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**Elektronikkomponenter –
Fasta kondensatorer –
Del 26-1: Förlaga till detaljspecifikation för
aluminiumelektrolytkondensatorer med fast elektrolyt
av ledande polymer –
Kvalitetsnivå EZ**

Fixed capacitors for use in electronic equipment –

Part 26-1: Blank detail specification –

*Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte –
Assessment level EZ*

Som svensk standard gäller europastandarden EN 60384-26-1:2010. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60384-26-1:2010.

Nationellt förord

Europastandarden EN 60384-26-1:2010

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 60384-26-1, First edition, 2010 - Fixed capacitors for use in electronic equipment - Part 26-1: Blank detail specification - Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte - Assessment level EZ**

utarbetad inom International Electrotechnical Commission, IEC.

Standarder underlättar utvecklingen och höjer elsäkerheten

Det finns många fördelar med att ha gemensamma tekniska regler för bl a säkerhet, prestanda, dokumentation, utförande och skötsel av elprodukter, elanläggningar och metoder. Genom att utforma sådana standarder blir säkerhetskraven tydliga och utvecklingskostnaderna rimliga samtidigt som marknadens acceptans för produkten eller tjänsten ökar.

Många standarder inom elområdet beskriver tekniska lösningar och metoder som åstadkommer den elsäkerhet som föreskrivs av svenska myndigheter och av EU.

SEK är Sveriges röst i standardiseringsarbetet inom elområdet

SEK Svensk Elstandard svarar för standardiseringen inom elområdet i Sverige och samordnar svensk medverkan i internationell och europeisk standardisering. SEK är en ideell organisation med frivilligt deltagande från svenska myndigheter, företag och organisationer som vill medverka till och påverka utformningen av tekniska regler inom elektrotekniken.

SEK samordnar svenska intressenters medverkan i SEKs tekniska kommittéer och stödjer svenska experters medverkan i internationella och europeiska projekt.

Stora delar av arbetet sker internationellt

Utformningen av standarder sker i allt väsentligt i internationellt och europeiskt samarbete. SEK är svensk nationalkommitté av International Electrotechnical Commission (IEC) och Comité Européen de Normalisation Electrotechnique (CENELEC).

Standardiseringsarbetet inom SEK är organiserat i referensgrupper bestående av ett antal tekniska kommittéer som speglar hur arbetet inom IEC och CENELEC är organiserat.

Arbetet i de tekniska kommittéerna är öppet för alla svenska organisationer, företag, institutioner, myndigheter och statliga verk. Den årliga avgiften för deltagandet och intäkter från försäljning finansierar SEKs standardiseringsverksamhet och medlemsavgift till IEC och CENELEC.

Var med och påverka!

Den som deltar i SEKs tekniska kommittéarbete har möjlighet att påverka framtida standarder och får tidig tillgång till information och dokumentation om utvecklingen inom sitt teknikområde. Arbetet och kontakterna med kollegor, kunder och konkurrenter kan gynnsamt påverka enskilda företags affärsutveckling och bidrar till deltagarnas egen kompetensutveckling.

Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

SEK Svensk Elstandard

Box 1284
164 29 Kista
Tel 08-444 14 00
www.elstandard.se

**Fixed capacitors for use in electronic equipment -
Part 26-1: Blank detail specification -
Fixed aluminum electrolytic capacitors with conductive polymer solid
electrolyte -
Assessment level EZ
(IEC 60384-26-1:2010)**

Condensateurs fixes utilisés
dans les équipements électroniques -
Partie 26-1: Spécification particulière
cadre -
Condensateurs fixes électrolytiques
en aluminium à électrolyte solide
en polymère conducteur -
Niveau d'assurance de la qualité EZ
(CEI 60384-26-1:2010)

Festkondensatoren zu Verwendung
in Geräten der Elektronik -
Teil 26-1: Vordruck
für Bauartspezifikation -
Aluminium-Elektrolyt-Kondensatoren
mit leitfähigem Polymerfestkörper-
Elektrolyten -
Qualitätsbewertungsstufe EZ
(IEC 60384-26-1:2010)

This European Standard was approved by CENELEC on 2010-10-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Management Centre: Avenue Marnix 17, B - 1000 Brussels

Foreword

The text of document 40/2053/FDIS, future edition 1 of IEC 60384-26-1, prepared by IEC TC 40, Capacitors and resistors for electronic equipment, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60384-26-1 on 2010-10-01.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN and CENELEC shall not be held responsible for identifying any or all such patent rights.

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) | 2011-07-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn | (dow) | 2013-10-01 |

Annex ZA has been added by CENELEC.

Endorsement notice

The text of the International Standard IEC 60384-26-1:2010 was approved by CENELEC as a European Standard without any modification.

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60068-2-20	2008	Environmental testing - Part 2-20: Tests - Test T: Test methods for solderability and resistance to soldering heat of devices with leads	EN 60068-2-20	2008
IEC 60384-1	2008	Fixed capacitors for use in electronic equipment - Part 1: Generic specification	EN 60384-1	2009
IEC 60384-26	2010	Fixed capacitors for use in electronic equipment - Part 26: Sectional specification - Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte	EN 60384-26	2010

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FIXED CAPACITORS FOR USE IN ELECTRONIC EQUIPMENT –

Part 26-1: Blank detail specification – Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte – Assessment level EZ

Blank detail specification

A blank detail specification is a supplementary document to the sectional specification and contains requirements for style and layout and minimum content of detail specifications. Detail specifications not complying with these requirements may not be considered as being in accordance with IEC specification nor shall they so be described.

In the preparation of detail specifications the contents of 1.4 of the sectional specification shall be taken into account.

The numbers between brackets on the first page correspond to the following information which shall be inserted in the position indicated.

Identification of the detail specification

- [1] The “International Electrotechnical Commission” or the National Standards Organization under whose authority the detail specification is drafted.
- [2] The IEC or National Standards number of the detail specification, date of issue and any further information required by the national system.
- [3] The number and date of issue of the IEC or National Generic Specification.
- [4] The number of the IEC or National blank detail specification.

Identification of the capacitor

- [5] A short description of the type of capacitor.
- [6] Information on typical construction (If applicable).
- [7] Outline drawing with main dimensions which are of importance for interchange ability and / or reference to the national or international documents for outlines. Alternatively, this drawing may be given in an appendix to the detail specification.
- [8] Application or group of applications covered and / or assessment level.
- [9] Reference data on the most important properties, to allow comparison between the various capacitor types.

[1]	[2]
ELECTRONIC COMPONENTS OF ASSESSED QUALITY IN ACCORDANCE WITH: [3]	[4] IEC 60384-26-1
Outline drawing: (see Table 1) (... angle projection) [7]	[5] Aluminium electrolytic capacitors with conductive polymer solid electrolyte
	[6]
	[8] Assessment level(s): EZ

Information on the availability of components qualified to this detail specification is given in the qualified product list.

[9]

1 General data

1.1 Recommended method(s) of mounting (to be inserted)

See IEC 60384-26, 1.4.2

1.2 Dimensions

Table 1 – Case size reference and dimensions

Dimensions in millimeters

Case size reference							
	<i>L</i>	<i>W</i>	<i>H</i>	<i>d</i>			
NOTE 1 When there is no case-size reference, decline Table 1 and give the dimensions in Table 2 as Table 1. NOTE 2 Indicate the dimensions as maximum dimension or as nominal dimensions with tolerance.							

1.3 Rating and characteristics

Ratings and characteristics are as listed below.

- Nominal capacitance range (see Table 2)
- Tolerance on nominal capacitance
- Rated voltage (see Table 2)
- Climatic category
- Rated temperature
- Rated ripple current (see Table 3)
- Tangent of loss angle (see Table 3)
- Leakage current (see Table 3)
- Equivalent series resistance (see Table 3)
- Reverse voltage (if required in the detail specification)

Table 2 – Values of capacitance and of voltage related to case sizes

Rated voltage					
Nominal capacitance	Case size	Case size	Case size	Case size	Case size

Table 3 – Characteristics

U_R	C_N	Tangent of loss angle at ... °C, ... Hz	Leakage current at ... °C	Equivalent series resistance at ... °C, ... Hz	Rated ripple current at ... °C, ... Hz
V	µF	Hz	µA	Ω	mA or A

1.4 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60068-2-20:2008, *Environmental testing – Part 2-20: Tests – Test T – Test methods for solderability and resistance to soldering heat of devices with leads*

IEC 60384-1:2008, *Fixed capacitors for use in electronic equipment – Part 1: Generic specification*

IEC 60384-26:–¹ *Fixed capacitors for use in electronic equipment – Part 26: Sectional specification – Fixed aluminium electrolytic capacitors with conductive polymer solid electrolyte*

¹ To be published.