

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 30 301-803

1994

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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 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

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.

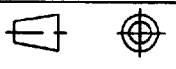
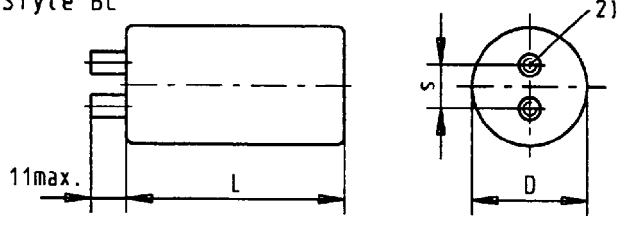
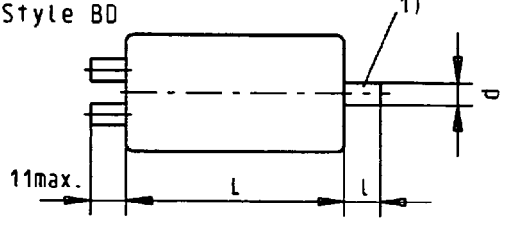
This second issue of 30 301-803 shall become effective for all new qualification approvals on 31 August 1994. Issue 1 will continue to remain effective to cover all past approvals.

Secretariat Note

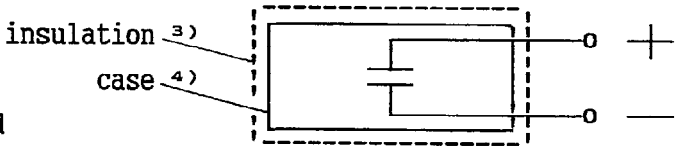
This detail specification is a revision of the former Issue 1 of 30 301-803, and is based on proposals of CEMEC WG PC 1A concerning some editorial corrections and improvements. These proposals have been discussed at the 1991 meeting of CECC WG 3, held in Brussels. It was decided to accept the proposed 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 30 301-803 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): 150 to 150 000 μF
 Capacitance tolerance: -10/+30 %
 Rated voltage range (U_R): 16 to 400 V d.c.
 Climatic category: 40/085/56
 Performance grade: long-life grade 5000 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)	150 to 150 000 µF
Tolerance on rated capacitance	-10/+30 %
Rated voltage range (U _R)	16 to 400 V d.c.
Category voltage (U _C)	= rated voltage
Climatic category	40/085/56
Rated temperature	85 °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