 to 250 V d.c.
Category voltage (U_C)	= rated voltage
Climatic category	55/125/56
Rated temperature	125 °C
Rated ripple current	see Table 2B
Equivalent series resistance (ESR)	see Table 2B and sub-clause 1.8
Leakage current	see Table 2B
Impedance	see Table 2B